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Intellectual Property and European Economic Constitutional Law

The Trouble with Private Informational Power

Tuomas Mylly

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Gummerus Kirjapaino Oy

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UNIVERSITY OF TURKU
FACULTY OF LAW

University of Turku
Faculty of Law
FI-20014 Turku
www.law.utu.fi

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© Tuomas Mylly 2009
Senior Lecturer in the Faculty of Law
University of Turku
E-mail: tuomas.mylly@utu.fi

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**TO ULLA-MAIJA,
ELLA AND OLAVI**



“Any submission on this topic is likely to be quite unoriginal.”

Forrester, Ian S.: *“EC Competition Law as a Limitation on the Use of IP Rights in Europe: Is there Reason to Panic?”* in Ehlermann, Claus Dieter and Atanasiu, Isabela (eds.): *European Competition Law Annual 2003: What is an Abuse of a Dominant Position?* (Hart Publishing, Great Britain 2006), pp. 503-521, at p. 503.



Foreword and Acknowledgements

Some years ago, I started to prepare for writing a book about the competition law treatment of a unitary refusal to license intellectual property rights. The WTO-pact, including the TRIPS Agreement, had entered into force. I was ready to uncover its effects on the topic. Analysing the case law diligently and utilising economics as a source of critique was to form the core of my research orientation. I intended to complete the research in less than five years.

Things don't always work out as planned. In the course of my research, I found myself reading more and more literature related to legal theory, informational power, European constitutionalism, democracy etc. I started to question my original premises. Taking advantage of academic freedom still surviving at universities made the reorientation of my focus possible. What was originally thought to form a couple of pages or lines in the introduction finally ended up becoming book chapters. Other book and article projects written in-between and ranging from textbooks on general European Union law to articles on international intellectual property and copyright law helped considerably in generating more interpretive flexibility in terms of both focus and time schedule. The same applies to my working period for the Nokia Corporation in 2000-2001.

Legal scholarship is essentially participation in discourses. I have been fortunate to benefit from several concrete – and often less concrete but even more fruitful – discussions without which this book would not have become what it is. I will start my thanks with the most recent reasons. Professors *Juha Karhu* and *Tuomas Ojanen* acted as the dissertation examiners and did their work with utmost professionalism. Moreover, they both provided me with comments and some suggestions for improvements. Your work is well appreciated! Juha Karhu also kindly promised to act (but did not promise to act kindly) as my opponent in the public examination of this thesis. Director of the CEIPI Institute, senior researcher of Max Planck Institute, professor *Christophe Geiger* promised to function as the other opponent. At the time of writing the public examination is yet to take place. I am still very honoured to have you as my opponent!

A sincere thank goes to my thesis supervisor, professor *Niklas Bruun*. Being the director of the IPR University Center and professor at the University of Helsinki, among your other demanding tasks now literally spreading all over the globe, has kept you busy during the recent years. Still, you have found time for reading my text and

giving me advice, yet being mindful of academic freedom. You headed the first research project funded by the Academy of Finland I participated in, *Intellectual Property 2000*. This book was published by the IPR University Center with your contribution.

I have also had the benefit of having unofficial dissertation examiners. Docent *Martti Virtanen*, despite his busy work as director of the Finnish Competition Authority, gave me priceless comments concerning the first competition law chapter. Your knowledge and insight in competition law and theory is unparalleled. Professor *Anne Kumpula* read parts of my manuscript and provided me invaluable comments. J. Boyle was right: intellectual property and environmental law have much in common. Professor *Jukka Mähönen* also read parts of my text and made some excellent points. I was also delighted that you seemed to sympathise with my unorthodox ways of (ab) using economics. Both Anne and Jukka have advised me at different stages leading to the public defence. Jukka also kindly promised to act as the *custos*. Docent *Pekka Lämsineva* read the chapter about rights constitutionalism. Your comments were too nice in comparison to what you likely felt. Yet you gave me the needed self-confidence for progressing with my text to its final stages.

Professor *Ari Saarnilehto* headed another research project funded by the Academy of Finland I worked in: *Competition and Innovation in European Law*. Before that you activated the industrial property research group at the Faculty of Law, facilitated useful contacts and looked after our research premises also in your capacity as the Dean of the Faculty of Law by that time. During the finalising stages of my project I had the benefit of concentrating on research in a third project funded by the Academy of Finland: *Transformations in Law and Power*, headed by professor *Veli-Pekka Viljanen*. I am very grateful for this golden opportunity. Dean *Heikki Kulla* I thank for keeping up the Faculty of Law and its floorball team at difficult times. The spirit in both has been enabling and supportive. *Tarja Linden* I thank for skillful typesetting and cover design.

The most influential discussions have been those taken for granted. *The Academy of the Coffee Room* has had the biggest influence on what I am as a legal scholar and what this research finally came about. After studying European law at Stockholm University, I started as a researcher and teacher of European law and ended up socialising with researchers from the public law corridor. I never got rid of that habit, even after I moved to the private law corridor. *Mikael Koillinen*, *Juha Lavapuro*, *Pekka Riekkinen*, *Janne Salminen* and formerly also *Petri Helander* can be singled out from these long-term coffee room discutants. Juha has probably affected the most the way I think about law and legal scholarship (more than *R.D.*!).

I also seem to have a joint interest in weird (legal) stuff with *Mika Viljanen*, a researcher from the golden fields of private law. Work in the project *Competition and Innovation in European Law* with researchers *Nari Lee*, *Jarkko Vuorinen* and later also *Katja Weckström* and *Pekka R.* was fruitful. The work of the project proved correct the insight of open source: cooperation and fun often produces better innovation (and friendships!) than competition. I should also mention the useful comments from the courageous participants in the Faculty's brown-bag lunch I tortured with my introductory chapter, especially *Mia Hoffren*, *Juha*, *Matti Urpilainen*, *Veikko Vahtera* and *Katja*.

I finally thank my parents *Sirkka* and *Juhani* for patience. It must have been hard for my father, as a long-term academic, to resist giving me “good advice”. My warmest gratitude goes to my wife *Ulla-Maija*. During the unexpectedly (also for myself!) long and intensive finalising stages of my research, you took an unproportionate work load at home. Yet you had the patience to listen to my sometimes wild, sometimes very tired research (or whatever) ideas. *Ella* and *Olavi* will have me spending more time with them next summer. This book is dedicated to you, Ulla-Maija, Ella and Olavi.

This research has been co-funded by several institutions in addition to the Academy of Finland (in the framework of the research projects already mentioned) and the Faculty of Law at the University of Turku (as my employer), which have shared the main responsibility for financing my bread and butter while doing research. My thanks go to the following additional foundations: *The Finnish Cultural Foundation*, *Jenny and Antti Wihuri Foundation*, *Turku University Foundation*, *Maaliskuun 25. päivän rahasto* and *Niilo Helanderin Säätiö*. Without your support and faith in my research plans the research would likely not exist, at least not in its current form.

After long hesitation, President *Václav Klaus* of the Czech Republic agreed to sign the *Lisbon Treaty*, four weeks before this book went to print. On one hand, it meant that my arguments already based on the material contents of that Treaty reflect European Union law in force at the time the book comes out of print. On the other hand, it meant that I had to change my references to the renewed Article-numbering of the Treaties in a big hurry. So thank you too *Václav*, maybe.

In Calonia, 25 November, 2009.



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Abbreviations

3G	The 3rd Generation Standards for Mobile Communications
3GPP	The 3rd Generation Partnership Project
3G3P	3G Patent Platform Partnership
3GPP2	The 3rd Generation Partnership Project 2
AFNOR	Association Française de Normalisation
API	Application Programming Interface
BSI	The British Standards Institution
CDMA	Code division multiple access
CEN	European Committee for Standardisation
CENELEC	European Committee for Electro-Technical Standardisation
CPC	Community Patent Convention
DIN	Deutscher Institut für Normung
DRM	Digital Rights Management
DVB	Digital Video Broadcasting project
EAGCP	Economic Advisory Group for Competition Policy
EC	European Community or Treaty establishing the European Community
ECJ	European Court of Justice
ECMA	European Association for standardizing information and communication systems
EEA	European Economic Area
EPC	European Patent Convention
EPO	European Patent Office
ETSI	European Telecommunications Standards Institute
EU	European Union or Treaty on European Union
FEU	Treaty on the Functioning of the European Union
FRAND	Fair, reasonable and non-discriminatory
FTC	The Federal Trade Commission
ICANN	Internet Corporation for Assigned Names and Numbers
IEC	International Electrotechnical Commission
IEEE	The Institute of Electrical and Electronics Engineers, Inc
IETF	The Internet Engineering Task Force
IPRs	Intellectual property rights
ISO	International Organisation for Standardisation
ITU	International Telecommunications Union
PCT	Patent Cooperation Treaty
RAND	Reasonable and non-discriminatory
SCP	Structure-Conduct-Performance
SFS	Finnish Standards Association
SIS	Swedish Standards Institute
SSNIP	Small but Significant and Non-transitory Increase in Price
TCP/IP	Transmission Control Protocol / Internet Protocol
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UDPR	Uniform Domain-Name Dispute-Resolution Policy
US	United States of America
W3C	The World Wide Web Consortium
WCDMA	Wideband code division multiple access
WCT	WIPO Copyright Treaty (1996)
WIPO	World Intellectual Property Organization
WTO	World Trade Organization



1 Introduction

1.1 Topic and Research Agenda

1.1.1 Short Introduction to a Scholarly Debate: Is There Reason to Panic?

How is the interaction between intellectual property and competition law determined? What constitutes the underlying theory for analysing their relations? The epigram chosen for this research suggests not only that there is broad agreement concerning the underlying theory, but also that there is not much new one could generate based on such settled premises, whatever they are.¹ All major questions have been resolved, a broad consensus prevails, and there are no underlying tensions pressing for change. The function left for legal scholars would be to report the latest judicial developments diligently and – perhaps even – to rephrase some of the known doctrinal criticisms in the context of new cases to satisfy the critical function of legal science. On the other hand, the title of Mr. Forrester’s article indicates the potential presence of a threat: Is There Reason to Panic? Sidestepping the question whether panic is a reasoned reaction to anything, who could have reason to panic? All intellectual property owners? The stock market? Legal scholars? Maybe the economy or even the society at large? And what could constitute the reasons behind the sudden application of European competition laws to intellectual property so as to limit the rights inherent to the latter so drastically that some one’s loosing of self-control would be, if not a reasoned reaction, at least an explainable one?

While the consensus on the underlying issues is finally being found, *private informational power enabled by intellectual property rights* continues assuming paradigmatic dimensions. It shapes technological trajectories and structures the flows of communication and information. It participates in constituting what the networked information society is and will be. Such power over societal developments

¹ See also Heinemann (1999), at p. 320, who explicitly states that “[a] consensus in fundamental questions seems to have been reached.” Cf. Drexl (2008a), at p. xv, in context of a preface to a collection of scholarly articles titled “*Research Handbook on Intellectual Property and Competition Law*”, stating that it is today widely admitted that intellectual property and competition law “are meant to promote complementary goals, namely innovation based on dynamic concepts of competition”. Yet there would remain disagreement concerning the question “whether and under which conditions competition law may intervene and restrain the use of an intellectual property right”.

now partially overlaps with market power traditionally addressed with competition law, but seems largely to escape its methods and basic orientation. Neither is the informational power a concern for its co-creator, the intellectual property institution. The European-level exclusive rights produce economic and informational power they are unable and unwilling to handle with. Private informational power enabled by intellectual property laws also runs free from the control mechanisms of fundamental rights law. On European Union level the relevant fundamental rights adjudication has rather had the function of strengthening and solidifying an already strong form of intellectual property protection, thus participating in the legitimation of the power in question. Hence the *trouble* with private informational power.

Any consensus concerning the underlying premises is thus highly superficial. There is no single theoretical perspective with which one could unproblematically approach the intellectual property and competition law institutions and their interactions. Their contents and interaction are constituted and shaped by a multitude of on-going discourses and normative premises that compete, criticise, complement and provoke each others. Intellectual property and competition laws form contested domains constituting core areas of information society regulation. Their effects and interactions transcend the economic sphere by conditioning the diversity, power and freedom of the market operators with repercussions beyond the economy. They affect aspects of freedom of information and expression and thus individual and collective autonomy, cultural reproduction processes, as well as the inclusiveness and openness of the central communication technologies and platforms necessary for public spheres. It thus seems that these laws, their interpretations and interactions, for their part, have the capacity to constitute some of the essential democratic features of the information society. If this is true, should not the theoretical frameworks and discourses shaping the contents of these laws and their interactions reflect such concerns? If they do not integrate such considerations now, *is there reason to panic?*

The fundamental nature of these questions implies that for a legal scholar panic is not a reasoned reaction, but instead pausing and reflecting these and other relevant questions, the underlying transformations and the relevant discourses more thoroughly, without excessive hurry and the limitations of a law review article. This, broadly speaking, will be the agenda of the current research project. The control of private, intellectual property-enabled informational power with societal implications will form the overarching theme of this research. The main focus will be on European Union law and what could be called constitutional dimensions of intellectual property and competition laws. In the remainder of this chapter, the research question will be somewhat specified and limited, the research genre, underlying premises and methodological questions elaborated, and the structure of the book explained. Immediately below, the research topic will be connected, in a preliminary fashion, to the transforming economic, societal and legal contexts.

1.1.2 Transformations and European Law

The last three centuries have witnessed three economic paradigms.² In the first paradigm agriculture and the extraction of raw materials dominated the economy. The main source of wealth was based on natural assets such as land and relatively unskilled labour. In the second paradigm industry and the manufacture of durable goods formed the most important sector. Tangible created assets, such as buildings, machinery and equipment, constituted the primary sources of wealth.³ In the third and current paradigm, which has been called information society, providing services, manipulating information, experiences and communicating are said to represent the cornerstone of the economy. The key source of prosperity is identified as being intangible created assets, namely knowledge and information of all kinds.⁴ Economies of scale has been complemented with economics of networks,⁵ and industrial production partially with decentralised non-market production, as the high capital costs required for production in the industrial economy are being replaced by computers and Internet access required for the core production processes of the information society.⁶ The three forms of economy mix and coexist within the same countries; societal transitions are neither total nor do they take place overnight. However, communication, production and manipulation of information and culture now constitute the dominating paradigm within the networks of the world markets.⁷

The transition from the first to the second paradigm has been referred to as *modernisation*, whereas the transition from the second to the third has been referred

2 See e.g. *Hardt & Negri* (2001), p. 280-282; *Castells* (2000), p. 70-72; *Lash* (2002), p. 176; *May* (2002), p. 157 and *Dunning* (2002a), p. 8. *Scholte* (2000), at p. 112-113, emphasises the continuing capitalist logic.

3 The best text to understand this transformation continues to be *Polanyi* (1944, 1957), *passim*. Also *Braudel* (1979, 1986a), at p. 231-373, says that when industry became a profit-making sector through new machines, capitalism was profoundly modified and extended.

4 See e.g. *Rifkin* (2000), p. 3-29 and 57 and *Hardt & Negri* (2001), p. 288. *Gilpin* (2000), p. 29-31, represented a more sceptical approach, stating that computing power may not have caused a societal change similar to electric power. The convincing information society analysis of *Benkler* (2006), *passim* effectively refutes *Gilpin's* view. *Vesting* (2001), at p. 29, suggests that in information society the starting point for constructing property rights has to be intangible, not tangible property like in the industrial society and the preceding paradigms. *Rifkin* (2000), at p. 5 and 57, also identified intellectual property as the new driving force and the source of power in the informational economy based on access and networks rather than (traditional) ownership and markets. In his analysis, “*tangible property is becoming increasingly marginal to the exercise of economic power*”.

5 *Shapiro & Varian* (1999), at p. 173, have stated that there “*is a central difference between the old and new economies: the old industrial economy was driven by economies of scale; the new information economy is driven by the economics of networks*”.

6 *Benkler* (2003a), p. 1252 and (2006), p. 3 and 32 distinguishes *industrial information economy* from the current *networked information economy*. The *Internet* is a linguistic, flexible proxy for an intelligent network of networks, comprising several layers of technologies, communication tools and communication, rather than a closed technological system. See e.g. *Froomkin* (2003) p. 778; *Vesting* (2004), p. 640-641 and *Zittrain* (2008), p. 67-71.

7 See e.g. *Lash* (1994), p. 129-130 and *Benkler* (2006), p. 3.

to as a process of *postmodernisation* or *informatisation*,⁸ while others characterise it as *reflexive modernisation* (and also *reflexive production*) or simply *information society* whereby the social structures of the industrial society are being replaced by a web of global and local networks of information and communication structures as a determining structural condition of reflexivity.⁹ In this paradigm, life chances and class inequality are said to depend on access to and place in the new information and communication structures whereas in industrial capitalism (modernity or “simple modernity”) they depended on access to and place in the mode of production.¹⁰

Law is constitutive of the capitalist relations as it, among others, enables and defines ownership and exchange and thus enables the accumulation of capital. It may also be seen as a specific discourse and practice on its own; law does not mirror the economic paradigms directly.¹¹ It may be seen to form its own legal paradigms co-evolving in complex interactions with the economic and social paradigms.¹² Legal concepts, doctrines, systematisations and argumentation patterns of various branches of law may have their origins in different times and thus on distinct social and economic paradigms. Yet, they coexist and mix in application discourse as part of the same

8 *Hardt & Negri* (2001), p. 280-282. For a discussion of the related terminology (modernism, postmodernism, postmodernity, high modernity, late modernity, *Zweite Moderne*, radicalised modernity, reflexive modernisation etc.) and its potential relevance, see e.g. *Giddens* (1994), p. 197; *Giddens* (1990), p. 1-3 and 45-53 and *Beck* (1997), p. 25. All transitions are both half invisible and half blind, and thus it is impossible to name our current situation accurately. In any case, the question of what label we use is secondary to the substantive analysis of the ongoing transformations. See also *Santos* (2002), p. 2.

9 *Lash* (1994), p. 110-121; *Lash* (2002), p. 1-3, prefers the term *information society* over postmodernism, the latter being an amorphous and content-empty word simply implicating chronological order (after modernism). *Castells* uses the term *informational* as opposed to information society to denote social organisation in which the generation, procession and transmission of information have become the fundamental sources of productivity and power. See *Castells* (2000), p. 21. *Lash* also uses the term *communications society* (2002, p. 20), which captures the importance of *flows* of information. See also the treatment of information society in chapter 2.5.

10 *Lash* (1994), p. 120-121 and 129-133 and (2002), p. 4, 24-25, 28 and 75; *Beck* (1992), p. 218 and *Rifkin* (2000), p. 234-257.

11 See e.g. *Hunt* (1993), p. 21-32, who emphasises the legitimating and constitutive function of law, in addition to its repressive role. *Edelman* (1973, 1979), *passim* also differs from simplistic Marxist approaches in emphasising the indirect and complex interaction between law and the capitalist developments, using the developments of copyright to photography as an example. See similarly *Hirst* (1979), p. 1 and *Barron* (2004), p. 182-183.

12 *Günther* (1988, 1993), p. 245 and *Habermas* (1992, 1996), p. 388-391, characterise legal paradigms which could provide a high-level point of reference in adjudication. Neither are legal transitions total nor do they take place overnight: legal paradigms, too, are never complete or concise. It is perhaps possible to construct such paradigms afterwards or in the mature stage of societal developments. The contents of the prevailing paradigm is always contestable and subject to competing interpretations.

legal order.¹³ The perceptions and interests prevalent in the economic sphere affect the development and interpretation of law, its concepts and underlying assumptions.¹⁴

Law may adapt and conform to the changing technologies and forms of production. It may be biased in over-protecting the interests of the hegemonic forces of the prevailing paradigm, thus inhibiting structural change. Standard legal doctrine may thus have a legitimating function with regard to the prevailing economic paradigm.¹⁵ It may reinforce the *status quo* or function as an apologetic message for the changes in the social organisation necessitated by a new form of production.¹⁶ It may retard or direct the transition from one paradigm to another, typically in the interest of the most influential economic interests. Law is characteristically conservative and, beneath the surface, changes slowly. Hence, the prevailing legal doctrine may cause inertia or dysfunction, and cause or tolerate injustice by constructing and disciplining the emerging socio-economic reality through an optic built for constructing and disciplining the previous paradigms. Yet, law also has a proactive and thus emancipatory

13 See e.g. *Hunt* (1993), p. 14 and *Gustafsson* (2002), p. 145, 173-191 and 200. See also *Tuori* (2002a), p. 151 and *M. Viljanen* (2008), *passim* (in the context of law on damages). See also chapter 3 subsequently.

14 Systems theory presses the idea of legal sphere's autonomy relatively far. From this perspective the "economic" concepts in law are defined through an interaction between economic and legal spheres. *Teubner* calls these concepts *law's binding arrangement*: the elements of law and economy link up to each other, but legal acts remain identifiable as against economic acts and legal norms against economic expectations. See *Teubner* (1997), p. 161 and (1998), p. 27. Cf. *Luhmann* (1993, 2004), p. 381-382. According to *Luhmann*, social subsystems are linked through "structural couplings". By structural coupling *Luhmann* means a phenomenon relevant to more than one subsystem: a stable pattern of communicative responses to irritations caused by the system's environment, which selectively include and exclude information. Such phenomena include *property* and *contract* as an event forming a structural coupling between legal and economic systems (*ibid.*, at p. 250-251 and 390-402) and *constitution* between legal and political systems (*ibid.* at p. 263 and 403-412). The sub-systems function according to their own internal logic and become self-referential. Systems do not affect each other directly, but through structural couplings. They can be described as autopoietic systems. As *Teubner* continues, many juridical concepts thus have both a legal and social face which on one hand evolve along separate and qualitatively different paths. On the other hand, the paths are re-connected via co-evolution. Changes on one side may provoke change on the other side due to their close structural coupling. See *Teubner* (1998), p. 27-28. Rather than being a causal relationship the relationship between the legal, economic and other social systems could more aptly be described with the metaphor of "productive misunderstanding". See *Teubner* (1997), p. 161.

15 See more closely about the typical techniques of legitimation *Hunt* (1999), p. 25-32.

16 See *Kennedy* (1985), p. 939-968 (arguing that the mainstream economic thought has been a vehicle for legitimating the actual arrangements of the capitalism of the time and that the legal doctrine has a legitimating or apologetic function with regard to the prevailing economic thought). See also *Petrusson* (1999), at p. 169 and 263-264 (in the context of patent law). The legitimating function of law may relate to the basic doctrines, argumentation patterns, the construction of the main rules and exceptions, as well as legal myths and rhetorics, together constituting a *structural bias*. For example, the mythological images of artisans, pioneers, individual farmers and local markets affected the early US antitrust case law despite the reality of large-scale enterprise and national markets and thus served to stifle impulses toward equalising market power. See *Peritz* (2000), p. 23-24. Likewise, the mythological images of heroic inventors and romantic authors affect the evolution and interpretation of patent and copyright laws despite the reality of innovation being a central comparative business advantage and the "copyright industries" being one of the biggest and most influential multinational businesses. See e.g. *MacMillan* (2002), *passim* (analysing copyright and film industry).

potential.¹⁷ It may affect core aspects of the socio-economic paradigm by structuring the economic and social spheres and technological environments. The function of law cannot be reduced to preserving the prevailing internal logic and dynamics of the economy, as these are always dependent on and partially constituted by the legal doctrine itself. The legal doctrine, for its part, is constituted by the multiplicity of ongoing communicative discourses and practices giving meaning to it.¹⁸ Finally, law may attenuate some of the adverse social effects caused by the economic paradigm: it also brings the rationality of other social subsystems into play against the economy.¹⁹

The establishing of the European Communities, later to be developed into the European Union (the EU), overlapped with the final stages of the industrial society paradigm. In the aftermath of the Second World War, coal and steel became the first commodities to be subjected under joint control and the pursuit of an integrated market, subsequently to be followed by the basic elements of industrial production: goods, services, capital and workforce, constituting the four basic freedoms under the European Economic Community. Law and the judicial activism of the European Court of Justice assumed a critical role in achieving these objectives. In addition to the law of the basic freedoms sanctioning domestic laws and practices inhibiting the free movement of the elements of production within the Community, competition law regulated the privately imposed constraints on the achievement of a competitive, integrated market. Early on, competition law had a central role in the Community. It also became a key element in the ordoliberal dream of the common market: together with the basic institutions of private law, competition law was elevated to constitute the core protective and enabling framework for capitalist economic relations. Establishing competition on the Community level and beyond was designed to avoid direct, reactive governmental involvement on the markets. The supranational competitive process, provided it follows the established, fixed rules of the game, would produce its intended outcomes automatically and without the concentration of economic power.

Although innovation became recognised as being important for economic growth in the course of the industrial revolution,²⁰ and modern patent law formed during the

17 See e.g. Santos (2002), p. 468 and Hunt (1993), p. 300.

18 See Kennedy (1985), p. 965-966 and (1997), p. 152. The *constitutive theory* as further developed by Hunt (1999), *passim*, argues that law does more than just reflect existing social relations. It actually constitutes certain economic relations and participates in the constitution of terrains or fields “*within which social relations are generated, reproduced, disputed and struggled over*” (*ibid.*, at p. 293), a perspective that appears apparent in the context of intellectual property law. The relationship between law and social practices is thus not only two-way, but neither is reducible to or explainable in terms of the other. See also Milovanovic (2003), p. 250-258, for a concise, but insightful introduction to the basic propositions of the constitutive theory.

19 Teubner (1987), p. 32.

20 The industrial revolution connoted, among others, the increasing deployment of machines for work previously done by humans. See Polanyi (1944, 1957), p. 40 and e.g. Sideri (2007), p. 12-14.

same period,²¹ intellectual property law assumed a marginal and defensive role in early Community law. Like property in general, it was nationally protected and defined. As territorially protected but attached to products capable of being otherwise freely circulated throughout the Community, it constituted a potential impediment for both the realisation of the basic freedoms and the objectives of competition law. From the perspective of early Community law nationally defined intellectual property formed a legally constituted monopoly or a protectionist impediment for the realisation of the Community's objectives: in the industrial paradigm the relationship between intellectual property and Community competition law was embedded in economic constitutional law characterised by the essential role of competition law in the realisation of the Community's integration objectives and the structuring of capitalist economic relations among industrial firms in general.²² Because of the primacy (supremacy) and direct effect of Community law the basic freedoms and competition law assumed constitutional force *vis-à-vis* the member states.²³ Intellectual property had a marginal role generally, restricted to certain industries and arts, and with regard to the objectives of the Community, in particular. Its relationship to competition law was seen as one conflict among others between the Community norms of general application and nationally defined rights. The early doctrines developed in case law reflected the embeddedness of this conflict in such a construction of the Community's economic constitution.

Community harmonisation of intellectual property law started relatively late, in 1989 through the enactment of the first trademark directive.²⁴ After this, the expansion of the Community dimension of intellectual property law has been noteworthy. Now national legislation in the field of intellectual property law *not* originating from the European Union law or other European measures has become minimal.²⁵ A European level of substantive intellectual property discourse has emerged, covering all intellectual

21 The idea of technology as an object of patentable invention resonates with the deployment of elemental forces explained by the rules of physics and chemistry. See e.g. *Hilty & Geiger* (2005), p. 626 and *Dutfield* (2005), *passim* (analysing the emergence of the European synthetic dyestuff industry and the emergence of modern patent law in European countries). The origin of the patent system dates back to the creation of exclusive privileges of medieval times, later having the purpose of attracting skilled labour and technologies developed abroad to the markets of the states' territories. See the subsequent treatment of patent law history in chapter 5.

22 The concept of economic constitutional law will be discussed more extensively in the latter part of this introduction and in the beginning of chapter 5, in particular.

23 See also *Scharpf* (1999), p. 58. See more closely about the concepts of primacy and direct effect in chapter 3.

24 First Council Directive 89/104/EEC to approximate the laws of the Member States relating to trade marks [1989] OJ L 40/1.

25 See e.g. *Tritton* (2008), p. vii and *Bently & Sherman* (2009), p. 11-12. Even in the area of patent law, where there is relatively little Union harmonisation, the accession of all European Union member states to the Paris Convention, PCT, TRIPS Agreement and the EPC has connoted a high degree of harmonisation of substantive patent law, further strengthened by the harmonising effect of the Community Patent Convention (CPC), which has not entered into force. See also *Tritton* (2008), p. 61-62 and 86-87. About the harmonising effect of the CPC, see e.g. *Benyami* (1993), *passim*.

property rights. Not only legal scholars, but also national and Community Courts participate in this discussion.²⁶ Intellectual property laws in Europe are partly directly applicable regulations operating uniformly on the Union-level, partly national laws based on the implementation of European Union directives,²⁷ and – to a decreasing extent – nationally defined aspects of protection, yet also for these parts subject to the general norms and principles of Community law. The Community Courts give annually several important decisions interpreting and applying intellectual property law, having effects throughout the Union. Although the member state regulation of intellectual property matters will not abruptly vanish, the most important legislative and interpretive decisions are now made on the Union-level. Also competition law has strengthened its federal features, especially after competition law enforcement was reformed with Regulation 1/2003.²⁸ Taken as a whole, these developments connote that also the interaction between intellectual property and competition law is no more about the relationship between Community law and nationally determined intellectual property rights, but centrally about their interaction on the European level.

Already these developments change the relevant questions and the foci of the discussion from what they have been before. National cases function as possible directions for convergence and potential sources of legitimacy or critique with regard to the interpretations reached in the Community Courts. Instead of formal authority, the *substantive argumentation* of a domestic case becomes decisive for whether it will be followed by other courts in Europe, or whether it could successfully challenge the positions adopted by the Community Courts. National court and administrative decisions thus still continue to have a role in providing competing interpretations, and in forming a broader set of possible values and principles in the European legal system characterised by constitutional pluralism.²⁹ For example, national courts may discuss and follow or refuse to follow the patent case law of the European Patent Office and thus contribute to the formation of the European patent law.³⁰ Likewise, in the area of trademark law some domestic courts have challenged the interpretations of the Community Courts, and have been affected by case law from other member

26 The term *Community Courts* refers to the European Court of Justice and the Court of First Instance, the latter now renamed the *General Court* with the entry into force of the Lisbon Treaty, signed at Lisbon, 13 December 2007 (consolidated versions of the two basic Treaties in OJ 2008/C 115/01).

27 It is recognised that even far-going harmonisation measures could produce diverging results when embedded in the still distinct legal cultures and normative environments of the European Union member states. See generally about the related discussion *Teubner* (1998); *Legrand* (1996); *Nelken* (2003), and *Legrand* (2003), all *passim*.

28 Council Regulation (EC) No. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1 [2003].

29 See about constitutional pluralism e.g. *Walker* (2002) and (2003), *Maduro* (1998) and (2003), all *passim*. Constitutional pluralism will be discussed subsequently in chapter 3.

30 See e.g. *The Right Honourable Lord Justice Chadwick* and *The Right Honourable Lord Justice Jacob* and *The Right Honourable Lord Justice Neuberger*, *Aerotel Ltd and Telco Holdings Ltd and others*, [2006] EWCA 1007, Civ. 1371, 27th October 2006, where the UK court used case law from the other member states and contested the interpretations of the European Patent Office (EPO).

states.³¹ Similarly, although competition law has federalised more intensively for a longer period, the domestic prohibition of abusing a dominant position may still be stricter than that on the Union level, and could thus continue to provide competing interpretations also regarding the interaction between intellectual property and competition law.³²

More recently, the European Commission has called free movement of knowledge and innovation a “*fifth freedom*” in the single market. Thus, whereas the single market was “*originally conceived for an economy reliant on primary products and manufactured goods*”, now the single market “*can be a platform to stimulate innovation in Europe*”.³³ Reflecting similar ethos, the member states have agreed on the objective of making the Community “*the most dynamic and competitive knowledge-based economy in the world*” by the year 2010.³⁴ Indicating the instruments with which to pursue these ambitious objectives the Commission stated in its industrial property rights strategy from the year 2008 that “*Europe requires strong industrial property rights to protect its innovations and remain competitive in the global knowledge-based economy*”.³⁵

Such new emphasis in the official phraseology of the member states and the European Commission alike raises questions: are the on-going transformations restricted to the *federalisation* of intellectual property and competition laws in Europe, or could such statements indicate a deeper shift or transformation affecting their fundamental premises? Are innovation and global competitiveness replacing the traditional common market objectives of the Community as the central values of this

31 See e.g. case C-414/99, *Zino Davidoff and others v Tesco Stores Ltd and others* [2001] ECR I-8691 and case C-206/01, *Arsenal Football Club plc v Matthew Reed* [2002] ECR I-10273 and the related UK case law which clearly did not accept the interpretations of the European Court of Justice. See also *Sumroy & Badger* (2005), p. 174-176 (analysing the reluctance of the UK courts to follow the European Court of Justice case law, which – in the eyes of the UK courts – may broaden the monopolistic nature of the intellectual property right). See also *Davis* (2004), p. 1017-1018, discussing the English courts’ dislike of some trademark interpretations on the European level.

32 Regulation 1/2003 allows, in its Article 3(2), the member states to apply stricter national rules which prohibit and sanction dominant firms’ unilateral conduct. See also *Drexel* (2007), p. 648, 655, 660 and 664, who notes that the German legislator ultimately enabled the application of stricter standards under German competition law. The German courts, in turn, seem to have utilised this opportunity in *Standard-Spundfass*, Decision of 13 July 2004, KZR 40/02 (Bundesgerichtshof), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 36, issue 6/2005, pp. 741-754. See also *Orange-Book-Standard*, Decision of 6 May 2009 (Bundesgerichtshof), KZR 39/06 (Germany).

33 *A Single Market for 21st Century Europe* (2007), at p. 8.

34 See *Facing the challenge: The Lisbon strategy for growth and employment, November* (2004).

35 *An Industrial Property Rights Strategy for Europe* (2008), p. 2. Taking into account the desire for strong industrial property rights, the Commission still, perhaps ironically, calls the free movement of knowledge “*the fifth freedom*” (*ibid.*, at p. 3). See also the *Green Paper, Copyright in the Knowledge Economy* (2008), at p. 4, where the Commission states that “*A high level of copyright protection is crucial for intellectual creation*”. It should be obvious that the strategy-, policy- and green papers do not have formally binding nature, but they may affect the interpretations of diverse norms with formally binding nature, and thus assume normative relevance. Hence, the distinction between soft and hard law is relative. The “soft law” -instruments referred to above are used in this context to demonstrate ideological trends, which could be explicitly captured by the language of such documents.

joint European adventure, and are “*strong industrial property rights*” the means to get to these aims? Could such a new emphasis connote a new role for intellectual property and competition law in the change of paradigm from industrial to information society? What exactly should the respective roles of these laws be and *why*? Does the transformation to the networked information society imply an automatic and simple logic whereby information is now recognised as the key input and commodity in the global economy, hence requiring ever-stronger protection?

Seen from a broader perspective, the changes underway are by no means restricted to Europe. What is taking place here must be seen in the contexts of intensified *globalisation*, and the *information society developments* transcending the boundaries of Europe. Intellectual property rights have traditionally been the target of relatively far-going international regulation, as the Paris and the Berne Conventions, originally agreed upon more than hundred years ago, demonstrate.³⁶ However, the TRIPS Agreement concluded during the Uruguay Round GATT-negotiations in 1994 and since part of the World Trade Organisation (the WTO) *acquis*, reflects a change of paradigm in the international regulation of intellectual property rights.³⁷ Traditionally, intellectual property rights have been perceived as restraints of international trade. This approach is demonstrated, among others, in Article XX of the GATT Agreement as well as in the free movement provisions of the basic Treaties and the related case law of the European Court of Justice.³⁸ However, now an *inadequate level of protection* is increasingly seen as a restraint of legitimate trade. Accordingly, the TRIPS Agreement harmonised the substantive intellectual property norms globally on the level of the industrialised countries, and even above this level. Strong industrial property rights in the name of global competitiveness, innovation and knowledge-creation is thus not merely a European, but a universal phenomenon.

Due to these developments, any analysis of intellectual property and competition law should increasingly integrate global phenomena, in the sense of considering the international regulatory frameworks, as well as the global functions of innovation, production, information networks and competition. On one hand, these shifts push European law towards a proprietary model based on strong exclusive rights. The TRIPS Agreement seeks to impose restrictions on law reforms and interpretations limiting intellectual property rights. Protection *has* generally expanded in Europe,

36 Berne Convention for the Protection of Literary and Artistic Works of September 9, 1886, as last amended September 28, 1979; Paris Convention for the Protection of Industrial Property of March 20, 1883, as last amended on September 28, 1979.

37 Trade-Related Aspects of Intellectual Property Rights, Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization, signed in Marrakesh, Morocco on 15 April 1994.

38 General Agreement on Tariffs and Trade 1994, Annex 1 A to the Agreement Establishing the World Trade Organization, signed in Marrakesh, Morocco on 15 April 1994. The most relevant free movement provisions are Articles 34 and 36 FEU, ex. 28 and 30 EC.

the US³⁹ and elsewhere through the hardening of the existing protection and the establishment of new *sui generis* forms of protection.⁴⁰ Consequently, it has rapidly become mainstream scholarship to criticise the tendency to overprotect intellectual property. The legislative counterpart of more innovation in the minds of the legislators has been more intellectual property protection. This reflects legislative path-dependency: lock-in to the legal strategy once adopted. It also indicates faith in well-defined property rights being a generic solution to any perceived market failure: the closer to absolute the protection is, the better defined it is. Diverse public interest and competition -related concerns within intellectual property law and policy would merely confuse the boundaries of otherwise well-defined protection. On the other hand, globalisation and the related developments could also open possibilities for challenging or modifying some of the traditional premises of intellectual property protection leading to strong protection. Such possibilities comprise the dimensions of territoriality of protection and the incentive function of intellectual property protection, among others. These are challenged by the increasing irrelevance of geographic borders in the Internet environment and the significant non-commercially motivated social production and development enabled by the global information networks, leading to computer operating systems, encyclopaedias, and vast amounts of other content created without direct commercial motivation and freely accessible in the Internet.

Such possibilities are also opened by the functional differentiation of social spheres and their juridification on a global level. International human rights law, cultural or health law, to name but a few representative examples, have opened new channels for progressive agendas, alternative interpretations and developmental trajectories.⁴¹ The embeddedness of intellectual property and competition laws in diverse social spheres, technological contexts and legislative environments implies that international and

39 In addition to the case law from European countries, US case law, in particular, will be utilised in this research, as it influences the doctrinal and legislative developments of European intellectual property *and especially competition law*. It is used to understand, inform, contrast, and give ideas, and thus not as a formal authority to be followed in European law. Even the basic legal concepts, such as the concept of *rights*, may have different connotations in the US and most European countries. According to *Glendon*, rights are often defined in more absolute terms in the USA. See *Glendon* (1991), at p. 18-46 and also *passim*. *Glendon* holds that also property rights are generally perceived in more absolute terms in the US (*ibid.* at p. 20-40). It should be noted that this research is not intended to be based on systematic comparative methodology.

40 See more closely the discussion in chapter 5. See also e.g. *Reichman* (1997), p. 19-20; *Drahos* (2002a), p. 4; *May* (2002), p. 43-44 and with regard to patents, *Llewelyn* (2005), *passim*.

41 See as one example the discussion of the *Doha Declaration* and the related developments in chapters 3 and 5. The Doha Declaration led to a re-interpretation of the TRIPS Agreement's patent norms regarding compulsory licensing, enabling the taking into account of health law as explicated in the human rights instruments and the law of the WHO, in particular. However, as will be explained in the chapters referred to, the result has been partly frustrated by bilateral measures. Another example is provided for by the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions, which provides a counterweight to the WTO's trade agenda and could also affect the interpretations of the intellectual property norms. See *Burri-Nenova* (2008), p. 18 and 55-58.

European intellectual property policies represent only one globalised and europeanised regulatory policy among others. The increasing interaction and compatibilisation of these regulatory policies functions as an agent for change.

Moreover, the European Union's objectives have been broadened from the economic domain in a narrow sense to cover a broader range of interests and values. The objectives of the Union now include respect for human dignity, liberty, democracy, equality, the rule of law and respect for human rights. These are connected to the status of the Union as a society based on pluralism and tolerance. The Union is also based on respect to its rich cultural and linguistic diversity.⁴² The European Union legal system now also comprises a relatively developed system of fundamental rights protection.⁴³ Finally, its economic model is supposed to be based on “*social market economy*”, implying the presence of a strong social dimension.⁴⁴ Such fundamental changes in the underlying objectives of the Union enable challenging the “*strong industrial property rights*” –ethos, as expressed by the Commission, from within European law by critically evaluating the effects of “*strong rights*” on such competing ends and the related norm-complexes. These changes also connote that the substantive elements of economic constitutional law, to which intellectual property and competition law may be connected, have been altered.

We are indeed in midst of an economic and societal transformation which calls for re-embedding the intellectual property and competition law institutions. Globalisation, informatisation and the pursuance of the “*strong rights*” –ethos by the legislature and the judiciary alike have led to intellectual property rights becoming the paradigmatic instruments of transnational and global power.⁴⁵ This power is pursued as techno-economic, economically guided action in pursuit of interests, having the scope to change the society.⁴⁶ The networked information society context denotes

42 See Articles 2 and 3 EU as amended by the Lisbon Treaty.

43 See more closely chapter 4, which discusses the fundamental rights dimensions of the topic. The Charter of Fundamental Rights of the European Union of 7 December 2000, as adapted at Strasbourg, on 12 December 2007 (later the “EU Charter”), is now incorporated as part of the EU Treaty as amended by the Lisbon Treaty.

44 See Article 3(3) EU as amended by Lisbon Treaty.

45 See on a level of general societal analysis e.g. *Rifkin* (2000); *Lash* (2002) and *May* (2002), all *passim*. As noted by *Boyle* (1997), at p. 87, to say that the control of information has become one of the most important forms of power in contemporary society was a triviality, even a cliché already in the end of the last millenium. There is thus no particular merit in recognising this on a general level of analysis. However, as also noted by Boyle, working out the implications of this and other information society developments critically in jurisprudence and legal doctrine was rudimentary – almost non-existent – during that time. Although much insightful theoretisation has taken place since Boyle's statement, critical treatments extending to the doctrinal level within the core branches of law in the information society and intellectual property, competition and fundamental rights law, in particular, have been scarce. This applies especially to European Union law.

46 The exercise of such power could be described as a third entity between politics and non-politics. See *Beck* (1992), p. 222. Alternatively, like many Marxist writers consider it in line with the collapse of the public/private distinction, it can be described as clearly political in nature. See *Rosenberg* (1994) and *May* (2002), both *passim*.

that such power may comprise control of central platforms enabling communication, innovation and production. Hence, whereas in the industrial society intellectual property rights regulated the relations of authors and publishers and some industrial firms, in the networked information society they increasingly extend to and regulate the core cultural and informational resources, cultural non-market production, and the communication structures necessary for open and pluralistic public spheres, enabling individual autonomy and the existence of a civil society discernible from the capitalist economy. In the networked information society technology itself functions as an important regulator of individual and institutional behaviour.⁴⁷ Intellectual property, in turn, may define who has the power over individual uses and future trajectories of technologies: a single entity, several entities or no individual entity at all.

Hence, also the application of competition law to resources protected by intellectual property rights may affect not only the conditions of competition and incentives of the firms involved, but also the openness of the enabling platforms in question, having potential repercussions for diverse rights and collective goods, individual autonomy, communicative diversity and thus even the democratic character of networked culture. The application of competition law may modify the nature of an enabling platform from a closed proprietary system towards open access or commons-based regime. The European Court of First Instance's *Microsoft*-judgement is an example of a case where the treatment of the interaction between intellectual property and competition law affected not only the positions of the firms involved on the relevant markets, but also the conditions of Internet-based digital communications, communicative diversity and economic culture more generally.⁴⁸ The same may apply to competition law treatment of (other) patented communication and Internet-standards. Certainly, not all competition law cases present such features. However, the ones that do structure the communicative environments of our world and constitute part of the ground rules for the networked economy, having repercussions for the society at large. The ones that do not may nonetheless form and affect the doctrines and interpretation patterns with which the judicial decision-makers – in line with judicial path-dependency – approach the ones that are societally significant in themselves.

The research at hand is hence also about the transformation of European law in the on-going processes of globalisation and information society. The respective roles of intellectual property and competition laws will be evaluated in these processes. *Whether* and *what kind* of freedom of knowledge and innovation are fostered in the Union, as suggested by the Commission's statement cited above, will thus be critically evaluated in this research. At the same time, the research constitutes an attempt to redefine what should constitute the core areas of European economic constitutional law. In particular, substantive issues related to the democratic character of information

47 See the subsequent discussion in chapter 2.

48 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, Commission's Decision Case COMP/C-3/37, 792 *Microsoft*. Yet, it should be noted at the outset that these issues were not discussed by the Commission or the Court of First Instance. The case will be discussed in the subsequent chapters and in chapter 7, in particular.

society regulation should be taken from the periphery of European law – from something once called information technology law – to its centre-stage, forming core areas of European economic constitutional law.

1.1.3 Control of Private Informational Power and European Law

The research at hand will not attempt to review and analyse the transformation of the whole legal sphere in Europe with respect to the change of paradigm identified above. It will focus on the control of private informational power enabled by intellectual property rights. In addition to European intellectual property law, it will analyse the potential of fundamental rights and especially competition laws to address concerns related to such power.⁴⁹ My particular emphasis will be on power over technologies enabling Internet-based communications. As the core focus is on the dimensions of power enabled by intellectual property and the related control mechanisms – not on the future of the Internet or particular technological issues related to it – I actively avoid narrowing the relevance of the discourse to current technological questions related to the Internet. The specific technological questions discussed rather seek to bring forth issues and problems with generic relevance. The fundamental rights discourse will concentrate on the potential of fundamental rights norms to control intellectual property-enabled power in the information society contexts. With regard to intellectual property law, the research will address patents and copyright more extensively,⁵⁰ but restricts their analysis to the basic doctrines relevant in the information society contexts. Other intellectual property rights, such as trademarks, will be mentioned only to the extent necessary for explicating a tendency or a general point being developed. Thus, the term *intellectual property* used in the framework of this research is, unless otherwise indicated, restricted to copyright and patents as defined above.

With regard to competition law the research will focus on the doctrines and theories underlying the competition law treatment of a unitary refusal to license an intellectual property right, and thus on the effect of the prohibition of abusing a dominant position on the exclusivity inherent in intellectual property rights.⁵¹ An obligation to license affects the core rights of intellectual property: intellectual property rights are typically perceived as negative rights enabling the partial exclusion of others from the

49 Also other laws may become relevant within the sphere of this research, such as specific (tele) communication laws. This research does not analyse the effects of these laws in any detail, but refers to them occasionally. As specialised regulation, the (tele)communication laws concentrate on regulating particular issues and could not resolve – even if expanded in scope – most of the generic issues involved in this research. Moreover, competition law may have an important complementary role within the regulated (tele)communications markets. See more closely the discussion of the essential facilities doctrine in chapter 7. For an introduction to the (tele)communications law in Europe, see e.g. *Walden & Angel* (2005).

50 Also *sui generis* database right will be discussed under copyright, even though *sui generis* right by definition does not logically fall under the pre-existing intellectual property right categories.

51 The most relevant competition law norm is thus Article 102 FEU, ex. 82 EC.

protected subject-matter.⁵² Addressing this question opens up the basic constituents of intellectual property right and competition law institutions alike in a way that is relevant not only for addressing this particular interaction of norms.⁵³

The European Commission now considers that “[s]trong protection of industrial property rights should be accompanied by rigorous application of competition rules”.⁵⁴ It seems to presume that competition is needed in addition to the strong exclusive rights, that strong intellectual property laws enable and facilitate market power they are ill equipped to handle with, and that existing competition law could fulfil that function adequately. In this research the purpose of addressing the instruments, doctrines and underlying ideologies of competition law is also to question the adequacy of competition law as a counterweight to the “strong rights”-ethos. Should competition law not be prepared to tame the excessive market and informational power enabled by exclusive rights, the boomerang simply flies back to intellectual property law, challenging the “strong rights”-ethos in the first place. However, such an ethos is also questionable from the perspective of inherent objectives of intellectual property law, as will be discussed in chapter five and below.

From the beginning, intellectual property laws have involved considerations related economic power. Patents, in particular, were in mercantilist spirit originally considered as monopoly positions granted by states for the furtherance of their own competitive position.⁵⁵ In England, the 1624 Statute of Monopolies (patents) as well as the 1710 Statute of Anne (copyright), intended to break the abuse of the royal privilege of granting monopolies (patents), and the monopoly on publishing (copyright) held by the Stationers’ Company, a guild of London booksellers, respectively. The English Statutes functioned as models for the Patent and Copyright clause of the US Constitution and by so doing affirmed the anti-monopoly origin of intellectual property laws in the US.⁵⁶ Intellectual property laws have also from the beginning had a protectionist character by giving patent protection to imported innovations,

52 However, as said by *Drahos* (1999b), at p. 443, negative rights create zones of non-interference, thus establishing a right to exploit, unless restricted by other laws (or intellectual property rights of others).

53 See also *Ullrich* (2007), p. lxvi (identifying other intellectual property –related abusive practices like excessive or discriminatory pricing of licenses, prevention of parallel imports and tying and bundling which are less relevant in comparison with the core question of a competition law –based obligation to license exclusive rights). The current research refers to the other central areas of competition law – namely merger control and the cartel prohibition – only to demonstrate general trends, ideologies, as well as problems or pressure ensuing for the prohibition of abusing a dominant position.

54 *An Industrial Property Rights Strategy for Europe* (2008), p. 2 and 9.

55 See *Koktvedgaard* (1969), p. 50.

56 See *Ochoa & Rose* (2002), p. 912-928. The pre-existing “copyright” laws in the form of crown-granted printing privileges for *certain* texts constituted an instrument of state censorship. I do not classify these rules as intellectual property laws although the rules obviously regulated “rights of exploitation in information”, an overly broad definition *Drahos* (1999a), at p. 350, gives to intellectual property rights. The essential element of intellectual property protection was first the placing of inventors and authors at the centre-stage and the establishment of formal requirements for protection, binding also state authorities. Later on, in mid 19th century the focus shifted from authors and inventors to works and inventions. See also *Koktvedgaard* (1965), p. 55-57.

restricting protection to texts of domestic origin and requiring working of the patents within the borders of protection.⁵⁷ Although many of such mercantilist practices have subsequently been prohibited by the modern norms of the international intellectual property treaties, the protectionist spirit may be seen to underlie many of the current national and international protection measures alike.⁵⁸ Similarly, the anti-monopoly origin of intellectual property regulation is still significant, as it surfaces periodically in the perception of intellectual property rights as state-backed monopolies, thus providing a counterweight to their image as inviolable property.

Nevertheless, the traditional natural rights justifications of intellectual property proceed from the assumption that authors and inventors have a natural right to the fruits of their labour, thus questioning the validity of both anti-monopoly and protectionist considerations in intellectual property law. Although contradicting the genesis of intellectual property rights protection and lacking a solid philosophical basis, the natural rights justification has in its simplicity rhetorical force, and has accordingly functioned as one of the background ideologies for construing intellectual property rights as strong, inviolable property.⁵⁹ From a historical perspective, the Scandinavian legal realists were closer to truth when proposing that the competition-related origins of intellectual property laws should be recognised, and their norms should often be interpreted in conformity with general competition law principles and ideology, albeit recognising that an exclusive right is the intended effect of an intellectual property right.⁶⁰

The innovation incentive theories could now be said to form the main justification for modern patent and copyright institutions. The incentive theories are based on a presumption that creativity and invention are furthered by granting temporary exclusive rights in order to enable the amortisation of the related costs of inventive and creative activities.⁶¹ Intellectual property modifies competition by shifting it from production and imitation to competition on the level of innovation and creation.⁶²

57 See *Drahos* (1999a), p. 351-353; *Petrusson* (1999), p. 348 and *Dutfield* (2005), *passim* (with regard to patents) and *Burkitt* (1999), p. 154-156 (with regard to copyright law in the US).

58 *Porter* argues that the patent system has been strengthened in cycles as a measure regulating and formalising the international flow of knowledge at the request of private actors relating to the decline of the particular national hegemon at the time when it could no more be sustained by more informal control of technical knowledge. The strengthened patent system, in turn, enabled the construction of formalised private international organisation, leading to complex collaborative arrangements and barriers to entry. Between the World Wars the patent system was a key mechanism used to enhance cartel solidarity. See *Porter* (1999), p. 266. The TRIPS Agreement, in turn, may be seen to freeze the comparative advantage of the industrialised countries in innovation in their favour. See more closely the analysis of the TRIPS Agreement in chapter 5.

59 See *Oddi* (1996), *passim*. For a historical account, see *Machlup & Penrose* (1950), *passim*. See *Drahos* (1996), *passim* for an analysis of the alternative justification theories of intellectual property law.

60 See *Ross* (1953), p. 263 and *Koktvedgaard* (1965), p. 203-274.

61 From an economic perspective, the profit thus enabled is a necessary evil in that the flip side of profit is deadweight loss. There is no economic rationale for protecting inventors *per se*. See e.g. *Scotchmer* (2004), p. 415. See more closely the subsequent discussion under chapter 5.

62 See e.g. *Lehmann* (1985), p. 538.

According to this rationale, there would be no competition in the creation of intellectual assets requiring considerable investments and being easily copied by the rivals. Intellectual property thus stimulates the production of and competition with high-risk intellectual creations by providing temporary exclusivities. Perhaps counter-intuitively, the incentive rationale of intellectual property rights is thus ultimately based on the notion of competition; on the idea of competition transposed from one level to another.⁶³

Yet at times, there are no (even potentially) competing exclusivities. This may be caused by the broad scope of the intellectual property right in question or the market developments, such as strong network effects or technical standardisation leading to insurmountable switching costs between different technologies or systems.⁶⁴ The restructuring of incentives through intellectual property laws thus does not lead to innovation and creation becoming self-regulating systems whereby the market actors are capable of reproducing the societally optimal results without further governmental interventions. Although network effects and economies of scale are no new phenomena, they became to characterise the paradigmatic sectors of the economy in the 1990s, implying a winner-take-all logic as a pattern of technological development in many core sectors of the economy.⁶⁵ Alternative technologies, in themselves viable, could not access the markets due to incompatibility with the dominating network technology.

Furthermore, we can learn from industrial history that at many occasions informal sharing of knowledge in the absence of patents or the invalidation of key patents have led to rapid spurs in innovation and economic development.⁶⁶ This was the case with the British cotton hegemony, which was based on sharing of knowledge and was facilitated by the invalidation of Arkwright's patents. The US automobile hegemony, in turn, was based on the free flow of technology among the leading firms through cross-licensing of technology, combined with the invalidation of key patents. In addition, the early German and French successes at manufacturing automobiles were based on the invalidation of patents related to the four-stroke principle.⁶⁷ The central infrastructure technologies of the late 20th century, computers, software, the Internet and even biotechnology grew in their early phases of development largely unpatented. According to Lemley: "[F]or one reason or another, the basic building blocks of what might be called the enabling technologies of the twentieth century – including the computer, software, the Internet, and biotechnology – all ended up in the public domain.

63 See also *Ulrich* (2001), p. 373 and (2007), p. xli-xlii. *Kallay* (2004), at p. 42, states from the perspective of Austrian economics that *competition is innovation* rather than merely promotes it.

64 See e.g. *Shapiro & Varian* (1999), p. 173-225 and *Varian* (2003), p. 631-637, for easily accessible introductions to the economics of network effects. For a more formal treatment of network effects, see *Shy* (2001), *passim*.

65 See *Peritz* (2000), p. 329.

66 See *Porter* (1999), *passim* and *Merges & Nelson* (1990), *passim* and at p. 877, explicitly.

67 See more closely *Porter* (1999), p. 259-268. For additional perspectives see *Merges & Nelson* (1990), *passim*.

Whether through a policy decision, a personal belief, short-sightedness, government regulation, or invalidation of the patent, no one ended up owning the core building blocks of these technologies during their formative years”.⁶⁸ This is changing now on many fronts. Internet and the basic software platforms are increasingly covered by intellectual property rights. One of the potentially central emerging fields of the 21st century, nanotechnology, provides an example where the basic ideas were patented at the outset.⁶⁹ These historical examples and current developments effectively challenge the “strong rights” –ideology as the predominant strategy leading to innovation and global competitiveness.

Even if a certain degree of market power may be beneficial for the rate of commercial innovation in some circumstances, competition generally induces innovation as it precludes a managerial attitude and makes the introduction of innovations at a faster rate a necessity.⁷⁰ In other words, commercial innovation is not only reactive to temporary exclusivities, but also and perhaps more so, to competitive pressure. In order for the exclusive right to increase commercial creativity and innovation, it is necessary that the exclusive right be used in (at least) potential competition with other exclusivities.⁷¹ The incentive justification – in its developed form – suggests that despite having different approaches in their basic modes of regulation, intellectual property and competition law would not have conflicting objectives: both could be seen to aim at increased welfare and enhanced production of technological assets. Application of competition law could modify the outcomes of intellectual property application, but in a complementary rather than exclusionary fashion. In line with such currently wide-spread understanding, it has now become a *cliché* to note that intellectual property rights and competition law are *not* opposed to each others, but are *complementary* and have *common objectives*.⁷²

Obviously, the perspectives about the appropriate weighing between the incentives needed for innovation and the benefits of competition resonate strongly with the geographical area and era in question.⁷³ In the networked information society context the whole concept of innovation assumes new dimensions. Innovation in information society is also much about changing social practices, and technologies about giving meaning to material artefacts.⁷⁴ The networked environment has enabled significant new forms of uncommercially motivated decentralised innovation.⁷⁵ The traditional

68 Lemley (2005b), p. 613.

69 See Lemley (2005b), p. 606-609.

70 See e.g. Jenny (2000), p. 25. Furthermore, cartelistic groups are often cautious about innovation and change, as a major technological advance often leads to new rounds of bargaining within the group, potentially blocking its operation and leading to its destruction. See Olson (1982), p. 62-63. For a formal economic argument, see Arrow (1962), *passim*.

71 See Ullrich (1995), p. 194 and (2007), p. xli-xlii; Pitofsky (2000), *passim* and Drexel (2008), *passim*.

72 See e.g. Reichman (1993a), p. 116; Anderman & Kallaughner (2006), p. 7 and Drexel (2008a), p. xv.

73 See generally Reichman (1993b), p. 174-175.

74 For an insightful analysis of innovation in the information society, see Tuomi (2002), p. 1-35 and also *passim*.

75 See e.g. Benkler (2006), *passim*.

incentive-justification and the prevailing view of complementary between intellectual property and competition law refer to a world where intellectual property was predominantly a matter of certain industries, publishers and arts. Innovation and creation facilitated by intellectual property rights were restricted to these spheres. The restrictive effects of protection largely fell on these domains in the form of restrictions of competition on the level of production and direct imitation, too. This is no more so, as has been argued above and will be further elaborated subsequently. The traditional incentive justification and the complementary-thesis should thus be placed under critical scrutiny, too. Some of the basic methodological premises for doing so will be discussed directly below.

1.2 About Research Genre and Some Underlying Premises

1.2.1 Research Genre

Addressing the interaction and cumulative effects of multiple legal institutions requires going beyond the express norms of the legal institutions in question; it requires constructing a theoretical framework.⁷⁶ For example, the relationship between intellectual property and competition law is not about a choice between two mutually exclusive norms following the logic of *lex specialis*. It is rather about systemic accommodation of two sets of special norms regulating conduct from their own points of views and using their particular regulation strategies. The absence of an express norm regulating their interaction is no gap in the law to be filled in by the legislators: the interaction between norms is *typically* a matter of argument and construction. It is the task of the judge and legal scholar to construct the argumentative models needed.

Legal dogmatics does not constitute a particularly fruitful starting point for the current research agenda: as typically backward-looking and norm-centred, it is powerless when analysing the role of law in societal transformations, or the impact of societal transformations on the functions of law.⁷⁷ There are always alternative ways for constituting the field and addressing the conflicts in legal terms.⁷⁸ For example,

⁷⁶ As *Lavapuro* (2009), at p. 280, notes, the branch of law –specific doctrines cease to be branch of law –specific, when they seek to resolve conflicts between their own norms and norms emanating from other branches of law.

⁷⁷ Legal dogmatics at its best – relevant, analytical and connected to societal change – is still typically rooted in certain foundational and thus persistent, unquestioned presumptions about law, its sources and functions, among others. The societal transformations addressed in this research (and more generally) not only provide new circumstances by re-positioning existing interests and values, but may require the identification of new ones and *could signify changes in the way we should understand the functions, sources and concept(s) of law*. Furthermore, the necessarily proactive role of law and legal doctrine in economic and social transformations implies that the claim of neutrality implicitly made by legal dogmatics could not hold water.

⁷⁸ See generally *Kennedy* (1997), at p. 140-141, and also *passim*.

is a patent an exceptional monopolistic position granted by the state for industrial policy reasons? Or is it property naturally belonging to the inventor, only codified in patent law? Do we see the intellectual property right as an exception to expression, competition and the freedom to utilise resources, or do we treat the application of competition law as an exception to the freedom to contract and to the freedom to exercise property rights? Are we confronted with an infringement of property rights, abuse of a monopolistic position or an exercise of access rights? What will be the intervening values and principles which structure and affect argumentation in individual instances of application? Are they based on the protection of the moral and economic rights of authors as values in themselves, innovation-based growth and economic efficiency, or the control of excessive informational power, preservation of public domain and enablement of participation and discourse necessary in a democratic society?

The malleability of the normative universe as such could support any of these premises. The legal sphere comprises institutional possibilities.⁷⁹ It contains competing and colliding values, principles and legal strategies and thus possibilities for alternative futures.⁸⁰ The existence of such possibilities forms one premise for this research.

Teubner describes the tension in law between its internal autonomy (formality) and simultaneously increasing dependence on the demands for performance from its social environment it tries to regulate: law is “sandwiched” – on one side by social state policy calling for legal enforcement and on the other by the regulated areas of social life. In order for law to be successfully enforced within the social fields it aims to regulate it must be adjusted to the logic of the social environment it tries to regulate. This calls for contextual interpretation considering the inherent logic of the social context regulated.⁸¹ Legal provisions thus have to be constructed into applicable norms in the light of the demands stemming from the concrete application situation on one hand, and based on the comprehensive legal order on the other hand. The concrete norm to be applied is often constituted of norms or norm fragments emanating from domestic, regional and international (or global) levels of regulation.⁸² Instead of reducing the applicable norm to one branch of law only and thus neutralising the overlap of norms, the effects of all potentially applicable norms in the given context should be evaluated.⁸³ Contextual application of law and the embeddedness and construction of norms on a more comprehensive legal environment forms another basic premise for this research.⁸⁴ But as indicated above, law is not only sandwiched

79 *Unger* (1996), p. 137 and 181.

80 *Unger* (1996), p. 137. See also *Gustafsson* (2002), p. 102-103.

81 *Teubner* (1987), p. 20-21, 25 and 33-34; See also *Teubner* (1996), *passim* and chapter 3 subsequently.

82 Similarly with regard to human rights law see *Scheinin* (1991), p. 34-38 and 353 and (1993), p. 18.

83 See *Pöyhönen* (2000), p. 12-14 and 198-201 and *Karhu* [ex. *Pöyhönen*] (2003), p. 803-804 (characterising an approach he calls *presumptive contextualism*).

84 See *Snyder* (1990), *passim* for identifying a research genre called *European law in context*.

between formality and the requirements of social spheres of its operation. It is also inherently utopian and aspirational, and thus inescapably political.⁸⁵

For comprehending the current research agenda and the discourses to which the research questions will be connected, it must be understood that a norm conflict appearing on a horizontal level between private firms or individuals may comprise important structural conflicts transposing the conflict into abstract level of political and moral values.⁸⁶ Intellectual property conflicts are symptomatic of many political problems with which the information society may be concerned. While many of the conflicts may seem trivial, some could be interpreted as collisions of neoliberal globalisation and democratic values.⁸⁷ In the latter instances the norm conflicts should not be trivialised, but seen in the wider context of the structural conflicts involved. The social and political conflicts produced by technological change and ownership of informational resources cannot be reduced to the question of interests of individual market actors, as diverse values and comprehensive views are involved in these conflicts, too.⁸⁸ Increasingly often, these conflicts entail decisions between democratic participation and centralised control.

1.2.2 Utilisation of Economic Analysis

It is necessary discuss the utilisation of economics as a methodological question and as part of the theoretical perspectives developed. Economic analysis of both intellectual property and competition law is emerging as the dominating research genre, partially replacing legal dogmatic approaches. This applies especially with

85 See e.g. Koskenniemi (2005a), p. 16.

86 See e.g. Teubner (1991), at p. 40, who divides the demands of diverse social spheres on a specific contract to three levels: 1) the *interaction level* reconstructing the expectations of the contractual partners; 2) the *institutional level* whereby the contract has to deal with the demands of market and organisation; and 3) the *societal level*, whereby the contract has to cope with the requirements of the large functional subsystems such as politics, economy and law. Like a general clause of contract law in Teubner's example, the interaction between intellectual property and competition law may be seen to provide room for dispute resolution on all these levels.

87 As Santos (2002), at p. 442, notes *neoliberalism* is rather a new version of conservatism than a new version of liberalism and argues (*ibid.*, at p. 445) that the legal and judicial needs of the market-based, neoliberal model are simple: "*transaction costs have to be lowered, property rights must be clearly defined and protected, contractual obligations must be enforced, and a minimalist framework has to be put in place*". The term neoliberalism as used in this research largely corresponds with the definition given to it by Santos, thus excluding e.g. ordoliberalism.

88 In norm conflicts the idea of "balancing" the conflicting interests has become a truism. Teubner (1989), at p. 747-748, states about balancing as a solution that "[t]here are just too many explicit and implicit normative assumptions based on a complex network of legal-doctrinal considerations that enter into legal analysis". What we need in the evaluation of conflicts is a vision of a defensible form of social life. Such vision need not be elitist but can be based on broadly shared moral principles. From this perspective, resolving conflicting claims is not like bargaining at the market square. It is rather assessing what is required by the totality of norms and norm fragments present in a given context, and what is morally right and what is not in given circumstances. See also Singer (2000), p. 11-12.

regard to the US discourse, which could be characterised as being largely occupied with economic analysis of intellectual property and competition law alike.⁸⁹ However, it is so increasingly also with corresponding European legal scholarship. Economic analysis – or at least declarations of the outcomes representing “*sound economics*”⁹⁰ or a “*more economic approach*”⁹¹ – is becoming the norm for research analysing intellectual property and competition law in Europe, as well.⁹² It should be clear by now that the research at hand is not based on this currently prevailing research genre. On the other hand, my intention is by no means to reject economic analysis. Doing so would miss many important dimensions of the topic. My purpose is to utilise economic analysis to *understand* and *explain* the mainstream understandings and legal developments,⁹³ to *criticise* one-dimensional economic discourse, and to *benefit* from the critical potential inherent to economic analysis of law.⁹⁴

Economic analysis directs attention to certain consequences of alternative rules or interpretations and thus provides one possible way out from both naïve legal dogmatics and simplistic rights approaches typically not very helpful in addressing constant conflicts between rights, the application of norms in changing contexts or societal circumstances, or when reflecting the desired future directions of legislation and doctrine alike. Economics provides a disciplined way to analyse the likely economic consequences and predict the action of commercially motivated operators. Quite often, pursuing the analysis surprises our intuition and leads to changes in what we consider the most desirable ways to achieve the objectives inherent in law.

However, as has been repeatedly argued, economic analysis of law cannot provide a unitary metatheory to account for the diverse complexities and controversies existing in the law.⁹⁵ Teubner has critiqued the approach of treating various social activities

89 See e.g. the contributions in *Anderson & Gallini* (1998) and *Eisenach & Lenard* (1999), both *passim*.

90 See e.g. *Kallaughner & Sher* (2004), p. 274 and *Drexler* (2004), *passim*.

91 See *Drexler* (2007) and (2008), both *passim*.

92 See also e.g. *Eklöf* (2005), *passim* (analysis of copyright and prohibition of abusing a dominant position based on a combination of legal dogmatics and law and economics –influenced argumentation models).

93 For example, mainstream economic analysis connected to the instrumental justification of intellectual property participates in constituting the contents of intellectual property norms and could explain parts of its development, such as the globalisation of intellectual property protection through the TRIPS Agreement. See also sub-chapter 5.3.

94 It should be self-evident that the deployment of terms like “economic analysis” or “economics” does not imply a naïve belief in a coherent set of economic theories or disciplines. This will become apparent in the course of this research. What is considered important in this respect is sufficient *transparency* and *many-sidedness* – the utilisation of several economic theories and explicit recognition of different perspectives and schools of thought – whenever needed. The reservation stated above applies to the umbrella term “law and economics” as well. There are several branches under that label, such as public choice theories, comparative law and economics etc. For an introduction to different schools of thought within the law and economics discourse see *Mercuro & Medema* (1999), *passim*. If not indicated otherwise, I refer to law and economics -tradition as the mainstream law and economics discourse based on welfare economics and wealth maximisation, utilising microeconomic theory and cost-benefit analysis. Known representatives include names such as *Posner, Landes, Cooter* and *Ulen*.

95 The literature on the topic is vast. As representative examples, see e.g. *Dworkin* (1985), p. 237-266 and 267-289; *Sunstein* (1997), at p. 103 and also *passim*. See also the literature referred to in the following pages.

without respect to their internal rationality and approaching them from the cost-benefit language of the economy only.⁹⁶ The institutional rationality of the concrete social sector involved – such as art, health or science – should be weighed against both economic and political demands.⁹⁷ The law is not exhausted to consequentialism measurable on the scale of wealth maximisation. Nor is it only satisfied with fulfilling current preferences, but has an expressive function in explicating diverse values, as well as a function in the processes of preference *formation*.⁹⁸ The cost-benefit approaches only deal with values or preferences already existing in society and are thus satisfied with gratifying pre-existing desires.⁹⁹ As argued by *Singer*, when construing property rights and institutions we are not only maximising wealth and deciding how to divide it up. To an appreciable extent, *we are also choosing what form of social life we want to have*.¹⁰⁰ More generally, law participates in the creation of the foundational values for the market order and society. Questions related to power, justice, cultural identity and societal structuration cannot be excluded from the analysis.¹⁰¹ This applies with particular force in a networked information society where discourse, meaning, culture and democratic participation are increasingly mediated by technological environments that are, for their part, partially constituted through legal rules affecting their trajectories and discourses constituting the contents of these norms.¹⁰²

Interpretive models based on economic wealth maximisation are thus by no means value-neutral. Proposing that all values and societal ends are commensurable

96 *Teubner* (1999), p. 68 and 75-77 and also *passim*. See also *Teubner* (1987), *passim* and *Teubner* (2008), *passim*. The practice critiqued by Teubner can in particular be connected to the Chicago School, its programmatic expansion and imposition of economic rationality and analytical schemata on other social spheres. See *Lemke* (2001), p. 197.

97 *Teubner* (1999), p. 67-68. This idea is in line with imposing constitutional constraints on the subsystem of the economy. *Habermas* (1992, 1996), at p. 353, argues that it is a different thing to constitutionalise communicatively integrated spheres (such as the family or school) and systematically integrated large organisations or networks (such as markets). Only in the former the constitutionalisation would connote superimposing the legal framework on a normative (social) infrastructure not legally created. Yet, the social relations and identities within family, school etc. are also necessarily structured by the legal ground rules and their path-dependent evolution, as illustratively pointed out by *Kennedy* (1993), *passim*.

98 See *Dworkin* (1986), p. 299-301; *Sunstein* (1997), p. 17-20 and 89-104; *Rawls* (1973), p. 259 and *Sclove* (1995), p. 162-163. *Sen* (2002), p. 621-629, makes a distinction between the opportunity aspect and the process aspect of freedom, linked by preferences related to *outcomes* and preferences related to *processes*. Individuals may have process-related preferences over the processes that occur in *their own lives* and preferences over the processes that operate *as general rules in the working of the society*.

99 *Hausman* (1992), *passim*; *Sclove* (1995), p. 162-163 and *Posner* (1990), p. 368. For an early survey of the position of “nonmarket” values in economic thought see *H. Levin* (1956), *passim*.

100 *Singer* (2000), p. 107. In intellectual property context see similarly *Fitzgerald* (2001b), p. 56.

101 *Kennedy* (1993), *passim*. See also *Study Group on Social Justice in European Private Law* (2004), p. 655-658.

102 *Benkler* has comprehensively discussed networked information society and the role of law in affecting its fundamental aspects like individual autonomy, democracy, justice and development, social ties and community. See *Benkler* (2006), *passim*. See also *Lessig* (1999a), (1999b), (2001), (2004a) and (2006), all *passim* and *Fitzgerald* (2000a), p. 47 and 52 and also *passim*.

and capable of being valued on the same scale (individuals' willingness to pay) is itself a value statement.¹⁰³ Some values are incommensurable.¹⁰⁴ From the perspective of Kantian philosophy values related to individual autonomy and respect for human dignity could not be placed on the same scale with values related to maximisation of economic welfare, as the former enable making value statements in the first place.¹⁰⁵ Likewise, values enabling reasonable value pluralism are the core ones from the Rawlsian perspective of political liberalism, and values related to opinion-formation and discourse within the civil society essential to Habermasian deliberative concept of democracy. Treating such values on the same scale with economic wealth maximisation and asking how much individuals would be willing to pay for personal autonomy, societal value pluralism or participation in lively civil society required in a democratic society contradicts these theories and, if given normative significance, has considerable effects: giving the prediction of economic consequences normative force in legal interpretation should be no more automatic than giving normative force to a particular philosophical or political theory.

Seeing decision-making as economic optimisation reduces the matters considered from issues of public debate into managerial questions restricted to the parties having something directly at stake for which they are willing to pay. Issues involving values and public preferences are removed from the democratic procedure. They become localised as individual instances to be objectified and neutralised in the process of economic wealth maximisation. The implicit ideology underlying this process is that wealth maximisation, through the fulfilling of individual preferences, is an objective uniting any society. *Sagoff* has provocatively called this *communistic fiction*: “*In welfare economics, the Marxist dream is realized; the triumph of society over polity, administration over government – and thus the final withering away of the state.*”¹⁰⁶ In addition, corporate power is presumed to be politically neutral: it only directs the resources of society in the manner corporate managers view best. If power is narrowly construed as the ability of an individual to satisfy her personal preferences, then, to the extent the managers put aside their personal preferences, they put aside their power as well.¹⁰⁷

103 *Sagoff* (1988), p. 45, states that the neutrality of the economist is legitimate only if private interests are the only values in question. Similarly *Sclove* (1995), p. 170-175 and *Singer* (2000), p. 129. The claimed neutrality of wealth maximisation is based on formal equality and liberty of contract: the latter is required by wealth maximisation. Freedom of contract allows every participant to exercise personal autonomy. In this logic, wealth maximisation can be seen to serve an underlying commitment to liberty and personal autonomy. See e.g. *Peritz* (2000), p. 260.

104 *Sunstein* (1997), p. 71-98; *Sagoff* (1988), p. 51-70; *Sclove* (1995), p. 170-175 and *Singer* (2000), p. 129.

105 *Sclove* (1995), p. 174-175 and *Sagoff* (1988), p. 44-45, develop this example in more detail.

106 *Sagoff* (1988), p. 48 and 108

107 See *Sagoff* (1988), p. 47. *Posner* (1990), at p. 354, adopts such a perspective of power when holding that firms or other organisations are just conduits for individuals. See the subsequent discussion of power under heading 2.3.

Instead of conceiving economic efficiency and other values as mutually exclusive choices, we should be interested in *which* values should be efficiently pursued.¹⁰⁸ Although efficiency analysis as such does not prevent us from taking other than measurable market values into account, it easily places them on the periphery. Neoinstitutionalist approaches could usefully broaden the perspective by enabling the study of existing economic processes and their connections not only to market institutions but also to (other) societal institutions and law.¹⁰⁹ Although this research utilises some works which could be placed under the banner of neoinstitutionalism (such as evolutionary and information economics), it is rather based on a heterarchy of economic discourses depending on the issue and argument being developed.¹¹⁰ Although neoinstitutional theories appear more realistic in their basic presumptions, they do not provide theoretical tools to question economic efficiency aims as such.

The complementary utilisation of economic analysis could also be seen to be in conformity with the European continental model of “*social market capitalism*” which seeks to respond to both social concerns and market efficiency. This model may be contrasted with the more market-oriented model of capitalism of the US, whereby the rationale for government intervention in the economy has predominantly been to correct market failures as identified by economists. In that system, the unregulated market may be seen as the standard state of affairs and those arguing for government intervention must prove that the intervention is justifiable to achieve important public policy objectives.¹¹¹ Although the European Union countries do not form one unitary area representing a single model of capitalism, the European countries as a whole and the EU Treaties in particular,¹¹² seem to emphasise the strategic role of government, the regulation of markets and the social dimension of capitalism. The

108 See also *Lessig* (1999a), p. 209.

109 See e.g. *Knudsen* (1993), p. 267-270 and *Timonen* (1997), p. 48-69 for introductions to neoinstitutionalism.

110 For example, addressing the *mainstream* economic theories perceived to underlye intellectual property protection is important for the understanding of both institutional practices and scholarly discourses based on economic analysis of intellectual property law. On the other hand, international economics may be used to explain the recent developments related to the globalisation of intellectual property protection. Additional theories could be used to challenge the mainstream understandings or to support proposals based on constitutional and democratic theory. For a similar open and eclectic approach to argumentation in general see *Kennedy* (1997), p. 15.

111 See e.g. *Gilpin* (2001), p. 131, 153-154 and 168.

112 See Article 3(3) of the Treaty on European Union, as amended by the Treaty of Lisbon, signed at Lisbon, 13 December 2007 (noting that the Union is based on a social market economy).

forms of capitalism vary, with corresponding differences in government policies, legislation and other institutions.¹¹³

However, it is recognised that some laws have partially or foremost an underlying justification related to economic ends.¹¹⁴ This is possible especially when the law is used as a steering medium instead of being what *Habermas* calls law as an institution.¹¹⁵ The *telos* of a particular legislation is always a matter of construction and interpretation. Even if the *travaux préparatoires* or provisions explaining the objectives of the law do not speak of an economic rationale, the function of the legislation may change under time and transformation of society.¹¹⁶

Intellectual property and competition law are relatively strongly result-oriented and instrumental in their nature. Accordingly, economic analysis of both sets of laws has become increasingly popular, as already indicated. Economic analysis now forms an inherent component of competition law application. It is not only built into its individual concepts and instruments, but economic welfare has also emerged as one of its currently endorsed primary objectives. Similarly, the incentive function of many intellectual property rights – now often recognised as the modern justification of intellectual property rights protection – has an economic nature, too.¹¹⁷ When interpreting such legislation having foremost or partially an economic underlying justification, economic analysis of alternative interpretations is often grounded to secure the *telos* of the law. One simply understands neither the essential dimensions of the functioning of intellectual property and competition law institutions nor the current theoretical discourses around them without comprehending the basic underlying economic concepts and arguments.

113 *Gilpin* (2001), p. 148-175. For a classic survey of the models of welfare capitalism see *Esping-Andersen* (1990), *passim*, distinguishing three basic types of welfare capitalism: “liberal” welfare state (e.g. USA, Canada, Australia); “corporatist” welfare states (e.g. Austria, France, Germany, Italy); and “social democratic” welfare states (e.g. the Nordic countries). See *ibid.* at p. 26-29. *Braudel* (1979, 1986a) and (1979, 1986b), provides a historical account of the development of market economies and capitalism. Braudel makes a distinction between market economy and capitalism, the latter being a more specific and recent concept. Capitalism does not control the whole market economy consisting also of small businesses and producers and workers in modest enterprises. Capitalism refers to top-level, large-scale banking, industrial production etc. Braudel emphasises the connections of capitalism with social order and the state: accordingly, the worst error of all is to assume that capitalism is simply an “economic system” (*Braudel* 1979, 1986b, at p. 623).

114 It is thus also recognised that the normative relevance of economic analysis and argumentation varies contextually and depending on the applicable laws. Estimate of the likely economic impact of an interpretation may always form relevant information or a *topos*: a consideration or argument having at least potential relevance in interpretation. As economic analysis is itself diversified and by its nature based on uncomplete information, it could be seen to produce several *topoi* to be evaluated together.

115 *Habermas* (1981, 1987), p. 307-310 and *Habermas* (1992, 1996), p. 80-81.

116 For a classic analysis see *Renner* (1949), *passim* (treating the institutions of private law).

117 See e.g. *Katz* (2007), at p. 841, noting that the trade-off and “balance” between incentive and access created by the length, scope and exemptions to intellectual property protection provides the basic economic theory of intellectual property laws, as well as their basic legal justification, constituting a story rarely challenged.

Still, wealth maximisation is not the only objective of either legal institution. Weighing the cumulative effects of the objectives and proposing changes to current interpretations is thus necessarily a normative task. As competition law participates in regulating aspects of economic culture, various collective goods related to economic rights and the control of private power in the marketplace of ideas, it must also necessarily participate in the definition of the related values. An economically efficient market in an authoritarian society is hardly the ideal pursued in competition law, and could prove a contradiction in terms in the longer run. Furthermore, copyright seeks not only to maximise the production of creative works, but also protects the moral rights of authors. Patent laws, in turn, not only incentivise invention, but also seek to foster the dissemination of knowledge. All these laws also refer to non-market values and contain exceptions intended to secure public service functions, freedom of speech and research, public's access to cultural resources, and so forth. Despite the economic ends now constituting important justifications of intellectual property and competition laws, they must be applied within functionally differentiated spheres following diverse rationalities, and within multiple contextually determined legislative environments constructed by norms emanating from different branches of law and norm-producing centres. Finally, even if it were possible to construct a "pure" intellectual property application situation the fact remains that intellectual property is regulated at three levels: the global, the regional and the state level. At which level should welfare be maximised? Can we tell without resorting to normative argumentation?

All this makes purified intellectual property or competition law application a practical impossibility. The *polycontextuality*¹¹⁸ of intellectual property and competition laws, their indispensable interaction with diverse social spheres obeying distinct rationalities and their embeddedness in multiple normatively saturated environments of application means that even if their basic societal justifications related to economic ends only, their application in real-life contexts could not be restricted to economic analysis alone. This is made evident by the constant overlaps and cumulative effects of norms and norm fragments in application discourse. In any case, the present research argues that neither intellectual property nor competition law serves economic ends only. Yet, there are additional questions related to the use of economic analysis.

The focus of this research on the changing of paradigm from industrial to networked information society complicates the utilisation of economics further. Neoclassical economics, in particular, is blind to historical transformations and societal change triggering deep-level pressures on the studied legal institutions. Innovation and the determinants of technological change are not adequately addressed in neoclassical economics and law and economics based on it.¹¹⁹ This has led many to build on

118 See more closely *Teubner* (1999), p. 396-397 and (2008), p. 837 and *Gear* (2003), *passim*.

119 See also *Itoh* (1990), p. 87-89 and *Gilpin* (2001), p. 60-61, 75, 105 and 111. Cf., however, with neoinstitutionalism as characterised by *North* (1990), *passim*, whereby the core focus is on institutional change and the interaction between economic action and institutions.

Schumpeter's views of capitalist dynamics.¹²⁰ Schumpeter argued that capitalism is by its nature an evolutionary process which could best be characterised as a form or method of economic change in which new technologies, commodities and new types of organisation revolutionise and destroy the existing economic structures from within.¹²¹ The problem usually addressed by neoclassical economics is how capitalism administers the existing structures, whereas the more relevant question is how it destroys them through the emergence of new ones in line with Schumpeter's well-known thesis of creative destruction. In this perspective, price competition is far less significant than the actual and potential competition of new processes and products.¹²² However, also Schumpeter's argument that innovation takes best place in monopolies capable of providing stability and high profits, is based on mainstream neoclassical notions of monopoly, monopoly profits and a perfectly competitive industry.¹²³ It is also based on the modes of production characteristic to the industrial society where the basic infrastructure needed for any production and distribution of products was extremely expensive when compared to the networked information society. The current wide availability of the basic infrastructural resources – computers, Internet technologies and digitised content – needed for the production and global dissemination of information goods, has – at the latest – effectively questioned Schumpeter's idea of monopolies as the most effective innovators.

It has been argued that the development of the networked information society could lead to a major change of economic paradigm comparable to industrialisation.¹²⁴ Although Schumpeter usefully shifted the focus to the long-term dynamism of the economy,¹²⁵ his theory is anchored in the production and innovation models of the industrial society. Thus, for Schumpeter a system of strong patent protection may be fully grounded as the prospects of monopoly rents may be an important factor for the long-term performance of the economy, despite the inevitable short-term deadweight loss.¹²⁶ When access to the basic infrastructures of production is cheap and ubiquitous in the information society but patents could signify the most effective barrier to entry to some productive and innovative activities, this presumption must be challenged.

120 In the context of the interaction between intellectual property and competition law see e.g. *Kallay* (2004), *passim* and *Drexler* (2008), p. 40-43 (also criticising the neo-Schumpeterian approach).

121 *Schumpeter* (1942), p. 80-83. From a sociologist's point of view see *Ellul* (1954, 1964), p. 112. Already *Marx & Engels* (1888, 1998), p. 13, realised that capitalism must constantly revolutionise the instruments of production. See also *Sideri* (2007), p. 17-18, for an argument that technological advance was an important factor for Marx and that Marx, in turn, influenced strongly Schumpeter's analysis of innovation and technological development.

122 *Schumpeter* (1942), p. 84.

123 *Schumpeter* (1942), p. 89-90. See also *Peritz* (2000), p. 109.

124 See the sources referred to in the beginning of sub-chapter 1.1.2 and especially *Benkler* (2006), *passim*.

125 Schumpeter said that "any system which at every given point of time fully utilises its possibilities to the best advantage may in the long run be inferior to a system that does so at no given point of time". This is because the latter's failure at every given point may be a condition for the level or speed of long-run performance. See *Schumpeter* (1942), p. 83.

126 See also *Audretsch* (1995), p. 41.

Strong protection based on the industrial society conditions of production could in the current circumstances constitute an impediment for the emergence of innovation and production models paradigmatic to the networked information society and, as a corollary, artificially sustain the monopolistic positions and economic structures of the industrial age. There is thus a potential problem with much of existing innovation and competition economics: it is based on the innovation and production models characteristic to the industrial society paradigm, where innovation and production is the task of industrial firms only, typically acting individually.

However, regarding the economic dynamics of innovation, production and creation of wealth in the networked information society, we still seem to be at the stage where visionary and insightful writers from fields other than neoclassical economics, including legal scholars (!), have advanced our understanding the most.¹²⁷ Surely, no paradigmatic shift takes place overnight and the traditional economic models retain much of their explanatory force in many contexts: the industrial model of innovation and production will not disappear unexpectedly, but will remain one among others. Yet the changing of the economic paradigm complicates the utilisation of economic analysis. The inevitable outcome of this is a gradual mixing of traditional economic analysis with the literature addressing the deeper-level transformations of the economy.

Another deficiency in neoclassical economics is its approach to what is referred to as external effects.¹²⁸ This deficiency is not restricted to the networked information society context, but is exacerbated in it as the paradigmatic platform used commercially for production and distribution, namely the Internet, is at the same time the central framework for the civil society's communication and interaction, social networking and cultural production. In this research the role of spillovers is seen in a broader context than in typical neoclassical economics, or law and economics based on it. The potential of market transactions, and thus also the interpretations of laws regulating them, to structure the networked information society forms one of the underlying themes for this research. Such spillovers extend beyond the market realm, and structure the conditions and autonomy of individuals, communities, social spheres and civil society in general. Law is thus constitutive of paramount aspects of the networked information society.

Mainstream economic theory typically describes an external or spill-over effect as an occurrence of incidental, unintended costs or benefits on others inflicted by production or consumption. It is an effect of one economic agent's behaviour on another's well-being, where that effect is not reflected in money or market

127 See e.g. Lemley & Lessig (2001); Frishmann (2005) and Benkler (2006), all *passim*.

128 The term *externality* is most often used in economics. The precise definition of it and its relation to the concept of external effect is not settled. The former concept is more often used to denote external costs and the presence of a market failure situation while the latter is sometimes considered to be a broader concept. See in more detail Hausman (1992), *passim* for an analysis of these definitions in economic literature.

transaction.¹²⁹ The core idea is that some costs or benefits of a decision do not bear on the decision-maker, leading to possible inefficiency of voluntary transactions.¹³⁰ When external effects occur, neoclassical economics tries to “internalise” the costs of external effects in the analysis, or even exclude them from the relevant analysis, like in the totalitarian antitrust ideology of *Bork* based on it.¹³¹ The wider notion of an external effect also includes public values, often referred to as non-pecuniary external effects, non-market goods, spillovers or externalities. In any case, external effects are supposed to be few, isolated and usually capable of being given a numerical value comparable to economic gains.

Yet all commodities and events can be seen to display external effects. They are not a rarity, but pervasive: the rule rather than the exception.¹³² The same applies for the effects of any norms which can be described in an unlimited number of ways. Any conception of consequences is interpretive and thus evaluative in nature.¹³³ External effects generally alter the social context in which they appear, producing changing preferences and behaviour which generate new externalities. They may thus form a positive feedback loop capable of transforming an entire community or society and affecting what individuals and communities can and cannot accomplish. When such dynamics become perceived, it also becomes obvious that individuals are not only (or mainly) affected by those with whom they interact. One can no more presume the automatic effectiveness or neutrality of voluntary exchange, or the prescriptions of economic analysis, which have the effects of modifying preferences and further structuring the society.

Such dynamic social responses are often complex and unpredictable. Without political coordination the structural transformations caused by externalities become unintended side-effects of individual and market behaviour.¹³⁴ The market behaviour is largely based on short-term profit, material interests and information generated through the market transactions. It does not *and cannot* take into consideration the dynamics generated by the totality of market actions and their spill-over effects for complex issues like technological trajectories and social structures. Private actions may produce enduring public consequences incapable of being internalised in decision-making.¹³⁵ Not only non-pecuniary external effects (for example for freedom

129 See e.g. *Cooter & Ulen* (2008), p. 44, 110-111 and 174-177. For an ideological and historical account of external effects as analysed in economics see *Sagoff* (1988), at p. 33-39.

130 *Hausman* (1992), p. 95-96.

131 See *Bork* (1978, 1993), p. 114-115 (arguing that externalities should not play any role in the interpretations of antitrust law, which should be guided by wealth maximisation only).

132 See *Sclove* (1995) p. 162-168 and *Hausman* (1992), *passim*.

133 *Sunstein* (1997), p. 91.

134 *Sclove* (1995), p. 166-167 and *Hausman* (1992), p. 108-109.

135 This is one of the main theses of *Sclove* (1995), *passim* and *Frischmann* (2005), *passim* (treating the societal spill-over effects in the framework of the *infrastructure theory* he has developed). See on a more general level *Cutler, Haufler & Porter* (1999b), p. 18 (saying that to the extent private authority extends beyond the members of the relevant unit to influence society more generally, the private authority begins to merge into the public realm, thus blurring the line between private and public).

of expression), but also pecuniary external effects may be of moral concern and thus being incapable of being wholly internalised. The effects of pecuniary external effects may be evaluated from the perspective of their transforming and structuring potential in the society as well as from the perspective of their impact on the lives of other people. Thus, both pecuniary and non-pecuniary external effects are *prima facie* of moral significance.¹³⁶ Hence, neither legal rules regulating the markets nor their application can be neutral regarding the interests of those acting on the market or affected by the market.¹³⁷ Law and economics based on cost-benefit -analysis typically ignores this. By so doing, it fails to leave room for debate how to define the fair ground rules that constitute the institutional structure of the market.

As Hausman argues, due to their structuring and transforming potential, external effects should be at the centre stage in any but narrow short-run analyses.¹³⁸ The task of addressing the long-term aggregate effects of certain interpretations falls largely on research.¹³⁹ This applies in particular with regard to intellectual property law. The cases are dispositive in nature and become decided as separate instances of application. External effects having the potential to structure society are typically neither part of the individual parties' argumentation nor part of the courts' analysis. External effects should also become emphasised in research addressing intellectual property.¹⁴⁰ Yet, as with the analysis of the creation of wealth in networked information society, one is largely left with approaches combining sociological, legal, political and economic discourses, rather than more formal economic contributions. So far the latter have largely excluded the effects of market transactions and the related laws on issues like technological trajectories, individual autonomy, freedom of speech and conditions of communication, or cultural creation from the domain of their analytical schemata.

136 Hausman (1992), p. 103-105 and Hausman (1989), p. 329-330 (proposing and rejecting some possible answers why pecuniary external effects could *not* be of moral significance).

137 Joerges (2005), at p. 464, says that "*markets are social institutions which cannot be governed through some objective mechanism and do not simply respond to some functional needs – they are, in the last instance, 'polities'*".

138 Hausman (1992), p. 109-110.

139 Arrow (1984), at p. 183-184, notes that the social costs represented by externalities are not adequately addressed in the court procedures of civil law as they concentrate on separate instances of application. Either there is vast repetition of the same argument in each instance of application or the costly information indicating the social costs of a particular interpretation is not collected at all. Arrow concludes that in either case the procedure seems extremely uneconomic from the viewpoint of information. – On the other hand, judges are institutionally better protected against strong, well-organised minorities than legislators. The latter may act against the less well-organised interests of majorities in matters such as intellectual property law. See also chapter 5.3.2.

140 See Frishmann & Lemley (2007), *passim*, for an opening in this direction in the field of law and economics, broadly conceived. The infrastructure theory developed by Frishmann will be discussed in chapter 7.

1.2.3 Justification Discourses and Economic Constitutional Law

The structuring effects of intellectual property and competition law application on society and the structural conflicts underlying their interaction – among other considerations discussed above – imply that traditional economic analysis of law cannot form the predominant methodology of this research. Economics will instead be utilised complementarily. Yet the traditional justification discourse related to intellectual property protection does not seem to provide the relief sought for either.¹⁴¹ That discourse typically presents the alternative justification basis of intellectual property protection as mutually exclusive theoretical premises, whereas the competing justificatory premises rather seem to provide complementary and intermingling cultural perspectives, often relating to different aspects of protection. More fundamentally, the justification of intellectual property is not something solvable on an abstract level – a thought disturbingly common for legal scholarship. It is not sufficient to merely test the basic idea of exclusive rights in knowledge on the basis of one theoretical proposition, be it Lockean labour theory, utilitarianism or something else. The embeddedness of intellectual property law in various normatively saturated environments of application and thus the constant overlaps and conflicts of norms, as well as the effects of intellectual property law on distinct social spheres of action and societal development connotes that the justification discourse is necessarily much more complex than the philosophically oriented literature on the topic often suggests.

As noted by *Schauer*, it is possible to construct different layers of justification behind the literal descriptions of all norms.¹⁴² Should the literal formulation of the norm be defeasible at the expense of its entrenched first-level justification, this first-level justification as a matter of fact becomes the norm. This implies that rules have the potential for existing at multiple levels within the same normative universe constituted of literally expressed norm formulations, their first-level justifications, the justifications of the first-level justifications, and so on. The presence of a multiplicity of rules as a system (that is, the legal order) implies that the literal formulations of norms and their justifications may also conflict.¹⁴³ Moreover, justifications behind the literal norm descriptions are not static, but dynamic, implying the need to adjust the justificatory bases in the course of time and societal development.¹⁴⁴ As noted above and will be elaborated further subsequently, intellectual property produces its effects through intriguingly complex interaction with other legal institutions and in diverse societal and economic contexts. Individual legal doctrines, concepts and interpretations within each intellectual property right have their particular effects

141 See e.g. *Drahoš* (1996) and *Kimppa* (2007), both *passim*.

142 *Schauer* (2002), p. 75-76 and also *passim*.

143 *Schauer* (2002), p. 188-191. Thus, background norms become important when analysing norm conflicts, even though they do not usually form an explicit part of the judgements addressing such conflict situations. See in the context of European law e.g. *Ojanen* (1998), p. 27 and 46-49 and *Bengoetxea* (1993), p. 262.

144 *Pöyhönen* (2000), p. 20.

on economic, lifeworld and societal phenomena, all affecting the philosophical and societal justification of various aspects of intellectual property rights.

This also implies that legal scholars cannot take what intellectual property law is for granted as presumed in many philosophical justification discourses. As already indicated, the contents of the legal doctrines, concepts, interpretations and interactions of norms are not fixed, but necessarily matters of construction. Each candidate for a grand justificatory theory of intellectual property rights is also a source of critique and analysis against which different aspects of intellectual property protection and upper-level justifications of norms become contrasted and interpreted. All justificatory schemes of intellectual property protection are thus simultaneously theories of interpretation and normative critique. The line between theory-consistent interpretation and theory-consistent normative critique, in turn, is also a matter of taste and – of construction. The difference between proposing that the correct interpretation of a particular norm is A or that the norm should be A may be a choice of formulation only, depending on the institutional position of the author and the anticipated persuasiveness of the argument.

European economic constitutional law is a notion going beyond a single justification-base or even multiple competing justification bases of one or two legal institutions.¹⁴⁵ In the framework of European economic constitutional law *Maduro* has treated the basic freedoms of the internal market,¹⁴⁶ and *Baquero Cruz* the application of European Union competition law to state measures.¹⁴⁷ As this research seeks to demonstrate, the notion also enables embedding private informational power on a broader normative discourse comprising not only intellectual property and competition law norms and their underlying justifications, but also constitutional law and other laws. The research thus seeks to broaden the discourses and normative premises typically considered with regard to intellectual property law. European economic constitutional law provides a conceptual umbrella under which such discourses could be pursued. Importantly, it *enables relativising the notions of innovation and global competitiveness* which have now become largely unquestioned – and unparalleled – policy objectives within intellectual property, competition and trade law alike. Thus, it also goes beyond what

145 See about the concepts *economic constitution* and *economic constitutional law*, which have partially different connotations, *Nörr* (1995); *Maduro* (1998); *Joerges* (1994) and *Baquero Cruz* (2002), all *passim*. The concept of *European economic constitutional* will be developed further in the beginning of chapter 5, in particular.

146 See *Maduro* (1998), *passim*. *Maduro* does not treat intellectual property rights in his thesis.

147 See *Baquero Cruz* (2002), *passim*.

could be called cyber-law or Internet-law,¹⁴⁸ or integration of subject-matter drawn from heretofore artificially disarticulated legal subcultures, in particular intellectual property law, competition law and trade law – into a regulatory framework capable of implementing a consistent innovation law and policy.¹⁴⁹

However, economic constitutional law is also a notion going beyond traditional constitutional law or fundamental rights jurisprudence. It could offer means to criticise the mainstream fundamental rights doctrine and address regulation not traditionally conceived as law, such as regulation of behaviour based on technological architecture or standards.¹⁵⁰ In the European context, it enables seeing the topic as part of the general transformation of European Union law from the common market paradigm and ordoliberal ideological genesis towards a broader set of regulatory protection interests and constitutional pluralist conceptions of the European polity. The central characteristic of economic constitutional law has been said to be its open-endedness and discursive nature.¹⁵¹ Hence, it comprises institutional possibilities and alternative futures, and thus premises for argumentation models and critique directed at specific developments, within intellectual property and competition law, as well.

At the same time, the multitude of specific European developments in areas like intellectual property and competition law presents a bottom-up perspective of economic constitutional law. Instead of restricting to a top-down view based on traditional constitutional law or the basic internal market freedoms, the long-term legislative and judicial development of such laws in Europe – their basic concepts, doctrines, argumentation patterns – may tell us more of the democratic values cherished, rights recognised and interests pursued than the incidental or hardly-existing instances where the core constitutional questions become openly interpreted

148 *Lessig* (1999b), *passim*, discusses *law of the cyberspace*. Although the legal study of “cyberspace” may usefully draw our attention to general phenomena related to law, as *Lessig* brilliantly demonstrates, it is doubtful whether a specific branch of law called Cyber- or Internet-law is grounded, as this would merely facilitate the fragmentation of law and artificially detach the Cyberlaw thus constructed from other areas and general principles of law. Furthermore, as the Internet provides the core economic and lifeworld infrastructure in the information society, its effects penetrate the whole society and legal sphere. In any case, the focus of this research extends broader, as it also seeks to address other related information society developments, such as the general expansion of intellectual property protection, globalisation processes, and the related changes in entrepreneurship and competition. The focus is on the interaction of these developments with what is called here European economic constitutional law, and intellectual property and competition law as important parts of it, in particular.

149 *Reichman* (1993a), p. 116, seems to propose forming something approaching innovation law by combining these branches of law into a coherent regulatory framework.

150 Technological architecture may reflect principles of constitutional relevance, it may frustrate such principles and it may constrain or empower the realisation of various rights, such as property ownership or freedom of expression. Excluding technological regulation from the discussion of economic constitutional law thus seems unwise. *G. Anderson* (2005), at p. 145-151 and also *passim*, develops pluralist constitutionalism based on the idea that the state is not the exclusive domain of constitutional discourse. *Lessig* (1996), *passim*, has applied similar ideas to the challenges posed by the Internet. See also chapter 2.4 subsequently.

151 See generally *Maduro* (1998), at p. 159-169 and 175, about the open-endedness and discursive nature of economic constitutional law.

and weighed by the Community Courts.¹⁵² The notion of economic constitutional law thus opens argumentation from the constitutional law expert's branch of law –specific doctrines and argumentation models – with their inherent limitations – to the discussion of democratic and other ideals inherent to the doctrines and historical developments of other legal institutions forming the basic regulatory areas in the information society. In other words, discussing the theme under the rubric of European economic constitutional law enables overcoming some of the limitations of mainstream fundamental rights doctrine, such as the fixation to individual rights and state action.¹⁵³ The more general and abstract idea of economic constitutional law permits the discussion of the interaction between competing rationalities of different branches of law and analysis of the democratic ideals and values inherent to the legislative and judicial developments, without these inherent limitations to the fundamental rights jurisprudence.

Economic constitutional law could thus also comprise branch of law -specific developments. As the legal field fragments into increasingly autonomously functioning, often expansionist areas of law, some branches of law may reflect inherent constitutionalisation. They may become largely self-referential and establish their own principles having constitutional functions. Economic constitutional law could also integrate and address constitutionalisation of intellectual property and competition laws based on specific international institutions, such as the WTO, or even specific kind of constitutionalisation based on economic analysis of law. Law and economics uses market simulation as its constitutional standard for legislative activities, other governmental measures, as well as interpretations and applications of law: the government and law must operate according to the standard of truth set by the market.¹⁵⁴ Not only traditional constitutionalisation, but also branch of law- or law and economics –specific constitutionalisation seek to establish a self-referential, persistent hierarchy of norms, leading principles and interpretive techniques upon which interpretations of laws, criticisms, recommendations for reform and even the

152 Hence, as should be clear by now the current research does not fall under traditional constitutional law. References to *constitutionalisation* as used in this research should often be understood in the framework of economic constitutional law discourse or “*new constitutionalism*”. See Hirschl (2004), p. 210-223 and also *passim* and G. Anderson (2005), p. 113-115 about *new constitutionalism*, implying the capacity of various areas of law to “lock-in” neoliberal reforms or attenuate the potential democratic challenge to economic liberalisation and neoliberal values. Anderson states that new constitutionalism “*puts the framework itself in the spotlight with a view to stimulating debate on the legitimacy of private power. In other words, new constitutionalism gives ‘constitution’ the political charge which classical liberal constitutionalism seeks to defuse.*” Also Fitzgerald (2001b), at p. 97 and also *passim*, seeks to broaden constitutionalism by noting that also principles of competition, intellectual property and many other laws represent constitutionalism by providing guidelines for regulating power relations.

153 See about these limitations e.g. G. Anderson (2005) and Teubner (2006), both *passim*, and chapter 4.

154 See Foucault (1978-1979, 2008), p. 30-32.

validity of other norms are based.¹⁵⁵ Each constitutionalisation project has its own expert community, dogmas, myths, priests, shared values – and purportedly very little interaction with the external constitutionalisation projects.

All this implies not only the possibility of interactive, *dialogical constitutionalisation* based on the potential of constant critique and additional perspectives emanating from the other constitutionalisation projects, but also *that the politics of law becomes explicit, as the basic premises of the constitutionalisation projects are not (wholly) compatible*. The competing constitutionalisation projects cannot be evaluated without discussing elements on the level of social and democratic theory or *metaconstitutionalism*, constitutional discourse approaching the interactions of the constitutionalisation projects and reflecting the inter-systemic legitimacy of authoritative decision-making.¹⁵⁶ Thus, in addition to necessitating a discussion of the premises of each constitutionalisation project to a necessary degree, it is crucial to open the theoretical basis of this research in terms of democratic theory and the model of judicial decision-making and legal argumentation. The basic argumentation model advanced in this research may seem somewhat complex and imprecise when compared to the legal dogmatic and law and economics treatments of the topic. Yet the lack of theoretical simplicity, it is argued, necessarily reflects the complexity of the world. As said by *Walzer*, a world that a single theory could fully grasp and neatly explain would likely not be a pleasant place.¹⁵⁷

1.3 Structure of the Book

Each substantive chapter (chapters 2-7) builds on partially distinct, yet interconnected discourses: they seek to shed light on private informational and economic power enabled by intellectual property rights from various perspectives. Critique anchored

155 *Walker* (2002), p. 342-359, identifies three categories of constitutionalism (generative, governance and societal) and seven indices of constitutionalism (discursive self-awareness, authority, jurisdiction, interpretive autonomy, institutional capacity, citizenship and voice). It is important to note, but at the same time self-evident, that branch of law- or law and economics –specific constitutionalisation does not and could not fulfil all these indices in the same way as for example the European Union could. Yet it is equally important to note that the former may develop some of the graduated and tenuous indices of constitutionalisation, thus producing structural changes in the institution being constitutionalised and the overall normative order. Constitutionalisation can thus be seen as a question of degree. As noted by *Teubner* (2004), at p. 12 and 14, every process of juridification necessarily at the same time contains latent constitutional normings. The juridification of a particular sector and its fragmentation from other sectors and general legal principles incrementally develops specific constitutional norms embedded in the specific set of norms. See also *Teubner* (1991), p. 37, noting that each branch of law or legal field develops its doctrinal structures according to the demands of the social segment involved.

156 See *Walker* (2002), p. 357-359 about the notion of *metaconstitutionalism*. As *Walker* notes, although the constitutional projects function self-referentially, they necessarily lead to increasing systemic interaction and intersystemic legitimacy questions by purporting to regulate issues having inter- or cross-systemic relevance.

157 *Walzer* (1992), at p. 89.

in European constitutionalism (broadly understood) forms the theme penetrating the whole research. The mainstream doctrinal developments and patterns of argumentation will be subjected to analysis seeking to expose their inadequacies. But the aim of this research is also to go beyond merely exposing the underlying structural biases and inadequacies of the law. It will also construct normative alternatives seeking to exploit the existing possibilities and ambiguities in current laws.

Chapter two discusses the topic from the perspective of democratic theory, chapter three on the basis of legal theoretical considerations concerning judicial decision-making in European Union law and the tension between constitutionalism and legal pluralism, chapter four discusses informational power from the viewpoint of rights constitutionalism, chapter five from the angle of the doctrines and principles inherent to European intellectual property law, chapter six evaluates the functions, objectives, inherent tensions and possibilities of competition law to integrate concerns related to informational power, and chapter seven analyses the evolution of the competition law doctrines and scholarly proposals purporting to regulate the interaction between intellectual property and competition law. Each of these discourses and premises participate in constituting the boundaries of private informational power enabled by intellectual property rights. In this sense, they illuminate the topic from different angles. At the same time, they complement each others and comprise elements necessary for the reconstruction of European economic constitutional law. Each chapter thus builds on and develops further many of the perspectives elaborated in the previous chapters. The chapters will be explained below in more detail. However, as each chapter opens with a description of its central contents and main arguments, their description will be here concise to avoid unnecessary repetition.

For the purposes of this research, economic constitutional law could be characterised as democratic theory juridified, focused on a given legal space or community and addressing the regulation of the economic sphere and its relations to government and the civil society. The purpose of the *second chapter* is to develop the underlying premises of this research in democratic and social theory. The significance of private informational power enabled by intellectual property and competition laws will be analysed from the perspective of democratic values.¹⁵⁸ Globalisation and information society processes affect the socio-economic environments of intellectual property's operation. These processes will be discussed in the second part of the chapter. The question asked will be whether these processes imply a paradigmatic change on the ways we should understand the roles of governments, the economy and the civil society. Also this discussion will be connected to the main research topic.

¹⁵⁸ It should be obvious that *democracy* is an essentially contested concept in the sense that there is disagreement or indeterminacy concerning its very core. It is at the same time a normative and complex concept, enabling the simultaneous co-existence of rival conceptions of its core. See Waldron (2002), p. 148-153 and Benkler (2003b), p. 180 ("*Democracy is concept with many conceptions*"). There is thus no such single thing as "democracy", but different varieties, conceptions and contested theories of it without there ever being a final resolution. See also Mouffe (2005), *passim* and Barber (2002), p. 3, and the discussion in chapter 2.

The implications of these perspectives and processes for judicial decision-making in the framework of European Union law will be addressed in the *third chapter*. As said, law may also be seen as a specific discourse and practice on its own. The perspective of European economic constitutional law also comprises an underlying general perception of law and legal decision-making. The chapter will build on a tension between legal pluralism and constitutionalism reflecting systemic coherence. The perspectives may complement each others, but are not easily reconcilable on a theoretical level. The discussion also relates to *constitutional pluralism* underlying the European Union legal system. The major question addressed throughout the chapter is how and to what extent legal decision-making under European Union law could integrate democratic and constitutional elements enabling some control of informational power.

The fourth chapter will discuss private informational power from the perspective of fundamental rights and rights constitutionalism. The concept of European economic constitutional law should be connected to constitutional law and the fundamental rights discourse. Although fundamental rights are often said to radiate their effects over all laws, the chapter questions the capacity of mainstream fundamental rights doctrine to control private informational power: private power in general is largely beyond the control mechanisms of fundamental rights law. Moreover, especially in the European Union the function of fundamental rights has been to legitimate a strong form of intellectual property protection. Nevertheless, the chapter seeks both to explore the inherent potential of fundamental rights to address such concerns independently and through the application of intellectual property and competition laws, in particular. This requires both developing rights constitutionalism and going beyond its specialised discourses.

The fifth chapter discusses the functions, inherent doctrines and problems of intellectual property in Europe. The basic doctrines and interpretation methods of intellectual property law define, concretely and on a day-to-day basis, rights to information and culture. Moreover, they increasingly structure the patterns of economic interaction, competition and communication. Hence, intellectual property norms and their interpretations constitute an important part of the economic constitutional law of the European information society. The concept of economic constitutional law will be further developed in the beginning of the chapter, and the basic doctrines and contents of intellectual property law later addressed from this perspective. The inherent doctrines and instruments of intellectual property law are also often referred to as factors abolishing the need to apply either fundamental

rights law or competition law so as to control or restrict some aspects of protection.¹⁵⁹ Yet, typically the adequacy of these inherent doctrines is taken for granted, without any substantive critical discussion of their contents, inherent limitations or practical significance. Already for this reason it is necessary to unveil and critically evaluate the inner-functioning of selected intellectual property rights. The key European and international level legal instruments will be introduced, in particular European and international patent and copyright law. The internal means within the selected intellectual property laws to foster competition will be discussed and questioned.

The sixth chapter analyses European competition law from the perspective of its functions, underlying objectives and doctrinal developments in the spirit of ideological critique and construction of alternatives. The chapter also includes a short historical description of the relevant conceptual and ideological developments from an evolutionary and comparative (US) perspective. The role of competition law in curbing societally undesired economic power will be addressed and related to the use of informational power, in particular. The democratic potential of European Union competition law will be developed by utilising the preceding theoretical discussion. Competition law will be approached from the angle of the civil society in the latter part of the chapter. It is argued that this is necessary also from the competition law's societal justification based on the control of the most harmful forms of excessive economic power.

The seventh chapter discusses the major doctrines and concepts developed to address the conflict between intellectual property rights and competition law in both European case law and legal scholarship. Such doctrines include the specific subject-matter doctrine, the essential facilities construction, and the more recent "new product" and the "innovation incentive defence" –tests, among others. The recent European scholarly discussion will be discussed and criticised for relevant parts and complemented with selected US discourses. The benefits and drawbacks of using competition law as a counterweight to strong intellectual property protection and in addressing the economic and societal problems caused by it will be addressed from multiple perspectives, utilising the discussion from the preceding chapters.

The eighth chapter concludes by evaluating the main results of the research.

159 See Govaere (1996), at p. 305, stating that the major shortcoming of the essential facilities approach to intellectual property rights is that "it neglects the fact that the relationship between restraints on competition and access to intellectual creation by third parties is already inherent in the system of intellectual property protection. No additional restraints on intellectual property owners need to be introduced in order to safeguard competition--") and Anderman & Kallaugher (2006), at p. 7, stating that "intellectual property laws make a contribution to effective competition and maintaining access to markets by devices within their own internal doctrines that strive to maintain a balance between 'initial' inventors creators and 'follow on' invention and creation. Good examples are the 'fair use' doctrine in copyright law, the doctrine of 'non-obviousness' and the provision of compulsory licensing in patent law and interoperability imperatives and decompilation rights in the computer program directive".

2 Democratic Discourse and Private Informational Power

2.1 Chapter's Contents and Central Arguments

Intellectual property and competition laws constitute the immediate regulators of private informational power. Their legislative development and interpretations are necessarily based on the underlying conceptions of the desirable functions of government, market and civil society.¹ Intellectual property and competition laws structure property in intangible resources and, in addition to concerning individual claims, participate in the creation of a market and social system enabling certain forms of life. Alternative interpretations of the relationship between intellectual property and competition laws connote alternative structures of social and economic life.

Intellectual property rights constitute the ground rules for the use and control of informational resources. They do not merely regulate the economy, but extend increasingly to Habermasian lifeworld and civil society. Furthermore, they enable and modify informational and technological power positions in complex processes involving the evolution of the markets and technologies. Interpretation of intellectual property laws ultimately refers to the basic conceptions of the interplay between government, economy and other social spheres and thus to democratic theory. The reference to the level of democratic theory is even more obvious with regard to

¹ The terms *government*, *governmental* and *state* as used in this research may also refer to the regional (the EU) and international levels, such as the WTO. The intention is thus by no means to suggest that traditional nation-states acting alone would be responsible for the tasks assigned to governments and governmental regulation. The term *market* is used here as an abstract concept referring to the economy as a system. The capitalist system(s) and its market mechanisms have slowly evolved on the basis of highly regulated social and economic life. Thus, the “self-regulating” structure of the economy has always been based on norms and the existence of elaborate institutions. See *Braudel* (1979, 1986a), p. 224-230 and also *passim*. Similarly *Rosenberg* (1994), p. 2 and 125. The term *civil society* refers to activities of voluntary associational life, distinct from both state and the capitalist economy. The latter spheres co-ordinate action differently and exercise systematic power. See *Habermas* (1992), p. 353-354 and (1996a), p. 269 and 366-369; *Walzer* (1995), p. 7-8 and (1992), *passim*; *Young* (1999), p. 143-144 and *Jean Cohen* (1995), p. 37-38. Cf. with *Habermas* (1962, 1989), p. 30 (civil society defined as the realm of commodity exchange and social labour) and *Foucault* (1978-1979, 2008), p. 296-302 (civil society as a concept enabling a governmental technology: the attaching of a juridical structure to the economic structure).

competition law.² Competition law develops largely through common law –patterns, as the relevant norms are concise and interpretively open. This opens competition law towards competing conceptions of the desired state involvement in the economy, the capacity of the economy to self-regulate, and the extent to which the regulation of the economy should cater for non-market interests.

The purpose of this chapter is, in its first part, to develop the underlying premises of this research in democratic theory. The perspective is systemic. The discussion is based on literature outside traditional (private) law discourse. In the latter part of the chapter, the discussion will be related to the on-going processes of globalisation and information society. The question asked will be whether these processes imply a paradigmatic change on the ways we should understand the roles of government, economy and civil society. The implications of these processes for law and judicial decision-making will be addressed in the next main chapters.

It is necessary to state the underlying premises of this chapter in a preliminary fashion to avoid misunderstandings. Governmental regulation is necessary and unavoidable for the manipulation of the boundary conditions for private decision-making in the market. Likewise, reactive governmental intervention in the economy is needed for avoiding the negative side effects of economic processes as well as compensating for them. Law is constitutive of the market and capitalist relations by defining ownership, contractual bindedness, freedom of association, extra-contractual responsibility, and so forth. The elements of a democratic civil society are also partially created, guaranteed and maintained through law and governmental involvement. However, this does not imply a call for more regulation and state involvement in the economy or civil society as something to be pursued for without a cause: governmental interference amounting to a statist, overly bureaucratic regime may equally undermine the democratic character of the society. Governmental involvement in the economy should thus also be restricted by law and democratic values, as guaranteeing a sufficient level of freedom on the markets enables associational diversity, plurality of actors and the creation of wealth. Excessive governmental involvement may also destroy the dynamism of economic processes.

Theorists like Habermas and Young, too, recognise that from the perspective of democratic ideals the law should preserve the capitalist dynamics and support institutions capable of advancing material well-being.³ It is equally naïve to presume that the governmental institutions only mitigate the inequalities caused by the economy, as it is to presume that the government is the only source of coercion or social pressure in the society, as assumed by *laissez-faire* ideologies. Protecting a certain level of freedom in the economy nourishes democratic values. Markets and governmental intervention are thus threats and promises, necessary conditions and

2 As already said by Bork in 1978, competition law (or antitrust) “goes to the heart of capitalist ideology, and since the law’s fate will have much to do with the fate of that ideology, one may be forgiven for thinking that the outcome of the debate is of more than legal interest.” See Bork (1978, 1993), p. 425.

3 Habermas (1981, 1987), p. 343-344 and (1992), p. 444; Young (1999), p. 157.

possible obstacles, to a democratic society and culture characterised by a plurality of actors, freedom and voluntary nature of action, inclusive and active public discourse as well as the enablement of self-expression and cultural meaning-making.

Hence, the law must, paradoxically, protect the freedom of the markets from the freedom of the markets, freedom of the markets from excessive application of law and governmental involvement, and private and public spheres of lifeworld from excessive intrusions of both markets and government. It is thus easy to agree with theorists like Young and Cohen in that state, economy and civil society should be in a relationship of mutual limitation.⁴ The theories discussed will be preliminarily contrasted to German ordoliberalism, which provides an example of a European liberal democratic model. It has greatly affected competition law thinking in Europe. Ordoliberalism and its alternatives will be discussed in the context of competition law in chapter 6.

The discussion of globalisation and information society processes in the latter part of this chapter serves to illustrate that as the economy and also parts of the networked civil society are globalising, the ensuing challenges and the feasible responses also operate on the levels transcending the boundaries of individual nation-states. The power of the states must thus ever more be used in cooperation with other states and non-state actors. To an extent there is governmental control of global phenomena, it is shared and decentralised control. The European Union, too, should be seen from this perspective. It enables forming responses to social problems escaping the national level, but proving too difficult to control directly – without the mediating regional level – on the global level where there exist no comparable political and judicial decision-making structures.

2.2 Perspectives on State, Market and Civil Society

I start by introducing some basic concepts based on the theory of communicative action and discursive democracy as developed by Habermas. Yet *it only provides a starting-point for the discussion by offering a vocabulary and conceptual framework widely used* – even if criticised – by many other theorists. Other contributions will be utilised to further develop the theoretical framework of this research. For example, Habermas' narrow construction of power, his emphasis on public elections as the main channel of influence from the public sphere to the state politics, as well as his idealisation of lifeworld communicative action as direct interpersonal relationships free from the mediation of cultural-economic and technological environments, are considered problematic.

One of the starting points of the theory of communicative action is the division between *system* and *lifeworld*. The system consists of the economic system on one hand and administrative system on the other hand.⁵ The lifeworld has a private sphere

4 Young (1999), p. 157 and Jean Cohen (1995), p. 38.

5 Habermas (1981, 1987), 309-310 and 320.

(family, neighbourhood and voluntary associations) and public sphere (space of political participation, debate and opinion formation), and it is based on communicative action.⁶ Communicative action is connected to symbolic reproduction, as it serves to transmit and renew cultural knowledge. It also serves social integration and the establishment of solidarity, and serves the formation of personal identities.⁷ Habermas now calls the voluntary associational features of lifeworld *civil society*.⁸ The conceptual division between state, economy and civil society does not mean that they are spheres or clusters of institutions capable of being sharply separated. Rather, they can be thought of as *kinds of activities*. Many institutions may include all three activities, even though one activity may be dominating.⁹ For example, family businesses, public and social enterprises, worker communes, consumer or other non-profit organisations, public funding agents and networked developer communities typically have their origins outside the economy, but are at the same time active participants in economic processes.¹⁰

According to Habermas' equally well known thesis of *internal colonisation*, the economy and the state become increasingly complex due to capitalist growth. They penetrate ever deeper into the symbolic reproduction processes of the lifeworld: action coordination transfers increasingly from communicative language over to steering media of money (the special code of the economy) and power (for Habermas the special code of the administration).¹¹ These steering media become recoupled to the lifeworld institutionally, through the basic institutions of civil law (institutionalising the money medium) and through legitimate organisation (institutionalising power), thus remaining anchored in the society component of lifeworld.¹² The steering media enable exerting generalised strategic influence on the decisions of others and bypassing the processes of consensus formation in language. Also formally organised domains of action emerge in modern societies. These are located in media-steered subsystems and first generated by positive law. Habermas maintains that these domains of action become disconnected from ethical motives, culture, society and personality. From

6 Lifeworld can be characterised as shared tacit convictions and beliefs that participants draw upon in communicative processes of cooperation. See more closely Habermas (1981, 1987), p. 119-152 and (1996a), p. 22.

7 Habermas (1981, 1987), p. 137.

8 See Habermas (1992, 1996), p. 269 and 366-367. Habermas (*ibid.*, at p. 366) notes that the connotation of the term civil society has changed and means neither bourgeois society of the liberal tradition nor the economy as constituted by private law and steered through markets in labour, capital and commodities. See similarly Young (1999), p. 143.

9 Young (1999), p. 145.

10 See also Walzer (1992), p. 100.

11 Habermas (1981, 1987), p. 183; 304-305; 355-356 and 367. See also Habermas (1962, 1989), p. 159-195.

12 Habermas (1981, 1987), p. 266-282 and Habermas (1992, 1996), p. 354. I do not use the word *institution* in the meaning assigned to it by Habermas (1981, 1987), p. 365. Habermas assigns the term legal institution to norms which are based on existing moral norms of the lifeworld (e.g. criminal law) and which need substantive justification. I use the term legal institution in a broader sense to refer to any established legal branch or specific area of law as a whole to distinguish it from other established legal branches (e.g. intellectual property institution).

the internal perspective of these domains, lifeworld becomes an element of system environments.¹³

On one hand, these developments simplify and rationalise communicative processes: institutionalisation of money and power media in lifeworld by means of positive law is a condition for modernisation processes. On the other hand, the steering media of money and power increasingly replace communicative processes by negative sanctions (power medium) and positive rewards (money medium).¹⁴ Problems emerge when the lifeworld cannot be withdrawn without disturbances from the functions transferred to another mechanism of action coordination. This is often the case with symbolic reproduction (as opposed to material reproduction).¹⁵ Habermas develops the thesis that it is the function of law and the system of rights, stemming from the communicative power of the lifeworld, to tame and balance the expansionist tendencies of the subsystems of economy and administration.¹⁶ Law transfers communication from the public and private spheres of the lifeworld into a form understandable for the economy and administration.¹⁷ In order for law to safeguard the democratic nature of the society, it must protect the public and private spheres of the lifeworld from internal colonisation, as these enable, through communicative action, legitimate legislation and administration based on it. Legitimate law is thus rooted in the lifeworld through the democratic procedure of legislation, based on the transformation of communicative power through law into administrative power.¹⁸

The distinction between lifeworld and system should not be seen as an absolute denial of recourse to moral norms and values in the system contexts. Likewise, lifeworld is not free from strategic calculations in the media of money and power (even in the absence of internal colonisation). Both strategic and communicative actions take place in all areas of the society.¹⁹ Public sphere may be conceived as a field of discursive connections whereby diverse communicative clusters constitute the public sphere,²⁰ or even multiple public spheres.²¹ Such more pluralistic readings

13 Habermas (1981, 1987), p. 307-310. See also Tuori (1993a), p. 8.

14 Habermas (1981, 1987), p. 267; 280-281 and 384.

15 *Ibid.*, p. 375.

16 Habermas (1992, 1996), p. 42, 56, 80-81, 150 and 410.

17 *Ibid.*, p. 354.

18 *Ibid.*, p. 80-81. Dryzek (2000), at p. 26-27, criticised Habermas of restricting the function of communicative deliberation to public elections as the main channel of influence from the public sphere to the state. He maintained that Habermas has “turned his back on extra-constitutional agents of both democratic influence and democratic distortion”. Habermas (2001), at p. 111 and also *passim*, also emphasises the importance of functional public sphere and the procedural demands of communicative and decision-making processes, “which loosen the conceptual ties between democratic legitimacy and the familiar forms of state organization”. See also Habermas (1992), p. 452-457, where Habermas modifies his previous characterisations of the public sphere to some extent.

19 Tuori (1988), p. 113-115. See also Habermas (1991), p. 255-256.

20 See Calhoun (1992a), p. 37-38. See also H. Nieminen (2008), at p. 24, where he characterises public sphere from the perspective of the network approach as “a space or spaces of negotiation between different networks”.

21 See Fraser (1992), p. 121-128.

of the public sphere imply the need to address the internal organisation and power relations of the public sphere(s).²² Only in premodern society the lifeworld interaction was characteristically based on direct interpersonal relationships. *In modern societies communicative interaction is culturally, symbolically and technologically mediated*, thus implying the centrality of indirect social relationships in the discursive practices of the civil society.²³ This trend finds its apex in the networked information society, as the lived experiences and the cultural life of individuals and communities become increasingly mediated by the digital networks and commodified forms of communications. The shift of culture – the shared experiences that give meaning to human life – into the digitally mediated media marketplace could lead to the commercial enclosure and commodification of the shared cultural commons.²⁴

Moreover, even strategic, utility-maximising exchanges in the economy take place against a horizon of some intersubjectively shared meanings and social norms. Values and tacit understandings of the lifeworld thus have effects on the subsystem of the economy. As a corollary, also the subsystem of the economy has a moral-cultural dimension.²⁵ It is anchored in the lifeworld in multiple ways, as its structures are necessarily historically contingent.²⁶ The communicatively reached understandings within the sphere of the economy may concern, for example, commonly held notions of reciprocity, proportionality and common convictions of which objects are considered exchangeable.²⁷ They may also concern notions of what are considered unfair practices between firms functioning on the markets, with possible repercussions for the theories of competition law.²⁸ Habermas has more recently abstained from his previous sharp

22 Calhoun (1992a), p. 38.

23 Calhoun (1992b), *passim*. As will be argued in more detail subsequently, the networked information society has expanded the technological mediation of lifeworld interaction, leading to *sociodigitisation*, the rendering in a digital form not only of information and artifacts, but the logics of social organisation, interaction and space.

24 See e.g. Rifkin (2000), p. 138-140. See also subsequently chapter 4.3.3 and the sources referred to there.

25 Fraser (1989), p. 117. See also Sunstein (1997), p. 96-104 and Tuori (1988), p. 114 and 154-156.

26 See Sitton (1998), p. 80-81. Foucault (1978-1979, 2008), at p. 30-32, identifies a transformation in the role of the markets, culminating in the middle of the eighteenth century. The market in the Middle Ages and sixteenth and seventeenth centuries was essentially a site of (distributive) justice. What had to be ensured was the absence of fraud, theft and other crime as well as the distribution of goods as justly as possible. From the middle of the eighteenth century the penetration of economic theory gradually changed the role of the markets. The normal price became to reflect the relationship between the cost of production and the extent of demand, formed by the autonomously and naturally functioning markets, no more having connotations of justice. The prices thus formed constitute a standard of truth, enabling us to judge which governmental practices are correct and which erroneous. Like Foucault notes (*ibid.*, at p. 32), “*The market determines that a good government is no longer quite simply one that is just. The market now means that to be good government, government has to function according to truth.*”

27 Fraser (1989), p. 117-118.

28 This could provide theoretical insights regarding the often confusing idea of “*fairness*” as a background objective of competition law or the narrower idea of *unfair terms* found e.g. in article 102 FEU, ex. 82 EC. Forrester (1998), p. 382 and (2006), p. 520, discusses the extent to which competition law application is connected to a concept of fair dealing or moral misconduct.

division between law as an institution, which requires moral justification, and positive law creating formally organised domains of action in media-steered subsystems, which need no moral justification. This is because law has an important function in transforming messages originating from lifeworld to the administrative system and the economy.²⁹

The distinction between lifeworld and system can thus be seen as a difference in degree: economic regulation cannot be excluded from the requirements of discursive procedure and substantive legitimation.³⁰ This becomes evident as the distinction between lifeworld and economy becomes blurrier: the economy is increasingly culturally inflected and culture economically inflected.³¹ Neither intellectual property nor competition law institution is restricted in its effects to the subsystem of the economy. Even if intellectual property law is what Habermas calls law as a steering medium, it requires more than procedural justification: it applies to situations embedded in informal lifeworld contexts central, in particular, to cultural reproduction.

Habermas (like Marx) assigns evolutionary primacy to the economic sphere: problems in that subsystem largely determine the path of development of the society as a whole. Habermas sees the economy and the state as complementary structures that relate to the lifeworld through four interchange relations and respective roles. These are 1) labour / employee-role and 2) goods and services / consumer-role as interchange relations and respective roles between the economic system and the private sphere and 3) taxes / client-role and 4) political decisions / citizen -role as interchange relations and respective roles between administrative system and the public sphere of the lifeworld.³² When compared to typical Marxist dualistic approaches, Habermas offers a more nuanced account of the society as a whole and leaves more room for governmental regulation and involvement than the economic determinism of at least

29 Habermas (1992, 1996), p. 80-81. See also Tuori (1993a), p. 4 and 8.

30 Fraser (1989), p. 117; Tuori (1988), p. 156-157.

31 Lash & Urry (1994), p. 64 and Rifkin (2000), p. 11 and 138-146. Marketisation is connected to globalisation and informatisation. It connotes a) the expansion of market-logic into new areas of life and society; b) the increasing importance of market-related objectives in political decision-making and c) the increasing authority of market actors at the expense of governmental authority. These developments relate to neoliberalism as a political and economic ideology, but cannot be exhaustively explained by it.

32 Habermas (1981, 1987), p. 320; 344 and 384.

some Marxist strands of thought.³³ For Habermas governmental interventionism should not lead to the control of economic processes and thus to the forfeiture of the capitalist dynamics upon which the economy is based.³⁴

These perspectives can be contrasted to German ordoliberalism. It has affected European competition law ideology, in particular.³⁵ Ordoliberals realised that an acceptable and workable economic system does not emerge spontaneously. They were also convinced that economic freedom is threatened by both excessive governmental intervention and concentration of private power. The latter was not a temporary phenomenon for ordoliberals, to be taken care by market developments alone. Instead, private power was to be tamed by law. It must simultaneously constrain governmental action.³⁶ The legal framework must thus protect economic freedom and to ensure that neither individuals nor public authorities intervene in the markets to create a monopoly.³⁷ The institutions of private law constituted the core of the legal system. These constitutive principles, together with regulative principles imposing on the state an obligation to prevent the market system from self-destruction, jointly formed an economic constitution.³⁸

Ordoliberalism was thus based on an idea of private and competition law as the constitutive and protective frameworks for capitalist economic relations.³⁹ The constitutive rules established the fixed, unchanging “rules of the game”. As *Foucault* has pointed out, the space of economic freedom thus established was an organising and regulating principle of the state from its genesis up to the last form of its interventions.⁴⁰ The civil society, as understood in this research, had for ordoliberals the primary function of a systemic environment for the economy. Supervising the “rules of the game” and thus enabling economic development and growth produced the necessary legitimacy for the state and regulation. Habermasian civil society or

33 Habermas differs from Marx in several respects in his conception of the respective roles of the economy, the civil society and the state. See *Habermas* (1981, 1987), at p. 339-343 and 350-352, criticises Marx of conceiving capitalist society as a totality, thus neglecting of the intrinsic evolutionary value that media-steered subsystems have in structural differentiation, forcing reorganisation of the feudal class relationships and transferring material reproduction of the lifeworld over to formally organised domains of action. Further, and linked with the foregoing, Habermas criticises Marx for having no criteria for distinguishing the destruction of traditional forms of life from the reification of post traditional lifeworlds. Furthermore, Habermas maintains that Marx also over-generalises the subsumption of the lifeworld under the capitalist economic system. According to Habermas, Marxian orthodoxy has difficulties in explaining governmental interventionism, mass democracy and the welfare state. On the other hand, as pointed out by *Sitton* (1998), *passim*, the economic subsystem is the weakest part of Habermas’ social theory. Habermas overestimates the coherence and autonomy of the economy and underestimates the extent to which capitalism must be embodied in specific social forms which are necessarily historically contingent.

34 *Habermas* (1981, 1987), p. 343-344. See also *Rosenberg* (1994), p. 127 and *Young* (1999), p. 155.

35 See e.g. *Fikentscher* (1998), p. 83-86; *Gerber* (1998a), *passim* and *Maher* (2000), *passim*.

36 *Lenel* (1989), p. 21; *Gerber* (1998a), p. 235-246; *Lemke* (2001), p. 193 and *Sideri* (2007), p. 23.

37 See *Foucault* (1978-1979, 2008), p. 137.

38 See e.g. *Barry* (1989), p. 114-115; *Tumir* (1989), p. 136 and *Gerber* (1998a), p. 245-247.

39 *Habermas* (1992, 1996), p. 87-88. See also *Baquero Cruz* (2002), p. 26-28.

40 *Foucault* (1978-1979, 2008), p. 84, 116 and 173.

public sphere was not needed in the process for the emergence of legitimate law, as the mere participation of citizens in the economic processes as workers, employers, investors and trade unions produced the required consensus for the “rules of the game” and the function of the state simultaneously.

However, capitalism has now emerged as the champion unlikely to be replaced by political decision. The globalisation of capitalist economic competition and marketisation of societies points to an entirely different direction: the economic logic intensifies and extends to new areas, both geographical and functional, with the willing assistance of the political decision-makers.⁴¹ States are increasingly “*using markets to tame politics instead of politics to tame markets*.”⁴² Democratic influence on policy-making emanating from the discourses of the civil society may appear as a source of indeterminacy for the realisation of the aims of such politics.⁴³

Moreover, as pointed out by *Fraser*, there is a serious mismatch between the weak, selective, multi-lingual and issue-specific transnational public spheres and the post-Westphalian world, where states do not fully control their territories, the transnational and global economy, or the global communications infrastructure.⁴⁴ Hence, although it is possible to discern competing rationalities of functionally differentiated social spheres in systems theory’s spirit, the subsystem of the economy is by far the most successful totaliser and expander of its own sphere logic and rationality. Instead of abstract compatibilisation of social spheres’ rationalities on a level playing field, one must foremost react to the expansion of economic logic throughout society. Through its success in totalising its own sphere-logic, most often the economic rationality is in need of adjustment towards the logics of other social spheres and the civil society.

There is thus a need for counter-weights and limitations on the totalising tendencies of the economy. In the absence of political globalisation matching the level and intensity of the globalisation processes driven by the capitalist processes, the responses must be sought for at other levels. Regional arrangements such as the European Union may now be seen as one response to the globalisation phenomena. At this level, the formation of policy responses becomes feasible, thus enabling partial control of global phenomena as part of a web of decentralised policy responses. The Union level hence enables forming responses to problems escaping the national level, but being too complex to control on the global level, where there are no comparable political and judicial decision-making structures available.

However, the mere capacity of the Union to address such problems does not guarantee the democratic legitimacy of its decision-making. It is possible to emphasise

41 See e.g. *May* (2002), p. 42-43 and *Touraine* (1994, 1997), p. 117 and 188-189.

42 *Fraser* (2007), p. 57.

43 *Dryzek* (2000), at p. 29, says that the main task of politics often seems to be to secure the confidence of actual and potential investors and to avoid capital flight. See also *Scharpf* (1999), p. 41, noting that competition among systems of regulation has features of a Prisoner’s Dilemma “*in which all competing countries are tempted to make larger concessions to capital and business interests than they would otherwise have preferred*” and *Hirschl* (2004), p. 43.

44 *Fraser* (2007), p. 53-60. See also the subsequent discussion of globalisation in this chapter.

output legitimacy in the form of problem-solving the Union is capable to produce with regard to the often conflicting interests between the member states and with regard to transnational and global problems, for which the nation state level of decision-making is clearly insufficient.⁴⁵ Yet, the regional policy level of the European Union, too, is dependent on and thus often serves the interests of the capitalist economy in the formation of policies and their implementation through supranational legislation.⁴⁶ Scharpf argues for a mixture of input legitimacy (“*government by the people*”) and output legitimacy (“*government for the people*”).⁴⁷ Yet a significant problem with input legitimacy is that there is no European public sphere comparable with national ones that could provide legitimacy for the European legislative activities and administrative decision-making.

For Habermas the notion of public sphere largely overlapped with the political space of a nation state, capable of regulating its own citizens’ affairs and solving their problems.⁴⁸ The communicative processes in the public sphere concentrated on the formation of consensus on a national scene, intended to enable legitimate legislation and state administration based on it. Nevertheless, Habermas saw the possibility of a new political self-consciousness developing in Europe on the basis of constitutional patriotism (*Verfassungspatriotism*), growing together from diverse nationally specific interpretations of the same universal principles of law, and on the basis of problems that can be solved only at a coordinated European level, potentially leading to Europe-wide public spheres developing around these questions.⁴⁹ According to Habermas, even if the European Union had a document called constitution, it could only function if the democratic process that it itself initiates actually came into being, ultimately leading to a European civil society and European political public sphere. This formation of collective identity cannot presuppose anchoring it in ethnic origin, but European-wide public communication.⁵⁰

The decision-making powers of the European Union also imply that the critical function and efficacy of the national public sphere is being reduced by the partial loss of state capacity over decision-making in their own territories. This is a more generic phenomenon in the post-Westphalian world. International bodies like the WTO and regional supranational organisations other than the European Union exercise

45 Menon & Weatherill (2002), *passim*, argue for output legitimacy in the context of the European Union.

46 See also Hirschl (2004), p. 215-217.

47 Scharpf (1999), p. 6-42 and also *passim*.

48 See Fraser (2007), p. 47-53. Thus, it characterised a model of deliberative democracy for a territorially bounded polity (*ibid.*, at p. 49). See also Habermas (1992, 1996), p. 307-308, 358, 368 and 502 (“*general public sphere*” or “*informal public sphere*” constitutes of a network of overlapping, subcultural publics having fluid temporal, social and substantive boundaries).

49 See Habermas (1992, 1996), p. 506-507. See also Habermas (2001), p. 74-78 and Calhoun (2002), *passim*.

50 Habermas (1995), p. 305-307 and Habermas (2001), p. 102-103. Weiler (1995), p. 220 and (1999), p. 83, expresses the same by holding that the problem is not the absence of constitution but constitutionalism.

regulatory functions over multiple states' territories. Multinational and transnationally networked enterprises beyond the total control of any single nation state affect aspects of economy and technology often more far going than any individual nation states. The networked global economy as a whole produces its effects anonymously in the absence of even jointly exercised state control over its core processes and outcomes.⁵¹ Fraser argues that the legitimacy and efficacy problems produced by these mismatches should be addressed by rethinking the role of the public sphere(s). Fraser's idea of renouncing the centrality of the public sphere based on citizenship, and the related requirement of *including all potentially affected by any given problem* in the public sphere discourses as peers for the public opinion to be legitimate, is a demanding normative ideal. In addition, the communicative power thus produced should be translated into legislation and administration based on it. Finally, the public power concerned should also possess the capacity needed to implement the discursively formed power through its decisions.⁵² The cross-border public spheres should thus correspond with the globalisation processes and the polycentricity of legislative activities and *vice versa*.

In the light of the foregoing it is no surprise that there have been increasing demands for a European public sphere that could function as a source of legitimacy for the legislative activities and decision-making on the European level. The denationalisation of the communications infrastructure and the development of the Internet and other communications technologies have enabled new forms of publicity and transnationalisation of public spheres. The emergence of cross-border, transnational public spheres corresponds with the partial loss of state capacity over decision-making on their own territories and over economic phenomena. Yet the prospect that a European demos comparable to nation states could develop from the deliberative practices enabled by the Internet as such seems highly unlikely.⁵³ At most, it is possible to identify diverse European and transnational networks "*each exercising their own public spheres and bringing forward elements for European public discourses which realise in different forms and in different forums*".⁵⁴

Based on such a more realistic reading of the current situation and the prospects of future developments, a European public sphere has been characterised from the perspective of deliberative democracy as a space or spaces of negotiation between

51 See Frischl (2004), p. 211-223 and also *passim* and Fraser (2007), p. 53-60.

52 Fraser (2007), p. 64-65. Cf. de Búrca (2008), p. 233-252 and 276-277, arguing for a "*democratic-striving approach*", based on the more modest idea of continuing pursuit and improvement of democratic values and democratic "building blocks" on the transnational level decision-making, albeit recognising that the dominant model of democracy (including the public sphere as conceptualised on the domestic level) cannot simply be transferred from the national to the transnational level. One of the core ideas of this approach is to keep comprehensive participation and representation of those affected as a continuously and consciously open question in the spirit of democracy-striving and self-correction, but also subject to practical constraints and hence incompeteness of democratic design of transnational decision-making practices.

53 See also e.g. Cederman & Kraus (2005), *passim*.

54 See H. Nieminen (2006), p. 116.

different networks about issues having at least a European dimension.⁵⁵ From the angle of *Mouffe's* pluralist theory on democracy, a European public sphere could have the more demanding function of constituting a symbolic space of vibrant contestation and confrontation about the overall direction of the European Union, where different hegemonic political projects can be challenged by counter-hegemonic movements, implying the permanence of political conflict.⁵⁶

From the perspective of such conceptions of democracy, European policies aimed at general inclusion and openness of the relevant discursive spaces and improvements in the possibilities of diverse social groups and movements to contest the hegemonic discourses would empower the suppressed, counter-hegemonic, critical and alternative networked public spheres and facilitate their access to the spaces of negotiation and confrontation. Yet despite the European Commission's invocation of and longing for the European public sphere as a cure to the Union's legitimacy and popularity crisis, on a more practical level such ends do not seem to guide the European Union's media and communications, intellectual property and competition policies.⁵⁷

Far from facilitating confrontation and challenge of the European integration project's direction or critical discourse around the Union's individual policies, what is sought for appears to be the legitimization of the Union's existing course and policies. The question is to what extent these European policies also further jeopardise the inclusiveness and openness of the public spheres at the nation state and transnational levels. It is namely increasingly these European policies that seek to define the rights, freedom and power positions related to information and communication in European countries. These, in turn, participate in constituting the social structure of public discourses and the conditions of competition at the national level alike. What is created with a policy of strong intellectual property rights and single-sided pursuance of competitiveness is not a European public sphere characterised by inclusion and openness, but a further limitation of already existing ones on national and transnational levels.

55 *Ibid.*, p. 21-24.

56 See generally *Mouffe* (2000), p. 10-15 (characterising democracy as *agonistic pluralism*) and (2005), p. 3 and 20-21 (arguing that "*the task of democracy is to transform antagonism into agonism*" and thus enemies into adversaries admitting that there is no rational solution to their conflict, but recognising the legitimacy of their opponents in the political processes, *ibid.*, at p. 21). See also *Karppinen* (2007), p. 502-506 (analysing the implications of *Mouffe's* thoughts for communications and media policy) and *Fraser* (1992), p. 122-123 (stressing the importance of narrowing the gap in participatory parity between dominant and subordinate groups).

57 See the *Commission's White Paper on a European Communication Policy* (2006), p. 4-5, where the European public sphere is seen as highly desirable. See e.g. *Nieminen* (2007), *passim* for a critical analysis of the European Union's media and communication policies. See the subsequent chapters of this research for intellectual property and competition policy. *Michalis* (1999) p. 163 and also *passim*, discusses competition policy in the communication sector and concludes that the EU has failed to take action *vis-à-vis* media concentration and pluralism. See also the subsequent discussion of communicative diversity in sub-chapter 4.3.3.

The features of the public sphere important for the pursuit of consensus in the communicative processes and the legitimation of the legislative process and administration based on it (deliberative democracy) need not be antithetical to the features of the public sphere considered important in other democratic theories. Mouffe's vision of democracy challenges deliberative democracy and goes further in its demands from the public discourses, insisting that contestation should be made actively possible, confrontation kept open and power-relations put into question.⁵⁸ Hence, inclusiveness and openness of the public sphere(s), albeit not for reaching consensus like in deliberative democracy, but for enabling the possibility of confrontation, constitute its core ideals. Similarly, it is possible to proceed in lines of democratic culture and identify cultural public spheres, where cultural expressions importantly participate in the constitution of identities, meaning and political agendas.⁵⁹ From such a perspective, the public sphere(s) and policies participating in their constitution should nurture the opportunities of individuals and social groups to participate in the forms of meaning-making and cultural activities that constitute them as individuals and social groups. However, neither do such conceptions of the role of public sphere exclude its other roles related to consensus formation or enablement of confrontation. The point is merely that widening the perspective to these theories of democracy problematises additional aspects of the European Union's relevant policies. Even if we renounced the ideal of a public sphere intended to provide legitimation to the legislative process on European and domestic levels, such policies appear problematic from the perspective of these competing and complementary theories of democracy and the functions entrusted by them to the public sphere(s), expression and discourse.

In spite of (or perhaps due to) the reductions in the public sphere's capacity to participate in the traditional legislative activities beyond the nation state level, it is possible to identify new kinds of democratically significant activisms on the part of the civil society. Its networked, transnationally operating clusters have started to emerge as active subjects purporting to affect the global economy and its regulation through traditional legal norms and computer code. The latter relates to the democratic character of the technological environments in which economic processes and lifeworld are ever more embedded. The social production processes of networked individuals and communities thus formed challenge the distinction between lifeworld and system. Uncommercially motivated consensual interactions of individuals produce technologies and complex products with considerable economic significance, often directly competing with commercially produced technologies and products. These practices also challenge the economic determinism of some theorists who see that the market forces and economics trump any democratic potential inherent in current

58 Karpinen (2007), at p. 504, notes that Mouffe's ideal may be characterised as a critical orientation seeking to question "how plural, really, is the pluralism and abundance extolled today", thus insisting the analysis of the hierarchical structures of the multiple publics and their relations to the broader structures of power.

59 See Touraine (1994,1997); Balkin (2004) and McGuigan (2005), all *passim*.

technologies.⁶⁰ Technologies of control related to the Internet, the proprietary control of computer code and the censoring of online expression and communication through intellectual property and technologies have thus provoked subversionist movements wherein individuals and communities develop technologies and mechanisms promoting the values of democratic participation and libertarianism.⁶¹ Perhaps the most important mode of such practices in the information society is now based on open source.

Furthermore, the transnational intellectual property lobby has found its counterparts in civil society, such as in the *Electronic Frontier Foundation*, *Center for Democracy and Technology* and other similar webs of organisations, acting as examples of *Sousa Santos' subaltern cosmopolitanism*.⁶² Such organisations do not only seek to affect the formation of traditional laws and policies, but also social norms, technical standards and technologies regulating social life and economic activities in their own right. Similarly, the open source development communities affect not only the technological environments and technical standards, but through their practices based on sharing and gift-culture also the social norms and meaning underlying the related social interaction. Intellectual property, in particular, assumes an ethical dimension in these processes in that it is configured around the right to distribute, not to exclude.⁶³

Taken together, social production, community-based creation of more democratic technologies, adoption of more democratic ownership and sharing arrangements, as well as subaltern networked organisations and social movements demonstrate that the impact of the civil society on politics is not channelled through public elections and the legitimating function of the public sphere only. The activist segments of the civil society, like that constituted of open source development of more democratic technologies, may bypass the traditional political system still anchored in nation states as simply irrelevant a sphere for political struggles. They may rather engage with the global politics of economy and technology directly, without the mediation of the traditional politics restricted in its capacity in the above senses. Such organisations could also participate in discourses where the direction of international norms are negotiated. They seek to operate as functionally differentiated representatives of the civil society. They aggregate specialised knowledge required in the negotiations, thus providing them with credibility and strengthening their symbolic power with knowledge-based power. They seek to affect norms at all policy levels and decision-making centres. They affect decision-making of the politicians by campaigns and publicity. Such campaigns

60 See e.g. B. Barber (2002), at p. 3, stating that because “*economics trump technology, the real monopoly and inequality trump potential pluralism and openness*” related to the current communications technologies.

61 See also Castells (2001), p. 182-184.

62 See more closely sub-chapter 2.5.2.

63 See about the impact of open source on the meaning of intellectual property from exclusion towards mechanisms of social cooperation Weber (2005), p. 178, 185 and 204; Fitzgerald (2001b), p. 57 and Vesting (2001), p. 29-30.

and publicity may also be directed at enterprises or consumer behaviour, and thus the societal effects of economic processes more generally.

Yet, one should not naïvely trust the capacity of such existing networked clusters and movements of the civil society's to transform the society into a more democratic one.⁶⁴ The potential of the networked civil society to produce any counter-weights and more democratic viable technological and institutional alternatives needs to be nurtured and facilitated by law, just like the inclusiveness and openness of the public sphere(s) for enabling negotiation and formation of consensus (deliberative democracy), continuous confrontation (agonistic pluralism) and participation in cultural meaning-making and identity-formation (democratic culture). A democratic society and culture characterised by realistic possibilities of individuals and communities to participate, influence, confront and self-realise at all spheres of the society is largely dependent on the subsystem of the economy and its regulation. Such possibilities are now increasingly realised in the frameworks of privately controlled information and communication networks, and through building on existing culture and information increasingly controlled by commercial operators.⁶⁵ The limits of intellectual property are thus elemental for the democratic nature of our information society.

What could law reflecting such democratic ideals look like? Only a few preliminary remarks can be made in here. There should be no automatic logic of propertisation leading to "clearly defined" (read: as close to absolute as practically possible) property whenever establishing such rights is feasible. Creating and allocating property rights is only one policy option to facilitate economic activities and the provision of public goods.⁶⁶ Moreover, what is known as property rules should not automatically be preferred over liability rules which preserve the right to use against payment.⁶⁷ When property rights are chosen, they should be defined and allocated in a manner that diversifies private power structures, decreases financial dependency on state and expands individuals' possibilities for independent-minded participation in public discourse. This should include access to informational and communicative networks supporting the ability of individuals and groups to resist, through critique and dissent,

64 As realised by *Rowbottom* (2006), p. 490 and also *passim*, the new forms of expression in the Internet environment enabled by the new technologies do not automatically lead to the leveling of the playing field for expression and participation, but could also lead to the perpetuation of existing media elites and even to the creation of new ones, such as the owners of the most popular online search engines, portals and online technologies, among others. These may namely be able to push some of their (preferred) content to a wide audience still needing guidance in navigating the mass of online information.

65 See also *Waldron* (1993), p. 881-886 and *Balkin* (2004), p. 3-4.

66 See also e.g. *Lessig* (2004a); *Frischmann* (2005); *Benkler* (2006), all *passim*. See also the chapter 5.

67 Property rules give an exclusive right, whereas liability rules only the right to get paid for use. See more closely the discussion in sub-chapter 5.3.1. *Reichman* (2001), at p. 27-28, says that legislators tend to instinctively turn to a property rule even when the problem is suboptimal investments in small scale innovation. In addition to liability rules, alternative regimes could also be based on allocation of potential profits, if any, between the original right holder and the maker of a derivative work (implying the possibility of no payments in case of derivative works made and distributed for free). See for such a proposal *Rubinfeld* (2002), p. 56-57.

hegemonic extensions of state and private power.⁶⁸ State intervention in the form of reactive norms is required to prevent market-based hierarchies and their undesirable societal effects.⁶⁹ Powerful economic entities need to be supervised, and when needed constrained.⁷⁰ Profit- and market-oriented economic activities may inhibit the possibilities for self-development, thus calling for governmental intervention: only states can effectively promote the co-ordination required for a society to ensure investment in needs, skill development and high-level infrastructure and environment for everyone. Enabling the possibilities for playing and communicating with others, as well as learning and using satisfying skills in socially recognised settings must form part of such efforts.⁷¹ Law should also promote the diversity of market actors, enabling the lowering of barriers between the market processes and the civil society.⁷²

Importantly, law should promote communicative diversity by enabling and facilitating the contestation of hegemonic discourses and communicative structures for diverse social groups, thus increasing the inclusiveness and openness of the public sphere(s).⁷³ It should advance democratic participation in culture, as democracy can also be seen as an attribute of social life and a form of social organisation. *Touraine* says that the aims of democratic culture include opposing the forces of domination and social control and allowing every individual to take more initiative in their pursuit of happiness. This includes the fostering of the creative and productive roles of individuals by producing a space where they can blend their cultural heritage with their technical environment.⁷⁴ *Balkin* has characterised democratic culture as proposing that individuals enjoy a fair opportunity to participate in the forms of meaning-making that constitute them as individuals. For freedom of speech, which constitutes the legal context of Balkin's theory-formation, this would imply that we should be interested in protecting not only speech about public issues, but also speech (broadly understood) that concerns popular expression related to other matters.⁷⁵

Without discussing the implications of the foregoing in the context of intellectual property at this stage, the following diagram serves to indicate the core differences

68 See also e.g. *Rawls* (1973), p. 225-226 and 275-276; *Netanel* (1996), p. 346 and *Young* (1999), p. 150-153.

69 See e.g. *Habermas* (1981, 1987), p. 344-347; *Walzer* (1995), p. 13-14 and 21-25; *Young* (1999), p. 158-159 and *Barber* (2003), p. xii. If freedom is construed in terms of non-domination (the absence of mastery of others as opposed to non-interference), state intervention reduces freedom only if arbitrary, as argued by *Pettit* (1999), *passim* (pointing out that coercive law may condition the exercise of liberty in the manner of natural limitations and obstacles but it need not violate or compromise that liberty in the sense of dominating people).

70 *Walzer* (1992), at p. 104, notes that the best constraint probably lies "in alliances with other states that give economic regulation some international effect".

71 See also *Young* (1999), p. 142, 153 and 157-159.

72 See also *Walzer* (1992), p. 100 and 106 and *Dahl* (2000), p. 171.

73 *Curran* (2002), at p. 237, notes that antimonopoly controls "that prevent market domination by one company is not enough if the market as a whole is rigged by high entry costs in favour of one class of sectional interest". See also *Karppinen* (2007), p. 506.

74 *Touraine* (1994, 1997), at p. 130-131 and 185-186 and also *passim*.

75 *Balkin* (2004), p. 3 and 33-41 and also *passim*.

of the main (normative) democratic theories with respect to intellectual property rights:⁷⁶

Democratic Model:	Liberal democracy	Republican democracy	Discourse democracy	Democratic culture etc. ⁷⁷
Threat:	Corruption of the market freedom and capitalist dynamics through governmental interference.	Corruption of public discourse and democratic governance through concentration / abuse of economic or political power.	Corruption of private and public spheres of lifeworld through administration and economy; frustration of value-pluralism in society.	Frustration of possibilities for self-realisation and influence also outside political discourse, structural exclusion of groups and identities.
Main target of protection:	Formal freedom, strong and well-defined property rights, honest transactions, market institutions from state institutions.	Protection of public political discourse from economy and excessive administration.	Protection of the communicative nature of action within private and public spheres of lifeworld, diversity of values.	Protection of individuals' possibilities for self-realisation, participation and critique, contestation of hegemonic discourses and structures.
Likely approach to IPRs:	Strong, well-defined IPRs enable optimal allocation of resources in markets.	IPRs have a productive and structural function in democracy. May restrain public discussion and political speech if too strong.	IPRs may colonise the private and public spheres of lifeworld and restrain communicative processes necessary for legitimate law.	IPRs should also serve the goal of promoting popular participation in culture and should not restrict protests, media events etc. Should enable the contestation of public spaces.

⁷⁶ For a concise text introducing discourse democracy as developed by Habermas, and the competing or complementary views known as liberal democracy and republican democracy, see *Habermas* (1996), *passim*. For a characterisation of discourse democracy, see also e.g. *Benhabib* (1996), *passim*.

⁷⁷ Democratic culture comes close but may be distinguished from strong, participatory or radical democracy. *Barber* (2003), argues in favour of strong democracy and (2001), with an emphasis on technologies and the Internet, both *passim*. *Mouffe* (1996) and (2005), both *passim* has been identified as a supporter of radical democracy. *Young* (1999), at p. 155, also discusses the agenda of the radical democracy. *Touraine* (1994, 1997) and *Balkin* (2004), have depicted democratic culture (both *passim*), as well as *Benkler* (2006), p. 273-473 and also *passim*.

2.3 Political Dimensions of Private Economic Power

Power is one of the most analysed and diversified topics in science.⁷⁸ Yet the purpose of the present discussion is simply to address the political and social dimensions of economic power based on the control of knowledge and informational resources. Privately held market power enabled by intellectual property rights should often be seen as an instantiation of political and social power, and thus a form of informational power. Law should equally (or even more so) react to the existence and exercise of the latter forms of power. It should be emphasised that the present discussion is not intended to have direct repercussions for the application of competition law or the finding of a dominant position when intellectual property rights are involved. Market power and dominance as concepts of competition law and theory will be discussed subsequently in chapters 6 and 7.

The notion of power used by Habermas is too narrow for the purposes of this research.⁷⁹ His previous limitation of power to bureaucratic contexts has been criticised by many.⁸⁰ The association of authority with only government functions ideologically as it characterises the world not as it is, but as it ought to be.⁸¹ Habermas does not provide much analysis of what he calls social power or media power. *Social power* is a measure for the possibilities an actor has in social relationships to assert his own preferences irrespective of the opposition of others. It may be facilitative or restrictive in its operation. Habermas considers harmful social power to work primarily through the political process either directly by influencing the administration or indirectly by manipulating public opinion. He admits that unequally distributed social power may lead to illegitimate power complexes. He further maintains that to the extent powerful corporations are involved in the exercise of political authority, state sovereignty is undermined. For Habermas the *power of the media* is mainly caused by the concentration of the sector: it is mostly the power of selection on both supply and demand side. It should be tamed and kept free from the pressure of political and functional elites in order for the mass media to be capable of raising and maintaining the discursive level of public opinion formation necessary for the legitimate legislative process.⁸²

Sousa Santos criticises the limitation of power and politics to the public sphere and state law. Such “*conceptual orthodoxy*” is based on liberal political thought. The limitation of political to state, and its separation from the economic sphere, has the

78 Foucault has famously argued that power does not have to be direct domination, but could be seen as continuing temporal relations of domination exercised locally in a chain of relations. Power may be latent and circulating: based on self-restraint and abstentions. It takes the form of strategies spreading into people’s day-to-day interactions. The objects of power are thus at the same time the vehicles of power. See e.g. Foucault (1980), p. 89-108. For a critique of Foucault’s conception(s) of power, see e.g. Fraser (1989), p. 27-33; Sousa Santos (2002), p. 5-7 and Tuori (2002b), p. 25-26 (all criticising Foucault of ignoring the normative and cultural sides of power).

79 Habermas (1981, 1987), p. 268-274 (power institutionalising in organisation of official positions).

80 See e.g. Fraser (1989), p. 121 and Tuori (1988), p. 115-117.

81 Cutler (2002), p. 24.

82 Habermas (1992, 1996), p. 175, 247, 327-328 and 433-434 (social power) and p. 376-379 and 422 (media power).

function of confining the democratic ideal of politics to the state and keeping the politics of production free from the basic legal and political principles of the public sphere.⁸³ He argues that the political nature of power is based on the global effect of combinations of different forms of power and the methods of their production: power forms do not operate in isolation. Although Sousa Santos admits that state power and law are still in many ways central, they cannot be conceived as a monopoly.⁸⁴ The other structural places of power, the householdplace, workplace, marketplace, communityplace and worldplace, produce power relations and, according to Sousa Santos, their specific forms of laws as well. The power of command in each of these structural places is as political as the power of the state (the citizenplace). The worldplace is the organising matrix of the relevant effects of world conditions and world hierarchies upon the other structural places of power. However, the worldplace is not determining the conditions of the other social structures. This implies that power exercised at more local structural places (for example the work- or communityplace) may have a bearing on the other levels, as well. This would imply that the development of capitalist societies and the capitalist world system as a whole is not based on power exercised at any structural place individually, but is grounded on constellations of power relations between them.⁸⁵ This is one of the main reasons why Sousa Santos considers emancipatory politics possible in the conditions of globalisation, and urges us to pursue such policies at all these levels.⁸⁶

Strange has divided power into two main types. The first is the traditional realist sense of power of an international actor to force others in the system to do something they would not do voluntarily. This is called *relational power*. *Structural power* consists of the capacity to shape and determine the structures and frameworks of the global political economy within which states relate to each other, relate to people, or relate to firms.⁸⁷ It enables changing the range of choices available to others without direct pressure.⁸⁸ *Strange* identified four basic societal needs in the modern world economy: security, knowledge, the production of goods and services and the provision of credit and money. The capacity to decide over them constitutes the core pillars of structural power. This capacity – the systemic ability to affect the basic structures of these pillars – is unevenly distributed among states and private entities.⁸⁹

83 Sousa Santos (2002), p. 362-373. See also G. Anderson (2005), p. 9-10. Perception of the private sphere as a non-political sphere of individuals, freedom of markets and economic exchange is seen as increasingly problematic or even untenable a premise also in research orientations known as international relations and international political economy. See Hall & Biersteker (2002), p. 5-6 and Cutler (2002) p. 24.

84 Sousa Santos (2002), p. 369-373. See also Braudel (1979, 1986a), p. 554-555.

85 Sousa Santos (2002), p. 371-375; 399 and 404-409.

86 *Ibid.*, p. 468.

87 *Strange* (1988), p. 24-29.

88 *Ibid.*, p. 31. In international political theory Nye (2004), at p. 68-80, develops the concept of *soft power* in international politics. It is power of an actor to persuade others to *want* something by setting the agendas and structuring the situations in world politics. It is a less transferable, less coercive and less tangible form of power.

89 *Strange* (1988), p. 15.

Although none of the structures necessarily dominates, the knowledge pillar has assumed central importance through the function of technology in enabling the gaining of traditional power and in strengthening the other pillars of structural power. The knowledge pillar thus intertwines with the other systemic pillars and greatly affects them.⁹⁰ It has become a structural basis of power in its own right. Moreover, it has become largely privatised through the continuing expansion of the institution of intellectual property, in particular.⁹¹ Strange noted that “*knowledge is power and whoever is able to develop or acquire and to deny access of others to a kind of knowledge respected and sought by others; and whoever can control the channels by which it is communicated to those given access to it, will exercise a very special kind of structural power*”.⁹² It is largely the transnationally operating firms, supported by governmental policies, which can make the critical decisions concerning the technological trajectories.⁹³ The privatisation of knowledge production has led to a growing dependence of states on firms for the generation and application of knowledge, leading to a consensual relationship between them. The crucial role played and power held by firms thus relates to their proprietary knowledge base and their specialised expertise in technologies and production, which gives them the structuring potential in the world economy.

The foregoing perspectives, albeit expanding the concept of political power from that understood in many legal discourses, still largely construe the subjects of power in individual terms. Teubner’s systems theoretical construction of power takes a step in the direction of Foucauldian conception(s) of power in stressing the structural violence and power “exercised by” the autonomously functioning and non-personalised *social sectors* such as the capitalist economy, technology or state bureaucracy. They exercise their power over *persons*, the *constructed masks* that the social sectors communicate with, and which are distinct from the minds and bodies of actual people, enabling the “sucking” of mental and physical energies from this environment for the self-preservation or expansion of the social sector in question. The social sectors communicate directly only with these person-constructs and could, through these communicative processes, irritate the actual people and threaten the integrity of their minds and bodies. The law should, even if difficult or problematic, also seek to react to such destructive anonymous tendencies of the social sectors.⁹⁴

Intellectual property is often characterised as an institution of civil law and thus akin to institutionalising the money medium in lifeworld. It establishes the possibility of

90 *Ibid.*, at p. 26-27 and 132-133, noting that competition between states is becoming competition for leadership in the knowledge structure and that power is passing to the information-rich instead of the capital-rich. See also *Lawton, Rosenau & Verdun* (2000), p. 9.

91 *Mytelka* (2000), p. 40. See also *Strange* (1988), p. 28.

92 *Strange* (1988), p. 30.

93 See e.g. *G. Anderson* (2005), p. 9.

94 *Teubner* (2006), at p. 339 (but law often cannot react adequately to such structural anonymous exercise of power, as pointed out by Teubner in the context of fundamental rights protections, *ibid.*).

reward to the creator or innovator and is thus based on the steering media of money.⁹⁵ It commodifies intellectual creations by enabling their private control, achieving this by establishing an exclusive right and by making it wholly or partially transferable.⁹⁶ The norms enabling the transfer of intellectual property rights largely constitute its property character, for transfer implies contract and contract implies payment in return for total or partial transfer.⁹⁷ Quite literally, intellectual property transforms cultural and innovative objects into intellectual *capital*, enabling its accumulation, like money. It is like money in another respect as well: the items of intellectual property have use value by virtue of the regime giving them exchange value. This aspect, among others, distinguishes intellectual property from physical property: its exchange value is typically based on use value.⁹⁸

However, intellectual property has also characteristics of institutionalised power, thus anchoring both money and power media in lifeworld. This is simply because intellectual property enables power over actions of other people.⁹⁹ For example, copyright gives its owner *general* power to block public at large from engaging in protected expressions.¹⁰⁰ Intellectual property also enables an important form of market control, as it is a state-sanctioned means of controlling competition.¹⁰¹ It shapes the patterns of control over some aspects of intangible resources by assigning this control to some and by denying it from others. These patterns of control enable and constitute certain forms of life and economic interaction while restricting others. Intellectual property is thus a form of negative sanctioning one is able to possess and transfer like a commodity. This corresponds with the patent system in that a patent is established in an administrative process, leading in principle to a transferable right to exclude others from the scope of the patent. Also copyright law has traits of the classic conception of power: it originally developed from governmental interest in censorship: granting exclusive rights to print *certain* books to dedicated publishers was a way to privatise the function of censoring ideas written in the form of books.

Intellectual property takes the shape of a power medium by untying the power vested in the *person* of the innovator and author from the personhood by making

95 See also e.g. *Drahos* (2002c), p. 228. In case of patents the reward is channelled through the employee-role as the employee is normally compensated for patentable innovations in the framework of fulfilling the employee's tasks.

96 However, from an economic or practical perspective a patent, in particular, only establishes a right to *try* to exclude by asserting the patent in court. Many patents (at least in the US context) have been found invalid if litigated. See more closely *Lemley & Shapiro* (2005), *passim*. See also the discussion in sub-chapter 4.5.2.

97 See e.g. *MacCormick* (2002), p. 235 and *MacMillan* (2002), p. 490-491.

98 *MacCormick* (2002), p. 235-236.

99 As said by *Singer* (2000), p. 28-29 and 94, it has long been understood that property in general implies foremost power over people and not over things. Owners are given the power to control the behaviour of nonowners. Because rights conflict, we should define them partially in terms of the relationships they instantiate (*ibid.* at p. 131).

100 *Rubinfeld* (2002), at p. 28, compares this power to the more limited power conferred by ordinary property laws which grant owners site- or item-specific informational power only.

101 See e.g. *Boyle* (1997), p. 105 and *Sell* (2003), p. 39.

the technical ideas and creative expressions transferable, by enabling their deposition and by preventing their degeneration through disclosure and copying for a certain period. It is a form of modern geopolitical power no more embodied in personalised relations of domination.¹⁰² Intellectual property transforms the positive “right” of an innovator or creator to utilise his/her technology or work in his/her own business into a relational negative power to exclude others from everything that is made possible by using the technical idea or expression protected by intellectual property (within the scope of protection and outside the scope of permitted uses). It enables the acquisition and aggregation of exclusionary power without the need to invest in innovation or creation, and makes this power a commodity capable of being priced, traded, negotiated and circulated in the economy.

Most of the implications of the foregoing for the research theme will be discussed subsequently. The basic proposition is simple: private, intellectual property –enabled control over technologies, innovation and use of knowledge and information should often be seen as a form of political power, as it not only affects competition and commercial innovation, but also lifeworld interaction and conditions of public discourse, among others. Technological environments may affect others’ conduct directly, without recourse to law or direct forms of interpersonal domination: they may restrict certain and allow other actions without direct involvement of the actor controlling the technological environment. It is thus a specific form and resource of power. This is the topic to be developed more extensively in the following.

2.4 How to Master (With) Technologies?

2.4.1 Technologies as Regulators

It has long been recognised that the environments we interact with are largely man-made and thus artificial.¹⁰³ Artificiality involves design, and design involves choices that affect the choices available for individuals interacting with the technological environments. Choices available for individuals, in turn, affect their freedom and personal autonomy. *Mumford* was right: the constructive efforts in maintaining democratic institutions must comprise technologies.¹⁰⁴ Technologies are developed in particular social contexts and deployed reflecting current social relations. It is often not the inherent nature of a technology, but its situation in society that is decisive for

102 *Rosenberg* (1994), p. 146-153. The function of property ownership has at the same time assumed a new function without any change in the norm-level. See the early analysis of *Renner* (1949), p. 105-108 (property has become a power enabling man’s control of human beings). *Sousa Santos* (2002), p. 367-368 and 410-411, makes the point missed by Renner: “*What differentiates capitalism from feudalism is precisely the privatization of the political power over production, which separates the control over production from the performance of public functions and communal services typical of feudalism.*”

103 See e.g. *Simon* (1969), p. 3 and also *passim*.

104 *Mumford* (1964), p. 7.

its impact.¹⁰⁵ Technological development is not based on technological determinism whereby the technology first develops through an internal dynamic to later change the society to fit its patterns.¹⁰⁶ Such perception only transfers power from the political process and public debate to the hands of specialists administering the technical development, seen as an autonomous sub-system within the society. Technological determinism thus effectively insulates the technical development, and as a corollary the actions of the specialists, from politics and morality.

Although not deterministically imposing societal outcomes, technologies are species of enduring social structures or frameworks capable of affecting and regulating the patterns of everyday life and human interaction. Design of technologies is necessarily concerned with how things should be, with devising artefacts to attain goals.¹⁰⁷ Technologies are thus neither natural nor autonomous in their development. Rather, they are tools facilitating certain practices and prohibiting or constraining others, affecting non-users and constituting systems of social relations, shaping communication and psychological development, thus demonstrating their nature as a political and cultural phenomenon.¹⁰⁸ Technologies are shaped by society and its values. As *B. Barber* states:¹⁰⁹

“If the dominant moments of modern society are democratic and civil, and if culture and education are made to trump other private goods, the new technologies are likely to be deployed on behalf of improved democracy, enhanced civic discourse, and the spread of culture. If those moments are primarily commercial, private, material, and consumerist, however, (as seems to be the case at present) then the technologies too will become commercial, private, material and consumerist. The technology cannot save us from ourselves, it can only reflect all too candidly who we are.”

Yet as argued by *Latour*, the rejection of technological determinism should not lead us to social determinism, the explanation of technological development and the effects of technologies by social, economic and cultural theories alone.¹¹⁰ Technologies also shape the society and its political structure. They may promote or hinder, but do not determine democracy and its forms. The ways of *using* technologies affect their democratic nature, but the effects are also shaped by the *original design* of the technology which may be more or less democratic for example in terms of the need for central

105 See also *Ellul* (1954, 1964), p. 63-64; *Castells* (2000), p. 4 and *Winner* (1986), p. 20-21.

106 See e.g. *Winner* (1986), p. 20-21 and *Bimber* (1990), *passim* (also discussing which theories represent actual technological determinism by maintaining e.g. that certain technologies require forms of organisation or commitments of political processes, regardless of their social desirability or previous social practices).

107 *Simon* (1969), p. 59. See also *Winner* (1986), chapter 1 and also *passim* and *Sclove* (1995), p. 10-11.

108 See e.g. *Hardt & Negri* (2001), p. 405; *May* (2002), p. 13 and 27 and *Winner* (1986), p. 6.

109 As emphasised by *B. Barber* (2002), at p. 2-3.

110 *Latour* (1987), p. 141. Such a theoretical perspective from above could focus our attention to some relevant aspects of technologies only, to the exclusion of others. For a less traditional, but perhaps even more compelling argument in the same direction, see *Latour* (1996), *passim*. See also *Hunt* (1993), at p. 179 and 205, emphasising the constant interaction between diverse societal processes in the definition of substantive outcomes.

coordination, transparency of technological design and scope for independent further development enabled by modularity, for example.¹¹¹ The once common thought that technologies are neutral may thus be characterised as naïve, as the choices between technologies and the ways of their deployment are not just instrumental in nature, but necessarily reflect choices between forms of social and political life.¹¹² Whereas in the industrial society the technologies of mass production, distribution and energy production emerged predominantly as threats to democratic ends, the environment and the health of humans, in the information society the communication technologies also contain an inherent potential to advance democratic objectives.

As explained above, Habermas considers the money and power media, in addition to the social and moral norms stemming from the lifeworld contexts, to steer the conduct of the individuals.¹¹³ He discards the thesis of autonomous character of technological development and believes that technology does not exclude the possibilities for democratic decision-making.¹¹⁴ Even though technological development is not deterministic, the society's exclusive reliance on norms of efficiency, reason and productivity in the direction of their development produces a self-correcting process functioning beyond ethical criteria and political system, leading to new possibilities for expanded power of technical control. Habermas argues for dialectic of technological potential and will, in accordance with political reflection and dialogue.¹¹⁵ The core idea in Habermas' analysis is the focus on norms of practice: technology becomes autonomous or deterministic only when the norms by which it is advanced are removed from political and ethical discourse, in particular through a process where the goals of efficiency and productivity replace the value-based discussion over methods, alternatives and objectives.¹¹⁶

Lessig also recognises that the market (through the money medium), social norms, and law (through governmental power) restrain the choices available for individuals and thus steer their behaviour.¹¹⁷ Lessig adds that in information society or "cyberspace"

111 See e.g. *Iversen, Vedel & Werle* (2004), p. 106 and 121-122 and e.g. *Rotenberg* (2004), p. 24, about modularity. *Kesan & Shah* (2004), *passim* deconstruct various institutional settings whereby code is being made and negotiated, such as firms, universities, consortia etc. Not surprisingly, they conclude that firms have been unwilling to incorporate unprofitable social values in code.

112 See also *Henman* (1997), p. 324-326 and *Winner* (1986), p. 52.

113 See also *Habermas* (1992, 1996), p. 39-40 (stating that money and administrative power "do not necessarily coordinate actions via the intentions of participants, but objectively 'behind the backs of participants'").

114 *Habermas* (1969, 1971), p. 59-60.

115 *Habermas* (1969, 1971), p. 60-61. Also *Ellul* (1954, 1964), *passim* argues that the adopted goals of logic and efficiency dominate the social, political and economic life. It is these surrogates for value-laden norms and judgments, which lead to the technological society.

116 See also *Bimber* (1990), p. 337.

117 Lessig rightly observes that law may affect the functioning of the markets and the contents of social norms, as well as architectures, thus affecting the choices and preferences of individual *indirectly*. See *Lessig* (1999a), p. 92-95 and (2006), p. 122-137 and 340-345. *Murray & Scott* (2004), *passim* develop a modified version of Lessig's four modalities. Their model consists of 1) hierarchy; 2) competition; 3) community; and 4) design.

people (ever more) live and interact in built environments. More specifically, their social life is to some extent determined by coded technological architectures. The choices made by programmers, or companies hiring them, constitute what Lessig calls *code as law*, a kind of man-made law of nature functioning as a self-executing *ex ante* constraint of conduct, and thus an effective regulator of human behaviour. Although Lessig writes about the Internet, his remarks are by no means restricted to it. Instead, they apply to any built environments.¹¹⁸ Furthermore, as he points out, the government can regulate private behaviour indirectly through the regulation of code and companies writing it. Thus, coded architecture is an instrument available also for governments.¹¹⁹

Yet in distinction to money and power media, technological architecture does not need law to anchor it to the lifeworld. Although technical architecture is not regulation directed at individuals, it functions and constrains irrespective of law's mediation. When compared to traditional law, coded architecture as a regulator of behaviour has several special characteristics. Whereas traditional law is based on an institutional, procedural and personal separation of enactment, application and enforcement of law, in the regulation of behaviour through computer code these three elements of regulative power merge.¹²⁰ Moreover, coded architecture does not typically provide any room for interpretation or non-application, and thus may not provide any opportunities characterising traditional laws for dynamic adaptation, reflexivity, change and learning.¹²¹ Interpretation and arguments play no role in the application of technologies.

Finally, software is not only functional, but regulates communicative processes, discourse and use of information by functioning as a medium allowing individuals and communities to see and say things, to construct meaning and knowledge in digital space.¹²² It is in this respect like language, but with the limitations indicated above regarding non-application, adaptation and interpretation. Hence, the programming of the code, the formation of the technological standards, the inherent potential of the code to facilitate democratic or authoritarian practices, the transparency and openness

118 See also Lessig (1999b), *passim*.

119 See Lessig (1999a), p. 43-53. Lessig was surely not the first to note the regulating capacity of technological design or even the first to make an analogy between technological architecture and law. See e.g. Simon (1969), at p. 59; Winner (1986), at p. 29 and also *passim*. See also Sclove (1995), *passim*. This is not to deny that Lessig has developed the thesis of code as law in the context of the Internet, in particular. His most distinctive contribution in this context is in clarifying the involvement and role of traditional law as part of technological regulation as well as the role of technology in enabling regulability by traditional law. Earlier e.g. Hunt (1993), p. 299-300 and also *passim*, has emphasised the important interaction of law with the other modalities of regulation. Vesting (2004), at p. 640, criticises Lessig of "a misconception of a technological superstructure steering the (media) world and its further evolution". As indicated above and subsequently, Lessig's contribution should not be understood as representing such technological determinism.

120 See Teubner (2004), p. 21-22.

121 Teubner (2004), p. 22.

122 See Fitzgerald (2001a), p. 121 and (2001b), p. 93-94 and Rotenberg (2004), p. 35-37.

of the code, and the empowerment of counterweights to the dominating code assume unprecedented constitutional and democratic significance in an information society embedded in coded architectures.¹²³

Each epoch has had its particular dominant regulators leading to specific responses in the forms and systemasy of legal regulation. The industrial society, where the money medium assumed a central role, led to an emphasis on contractual freedom and sanctity of property ownership, and after maturation of the developments into social problems, to social legislation and welfare-state values. The legal sphere is thus penetrated with norms of different times representing and embedded with diverse values.¹²⁴ In the information society technological design assumes an unprecedented role as a regulator of behaviour. So far, the central ideas of the industrial era, freedom of contract and strong form of property ownership, have been the standard reactions to the problems posed by private technological regulation.

Yet technological regulation should be integrated in legal and constitutional theory. Technologies may frustrate rights created by law or the realisation of related collective goods, indicating the need for corrective measures by the legislator, the judiciary, or both. They may facilitate communication and possibilities for self-expression and induce decentralised innovation, entrepreneurship and economic activities. Contrary to laws of nature, technological architectures are man-made and can be redesigned. We shape the social contexts in which technologies emerge and deploy the emerging technologies for both authoritarian and democratic purposes: technologies themselves (usually) have no natural character.¹²⁵ Law has an important role in these processes, irrespective of one's wishes. Deciding to remain passive, not changing the law or its interpretations when the economic, social and technological paradigms change and produce social problems and the functions of law may be as political as actively reacting to such changes.

2.4.2 Regulation of Technologies and Informational Power

The technologies constituting our information environment have specific significance from the perspective of democratic values. As pointed out by *Benkler*, the structure of our information environment is *constitutive of our autonomy*, not only functionally significant to it, as an essential condition of self-direction is the capability to perceive the state of the world, to conceive available options for action, to connect actions to

123 Due to the specific features of code as a regulator, the judicial review and other public controls of the meta-rules of code assume an importance which is higher than judicial controls of standard contracts and the rules of private organisations. See *Teubner* (2004), p. 22. See also *Vesting* (2004), p. 645, noting that the strategic development of standards takes on functions that may be compared with or even qualified as normative functions.

124 *Gustafsson* (2002), p. 145; 173-191 and 200. See also *Tuori* (2002a), p. 151.

125 See *Mumford* (1964), *passim*; *May* (2002), p. 28-32 and *Sunstein* (1997), p. 200 (noting that constitutional law should be concerned with harnessing the technologies for democratic ends).

consequences, to evaluate alternative outcomes, and to decide upon and pursue an action accordingly. As Benkler says:¹²⁶

“All of the components of decision making prior to action, and those actions that are themselves communicative moves or require communication as a precondition to efficacy, are constituted by the information and communications environment we, as agents, occupy. Conditions that cause failures at any of these junctures, which place bottlenecks, failures of communication, or provide opportunities for manipulation by a gatekeeper in the information environment, create threats to the autonomy of individuals in that environment. The shape of the information environment, and the distribution of power within it to control information flows to and from individuals, are, as we have seen, the contingent product of a combination of technology, economic behavior, social patterns, and institutional structure or law.”

Online service providers, owners of search engines and makers of software used for accessing the information structures may select, pre-structure and filter content and the existence of alternatives. They could thus reduce the diversity of competition on the provision of access to the structures of information. Diversified competition in the provision of such services facilitates individual autonomy and communicative diversity.¹²⁷ In this environment, *the reduction of interoperability implies a reduction of communication options*, whereas a variety of technologies and business or net-cultures enabled by interoperability between technologies generates possibilities of autonomy.

The prospects of public policy to influence the communication technologies and the related design processes are relatively limited, and if excessive or unreflective, the public policies by themselves could become problematic from the perspective of democratic values.¹²⁸ Yet the governments and the public authorities already participate in multiple ways in the processes of technology creation and selection, thus implying possibilities to consider the democratic features and constitutional implications of technologies and the processes leading to their adoption. Public funding of research and development as well as public procurement constitute major opportunities for coupling public policies and public funding with the democratic design (processes) of technologies.¹²⁹ Governments also participate in standardisation processes and endorse some standards at the expense of others.¹³⁰ The democratic features of the standardisation process affect the acceptability of the standardisation cooperation in the application of European competition law.¹³¹

126 Benkler (2006), p. 146-147.

127 Vesting (2004), p. 666-667 and Benkler (2006), p. 147-149.

128 See also Iversen, Vedel & Werle (2004), p. 122.

129 In the EU public funding of R&D exceeds 40%. See *Commission Staff Working Document* (2007), p. 80.

130 A standard is a technical specification relating to a product or an operation which is recognised by a large number of manufacturers and users. See *Communication from the Commission* (1992), p. 2. Council Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations defines a standard to be “a technical specification approved by a recognised standardisation body for repeated or continuous application, with which compliance is not compulsory”.

131 See more closely the treatment of standards and standardisation in chapter 7.

However, the democratic/undemocratic features associated with the coding of the technology in question may have often more to do with its *legal coding*, the related control mechanisms defined by the underlying ownership structure, contractual design and freedom to modify the technologies so as to constrain the actions of others. These participate in establishing the “rules of the game”, the forms of power, selectivity and exclusion inherent in communication.¹³² The aspects of property, contract and competition laws, in particular, thus necessarily participate in the definition of the democratic undertone of technological systems. It is these laws that typically affect the variety of technical options available. This may affect the scope for innovativeness, the viability of open source software and thus the extent of non-commercially motivated cooperation and active civil society participation in technological design processes, as well as the possibilities of central coordination and thus the bureaucratic or hierarchical structure of the technology in question.¹³³ The existence and scope of patent rights underlying the technologies or freedom of others to experiment with and reverse-engineer the technologies are neither inherent features of technological design nor merely dependent on the usages of the technology in society, but something essentially constituted by legal design. The same applies for the transparency and openness of the technological design, access and use rights and the binding nature of contractual clauses limiting these, and the positive and negative obligations of a dominant technology owner.

The code does regulate. The technological design may weaken or strengthen property rights, could obliterate the need for contracting, make technological exclusion harder or easier. But the multiple effects of multiple traditional laws in empowering or dis-empowering the code and allowing or disallowing practices based on it, should be emphasised. Intellectual property and competition laws, in particular, play a major immediate role in the public regulation of code, technological environments and informational power. They assume constitutional dimensions in that they protect code and provide its creators’ enforceable rights, regulate the (basic) rights of others to use, experiment and reverse engineer the code, and participate in the definition of interoperability and openness of technological environments and, through competition law, establish a judicial review for (dominant) code as a regulator.

The foregoing could be concretised with two examples. The first involves Windows and Linux operating systems for personal computers. Although they differ in their technological performance and properties, this is not their core difference (although many might say it is

132 As Karppinen (2007), at p. 505, states, a “realistic question is not whether there will be forms of power, regulation and exclusion in the future, but rather what form they should take, what values they are based on and how such decisions are arrived at”.

133 Cf. with Iversen, Vedel & Werle (2004), p. 108-109, who discuss the elements of technical architecture (and the Internet architecture in particular), like the extent of decentralisation, the need for central coordination, the technical autonomy of networks, open source and public domain software, as well as the variety of technical options present in the technological architecture without recognising the pervasive effects of legal norms and their interpretations on these issues central for the democratic character of the technologies in question.

just that). It is instead *the process of production*,¹³⁴ affected by the legal properties constituted of central/dispersed ownership of the copyright to the code and thus central/dispersed control of all dependent activities, aggressive/no patenting of the inventions underlying the code, control/freedom -oriented function of licensing for development by others, and secrecy/publicity of the source code and thus secrecy/publicity of design choices affecting others. Instead of computer code, the legal code, combined with the related social norms and practices, is the most essential feature of the Linux operating system's democratic and Microsoft's operating system's less democratic character. The Linux-model simply does not permit most of the abuses enabled by the centralised control –model of the Microsoft.¹³⁵ Open source also restricts the ability of private firms and governments to control the architecture of Internet applications.¹³⁶ Although open source projects are not free from emerging hierarchies and power, such hierarchies, power and the decisions made by the leaders like Linus Torvalds must be justified to the sceptical and independent-minded participants.¹³⁷

The governmental involvement regarding the related design choices should obviously *not* consist of state officials writing the code for operating systems, of overtaking the dominant platform for governmental control, or of enacting laws setting out in detail the permitted design choices for any operating system. The governmental authorities simply lack the practical knowledge required. Even if they possessed supreme programming capabilities, such measures would unduly repress the freedom to engage in the activities involved, be it in the form of private enterprise, open source development community or something else. Devising the technologies, technological standards and trajectories is primarily the domain of self-organisation, -regulation and -modification involving multiple non-state actors representing diversified knowledge pools, such as private enterprises, standards bodies, networked enterprises in the form of standardisation consortia, open source development-communities and public interest associations.

What is feasible for governments is the regulation of this self-regulation on a secondary level.¹³⁸ The more democratic alternatives could be preferred in public procurement, standardisation and public funding. More importantly, the governmental measures should seek to secure the existence of communicative diversity on markets critical for our

134 See also *Weber* (2005), p. 192.

135 See also *Lessig* (2001), p. 68. Moreover, it may be able to resist some aggressive practices by dominant firms, such as buying it, driving it “out of business”, hiring its talent away, or tying it up in the courts. As pointed out by *Weber* (2005), p. 209, this is all due to open source software community's non-hierarchical, decentralised structure. However, as is evident from the *Microsoft*-case (case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, Commission's Decision Case COMP/C-3/37, 792 *Microsoft*), dominant firms may seek to leverage their market position into the related markets occupied by open source software, and they may seek to limit the success of open source software by controlling its interoperability with the dominant operating system.

136 *Castells* (2001), p. 183.

137 *Weber* (2005), p. 193-200 and *Lessig* (2001), p. 68. See generally about free software and open source movements and open source licenses also *Benkler* (2006), p. 63-67 and *Välämäki* (2005), *passim*.

138 See *Vesting* (2004), p. 657-660 (in the context of interoperability standards).

information environment and hence also for our capability to experience and perceive the world around us free from central authority. Facilitating interoperability with and openness of the dominant platform advances these ends and furthers communication occurring between the platforms, as well as communication between the non-dominating platform and the surrounding information environment in general.

Intellectual property interpretations play a pivotal role here: enabling interoperability and open interfaces through copyright and patent law empowers open source technologies through interoperability with proprietary technologies. In contrast, protection of the interfaces and expansive patent protection of software, in particular, may exclude interoperability and make the deployment of and building on open source technologies risky, both decreasing the potential success of open source technologies. Competition laws are no less significant. The dominating *Microsoft*-platform should be opened to competitors to an extent enabling effective interoperability, thus allowing competition on the merits, the existence of viable alternatives, inter-systemic communication, as well as the prospective change of the technological paradigm into a more democratic alternative despite the current strong network effects and lock-in to the dominating *Microsoft*-platform.

An owner of a dominating platform should not be allowed to exclude competition through exclusionary design choices or to leverage its dominance to other markets by similar practices. When the dominating infrastructure technology, like an operating system, is based on the rationale of maximising the private profits of its owners only, the societal outcomes produced in the course of its development and operation are likely to prove problematic from a broader perspective. In such a situation, law should bring broader constitutional values to its regime of control.¹³⁹ Such values could include, among others, control of economic power with pervasive social and political effects as a value in itself, plurality and diversity of markets and market actors, and communicative, expressive and digital freedom and diversity, with implications for individual autonomy, realisation of fundamental rights and related collective goods.

The second example concerns the *end-to-end design-principle* of the Internet. This principle connotes that whenever feasible, communications protocol operations should be defined to take place at the end-points of a communications system, or as close as possible to the resource being controlled. Intelligence is thus at the ends of the Internet, peripheries of the network where users put information and applications onto the network. The design principle, implemented through the core Internet-standards *Transmission Control Protocol / Internet Protocol* (TCP/IP), among others, protects an infrastructure commons by restricting the ability of infrastructure providers to distinguish between end uses and end users: the network cannot discriminate in favour

¹³⁹ It should be emphasised that the democratic and constitutional reasons elaborated in this and the subsequent chapters are by no means the only reasons for controlling the abusive practices related to technologies. See more closely chapters 6 and 7, in particular. The point is rather that in the application and interpretation of both intellectual property and competition laws the underlying democratic and constitutional values and tensions should be recognised and internalised in the decision making, whenever necessary and possible.

of certain classes of end users or end users, thus enabling creativity and innovation at the ends, controlled by no central authority.¹⁴⁰ The absence of central authority resulting from the stupidity of the network thus implies freedom of experimentation, innovation and diverse economic activities.

Although the democratic quality of the TCP/IP protocols resulted from a historical accident rather than from the pursuit of democratic ideals,¹⁴¹ the implementation of the end-to-end design-principle in the Internet can be seen to advance ideals of democratic culture, as characterised above.¹⁴² There is no question that the end-to-end principle and the TCP/IP protocols have subsequently assumed such democratic significance.¹⁴³ Measures threatening these democratic operating principles of the Internet need not regulate the TCP/IP protocols directly, but could also be in the form of computer code or other measures modifying these basic operating principles.¹⁴⁴ The TCP/IP protocol itself will be used here as a simplified example capable of illuminating the significance of such practices.

Also with regard to the TCP/IP protocols the related legal code is significant, including the non-proprietary nature of the core Internet standards, and hence the active avoidance of patented solutions and extensive intellectual property licensing obligations imposed on the participants to the standardisation processes, the democratic features of the related standardisation procedures involving non-profit organisations and civil society groups in addition to commercial enterprises, as well as the openness and transparency of the standards.¹⁴⁵ The related legal code thus seeks to ensure that an undemocratic capture of such standards by economic concentrations of power is not possible. To the extent such a capture would be enabled for example by the invocation of patents later in the process, the democratic features of the standard and the related processes would be jeopardised in a constitutionally significant manner.

Such private interference with the constitutional technological principles of the Internet should be recognised in the application of both intellectual property and competition laws: a constitutional conflict would emerge. Now facilitating competition and more alternatives for accessing the information environment around us provides no option for the governmental measures. Communication may not be

140 See e.g. Lemley & Lessig (2001), *passim*; Chen (2005), p. 1364-1368 and Cooper (2003), *passim*. See also Frischmann & Lemley (2007), p. 294-295 (noting that functionally the end-to-end principle acts as a limitation on the property rights of network owners). See Froomkin (2003), p. 778-780 and Lessig (2006), p. 43-59, about the TCP/IP protocol. See also the subsequent discussion of that standard in chapter 7 subsequently.

141 See e.g. Iversen, Vedel & Werle (2004), p. 122.

142 As Karppinen (2007), at p. 504, notes, “recognition of power and exclusion as inherent in all communication does not mean that some institutions or practices cannot be deemed more inclusive or more democratic than some others”.

143 For example, Cooper (2003), at p. 195, states from the perspective of US law that: “There is a close symmetry between the end-to-end principle and the fundamental institutional principles of our democracy”.

144 See e.g. Lessig (2006), p. 62 and 111-112.

145 See more closely about standardisation and standards in chapter 7.

simultaneously based on competing protocols without jeopardising the unity of the Internet. Facilitating the openness of the standard has another function: to avoid private control over the core operating principle of the Internet, and the inherent potential to harness and modify that operating principle for the purposes of private profit maximisation.

Concentrated control of essential technologies has been called *hyperempowerment*, in itself problematic from the perspective of democracy. It may take the form of practices like replacing a communitarian technology with an individual or authoritarian one, or of manipulating technological systems on which other institutions, people or other technological systems depend.¹⁴⁶ These may also constitute abuses of dominant position under competition law. Although being an inadequate and partial solution, democratic values and the changed societal environment should be considered in the application of competition law when the context so requires as will be further argued in subsequent chapters.¹⁴⁷ Competition law should thus strengthen its democratic function in fostering the openness of central communication networks and essential information technologies.

Hence, important coded architectures penetrating the lifeworld and producing public and non-market goods should not be left outside the legal system and constitutional discourse. Like city planning, the core coded environments should not only be based on the interests of commerce, but also on democratic values. Like biodiversity, digital and communicative diversity should be seen as ends in themselves requiring active protection measures. As said, this does not connote governmental code-writing or design of technological architectures, but, among other measures, manipulation of the boundary conditions for the decisions of private enterprises designing and modifying them, review of that process reactively under constitutional values, and promotion of interoperability and openness of communication technologies through various legal instruments and constitutional principles.¹⁴⁸ Neither does this connote that all technologies entail risks for democratic values and should be subjected under reactive regulatory control. Most technologies clearly do not. The point is rather that the central ones that do, by regulating communication, lifeworld interaction, entrepreneurial opportunities of others and competition on a large scale, should be distinguished from the more mundane instances having no or very limited repercussions for others and the society in general.

146 See *Sclove* (1995), p. 113-115. See also *Rotenberg* (2004), p. 37, noting that large market shares in themselves are often in contradiction with media pluralism.

147 In addition to competition law, other legal institutions may (and should) address these concerns as well. These include fundamental rights law, intellectual property law, telecommunications law and consumer law, for example. The appropriateness of competition law in addressing these concerns will be further analysed under heading 6.3.4.

148 The same idea is expressed by *Graber* and *Teubner*, when arguing that constitutional protection should extend to any communicative medium, such as technology, which tend to colonise other sectors of social life. *Graber & Teubner* (1998), p. 69-70 (also stating that Silicon Valley “*carries potentially as many risks for the freedom of science, education and research as Lyssenkow’s [sic] socialist biology*”).

Individual freedom and other societal and constitutional values may thus be threatened not only by the actions of the government, but also by the market forces using the money medium and increasingly, technological architecture as a regulator: technologies constitute social structures and coerce physical compliance. As the technological architecture is in some senses similar to legislative acts in establishing a relatively enduring framework for public order, the effects and democratic character of some technologies should be accorded similar concern we accord to the effects and democratic character of legislative acts.

Law can indirectly affect private behaviour and advance and protect values by regulating the use of the money medium and technical architectures. Values related to privacy, freedom of expression and individual autonomy are not functions of our technological environment, but something forming the foundation for our social and political relationships. Deciding about such values should also be a matter of politics and law, not only economy and technology. To the extent they are jeopardised by technology, the law should react and contribute in enabling a technological environment making the realisation of these values possible. Lessig presents the (potential) role of law with the following simple model:

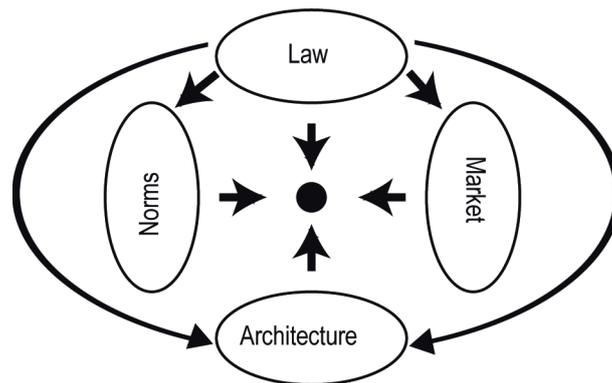


Figure 1: Modalities of Regulation. Source: Lessig (1999a), p. 93 and (2004), p. 124.

The model conceptualises the four modalities of regulation as analytically independent. The total regulation of any policy domain and any subject is constituted of the sum of the effects of the four modalities together.¹⁴⁹ The law, however, has a special role in affecting the three other modalities. It may increase or decrease the constraint of a particular modality. The effective protection of a particular right at any particular moment depends on the combined effects of all modalities. The analysis of a particular right or legal problem must thus be comprehensive, covering all modalities, as a restriction imposed by one modality may be erased by another, and a right enabled

149 Lessig (1999b), p. 508.

by one modality may be displaced by another.¹⁵⁰ For example, in the area of copyright technological protection measures may in practice abolish the statutory rights of users, copyright collecting societies may try to create new social norms and modify the existing ones based on the fees collected from copyright administration, and copyright levies affect the financial possibilities and preferences of people buying devices with memory capacity.¹⁵¹

The expanded possibilities of private regulation do not abolish, but modify the significance of law and politics. Traditional law has a triple function in the processes of private regulation. First, it provides firms with instruments enabling private regulation of the socio-economic reality through the manipulation of the technological environments and social norms and meaning. Protection of technological measures within copyright law, securing private regulation through technologies and contracts, is one example of such laws.¹⁵² As the weakness of code as regulation is that it may be circumvented with other code, it needs regulatory support and hierarchical control to solidify and strengthen it as a modality of regulation.¹⁵³ Second, law continues to construct the socio-economic reality by prohibiting the individuals directly – the old-fashioned way – or by affecting the resources available. From the perspective of private enterprises, the prohibitions of law, equipped with remedies and sanctions, regulate individuals' behaviour often effectively enough when compared to private manipulation of technical environments or social norms. Third, law may be used reactively to constrain or remedy the socially harmful actions of firms, including their design and manipulation of technological environments. These functions of law for private enterprises perhaps explain, despite expanding practices of private regulation based on privately created institutions and technologies, the firms' continuing interest to affect the direction of traditional law.

However, the most important lobbying efforts now seem to be concentrated on laws enabling the manipulation of techno-economic environments and social norms on one hand, and on reactive laws enabling governmental control of private techno-economic and social action, on the other hand. This may be so because it is the combined effect of these types of traditional laws that affects the potential of private regulation, and its functional autonomy with regard to the government, as well. Moreover, the multinational corporations and webs of cooperating firms increasingly exercise their technological and lobbying power on a global level, whereby individual nation-states appear as mere sub-units of a broader regulative complex. The globalisation and information society processes will be treated in more detail in the following.

150 Lessig (2004b), p. 123-124.

151 See more closely e.g. T. Mylly (2007), *passim* (analysis of the transformation of copyright in the Finnish context by using Lessig's four modalities of regulation as an analytical schemata).

152 See e.g. Reichman & Franklin (1999), *passim*; Elkin-Koren (2001), p. 192 and T. Mylly (2007), p. 114-122. More generally, contract and property law, company law and laws of association etc. enable the formation of complex webs of private authority and private regulation of broad areas of economic and social life.

153 See also Sideri (2007), p. 70.

2.5 Foreground Developments: Globalisation and Information Society

2.5.1 Introduction

The focus of the following will be whether the globalisation and information society processes imply changes on the ways we should understand the respective roles of governments and regulation, economy and the civil society. It will be argued that these background developments – or more aptly called *forefront developments* due to their prominent role in social sciences except for legal science – indeed seem to modify the roles of governments, markets and the civil society, thus also affecting the conclusions reached in the framework of this research.

Globalisation and information society need to be treated also for reasons that are more practical. Contextual application of law is not possible without situating the cases at hand in a broader economic and societal context. Only embedding the factual circumstances in a broader societal setting and dynamics enables seeing the social subsystems and their competing logics at play, identifying the applicable norms and deciding about their relations and appropriate application.¹⁵⁴ One cannot evaluate the extent to which the *telos* of a particular norm could be satisfied without the simultaneous analysis of the application environment. The way we construct the broader societal setting and its dynamics could also lead to the need to re-assess the functions of a legal institution. The developments addressed below, in longer-term analysis, do not thus only contribute towards understanding the social environments where the norms may be applied: they may also affect the way we should see the functions of particular norms or norm complexes.

Analysis of globalisation in a vast number of studies could be said to express the need for understanding processes that have lost meaning in terms of more traditional concepts.¹⁵⁵ How the processes and actors of globalisation are perceived affects our understanding of the legal field, as well.¹⁵⁶ It is impossible to enter into the complex and extensive discussion of globalisation with much detail here. It must suffice to outline what are considered the most essential developments for the purposes of this research. Hence, the discussion will concentrate on the main features of the globalisation processes, the role of states and governmental regulation, economic globalisation and the analysis of innovation in the frameworks of multinational corporations and networks.

154 See also the next main chapter. Arguments stemming from societal context become legally relevant by the mere fact of their use in a judicial context and their integration into legal discourse. See e.g. *Bengoetxea* (1993), p. 143.

155 *Petrella* (1996), p. 64.

156 *Sousa Santos* (2002), p. 177. As *Beck* notes, globalisation has been for some years, and probably will continue to be, one of the most often used, most often misunderstood, fuzziest, rarely defined, but at the same time politically most powerful and disputed word. *Beck* (1997), p. 42.

The treatment of the information society will extend the analysis to the public sphere of the lifeworld and cultural production and reproduction processes enabled by the Internet, in particular. The Internet provides an example of a globalised phenomenon that is beyond the control of a single nation-state. At the same time, its future development has emerged as one of the paradigmatic questions of our time. On one possible direction is the commerce-driven trajectory, whereby the libertarian genesis and democratic architecture of the Internet become gradually diluted, as economic demands and state supervisory interests lead to centralised control. The alternative consists of a trajectory whereby the rising social production, networked public sphere and democratic culture are enabled by the preservation of the end-to-end structure of the Internet, facilitation of diversified competition on the provision of the underlying services, technologies and infrastructures of the Internet, and by allowing a robust public domain and thus sufficient freedom to utilise the existing cultural and informational resources.

2.5.2 Globalisation Theories and Theories of Globalisation

Some authors perceive globalisation mainly as a profound shift from state-dominated to market-dominated world.¹⁵⁷ Others emphasise its transformative effects beyond the respective roles of markets and the states. *Giddens* belongs to the latter group of theorists. He characterises globalisation as “*the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring miles away and vice versa*”.¹⁵⁸ This well-known definition is based on *Giddens*’ sociological theory of *time-space distantiation*, according to which various social phenomena stretch themselves across the dimensions of time and space, enabling and explaining the processes of globalisation through which social phenomena acquire a global reach. Through the separation of space and time social relations become *disembedded*: they are lifted out from their local contexts of interaction and become reconnected to wider structures of indefinite geographical scope.¹⁵⁹ This is enabled by symbolic tokens (especially money) and expert systems that are objective mechanisms, and trust which is a subjective orientation.¹⁶⁰

It is common to emphasise the increased interconnectedness, *transnationalisation* and “shrinking” of the world when defining globalisation.¹⁶¹ *Held* stresses the distinctive spatial attributes of today’s globalisation, namely transregional interconnectedness of social networks and power, the possibility of action at a distance, as well as intensification, regularisation and speeding up of these phenomena. The impact of distant events is magnified so that it becomes difficult to distinguish domestic and global

157 See e.g. *Gilpin* (2000), p. 18 and *Strange* (1996), p. 13-14 and 43-46.

158 *Giddens* (1990), p. 64.

159 *Ibid.*, p. 20-25. On the concepts of time and space see also *Harvey* (1989), p. 211-239.

160 *Giddens* (1990), p. 21-36.

161 See e.g. *Jackson* (1997), p. 348-350; *Twining* (2000), p. 7.

matters.¹⁶² He defines globalisation as “a process (or set of processes) which embodies a transformation in the spatial organisation of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power.”

This definition aptly gives a picture of globalisation as not only one, but as *various parallel and sometimes contradictory processes*, involving transformations within many spheres.¹⁶³ Globalisation is thus not restricted to the economy, but polycentric in nature.¹⁶⁴ Culturally oriented sociology of globalisation has started to use the term *glocalisation* to describe the multidirectional developments and the interaction between global and local. Globalisation thus involves parallel and interconnected processes of localisation, regionalisation and transnationalisation of economic activities.¹⁶⁵ Yet Held does not provide an explanation *why* these processes take place.

Scholte, too, sees globalisation as multiple processes, but restricts the word global to denote de-territorialised or *supraterritorialised* phenomena marked by simultaneity and instantaneity in the single world space. These phenomena are characterised by the relative irrelevance of geographical distance in distinction to internationalisation, liberalisation and universalisation, which are understood in geographical terms.¹⁶⁶ *Scholte* defines communications and certain features of markets to represent such global simultaneity and instantaneity regardless of geographical frontiers.¹⁶⁷ He notes that despite the de-territorialisation of such phenomena, they still have to engage at some level with territorial places, territorial governments and territorial identities. The detachment from territorial logics is thus always partial and relative.¹⁶⁸

Sousa Santos divides globalisation into hegemonic globalisation and counter-hegemonic globalisation.¹⁶⁹ The former is characteristically economic in nature and is based on neoliberal ideology and globalisation from above, while the latter is globalisation from below. He defines globalisation as “the process by which a given local condition or entity succeeds in extending its reach over the globe and, by so doing,

162 *Held et al.* (1999), p. 15 and 81.

163 See also *Rosenau* (1997), p. 82-98; *Beck* (1997), p. 28-30 ; *Hardt & Negri* (2001), p. xv; *Nelken* (2003), p. 460 and *Sousa Santos* (2002), p. 178-182, who similarly emphasise the multiple dynamics, directions and dimensions of globalisation processes. Also *Habermas* (2001), p. 65-66 understands globalisation as a process, not an end state.

164 *Fisher-Lescano & Teubner* (2004), p. 1005. Cf. however e.g. with *Touraine* (1994, 1997), p. 188.

165 See *Robertson* (1995), *passim.* and *Beck* (1997), p. 88-92 and *Sölvell & Birkinshaw* (2002), p. 82.

166 *Scholte* (2000), p. 16 and 46-47. *Scholte's* explanation for the current globalisation processes is a multi-level model based both on structural reasons and actor decisions. On structural level *rationalism* and *capitalism* began to create opportunities for globalisation several hundred years ago. On actor-level technological innovations and regulatory measures produced dynamics for a major spread of supraterritoriality by the middle of the twentieth century. Further technological advances and regulatory measures (liberalisation) affected the nature (based on neoliberalism) and pace (accelerated) of the current globalisation processes. See in more detail *Scholte* (2000), p. 92.

167 *Scholte* (2000), p. 51-52.

168 *Ibid.*, p. 59-60.

169 *Sousa Santos* (2002), p. xx and 182.

develops the capacity to designate a rival social condition or entity as local¹⁷⁰. In addition to de-territorialisation of social phenomena re-territorialisations occur, connoting the emergence of new regional, national and local identities.¹⁷¹

Sousa Santos further distinguishes four basic forms of globalisation.¹⁷² The first he calls *globalised localism*, meaning that a given local phenomenon, such as American fast food or popular music, is successfully globalised. The second form of globalisation is called *localised globalism* consisting of a change in local conditions, structures and practices in response to transnational practices and imperatives. These two forms account for the hierarchies and asymmetries in the world system. In his view, the international division of globalism assumes a pattern according to which the core countries specialise in *globalised localism*, whereas *localised globalism* is left for the peripheral countries.¹⁷³ Globalisation can be characterised as “a web of localized globalisms and globalized localisms”. The third form of globalisation is *subaltern cosmopolitanism*, comprising phenomena taking advantage of the transnational interaction created by the world system, such as various transnational organisations in defence of common interests. Such organisations and movements counteract the detrimental effects of hegemonic forms of globalisation and act at the margins of the capitalist world system. Finally, there are forms of globalisation which by their nature are as global as the globe itself, such as the global warming or the struggle against mass destruction weaponry. Sousa Santos names these *the common heritage of humankind*.¹⁷⁴ Subaltern cosmopolitanism and the common heritage of humankind belong to the counterhegemonic form of globalisation.¹⁷⁵

Rosenberg has made a distinction between *theories of globalisation* and *globalisation theories*. With the former, he means theories which analyse globalisation by using other theories, and with the latter theories which take globalisation as an explanatory schema in its own right. Rosenberg advocates the former view, according to which globalisation should be understood as a descriptive term, a geographical category. Globalisation as an outcome and the changing character of the modern world should

170 *Ibid.*, p. 178.

171 *Ibid.*, p. 177. See also Scholte (2000), p. 42 and 59-60.

172 Sousa Santos (2002), p. 179-182.

173 *Ibid.*, p. 179. However, as pointed out by Aman (1998) p. 813, previously local phenomena can be seen in the light of the pressures of global competition more generally, irrespective of the state's position in the core or the periphery. As a matter of fact, globalisation and global competition between states transform the line between local and global “blurry at best, and irrelevant in most instances”. Twining (2000), p. 222 points out that localised globalism and globalised localism are in fact two sides of the same coin and cannot be sharply distinguished. Furthermore, Giddens (2002), p. 16-17 rightly points out that the direction of globalisation is not only from North to South, but in some instances also *vice versa*. Hardt & Negri (2001), p. 44-46, warn of romanticising and fixing the local in stone and stress that the differences of locality are neither pre-existing nor natural but rather effects of a regime of production. They argue that “[i]t is false, in any case, to claim that we can (re)establish local identities that are in some sense outside and protected against the global flows of capital and Empire”.

174 Sousa Santos (2002), p. 180-182. Rosenau (1997), p. 71-72 calls the last category “interdependence issues”, which impel cooperation on a transnational scale.

175 Sousa Santos (2002), p. 182.

thus not be explained circularly by invoking globalisation as a process.¹⁷⁶ Rosenberg criticises in particular globalisation theories of concentrating on objectified time-space distantiation, as developed by Giddens, as a sociological foundation explaining the globalisation processes. Although Rosenberg acknowledges the phenomenon of time-space distantiation as a social fact, he does not explain globalisation with it, but instead emphasises the need to address it on societal and cultural basis and by analysing the reasons for this phenomenon.¹⁷⁷

Rosenberg also criticises Scholte and Held of an outdated picture of the Westphalian System. According to Rosenberg, this leads to overstatements concerning the current transformations.¹⁷⁸ He argues that capitalism has generated supraterritoriality, as defined by Held and Scholte, from the start: *such supraterritoriality is intrinsic to capitalist social relations themselves*.¹⁷⁹ Accordingly, Rosenberg explains the current globalisation processes as resulting from ongoing world-historic upheaval of capitalism, connected with the radical leap in the technology of speed that increases the velocity and impact of these capitalist processes.¹⁸⁰

Although Rosenberg seems to be correct in avoiding circular explanation and in seeing economic globalisation as a continuum of capitalist developments, some aspects of globalisation processes seem to escape his focus on capitalist processes. The polycentric nature of globalisation is not explained by this model. Sousa Santos provides a middle-ground when suggesting that while globalised localism and localised globalism could be explained by sub-paradigmatic readings (based on capitalist developments), the counter-hegemonic forms of globalisation (subaltern cosmopolitanism and common heritage of humankind) necessitate *both* paradigmatic and subparadigmatic explanations.¹⁸¹ Systems theoretical models developing the idea of multi-dimensional fragmentation of global society provide fruitful perspectives on non-capitalist globalisation processes, in particular.¹⁸² Their further analysis is beyond the scope of this study.

Following Held and Rosenberg, globalisation is understood here mostly as a descriptive term. The primary motor of most globalisation processes is understood to

176 Rosenberg (2000), p. 2-4 and 120-121. See also Sassen (2006), p. 4-18 and Sousa Santos (2002), p. 172-177, who speaks of paradigmatic and sub-paradigmatic readings of globalisation. According to Sousa Santos some aspects of globalisation can be explained by the paradigmatic and some by the sub-paradigmatic readings of globalisation.

177 Rosenberg (2000), p. 124. As Sousa Santos (2002), at p. 179 says, time-space compression cannot be analysed independently of the power-relations that account for the different forms of time and space mobility.

178 Rosenberg (2000), p. 29-30 and 34.

179 *Ibid.*, p. 32-33. See also Rosenberg (1994), p. 87 and 129.

180 Rosenberg (1994), p. 172 and Rosenberg (2000), p. 164-165. Rosenberg emphasises the structural effects of capitalism but departs from most other Marxist writers in giving weight to other societal developments as well. Also Mouffe (2005), p. 59-60, criticises Giddens for overlooking the systemic connections between global market forces and diverse problems, such as exclusion and environmental risks.

181 Sousa Santos (2002), p. 182.

182 See e.g. Teubner (1996 a and b) and Fisher-Lescano & Teubner (2004) with references to the pioneering work of Niklas Luhmann on systems theory.

be the capitalist developments. Although the economic processes of capitalism are the engine of globalisation, states are deeply intertwined in the globalisation processes at various stages both reactively and proactively, also involving several transformations *within* states.¹⁸³ In addition to economic globalisation, also technological, political and cultural globalisation processes take place, among others. These processes are not primarily state-driven or territorial in nature, but can best be characterised as functional differentiation on the global level.¹⁸⁴ The economy has overtaken the leading role of politics and law as the engines of these fragmented and contradictory processes.¹⁸⁵ The various functional processes of globalisation also intertwine and cluster in a historically unique way so that their demarcation lines have become fuzzy.¹⁸⁶ It is thus ever more difficult to separate the economic, technological, cultural and political aspects of globalisation processes from each other.

Even though the processes of globalisation are not new,¹⁸⁷ especially the globalisation of communications has changed the pace and possibly also the nature of these processes.¹⁸⁸ A global economy with a capacity to work as a real time unit is enabled by the late twentieth century information technology and communications infrastructure.¹⁸⁹ However, the mere existence of these new technologies does not determine the direction of the globalisation processes. It is rather their deployment and ways of use that are more important,¹⁹⁰ as has been discussed above on a more general level. The technologies do not evolve independently. Rather, their paths of development continuously intertwine with the economic, social, political and cultural processes.

The above analysis implies that globalisation is best described not as a single process, but a complex set of processes operating in multiple directions, also creating need and room for local autonomy. It should thus rather be understood as a *regime* of homogenisation *and* heterogenisation than just homogenisation on a global level.¹⁹¹ Although everything in the economy is not global, most parts of the economy are dependent on its globalised core which, according to *Castells*, consist of financial markets, international trade, transnational production, and to some extent science and technology and specialty labour.¹⁹² All aspects of societies founded on national capitalism are weakening at the expense of the growing power and dynamics of global

183 See more closely the subsequent discussion about the role of states in the globalisation processes. *Sassen* (2006), *passim* provides a thorough analysis of the role of states in the globalisation processes.

184 *Luhmann* (1993, 2004), p. 480-481; *Robé* (1996), p. 56. See also *Held et al.* (1999), p. 430-431 and *Rosenau* (1997), p. 64-65 and 71-72 as well as *Beck* (1997), p. 175-177.

185 *Teubner* (1996), p. 5; *Sousa Santos* (2002), p. 167 and 177; *Aman* (1998), p. 780. 76.

186 *Giddens* (1990), p. 6, *Held et al.* (1999), p. 425 and 429; *Sousa Santos* (2002), p. 166; *Beck* (1997), p. 180-181.

187 For a historical account see *Held et al.* (1999), p. 414-452 and *Scholte* (2000), p. 62-88.

188 See e.g. *Twining* (2000), p. 7; *Giddens* (2002), p. 10 and *Held et al.* (1999), p. 58-59.

189 See e.g. *Strange* (1988), p. 127; *Castells* (2000), p. 101 and *Malanczuk* (1998), p. 51.

190 See *Rosenau* (1997), p. 47 and 69-70. See also *Rosenberg* (2000), p. 164-165.

191 *Hardt & Negri* (2001), p. 45. See also e.g. *Giddens* (1990), p. 64-65 and *Held et al.* (1999), p. 27.

192 *Castells* (2000), p. 101-102.

capitalism.¹⁹³ Cynically, *Hardt and Negri* depict the new order with the concept of *Empire*, which has assumed a gloomy and seemingly deterministic connotation: the new *globeconomic-industrial-communicative machine*.¹⁹⁴ Whether there is any scope and impact left for state politics and law in such a machine will be discussed in the following.

2.5.3 The Role of States in Globalisation Processes

Perhaps the most frequently discussed and most vigorously disputed question of globalisation is the role of the states and the capacity of governmental regulation to have an impact on issues transcending the boundaries of nation-states.¹⁹⁵ It is common to argue that the role of states is diminishing in the course of the globalisation processes and that the sovereignty of states is undermined due to transnationalisation of social phenomena. The intensified cross-border interactions and transnational practices have to some extent eroded the ability of nation-states to control the flows of goods, capital and ideas the way they have been able to do previously. The formation of neoliberalism as an ideology increasingly guiding political action together with the practices of transnationally operating corporations have undeniably led to a relative decentring of the nation-state as an actor in the world system.¹⁹⁶ To some extent, state functions and constitutional elements have been displaced to other levels and domains.

Some authors argue that because of these developments government and politics become fully integrated into the system of transnational command.¹⁹⁷ The development has been said to challenge the sovereignty of the state and to turn it into relative sovereignty.¹⁹⁸ From a systems theoretical perspective the state is no longer seen as the central institution of societal self-organisation.¹⁹⁹ Rather, because of functional differentiation, transnationally operating, relatively autonomous regimes could (have) replace(d) the state as the central category.

193 *Petrella* (1996), p. 68.

194 *Hardt & Negri* (2001), p. 40. *Rosenau* (1992), p. 13-14, expressed a roughly similar idea already 10 years earlier. See also *Beck* (1997), p. 32. For a critique of Hardt and Negri's vision, see *Mouffe* (2005), p. 107-115 (stating that Empire "is seriously lacking in political strategy", *ibid.* at p. 110) *Rugman* (2002), at p. 9-10, argues that the governance of the whole is triad-based (EU, USA, Japan) activity of multinational corporations. This seems to be an oversimplification.

195 *Scholte* (2000), p. 132. For a concise account of major interpretations see *Sassen* (2006), p. 224-230.

196 See e.g. *Fourcade-Gourinchas & Babb* (2002), *passim* and *Sassen* (2006), p. 186-203.

197 *Hardt & Negri* (2001), p. 307-309. Cf., however with *Gilpin* (2001), p. 363, who maintained that economic globalisation is "much more limited than many realize" and that its "overall impact on the economic role of the state is similarly limited".

198 *Robé* (1996), p. 49 and 56.

199 See e.g. *Jachtenfuchs* (1995), p. 38 and *Teubner* (1996b), *passim*.

Strange has characterised this development as a shift from the states towards markets in the international political economy.²⁰⁰ It has been said to be a structural and irreversible process that could not be reversed by political will.²⁰¹ The growing globalisation of the economy erodes one putative foundation of the nation-state, namely the position of the national market as the most relevant strategic economic space. Even the dominant countries are dependent on the global system. The interactions of the world market have led to a generalised disarticulation of all national economies.²⁰² The structural shift towards markets has led to the transfer of some powers in relation to the civil society from states to transnationally operating corporations.²⁰³ The increased *de facto* global regulation by non-state actors may profoundly affect the lives of citizens largely beyond the democratic control mechanisms vested at national levels.

In spite of the developments characterised above, the changes in the role of the states described above should not be over-exaggerated: globalisation transfers the role of states, but they are not outsiders in the process.²⁰⁴ Globalisation should not be seen as an automated, uncontrollable process implicating a simple erosion or transfer of state power to other institutions resulting from a zero-sum game.²⁰⁵ The governments and government-based bodies, among other infrastructures and institutions of a global political economy, mediate, manage, contest and resist globalisation.²⁰⁶ First, the deregulation (re-regulation) and liberalisation policy of states and state-based institutions has largely enabled the global communications infrastructure making the real time global economy possible.²⁰⁷ Thus, even the downsizing of the state seems to require wide-ranging state intervention: the state must intervene in order not to intervene. Second, also multinational corporations are and will be dependent on the availability of reliable public infrastructure and securing of property rights. These are still provided by states, thus subjecting the corporations to state regulation.

Corporations also need the states to conclude international treaties within the field of international economic law in order to secure an international regulatory environment enabling sufficient legal certainty and predictability.²⁰⁸ Global capitalism requires international public goods related to rules, standards and dispute-settlement institutions going beyond the province of any single nation state.²⁰⁹ *Wallerstein* even sees the relative power of states to depend on their ability to maximise the conditions

200 *Strange* (1996), p. 13-14 and 43-46.

201 *Hardt & Negri* (2001), p. 336; *Castells* (2000), p. 147. See also *Beck* (1997), p. 28-30.

202 See e.g. *Petrella* (1996), p. 67 and *Hardt & Negri* (2001), p. 284.

203 *Strange* (1996), p. 46 and 53. See also e.g. *Giddens* (2002), p. 78-79 and *Lash & Urry* (1994), p. 280.

204 See e.g. *May* (2002), p. 126-131; *Rosenau* (1997), p. 72-73 and 172 and *Castells* (2000), p. 116.

205 *Held et al.* (1999), p. 440-441; *Rosenau* (1997), p. 446; *Beck* (1997), p. 191 and 203-204.

206 *Held et al.* (1999), p. 18-19, 430 and 436-437.

207 See e.g. *Scholte* (2000), p. 101-102; *Strange* (1996), p. 44-45 and *May* (2002), p. 16-17.

208 See *Robé* (1996), p. 47 and *Aman* (1998), p. 817. According to *Bellamy* and *Castiglione* the development of inter-national and inter-governmental institutions should rather be seen as attempts by nation-states to keep their power. *Bellamy* and *Castiglione* (1997), p. 434. See also *Jackson* (1998), p. 6.

209 See e.g. *Schachter* (1997), p. 16.

for profit-making by their enterprises in the world economy.²¹⁰ Some authors see the situation more positively from the perspective of civil society so that the states now participate in global competition and use the market forces to maximise the prosperity of their own citizens.²¹¹ Be it as it may, the market does not want to be in a generalised conflict with the state. The latter still establish rules that multinational corporations must follow, even though economic and technological forces shape and construe the policies and interests of states. States also form the basic frameworks of conflict-solving. The state-based action is (ideally) in the collective and longer-term interest of individual actors of the capitalist market economy.

According to Rosenberg, the rise of modern sovereignty is based on centralised political apparatus and the abstraction of the political from the directly social relations of pre-capitalist societies.²¹² This creates the realm of private transnational power and the possibility of a world market. The transborder extension of these de-politicised social relations would thus not undermine the sovereign form of the state, as the sovereignty is constituted of and political power divided between public and private spheres. Rosenberg thus understands sovereignty as the social form of the state in a society *where political power has been divided between public and private spheres*. Through the separation of the public (in this context the state) and private spheres (in this context the markets) the political function of power becomes an integral part of the private sphere and the markets. The relations of production may extend across political borders without affecting the territoriality of the states involved.²¹³ The transborder connections, rather than dissolving the international moment of the process, draw the states affected by them into closer interrelation and conflict. *The possibility of an international economy is based on the premise of a sovereign states system and conversely, the possibility of sovereign equality is dependent on the creation of the realm of private transnational power*. The intensification of transnational economic relations would thus not necessarily connote a transformation of the basic character of the international system itself.²¹⁴ The division of political power into public and private realms could be used to explain the territorial differentiation between states together with an unprecedented porousness and interdependence.

210 Wallerstein (1984), p. 5; Malanczuk (1998), p. 57. See also Sassen (2002), p. 103.

211 Aman (1998), p. 793-794. See also Castells (2000), p. 94 and Held et al. (1999), p. 440.

212 Rosenberg (1994), p. 123-124 and Rosenberg (2000), p. 37. Also Braudel (1979, 1986a), p. 519 and 553-554 says that a certain capitalism and a certain version of the modern state first appeared in the context of the market economy. However, as Held et al. (1999), at p. 52 notes, sovereignty should be distinguished from states' autonomy. The former relates to states's *de jure* power to rule over a bounded territory (question of rightful basis of decision-making), whereas the latter connotes the capacity of states to articulate and achieve policy goals independently. Financial globalisation, for example, affects mostly the autonomy of states, not their sovereignty (*ibid.*, p. 442). MacCormick (1993) and (1997), both *passim*, questions whether either the member states or the EU could be considered as sovereign in terms of the traditional legal definition.

213 Rosenberg (1994), p. 87 and 126-129 and Rosenberg (2000), p. 38. See also Sousa Santos (2002), p. 71.

214 Rosenberg (1994), p. 87-89 and 131 and (2000), p. 38 and 41.

Because of the states' reactions to and management of globalisation, new modes of national policy and administrative coordination have emerged to enable more efficient participation in internationalised decision-making.²¹⁵ Yet, some of the core processes influencing the lives within and across political communities are now beyond the control of nation states acting alone. Economic and technological globalisation has not been followed by political globalisation enabling the control of the other subsystems: the globe is still politically fragmented among self-interested states.²¹⁶ The power of the states is fragmented and must be shared and used in cooperation with other states and non-state actors. The ensuing intensification of *inter-national* relations curtails the sovereignty of states *vis-à-vis* each other, but enables nation-states' pursuit of shared control over the globalising economy, thus increasing their autonomy.

As indicated earlier, the regionalisation developments can be seen as a reaction to the transnationalisation and globalisation of social and economic phenomena and the following need for internationalised political decision-making. It is also possible to see one current function of the European Union in the regaining of the action potential of the state, which has been lost in the course of globalisation, and differentiation of functional systems.²¹⁷ Regionalisation and globalisation may thus not be antithetical, but complementary process.²¹⁸ Compared to earlier periods when empires and blocks sought autonomous development, current processes of regionalisation and globalisation have been considered as mutually reinforcing processes within the global political economy.²¹⁹ Without regional cooperation, nation states could not control the transnational and global phenomena to the extent they can through regional arrangements.

Regionalisation thus has a dialectic relationship with globalisation: regional arrangements are often motivated by a desire to gain control of some phenomena escaping the national level, but proving too difficult to control at the multilateral or global level. It can be seen as re-territorialisation at suprastate level of phenomena detached from the infrastate level.²²⁰ Yet, regional constellations should not be considered as mere reactions to or followers of the globalisation processes.²²¹ The regionalisation developments could also lead towards a multipolar world characterised by large regional units with their specific concerns and traditions, thus indicating the potential of such units to resist monolithic globalisation and convergence based on the capitalist processes only.

215 Held et al. (1999), p. 440; Scholte (2000), p. 53-54 and Sassen (2006), p. 17 and 168-184, who sees the constitutive difference of the current globalisation to early post-World War II system to relate to the internal transformation of the national state, marked by a significant shift of power to the executive, among other changes.

216 See e.g. Teubner (1996a), p. xiv; Gilpin (2000), p. 9 and Koskenniemi (2001), p. 513.

217 See also Jachtenfuchs (1995), p. 47 and Maher (1998), p. 238.

218 See e.g. Held et al. (1999), p. 16 and Scholte (2000), p. 147 Cf. however with Malanczuk (1998), p. 52 and Rugman (2002), p. 6, holding that regionalism may undermine the processes of globalisation by establishing new barriers.

219 Held et al. (1999), p. 430.

220 Sousa Santos (2002), p. 177.

221 See Mouffe (2005), p. 117 and 129.

2.5.4 Transformations of Market-Based Production and Innovation

The effects of globalisation have so far been addressed on the macro-level. The capitalist dynamics has been identified as the predominant motor of the globalisation processes. On the micro-level the ongoing processes affect the organisational forms of firms and the ways they produce and innovate. Business practices are increasingly performed by networks: whereas the firm continues to be the unit of accumulation of capital, property rights and strategic management, the network is the enterprise.²²² Global production of goods and services is often performed by transnational production networks, of which *multinational corporations* are an essential component.²²³ Multinational corporations and networks built around them supply markets throughout the world and produce from sites across the globe. This phenomenon has given rise to notions such as *alliance capitalism*²²⁴ and *network enterprise*.²²⁵ It has been argued that networks are replacing hierarchies and markets as the basic form of economic organisation.²²⁶ Companies belonging to these networks are dependent on technology, capital and labour on global rather than on territorial level. The networks are not limited to production, but increasingly relate to generating new knowledge or to using or controlling its evolution.²²⁷ Standardisation, research and development cooperation and strategic cooperation alliances can be mentioned as the paradigmatic examples of this phenomenon. The networks thus actively shape the boundaries of industries and technological trajectories.

The networks cover not only multinational corporations, but also small and medium-sized enterprises are integrated into them.²²⁸ The inter-firm networking can take the organisational form of multidirectional network model or production

222 See *Castells* (2001), p. 66-67.

223 *Castells* (2000), p. 121-122 and *Lawton & Michaels* (2000), p. 57-66. A *multinational corporation* can be defined as an institution which owns or controls value activities in at least two countries. They can be divided into *multidomestic multinational corporations*, which treat their foreign subsidiaries as autonomous wealth-creating units and *globally* (or regionally) *integrated multinational corporations*, which adopt a systemic and holistic approach towards their global operations, and treat their foreign subsidiaries as part of a network of interrelated activities. See *Dunning* (2002a), p. 18. As e.g. *Rugman* (2002), p. 3-5 and *Dunning* (2002b), p. 161 point out, even the most globally oriented multinational corporations usually practice regional, rather than global research and development and production strategies.

224 See e.g. *Dunning* (2002a), p. 10. For an early account of alliances, see *Cowhey* (1990), p. 109 and 117.

225 See *Castells* (2000), p. 187-188. *Arrow* (1984, 1973) has characterised a firm as an incompletely connected network of information flows without any definite boundaries more than thirty years ago. Seeing firms as networks of contracts is not unusual. See e.g. the discussion in *Mähönen* (2001), p. 137-143.

226 See e.g. *Kobrin* (2002), p. 44.

227 Five forms of typical networks can be distinguished: 1) supplier networks; 2) producer networks; 3) customer networks; 4) standard coalitions; and 5) technology cooperation networks. Networks are often centred on major multinational corporations or are formed on the basis of alliances and cooperation between such companies. See *Castells* (2000), p. 207-208. See also *Dunning* (2002a), p. 10-11 and *Rugman* (2002), p. 13-14.

228 *Castells* (2000), p. 172-174; *Held et al.* (1999), p. 236 and 282.

under an umbrella corporation (so-called *flagship firm*²²⁹) by using licensing and/or subcontracting, among other strategies. The first model involves establishing network relationships with several larger firms or with other small and medium-sized enterprises, whereas in the second model the small and medium-sized enterprises are under the control of subcontracting, licensing or franchising arrangements by large corporations. Intermediate forms of horizontal networks based on a set of core-periphery relationships are also common. The components of the networks are at the same time autonomous and dependent on the network. The same units often belong to several networks having distinct means and goals.²³⁰ A multinational corporation may be involved in hundreds of networks, thus linking various parts of its organisation with others. It is possible to conceive the networked world economy in terms of a complex web of transactions than as a series of isolated cooperative arrangements between firms.

The network form of production has been said to constitute an organisational response to globalisation: not even the dominant market leaders are capable of generating all the capabilities internally needed to cope with the requirements of global competition.²³¹ A multinational corporation or a network of companies can carry out its activities at the most efficient location for each particular activity anywhere in the world. Importantly, competitive advantages of firms depend not only on their products and on technologies as such, but on the *speed* with which innovation takes place and new products can be put on the market and distributed. The innovatory capacity of firms as well as their ability to organise efficiently cross-border production and distribution networks have thus become the key issues in globalised competition. The network enterprise model can also be connected to the information society developments also in that it is compatible with the paradigmatic processes of information society. Communication and procession of information and symbols are by their nature characterised by profound communality of production.

The convergence of technologies also necessitates the pooling of knowledge between firms representing (originally) different market segments in networks and alliances. Empirical studies confirm that alliances have increased most rapidly in the knowledge-intensive sectors.²³² The most important reason for their formation has been said to be the increasing cost, risk and complexity of technology.²³³ Especially participation in research and development networks is ever more common and necessary by in the knowledge-based global economy.²³⁴ The business risks related to dramatic technological change constitute important reasons behind the network model. Networked model of production provides greater flexibility and possibilities for sharing costs and risks as well as for keeping informed of changing

229 See Rugman (2002), p. 13-14 and Ernst (2005), *passim*.

230 Castells (2000), p. 172-187. See also Lash & Urry (1994), p. 23.

231 Ernst (2005), p. 95.

232 Dunning (2002a), p. 11. See also Cowhey (1990), p. 131; Nakatani (1990), p. 157-158.

233 Kobrin (2002), p. 49-50.

234 Dunning (2002a), p. 19-20 and Cowhey (1990), p. 136-137.

technological landscapes, thus making continuous product innovation more feasible and economical.²³⁵ Cooperation acts as an “insurance policy” against misguided technological decisions, as the consequences of such decisions would be suffered by the competitors in the same networks as well. Networks thus enable the spreading and sharing of uncertainty.²³⁶ Global technological standards have the same effect by setting limits on uncertainty about the development and operation of new technologies and by allocating some of the risks of production on standard-setting bodies, insurance companies and governments.²³⁷

Cooperation between competitors in research and development activities does not necessarily preclude competition, as there are normally competing alliances and the cooperating partners within the same alliances can compete fiercely in the markets for final products. Cooperation within these network structures may rather a pre-requisite for being able to participate in competition.²³⁸ Yet the geographical localisation based on specialisation of economic activities may also lead to further concentration of various economic activities into spatial clusters, thus providing an example of how globalisation of economic activities also leads to geographical heterogenisation.²³⁹

Multinational corporations engage in foreign direct investment and extensive cooperation to obtain access to particular knowledge sources and knowledge spillovers at particular locations.²⁴⁰ Participation in such networks also provides possibilities for the most influential actors to shape the direction of technological trajectories, the dynamics of value chains and the longer-term structural developments within the business sectors involved. Access to international networks of innovation and innovation clusters, such as strategic alliances, is thus becoming increasingly important, as they are becoming the gates to privileged information essential for competition on the markets.²⁴¹ Quite often entry into these networks requires considerable recourses in the form of finance, technology or market share or alternatively, an alliance with a major player in the network.²⁴² The replacement of international trade by the strategic position of a firm in the web of networks as the source of the most essential knowledge spillovers may contribute in privatising knowledge and making its use conditional on access to the relevant networks. This often requires bargaining chips in the form of knowledge and information, among others.

Multinational corporations and the webs of extensive cooperation networks have become worldwide institutions coordinating economic activities located in many countries. They are simultaneously the *power-holders* of wealth and technology in the

235 Held et al. (1999), p. 260-261 and 267; Gilpin (2001), p. 286; Castells (2000), p. 187-188.

236 Cowhey (1990), p. 117; Nakatani (1990), p. 155-158; Castells (2000), p. 208-209 and Kobrin (2002), p. 49-50.

237 See e.g. Salter (1999), p. 102-103. Standards will be treated in chapter 7 subsequently.

238 See Castells (2000), p. 175 and 187.

239 See also Dunning (2002a), p. 15-16. See more closely about the reactions of competition law in chapter 6.

240 Audretsch (2002), p. 76-77; Malmberg, Solvell & Zander (1996), p. 93-94.

241 Dunning (2002), p. 15; Castells (2000), p. 129 and 174-175.

242 Castells (2000), p. 207-208.

global economy as the networks are built around them and highly *dependent* on their membership in complex, changing and interlocked network-structures. Even though the networks may be structured around multinational corporations, thus giving them some oligopolistic control, the informational, global economy is rather based on a web of multiple networks, as the multinational corporations are dependent on them and they affect the multinational corporations' internal structure and dynamics.²⁴³ It thus seems that the evolving global network enterprise model simultaneously increases the power of multinational corporations to affect the structures and operation of the economy globally, but at the same time the networks function, due to mutual (or rather multilateral) dependency, as the inherent restrictions on the use of such power. This complicates the meaning of informational power.

The interaction between local and global is thus also visible in innovative activities. Much of the innovative activity is localising into geographically concentrated clusters or regional innovation systems, while production is mainly performed on regional level and beyond.²⁴⁴ The globalisation of innovation thus connotes the increasing importance of regions, cities and even districts and their connections to other comparable clusters, thus partially sidestepping the state-level and the level of individual multinational corporations.²⁴⁵ Paradoxically then, globalisation is putting more stress on local processes of innovation and competition. However, the regionally and globally operating networks are the privileged instruments for the promotion of local innovative capabilities. Innovation thus takes place locally, based on regional specialisation and creation of local centres of excellence, but has a global function due to networks and multinational corporations producing and selling similar or identical products globally. To be innovative and successful globally, firms must *localise* into these clusters and take part in alliances having constant interaction with such locally functioning clusters. From the perspective of firms involved, innovative activities form a competitive advantage on a global (or at least regional) level. This connotes *transnationalisation and globalisation of firms' innovative strategies*. The participation of firms in regional systems of innovation and local, strategically important clusters also connotes *a transition from an internal knowledge base in specific industries to a decentralised knowledge base of firms*.²⁴⁶

243 Castells (2000), p. 208-210.

244 See e.g. Audretsch (2002), p. 63 and 77; Dunning (2002a), 15-26; Storper (2002), p. 49 and 52; Sölvell & Birkinshaw (2002), p. 82, 86-87 and 97. Asheim & Coenen (2006), p. 153-156, make a distinction between clusters and regional innovation systems. The latter are broader in terms of industries involved.

245 See e.g. Audretsch (2002), p. 63 and Ernst (2005), p. at 109.

246 See Asheim & Coenen (2006), p. 150.

The foregoing developments can be contrasted to intellectual property protection that is still largely national, regional and *international* and thus based on territoriality.²⁴⁷ States play a decisive role in defining and enforcing intellectual property laws, the instrument on which information capitalism and the use of informational power depends. While the multinational corporations may demand less regulation (or more deregulation) in many areas such as competition law,²⁴⁸ intellectual property laws are certainly not one of them.²⁴⁹ Even though the current intellectual property regime may largely represent the neoliberal thrust of the globalisation processes, the same processes call for a critical evaluation of norm conflicts involving intellectual property rights as the conflicting norms may be embedded with different conceptions of the respective roles of state, market and civil society and thus, different conceptions of democracy and the function of state-based regulation.

2.5.5 Information Society: Sub-Paradigmatic and Paradigmatic Readings

As can be concluded from above, modern information technology and communications infrastructures enable and accelerate the processes of globalisation. The network enterprise model utilises the Internet as its material infrastructure and basic medium of communication and information processing: production systems are now dependent on information and communication structures. Furthermore, economic globalisation intensifies competition and leads to innovation becoming an increasingly important competitive advantage.²⁵⁰ The transformation of the economy from the industrial to information economy will be further addressed under this heading.

Although the information society and globalisation are intertwined in their development, information society should not be reduced to being information technology and communications infrastructure for the purposes of global capitalism

247 However, information protectable by intellectual property is a global resource by its very nature. This is only partly due to the non-rivalrous nature of information and international regulation, dating back to more than one hundred years ago, but also due to now standard principles applied at local level, such as absolute (global) novelty requirement in patent law and automatic, practically global copyright protection without any further measures except the creation of a protectable work. These principles are applied without any reference to their origination in the international treaties.

248 See *Ullrich* (1998), p. 46 and *Mytelka & Delapierre* (1999), p. 130 (pointing out that the relaxation of antitrust regarding cooperation in research and development in the 1980s can be seen in the context of the increased ability of firms to shape the terms on which competition within newly deregulated markets takes place).

249 *May* (2002), p. 129-131. See also *Sell* (2003), *passim* and at p. 75-95. *Porter* (1999), *passim*, sets the variations in international patent policies in their historical context by relating the changes to the need to formalise the flow and control of technical knowledge at the times of waning industrial hegemonies once based on informal control of technical knowledge.

250 Yet innovations have been identified as remarkable constituents of capitalist dynamics by both historians and economists. See, respectively *Braudel* (1979, 1986b), at p. 623 (pointing out that innovations often come from below but almost automatically find their way to the owners of capital) and *Schumpeter* (1942, 1976), *passim*.

and network enterprise.²⁵¹ It seems that the transition to the networked information society could also transform significant aspects of what has been referred to as the public sphere of the lifeworld, local and global political movements, as well as cultural production and reproduction, thus further blurring the distinction between lifeworld and system. The networked information society could enable a shift from the mass-mediated public sphere to a networked public sphere not controlled by media owners, thus resisting the corruption by money characterising the mass media.²⁵² The immanent capacity of such on-going developments to function as a counter-weight and challenge with respect to the neoliberally oriented globalisation processes should be recognised at the outset. The primary focus here will thus be on the changes brought by the globalisation and information society processes on the aspects of civil society.

The significance of information, knowledge and communications for economic productivity, social structures, power and culture *has* transformed.²⁵³ Yet the pervasiveness and effects of these transformations are matters of continuous debate. It is possible to distinguish paradigmatic and sub-paradigmatic interpretations. Sub-paradigmatic interpretations concentrate on transformations in production. They recognise that knowledge and information are now the central *inputs* of production processes, but that their control (especially through intellectual property rights) is based on the same logic of capitalism that has existed before. Most production *processes* are now also more knowledge- and information-intensive. The increased importance of knowledge and information as inputs in end-products and production processes can hardly be questioned on a general level of analysis. In the terminology of international economics, knowledge-based, innovative activity has become the prevailing comparative advantage of industrialised countries as globalisation has rendered the comparative advantage in traditional technology industries incompatible with workers' high income.²⁵⁴ The existence of this comparative advantage is highly dependent on intellectual property protection.

Mytelka provides a concise description of these developments and their interconnections.²⁵⁵ According to his analysis, production became more knowledge-intensive across a broad spectrum of industries during the 1980s and 1990s. The

251 See also *Latham & Sassen* (2005), at p. 7.

252 *Benkler* (2006), p. 10-11 and also *passim*.

253 Many authors distinguish information and knowledge, information being easily transferable data and increasingly global due to networks such as the Internet enabling instant sharing of information world-wide. *Knowledge* is defined as institutionalised and embedded in social practices, conventions or rules and memes. It is by its nature more local (the marginal cost of transmitting it raises with distance). While the economic *activities* increasingly constitute either of procession of information or manufacturing of information-processing devices, as *Castells* (2000), at p. 78, has discussed, the economic *processes* (*how* activities are performed) are based on knowledge and increasingly constitute the competitive advantages of firms, as pointed out by *Sölvell & Birkinshaw* (2002), p. 87 and 92. On the distinction between information and knowledge see also e.g. *Storper* (2002), p. 57 and *Audretsch* (2002), p. 68 and 72.

254 *Audretsch* (2002), p. 62-66 and 77; *Sell* (2003), p. 3.

255 *Mytelka* (2000), p. 47. See also *Mytelka & Delapierre* (1999), p. 130-131 and *Kobrin* (2002), p. 46-47.

solidification of innovation-based competition shortened product life cycles and accelerated the pace of technological change. This raised costs, risks and uncertainties in research and development. The increased costs and risks could only be amortised through market opening and liberalisation of trade. The ensuing liberalisation and deregulation led to the diffusion of innovation-based competition rapidly around the globe. According to Mytelka, this significantly modified the competitive conditions for firms and led to new roles for states in the form of supporting innovation by firms located within their territorial boundaries. Strategic partnering, accelerated mergers and acquisitions as well as the emergence of knowledge-based networked oligopolies became the key elements of firms' corporate strategies. Mytelka argues that the latter emerged out of the globalisation of knowledge-based competition, which had made it ever more difficult to identify potential competitors in distant markets. Rivals could now also emerge from other industries because of disruptive technologies or combinations of hitherto unrelated generic technologies, thus decreasing predictability and increasing risks.

The production processes as such are now characteristically about producing prototypes and processing and transmitting information. They are thus not only dependent on research and development, but *are* partially research and development. Innovation has become chronic and routinised. The accumulation of the *same*, based on the repetition of homogenous products by using labour time with regard to real property has lost its centrality and is replaced by the centrality of the accumulation of *difference* in the form of intellectual property, based on the repetition of difference of prototypes by using knowledge-intensive labour time. Information and communication structures have thus become essential to and coextensive with production systems.²⁵⁶ Businesses have adopted the network as the key organisational form by using the Internet as their fundamental medium of communication and information processing. The Internet has become the material infrastructure of the network organisational form, as the factory was the material infrastructure of the organisational structure of industrialism.²⁵⁷ The new global information infrastructure is embedded within and completely immanent to the new production processes based on networked horizontal cooperation.²⁵⁸ As a corollary, the control over linguistic sense and meaning and the networks of communication have become central issues for political struggle.²⁵⁹

But not only is the production and organisational form of business affected by the new communications media. In addition to being a material infrastructure of the economy, the Internet functions as the fundamental communications medium organising social and political action, as well as individual forms of life. Technology ever more characterises culture and becomes something entering integrally into

256 Lash (1994), p. 129 and 194 and (2002), p. 23 and Lash & Urry (1994), p. 96 and 107-108.

257 Castells (2001), p. 66-78.

258 Hardt & Negri (2001), p. 298.

259 *Ibid.*, p. 404-405 and Castells (2001), p. 140 and 277. See also Lash (1994), p. 135, who introduces the concept of "*sign economy*" and brings out the importance of questions related to power and domination over aesthetic, cultural symbols. For a critique see Giddens (1994), p. 197.

forms of life.²⁶⁰ *Latham and Sassen* have coined this with the term “*sociodigitisation*”, denoting the rendering of facets of social and political life in a digital form. Not only information and artefacts are rendered in a digital form, but more importantly logics of social organisation, interaction and space.²⁶¹ Such a construction of the information society makes it evident that not only is the economy affected, but other subsystems of the society as well. This is what the paradigmatic interpretations of the information society concentrate on. They do not necessarily contest the continuation of the known capitalist logic in the accumulation of information, but broaden the analysis to other subsystems of the society. It is thus possible, without rejecting the continuing relevance of capitalist logic, to maintain that informatisation has reached a point where the previous economic and social structures have largely been, or are in the process of being replaced by new ones, ultimately deeply affecting the social structures of the society.

Castells uses the term *informational* as opposed to information society to denote social organisation in which the generation, procession and transmission of information have become the fundamental sources of productivity and power. He emphasises the pervasiveness of the effects of the new technologies: *information is an integral part of all human activity, and it directly shapes all processes of individual and collective existence.*²⁶² The Internet is not simply a technology, but essential for expression and organisation for various social movements and groups as well as for individual identities.²⁶³ Irrespective of what we may think, due to convergence around the Internet the regulation of several information technologies is regulation of communication, networked forms of life and cultural environment rather than regulation of economic resources.²⁶⁴ *Lash and Urry*, too, prefer a paradigmatic interpretation.²⁶⁵ They talk of *a society of flows*: a networked society based on global communications. The ongoing transformation would not only (or mainly) entail change from a mode of production to mode of information, but from mode of production to mode of communication. The previous social structures of the industrial

260 *Lash* (2002), p. 176.

261 *Latham & Sassen* (2005), p. 16-17.

262 *Castells* (2000), p. 21 and 70. *Lash & Urry* (1994), p. 221-222, criticise *Castells*' narrow focus on information and emphasise the centrality of symbols (in addition to cognitive information), which also contain moral, affective, aesthetic, narrative and meaning dimensions. They prefer the term “culture society” over informational society (*ibid.*, at p. 143) and maintain that what follows modernity will be societalisation of culture (whose demarcation line with industry is at the same time becoming blurrier), similar to earlier societalisation of the industrial principle.

263 *Castells* (2001), p. 139-141 and 203-205. See also *Benkler* (1998), p. 290-291 and *Wayne* (2004), *passim*.

264 See e.g. *Benkler* (1999), *passim*.

265 *Lash & Urry* (1994), p. 64; *Lash* (2002), p. 20 and 176-177. *Lash* calls the increasing centrality of global communications the *second-generation of the new economy* or a *communications economy* (2002, p. 204-205). It is also characterised by re-territorialisation of flows in networks, actor-networks, standards and platforms, and boundaries of proprietary. *Benkler* (2006), p. 32 and also *passim*, distinguishes the current *networked information society* from the pre-existing *industrial information society*. The networked information society could enable reversing two trends of the industrial information society related to cultural production: concentration and commercialisation.

society would be displaced in this process not just by information structures but ever more by global communication structures.

Simultaneous decentralised access to the Internet has already led to the creation of cross-border public spheres bypassing any central authority or global institutions and, ironically, constructing a far more concrete base for social struggles than is the current national political system.²⁶⁶ As already indicated, the emerging networked public spheres based on the Internet enable formation of engaged groups transnationally and without the mediation of the traditional media owners. Attention in this environment is based on being interesting to such groups, whereas in the mass-mediated environment moderate interest to a large number of viewers was the key to attention. As the attention among many clusters of interest groups is based on being interesting as opposed to buying attention in mass media outlets, the Internet as a platform for public spheres democratises public discourse by lessening the impact of both the money and power media on the deliberative practices and critical engagement of the civil society.²⁶⁷ The sociodigitised public spheres imply the plurality of public arenas and promote what Fraser has called subaltern counterpublics, the utilisation of parallel discursive arenas by subordinated social groups.²⁶⁸ Non-governmental organisations may gain new momentum through the dynamics of collaboration with other organisations and formation of transactive memory systems afforded by interactive technologies.²⁶⁹ Local political movements and agendas can constitute global scalings, microenvironments with a global span.²⁷⁰

Another significant development brought about by the networked information society relates to the emerging forms of networked social production, which confuse the boundaries between the economy and the civil society. The widely distributed availability of the basic elements for informational production – access to computers interconnected so as to exclude centralised control, as well as access to existing information, knowledge and culture in a digitised form – enable significant new modes of social production. They lead not only to content and information products created by individuals acting alone and organisable in the Internet environment through practices like linking, peer-review and search engines, but also to complicated products requiring large-scale cooperative efforts, such as the Linux operating system and Wikipedia encyclopaedia.²⁷¹

As Benkler says, the pressure from social production is a threat to other businesses, whereas it is an opportunity for others.²⁷² A robust public domain in existing information is hence not intended to displace commercial production, but seeks to ensure that enough

266 See Sassen (2006), p. 366 and 374.

267 See Benkler (2006), p. 10-13. See also Sack (2005), p. 265-277.

268 Fraser (1992), p. 123-124.

269 See Bach & Stark (2005), p. 38-43.

270 See Sassen (2005), p. 73-82.

271 See Benkler (2006), p. 105-122. See also Benkler (2003a), *passim* and Lessig (2008), p. 117-176.

272 Benkler (2006), p. 126-127.

cultural raw materials are left for non-professionals for reworking of cultural meaning.²⁷³ As the below chart of IBM's revenues demonstrates, the shift to social production practices enabling products like the Linux operating system would by no means imply a demise of commercial enterprise, but a possible reorientation from business models based on proprietary logic and exclusion towards other earning logics.

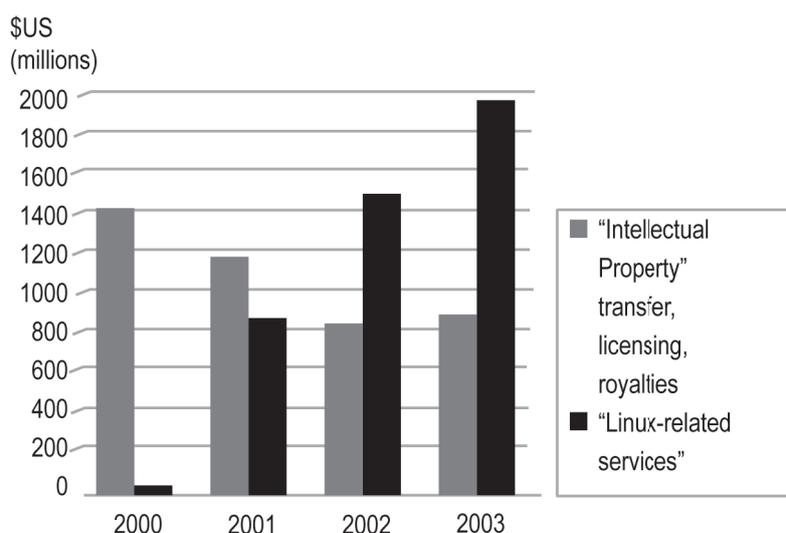


Figure 2: Selected IBM Revenues, 2000-2003. Source: Benkler (2006), p. 47.

There is thus no necessary conflict between policies enabling and facilitating large-scale social production based on the Internet, and the interests of commercial enterprise in general. Provided there are no excessive constraints imposed on private enterprise by either governments or powerful economic actors, business scholars instruct policy-makers and lawyers not to be particularly worried about the capacity of private enterprise to create and utilise business models producing value also in the absence of a proprietary logic based on exclusion of others. The latter provides only one possible – and in the industrial economy the dominant – basis for a profitable business. It is rather an uncontested presumption of legislators, the judiciary and legal scholars alike, also nurtured by the active lobbying of the currently dominant economic interests dependent on the structures of the industrial paradigm, that any profitable economic activities must somehow be based on the prevailing logic.²⁷⁴ Open source code “does not obliterate profit, capitalism, or the general concept of intellectual property rights.

273 See Benkler (2000), p. 577. See also Lessig (2008), at p. 225, arguing that parallel economies are possible.

274 See Taalas & Rehn (2007), p. 59-61 and also *passim*.

Companies and individuals are creating intellectual products and making money from open source software code, inventing new business models and notions about property along the way.²⁷⁵ More generally, the interests of the “economy” and the networked civil society should not necessarily be seen as antithetical. The relevant question is whether to let the incumbents of the industrial age to define the socio-economic environments of the information age, thus inhibiting the immanent potential of the emerging and already emerged forms of social production to flourish and renew the economy.

Software now determines in a fundamental way not only which programs can be run, but also which speakers and which content are allowed. It increasingly determines which actions are possible for individuals, innovators and competitors. In information society, the archetypal software constitutes a key part of our social structure and constructs meaning and identity as part of communicative architecture. It thus regulates and defines to an increasing extent society’s culture. Technologies do not deterministically impose the development of the society; they mirror it and may allow for different and competing interpretations. However, different technologies also imply different political possibilities that depend also on the social environment. Which way societies develop does not thus primarily depend on the code itself, but on the ability and willingness of societies and their institutions to impose, resist and modify the code. The control of code has thus emerged as a fundamental source of power in the information society. Intellectual property rights, in turn, are the primary instruments enabling their control.

2.6 Concluding Perspectives and Transitional Thoughts

The European Commission’s longing for a European public sphere does not correspond with its substantive intellectual property and competition policies. These policies now increasingly also undermine the public sphere on the domestic level and are not supportive of a democratic culture characterised by the possibilities of individuals and civil society groups to participate in the cultural activities and meaning-making. Yet communicative and entrepreneurial diversity and aspects of democratic culture could be furthered by changing the interpretations of existing Union laws and by developing certain doctrines of law through case law, as will be argued in the subsequent chapters. Such changes would also be enabled, if not required, by the basic Treaty framework.

Sociodigitisation implies that technology becomes something that enters integrally into forms of life. It defines what ways of life will be enabled and disabled. We live and communicate in virtual spaces based on networks of digital information flows. The computerised communication systems built around the Internet form an integral part of the context in which we live: rather than being mere technological inputs, they are environments organising time and space. They have the potential to democratise

²⁷⁵ Weber (2005), p. 179.

speech by giving individuals abilities previously not enjoyed by lowering the costs of copying, distribution, and creation with existing resources. They form the technological infrastructure relevant for lifeworld contexts of interaction, influence, participation and self-realisation. Their effects are pervasive, as information is an integral part of all human activity, directly shaping individual and collective existence. The Union's laws and policies concerning the Internet, and more generally its information and communications laws, should increasingly be seen from such additional perspectives and the democratic and constitutional values involved.

The functioning of the Internet is based on the combination of a democratic mechanism and an oligopolistic mechanism. Even though both governments and enterprises may achieve to gain maximum control of these networks constituting the cornerstones of the informational economy, there are certain democratic elements in the decentralised and interactive network structure of the Internet, as implied above.²⁷⁶ However, the original democratic coding of the Internet should not be taken for granted, as has been repeatedly argued.²⁷⁷ The content industries and governments have a unity of interests: the control of access and identity simultaneously enables securing profits from information production and exercising governmental control. As argued by Lessig and Castells, content industries have a stake in supporting governmental efforts to restore control by architecture of controlled software.²⁷⁸ The establishing of quasi-monopolies over the global information infrastructure may tilt the balance from the horizontal, decentralised model towards a tree structure subordinating all of the branches to the central root. This authoritarian alternative undermines the possibilities of creating inclusive and open public spheres in the Internet environment. Although the European Union laws and policies do not alone regulate the whole Internet or determine its future, they importantly participate in constituting its current characteristics and future trajectories.

276 See also e.g. *Hardt & Negri* (2001), p. 298-300; *Castells* (2000), p. 382-383. *Habermas* (1981, 1987), at p. 390-391, stated that there is always a built-in emancipatory counterweight for authoritarian potential in the communication structures themselves. It is thus a question of whether the Internet develops more into an institution supporting the steering media of money and power (system) or public and private spheres (lifeworld).

277 See e.g. *Lessig* (2001), p. 147-233 and (2006), p. 6-8; See *Castells* (2001), p. 183. Due to the centrality of the Internet as a communication structure and its democratic potential, Castells identifies its control as probably the most fundamental political issue raised by its development (*ibid.* at p. 164-165) and *Zittrain* (2008), p. 36-62 (arguing that as security issues and breaches become more commonplace throughout the networks, people will come to prefer security over generativity). See also *B. Barber* (2001), *passim* (addressing these developments from the perspective of democratic theory and emphasising that is wishful thinking of dangerous and delusional nature to be content with the technical promise of pluralism and freedom of the Internet).

278 See *Lessig* (2006), p. 74-80 and *Castells* (2001), p. 182-184. In addition, technologies that engage citizens directly may be perceived as threats to traditional political parties and bureaucratic government (representative government wants citizens to be active once a year – on Election Day), as said by *B. Barber* (2001), p. 5. This may be another (non-expressed) reason for the governments to support commercial control of technologies.

The communication networks themselves, not only content flowing in them, have become questions of intellectual property rights. They involve questions of tangible property ownership, but are also matters of intellectual property in the form of operating system software, technical standards and platforms. Technical standards may form borders in the cyberspace. The exclusion from core platforms and standards may connote exclusion from aspects of the global information order.²⁷⁹ Intellectual property is thus something constituting, for its part, the communicative contexts of the public sphere(s).²⁸⁰ It pervades the lifeworld directly, by restricting the possibilities of individuals and communicative clusters constituting the public sphere to utilise protected subject-matter freely in their interactions. It affects them indirectly by structuring the entire communication system by making the exclusion of some technologies possible, thus affecting the plurality of actors and the extent and nature of communication and information sources within that system. Power in its most significant forms has become informational and based on intellectual property.

As emphasised by Calhoun, the lifeworld interaction in modern societies is largely indirect. It is technologically mediated, as coined by the term sociodigitisation. To protect democratic values and lifeworld interaction we should thus be worried about the existence of sufficient technological alternatives, the public domain and communication sources preserving individual and social autonomy, and about the democratic character of the core communication and Internet technologies, standards and platforms. We should be concerned about the mechanisms of their formation, ownership and control. Questions of exclusion and access to communication networks, platforms, standards and information structure the global architecture of communications and thus also the possibilities of communicative action in the information society. Communication and information structures and the related norms can support communicative action and democratic culture, or be captured by strategic action represented by the steering media of money and power.

Competition law reacts to anticompetitive actions of firms. Its direct impact is on commercial actors, but it affects indirectly the market as an institution. Its concern is harmful market power, be it held by a single dominant firm or several firms through collusion or contract.²⁸¹ In the application of competition law to exercises of exclusionary power enabled by intellectual property rights one has to recognise and take account of the potential (usually unintended) consequences of this conduct on democratic values, such as the structures of communication networks. Quite evidently, there are no such concerns in all contexts of competition law application. However, cases such as *Microsoft*²⁸² have to be understood against this background. It is not satisfactory to analyse such cases in a market-liberal fashion only within the subsystem of the economy and to argue that restricting the conduct of the dominant

279 See also *Lash* (2002), p. 24 and 197-198 and *Salter* (1999), p. 102-103.

280 See also e.g. *Coombe* (1991), *passim*.

281 All main instruments of competition law are related to market power. See *Kuoppamäki* (2003), p. 1369.

282 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601.

players is “a policy in war with itself”,²⁸³ or that “serial monopoly” is generally not problematic as new dominating technology standard will inevitably emerge and become the next serial monopoly.²⁸⁴

However, it would be naïve to expect any alternative democratic models to be simply transferable into the judicial practices and doctrines of intellectual property and competition law. For almost exclusively, the intellectual property institution and its interaction with competition law has been analysed in the context of liberal democratic theory. The law and economics literature, for example, is based on this model. The ordoliberal approach, too, may be seen as a variant of liberal democratic theory. The other democratic models could provide a basis for critiquing the fundamental premises of the prevailing approach or, more modestly, bring alternative or complementary perspectives to the developments and interpretations from their own premises. Although intellectual property and competition laws now increasingly affect the structures of communication and lifeworld interaction, their major societal justification is instrumental. Rather than rejecting the discourses based on economic analysis and welfare maximisation, there should be an additional layer of considerations based on democracy and constitutionalism. This requires analysis of the relevant laws from the perspective of democratic ends and constitutional values and the construction of alternative models complementing the existing ones.

Even if the underlying theories disagree, the outcomes they propose may sometimes be compatible.²⁸⁵ Many of the concrete proposals stemming from democratic discourse may be compatible with the recommendations of evolutionary economics, infrastructure theory, and even standard microeconomic scholarly work reminding us that one should also consider the social costs generated by exclusive rights, or that a liability rule may be preferable over a property rule in some circumstances.²⁸⁶ Thus, even though the doctrines, patterns of argumentation and applications of economic analysis based on liberal ideology may typically create an “applications barrier”²⁸⁷ for patterns of argumentation based on the other democratic models, this may not always be the case. Economic analysis of the relevant laws could also be used to support some of the proposals emanating from democratic discourse. This is enabled, among others, by the heterogeneity of economic discourses. Being able to agree on some of the outcomes with credible economic analysis

283 Bork (1978, 1993), p. 7. Baquero Cruz (2002), at p. 3-4; 31 and 86, also argues that the liberal view of constitution as a legal instrument guaranteeing a system of limited government and creating a sphere of individual autonomy immune to *public* power is not adequate in the contemporary world, where *private* power has become a central concern. He sees the European Union competition rules as one constitutional element capable of restricting this power.

284 See Liebowitz & Margolis (2001), *passim*.

285 See more closely the next main chapter.

286 See the discussion of the economic theories underlying intellectual property law in the beginning of chapter 5. Infrastructure theory will be discussed in chapter 7, in particular.

287 Applications barrier refers to a situation whereby the independent developers only write applications for the dominating platform and consumers prefer the platform with the most applications. Introducing a new platform successfully would thus be unlikely.

strengthens the chances of the proposals penetrating the relevant scholarly discourses, argumentation patterns and doctrines of law.

Hence, even if the paradigmatic operating systems of both competition and intellectual property law have been variants of liberal democracy, applications based on other models could be made interoperable by reverse engineering the existing doctrines and forward engineering the proposals. To have an impact, it would be preferable if the proposals were acceptable for at least some of the discourses of both operating systems.²⁸⁸ Certainly, this cannot always be achieved. Fundamental critique cannot be avoided. Yet, operationalising fundamental critique on the level of individual doctrines of law is notoriously an arduous, often a counter-productive task: micro-critique may produce macro-legitimation and thus dilute the truly critical edge of the analysis. On the other hand, without connection to judicial practices fundamental critique remains mere noise for the institutional elites and specialised experts administering the relevant laws, and for the legal and economic discourses based on the predominant research paradigms and prevailing ideologies alike. Reverse engineering the existing doctrines enables the identification of instances and potentials for alternative interpretations, judicial developments and doctrinal changes.

Importantly, the extent to which democratic and constitutional values typically considered external to the intellectual property and competition law institutions could be integrated in the relevant judicial decision-making practices also depends on how diverse norms embedded with diverse values interact and affect interpretation and decision-making. Intellectual property and competition law institutions should be *normalised* in the sense that neither legal institution should have its own sources of law doctrine or legal theory. Like with other laws, their contextual application should lead to the applicability of diverse norms present in the situation at hand, and their interaction with intellectual property or competition norms.

Constructing an acceptable and realistic framework of judicial decision-making is the purpose of the subsequent chapter. It will address the operating system(s) of judicial decision-making in the context of European Union law, and thus the institutional possibilities it opens for alternative developments and patterns of argumentation in instances where the concerns identified above could materialise.

288 Another known strategy to overcome the applications barrier in the software markets is two-level entry, the simultaneous introduction of a new operating system and applications based on it. In legal and political science, the simultaneous entry of a new legal operating system and applications based on it is known as *revolution*, thus being beyond the current research seeking to utilise the existing ambiguities and institutional possibilities within law.

3 Norm Interaction and European Legal Space

3.1 Chapter's Contents and Central Arguments

As law is a specific discourse and practice on its own, it sets inherent constraints and opens possibilities for alternative developments and interpretations. The boundaries of these limitations and opportunities depend on the way we construct law and legal decision-making. Discussing norm interaction and legal decision-making under European Union law constitutes the purpose of the present chapter. The notion of European economic constitutional law developed in this research also comprises a conception of the overlapping legal systems, their interaction and the principles and values guiding interpretation. Moreover, the extent to which private informational power could be controlled by integrating democratic and constitutional values in the decision-making practices under European intellectual property and competition laws depends not only on the inherent discourses and on the doctrinal developments of these specialised branches of law. It also depends on the perceptions of norm interaction, interpretation and the constitutional objectives underlying European law in general.

The discussion will build on the notion of legal pluralism in the context of European Union law. Constitutionalism and pluralism can be seen to provide alternative, narrative perspectives to law and the interaction of norms.¹ The perspectives complement each other, but are not easily reconcilable on a theoretical level. On a functional level, they do not have to be seen as conflictual approaches. The discussion relates to *constitutional pluralism* underlying the European Union legal system. From the perspective of a legal decision-maker, conflicting demands must somehow be resolved. The overlapping legal systems seek to establish their own rules for dealing with intersystemic conflicts. There is no level above them where the competing claims could be resolved. The dilemma is thus the following. In case of intersystemic conflicts, how to avoid the traps of unrealistic monist hierarchical models on one hand, and descriptive characterisations of legal pluralism lacking normativity and typically being useless to legal decision-makers, on the other hand?

After discussing legal pluralism and decision-making on a general level in the first part of the chapter, the second part seeks to address this dilemma in the context of

1 See Koskenniemi (2007), p. 25.

European Union law. It also builds on the new constitutional structure of European Union law and seeks to address its implications for legal decision-making and interpretation. Both an internal perspective based on the coherent interpretation of the basic European Union Treaties in the light of their expressed values and objectives and an inter-systemic perspective comprising the interactions between European Union norms, domestic laws and international law will be elaborated. Courts and other legal decision-makers do not only adapt to an emerging pluralistic legal culture in Europe. They are also deeply intertwined in constructing it. They participate in an ongoing discourse about the desired interaction and weight of different types of norms, normatively relevant considerations and intersystemic interaction. It is argued that this discourse is also about democratic legitimacy. The interaction between European Union norms and domestic legal systems, as well as the effects of diverse international law instruments in European Union law will be approached from such perspectives. The practical examples will relate to European and international norms affecting intellectual property -enabled power, such as the TRIPS Agreement.

3.2 Norm Interaction and Legal Pluralism

3.2.1 Introduction: Coherence and Layers of Law

The following two sub-chapters will discuss norm interaction and conflicts in legal decision-making in general. The analysis will start with understandings anchored in the notion of *coherence*. Such perspectives will be first developed by discussing a layered model of law and subsequently also challenged by discussing the notion of legal pluralism.

According to *Dworkin's* well-known theory of law as integrity, judges should conceive the body of law they administer as a coherent and structured whole rather than as a set of discrete decisions that they are free to make or amend one by one. This calls for horizontal, rather than vertical (or historical), *consistency in principle*. The government should speak with one voice and express a single and comprehensive vision of justice.² If possible, a statute should be interpreted so that it is also consistent with the legal standards of other legislation in force.³ This leads to constructive and comprehensive interpretation: an individual legal decision can be right only if it fits into a coherent legal system.⁴ Principles as well as higher-level justification of rule

2 *Dworkin* (1986), p. 134, 165-167, 226 and 400 and (1997), p. 355-357. For a critique of Dworkin's use of the concept of coherence see *Raz* (1994), p. 319-325. *Consistency* and *coherence* can be distinguished. The former connotes the logically non-contradictory character of the surface level legal order while the latter relates to substantive, principle and objective level congruity of the legal order. See *Tuori* (2002a), p. 170. However, many see the lack of inconsistencies as a negative characterisation of coherence. See e.g. *Alexy & Peczenik* (1990), p. 130-131.

3 *Dworkin* (1986), p. 227 and 338. See also *Günther* (1988, 1993), p. 70 and 242.

4 *Dworkin* (1978), p. 119-123. See also *Habermas* (1992, 1996), p. 232 and 237.

applications in the light of principles should be recognised as normal components of legal discourse.⁵ This approach dissolves both the closed character of the rule system and the ostensible irresolvability of conflicts between rules.⁶ It also implies that in *some* instances the courts may have to proceed to the level of the basic principles of political morality in order to decide the case at hand.⁷

Günther similarly perceives broad systemic coherence to function as a regulative ideal in each judicial decision. He makes a distinction between discourses of justification and discourses of application. The latter concern the norms' appropriate reference to a situation. It is only in the application discourses where conflicts of norms arise.⁸ Changing the situation changes the relations between *prima facie* applicable norms. Coherent application of a norm is thus contextual in nature. The appropriate norm should be assessed in relation to as many other normative viewpoints as possible.⁹ The situation should be considered from multiple normative viewpoints simultaneously so that a meaningful interpretation is provided for in that specific context.¹⁰ Karhu (ex. Pöyhönen) emphasises the need to identify the applicable norms based on the requirements emanating from the comprehensive understanding of the situation at hand. In typical application situations there are multiple overlapping norms to be considered simultaneously.¹¹

The justification of the applicable norms at the level of principles and values connotes that the norm conflicts may also be perceived as ideal collisions of values, principles and norms.¹² Law is not exhausted to the surface level of linguistically expressed norms or norm fragments of legislation, case law and statements of legal scholars, but may be seen to comprise the additional levels of *legal culture* and the *deep structure of law*, as discussed by Tuori.¹³ This enables distinguishing horizontal and vertical internal

5 See also Bengoetxea, MacCormick & Soriano (2001), p. 65. See also Schauer (2002), p. 73-76.

6 Scheinin (1991), p. 36 and Habermas (1992, 1996), p. 209.

7 Dworkin (1986), p. 250-254 ("local priority of departments of law"); Dworkin (1997), p. 358-360; 370-371 and 374 ("--[the embedded account] recommends that judges ascend to more abstract theory only when they have special reason to do so"). See also MacCormick (1992), p. 316 and 320. Also Klami (1994), at p. 11-12 and 45, emphasises in the context of European law that cases should be decided on the level of the legal ideology only when not resolvable on lower levels. See also Schauer (2002), p. 196-206 and also *passim*, introducing the notion of *presumptive positivism*, which is based on presumptive preference of a locally applicable pedigreed rule, which however enables and leads to addressing or testing the result against a larger set of justifications and values.

8 Günther (1988, 1993), p. 70, 242-243 and also *passim*. See also MacCormick (1978), p. 152 and N.W. Barber (2006), p. 314 ("the contradiction between rules lies not in their inherent truth or falsity, but in their subjects' inability to fully comply with the rules: a claim that both had been fully complied with would necessarily be untrue").

9 Günther (1988, 1993), p. 70-71.

10 See also Scheinin (1991), p. 34-38 and (1993), p. 18 (noting that the concrete applicable norm is typically constructed on the basis of several *norm fragments* – hence, the normativity of law has more to do with the thus constructed applicable norm and its application to the facts than with the individual norm fragments).

11 Pöyhönen (2000), p. 10-11 and 198-200.

12 See H. Tolonen (1993), p. 59.

13 See in more detail Tuori (2002a), *passim*. For a definition of the surface-level see *ibid.*, p. 154-161.

conflicts in law. The former exist on the same level of law, typically on the surface level between norms in different sets of legislation.¹⁴ Vertical conflicts, on their part, are conflicts between different levels of law. Horizontal conflicts can sometimes be settled through recourse to formal *lex superior*, *lex posterior* and *lex specialis* standards.¹⁵ However, more typically they have to be resolved through recourse to and weighing of principles justifying the rules, and their counter-principles.¹⁶ The standards have lost much of their capacity to resolve conflicts of any theoretical interest.¹⁷ According to Tuori, horizontal conflicts not resolvable through these standards are transferred onto the level of legal culture.¹⁸ Already the principles conditioning the use of the formal standards belong to the level of legal culture.¹⁹ It also consists of the methods of interpretation, sources of law doctrine, legal principles and doctrines from various legal fields of law, among others.²⁰

Sometimes the norms may present a fundamental social conflict. In such hard cases, the deep structure of law may become the decisive point of reference. According to Tuori, the deep structure of law consists of the paradigmatic principles and the basic legal categories within that legal order. It extends to the values and principles underlying the whole society. These may also relate to principles and values underlying the economy.²¹ It structures the use of interpretive methods, forms a base for the balancing of principles, and places limitations on possible interpretations and doctrinal developments. The deep structure of law would thus organise and orient judicial decision-making in a fundamental and all-encompassing way.²² Tuori

14 *Ibid.*, p. 316.

15 See generally Larenz (1983), p. 256-260; Klami (1982), p. 46-60 and Scheinin (1991), p. 43-48. *Lex specialis* could be defined as a standard according to which a more specific rule takes precedence over a general standard if a matter is being regulated by both. See Koskenniemi (2004a), at paragraph 21.

16 See also Schauer (2002), p. 188-191. Thus, background norms become important when analysing norm conflicts, even though they do not usually form an explicit part of the judgements addressing such conflict situations. See in the context of EU law e.g. Bengoetxea (1993), p. 262.

17 See also Lindroos (2005), p. 35-66 (discussing *lex specialis* in international law and rightly pointing out that *lex specialis* is a mechanic standard without substantive content) and Koskenniemi (2004a), at paragraphs 97-106, in particular (pointing out that *lex specialis* argument has most relevance within a single treaty and between treaties within a single "treaty-regime" as in these cases one may find the regime's teleology against which the relations of norms become addressed).

18 Tuori (2002a), p. 316.

19 *Ibid.*, p. 157 and 167 and Ojanen (1998), p. 29.

20 See in more detail Tuori (2002a), p. 166-183. Koskenniemi (2000), p. xiii, holds that there is no "fundamental" explanation for sources doctrine in international law. Instead, it could be considered as part of professional lawyers' professional task and self-image; a function of a professional culture.

21 See Petrusson (1999), p. 304, for the idea that also some values and principles underlying the economy could form part of the deep structure of law.

22 Tuori (2002a), p. 232-240. See also Habermas (1992, 1996), p. 221. Tuori's work offers an organised structure of principled adjudication requiring higher-level justification of rule applications. It also provides useful insights regarding the dynamic interactions between the levels of law on one hand, and law and societal developments on the other hand. See also Schauer (2002), p. 72-27 and also *passim*, for another layered understanding of norms also purporting to maintain the positivist features of law.

identifies its basic normative core in mature modern law in fundamental rights and the *Rechtsstaat* principles.²³

All levels of law are at least implicitly involved in instances of horizontal conflicts of norms. In judicial practices, the deep structure affects the level of legal culture and surface level, while the developments on the latter further affect the other levels of law.²⁴ However, there may be diverging proposals for systematising the legal order.²⁵ Already the reconstruction of the law's deep structure involves subjective interpretation having normative implications.²⁶ The elements of legal interpretation are in a continuous flux, demonstrating a dynamics in interpretation between different levels of law, as well as between law and societal developments. Even if some core elements constituting the deep structure of the law could be identified and agreed upon on a general level of analysis, the dynamic and interactive nature of the levels connotes that the possibility of competing interpretations and systematisations is inevitable. This applies in particular at times of a paradigm change, but is not restricted to it: even if it were possible to agree that the deep-structure of mature modern law now centrally consists of fundamental rights and the *Rechtsstaat* principles, there is still considerable scope for competing constructions of the legal order.

The foregoing theoretical views are largely compatible with each other: they are based on an idea of coherence forming an important objective of application practices. Its value relates to consistency and the ensuing equality before the law, among others.²⁷ Yet, coherence is obviously not the only criterion when deciding cases.²⁸ Tuori's levels of law -model can be seen to constitute a further development of Dworkin's, Günther's and Habermas' ideas of principled coherence achievable in adjudication. However, the presence of norms emanating from multiple norm-producing centres and multiple loyalty obligations of the legal decision-maker imply that these ideas have to be modified and complemented. This is the purpose of the following.

3.2.2 Legal Pluralism and Polycentricity of Law

Legal Pluralism and "Globalisation of Law"

It has become relatively usual to perceive the legal order as constituting of a multitude of overlapping legal systems, or at least of legal norms produced in multiple centres.

23 Tuori (2002a), p. 190 and 202-203.

24 See in more detail *Ibid.*, p. 197-216.

25 See *Ibid.*, p. 317. See also Ojanen (1998), p. 29-59 (building on Tuori's previous work).

26 Tuori (2002a), p. 190.

27 See e.g. Alexy & Peczenik (1990), p. 143-144; Tuori (2003a), p. 363 and Berteau (2005), p. 160 (all connecting coherence to these values).

28 Also Dworkin acknowledges that the interpretation has to be context-specific and forward-looking (to show the best route to a better future) in addition to being a comprehensive interpretation of the legislation and the legal practice. See Dworkin (1986), p. 271 and (1997), p. 364. Koskenniemi (2004b), at paragraph 174, points out that coherence is a formal and abstract virtue: if a legal system is in some respects unjust and unworkable, "no added value is brought by the fact of its being coherently so".

The existence of multiple systems of rules affecting the same social field and geographical area is a social fact, rather than a perspective representing a particular school of thought.²⁹ Law is in these senses *pluralistic* and *polycentric*.³⁰ Legal pluralism and polycentricity of law do not have to be seen as new phenomena caused by recent developments related to globalisation or accelerating functional differentiation of social fields. They can also be seen to constitute inherent characteristics of law. Yet, their role is accentuated by these developments, making a polycentric view of law unavoidable.³¹ Globalisation of law has been characterised as globalisation of the functional differentiation that existed in the national society.³²

Modern law is also inherently *polyvalent*, reflecting its many-valued nature: it contains (sets of) norms representing diverse values, interests and legal strategies. This is caused not only by societal value pluralism and by multiple centres producing the norms, but also by the fact that different areas of legislation, enacted at different times, represent values and legal strategies akin to the time of legislating.³³ The law's polycentricity is due to the existence of overlapping parallel legal systems. Their parallel existence relates to legal sphere's polyvalence, which, in turn, is caused by societal value-pluralism.³⁴ From this perspective, the legal system in any scale or on any level is neither coherent nor consistent, but pluralistic into its deepest levels.³⁵

Moreover, even the same (sets of) norms are subject to diverse normatively relevant discourses, producing propositions that reflect their particular underlying premises.³⁶ For example, economic analysis of intellectual property or competition law produces specific practical propositions that reflect the perceived underlying values and aims. In addition to scholarly normative critique and prescriptions based on economic analysis,

29 See e.g. *Griffiths* (1986), p. 4; *Twining* (2000), p. 224 and *Gustafsson* (2002), p. 166.

30 See from different perspectives e.g. *Eriksson et al.* (1998), p. 1-3; *Gustafsson* (2002), p. 124-204 and *Santos* (2002), p. 89. In the context of European Union law see *Walker* (2003), and *Maduro* (2003a), both *passim* and in the context of international law *Koskeniemi* (2004b) and *Fisher-Lescano & Teubner* (2004), both *passim*. According to *Koskeniemi* (2007), at p. 22, the vocabulary of pluralism in law schools has emerged from three sources: the study of local laws and *de facto* practices, the interaction between domestic laws and imported metropolitan laws, and globalisation.

31 See also *Gustafsson* (2002), p. 135 and *Eriksson et al.* (1998), p. 1-3.

32 See e.g. *Luhmann* (1993, 2004), p. 480-481 and *Fisher-Lescano & Teubner* (2004), *passim*.

33 See e.g. *Gustafsson* (2002), p. 145-147 and 164-166; *Unger* (1996), p. 41 and *Kahn* (1999), p. 54 and 107.

34 *Gustafsson* (2002), p. 162 and 169. See also *Waldron* (1999), p. 10. According to *Raz* (1994), p. 317, moral pluralism connotes that conflict is the normal state for human beings and that most of the time there is no correct way of balancing the competing values: instead, there is often a whole range of possibilities mixing the different values. Moral pluralism thus leads to the permanence of conflict. More important than realising the *fact* of value pluralism is the legitimation of conflict and division in *conceptual* level in current democratic (and legal) theory, as pointed out by *Mouffe* (1996), p. 246. See from another perspective *Rawls* (1996), p. 36-43 and 144-172 (arguing that the diversity of *reasonable* comprehensive religious, philosophical and moral doctrines found in modern democratic societies is a permanent feature of the public culture of democracy and calling this *reasonable pluralism, which forms one of the basis for overlapping consensus between them*).

35 *Gustafsson* (2002), p. 147 and 166; *Raz* (1994), p. 314-317 and *Wilhelmsson* (2004), p. 220-221.

36 See also e.g. *Sunstein* (1995), p. 1744-1740.

the discourse becomes normatively relevant for example by an increasing tendency of competition authorities and government and Commission departments to utilise economic policy analysis when preparing intellectual property or competition laws and related policies. As part of the semi-official *travaux préparatoires*, such reports and economic policy analyses obtain institutional support and normative relevance. Ultimately, public authorities and courts may start to deploy economic concepts and analysis in their guidelines, decisions and judgements, thus conferring additional normative force for the economic analysis of the norms in question.

This normatively relevant discourse co-exists with other normatively relevant discourses discussing the same laws within the same time-space, but often reaching different conclusions based on different premises. Ordoliberalism, legal dogmatics, natural law, constitutionalism and political theory of integration can be mentioned as examples of other normatively relevant discourses within the legal fields analysed in this research. The same laws can be seen as part of various competing projects aimed at perfecting an order based on market freedom (ordoliberalism), the conceptual structure and internal normativity of law (legal dogmatics), an eternal state of affairs based on nature or God (natural law), fundamental rights and collective goods (constitutionalism) or federal-like transactions (political theory of integration). From a perspective inherent to any one of such projects, law may seem coherent or capable of being made coherent towards the prevailing teleology. From a perspective from above, each project provides a competing view of the relevant laws and thus forms a potential base for criticising the proposals of the other projects. Taken as a whole, the multitude of such normatively relevant discourses may be seen to manifest the inherent indeterminacy, contestability and value pluralism of law, and more broadly, societal value pluralism. Together, such discourses participate in constituting the contents of the relevant norms and their interaction.

Not only the legal rules and normatively relevant discourses overlap, but also the jurisdictions of courts and other decision-making bodies to give binding decisions when interpreting their corresponding legal orders and applying their norms in concrete situations. The interaction between overlapping legal rules depends on the body making the decision in question. A national court, for example, constructs the relationships between overlapping legal orders, such as the WTO norms, European Union law and rules of domestic origin differently from a WTO dispute settlement body or the European Court of Justice. Yet, all three decision-making bodies may give formally binding decisions concerning the same geographical territory and social field. Each decision-making body may apply the same substantive norms. However, the perspective to the norms in question may be very different due to differences in the scale of operation, background legal order and its objectives, legal culture, as well as norms affecting procedure and competence of the decision-making body in question.

Plural forms of ordering thus participate in the same social field and in the same time-space context.³⁷ Local, national, transnational, regional, international and global orders can apply to the same situation.³⁸ The totality of these orderings and their structure represents a new global form of legal pluralism.³⁹ The overlapping legal orders vary in their material scope from a narrow focus on one or few interests (for example the WTO) to all-embracing regulation (typically nation state legal orders). They further vary in their stages of development from minimally to extensively developed (typically modern nation state legal orders). Furthermore, the overlapping legal systems vary in their geographic focus from local (for example municipal laws) to global, functionally or technologically operating forms of regulation. Finally, the institutional structures of the overlapping legal orders vary from independent organs and judiciary with regulative and sanctioning power (for example the European Union and the WTO) to informal and *ad hoc* structures and operation. Very few (if any) of these orders or systems of norms are complete or self-contained.⁴⁰ They are rather dynamic in their nature, and interact with other legal and non-legal systems by competing, conflicting and influencing each other in multiple and often complex ways.

Sousa Santos identifies three scales of legal regulation: local law (large-scale legality), nation-state law (medium-scale legality) and global law (small-scale legality). The scales translate the same social object into different legal objects.⁴¹ Socio-legal life constitutes of different legal spaces operating simultaneously on different scales. The scales differ in their features of operation and regulation patterns. Small-scale legality (global law) is poor in contextualising behaviour and details. It captures only the skeletons of behaviours, and is based in its regulation pattern on orientation and movement. Large-scale legality (local law), on the other hand, is rich in contextualising details and in making distinctions between inside and outside, just and unjust, but often lacks sense of direction, movement and distinctions between past and present,

37 Twining (2000), p. 85 and 228-229. According to Teubner, legal pluralism is no longer defined as a set of conflicting social norms. Instead, he defines it as "a multiplicity of diverse communicative processes in a given social field that observe social action under the binary code of legal/illegal". Rules become legal as different discourses start to use this binary coding in their communicative events. The binary coding distinguishes the legal from economic and other social processes. See Teubner (1996b), p. 12-14. Twining justifiably criticises Teubner of narrowing the conception of legal to the binary code of legal - non-legal so as to prevent broader conceptions of law as enabled by legal pluralism. Twining sees no point in identifying the defining characteristics of law, as he considers the indicia of "the legal" more like a continuum or more complex mix of attributes, which it is not normally necessary to set off artificially from closely related phenomena. Twining (2000), p. 87 and 230-231.

38 Twining (2000), p. 85 and 151.

39 Snyder (1999), p. 340 and 372; Robé (1996), p. 49 and 70 and Fisher-Lescano & Teubner (2004), p. 1018-1033.

40 Cf., however the noted tendency of some international regimes to become self-referential and partially independent from general international law. See about the related discussion Simma (1985), *passim*; Koskeniemi (2004b); *passim*; Lindroos (2005), p. 30-35 and Lindroos & Mehling (2006), *passim*.

41 Santos (2002), p. 426-427 (e.g. a local labour conflict is translated differently into legal codes depending on the proximity of the legal order in question).

part and whole, functional and non-functional.⁴² In conflict situations between the levels, large-scale legality tends to be defensive and small-scale legality aggressive in the sense of purporting to restrict the application of large-scale legality.⁴³

The geographically and functionally dispersed legal decision-making institutions affecting the functioning of various global phenomena and actors have been called *sites*. They can be divided into polity-based sites established by governments and government-created organisations, and market-based sites, such as commercial arbitration.⁴⁴ Due to structural and procedural linkages between the sites, the regime is not anarchic. A key concept is *interlegality*.⁴⁵ It implies that the different legal orders coexisting in the same political place are not separate, isolated entities as assumed by traditional legal anthropology or as sometimes seen in systems theory. Rather, the different legal spaces are interpenetrated and mixed in the minds and actions of the actors. This constant interaction and intersection of different legal orders in socio-legal life connotes interlegality. It is the phenomenological counterpart of legal plurality. Identifying and analysing the different legal orders separately is not enough, as tracing the complex and changing relations among them becomes the most critical task for jurisprudence.

The relations between some sites may be arranged hierarchically, but more often, they are competing, collaborative or complementary.⁴⁶ Political conflicts are not limited to single sites, as each competing group may invoke the institutions, norms, and processes of different sites.⁴⁷ As a corollary, the negotiation of substantive regulatory outcomes may be seen as a continuous, sequential process whereby the forum of the negotiations and legal decision-making shifts or expands from one site to another.⁴⁸ Due to interlegality, the sites affect each other by enabling, censoring and influencing certain outcomes and directions. The entities operating globally are affected by a plurality of sites and they must function under the constraints and possibilities it sets.

For example, because of the initiative and strong lobbying on the part of major US-based intellectual property stakeholders, the US shifted multinational negotiations over international intellectual property protection from the World Intellectual Property Organization (WIPO) to the GATT during the 1980s, ultimately leading to the TRIPS Agreement.⁴⁹ When progress within the TRIPS-framework could no longer be made in the late 1990s, the same substantive issues were partially taken back to the WIPO-framework and, largely, to bilateral free trade agreements. Specifically with such free trade agreements, the US has managed to achieve in many developing countries intellectual property

42 *Ibid.*, p. 426-429.

43 *Ibid.*, p. 428-430.

44 *Snyder* (1999), p. 372. However, it may be difficult to sustain a sharp division to polity-based and market-based sites, as the market is regulated by the political process and interconnections between sites blur the distinction. It is difficult to place e.g. trade associations exclusively in either category.

45 *Santos* (2002), p. 97 and 437.

46 *Snyder* (1999), p. 374.

47 *Ibid.*, p. 334-343 and 372-373.

48 See also *Drahos* (2007), p. 33-35.

49 See more closely *Sell* (2003). See also subsequently under heading 5.3.2.

protection exceeding the TRIPS-standards, which were considered by most developing countries as the absolute ceiling during the Uruguay Round negotiations.

The shifting of the site of negotiations to bilateral free trade agreements also largely managed to overcome the victory of the developing countries achieved in the form of the *Doha Declaration*⁵⁰, which recognised public health as a fundamental concern within the TRIPS Agreement, and in principle enabled importation under a compulsory license.⁵¹ The Doha Declaration did not create any peremptory norms related to public health, but only recognised the capacity of the WTO Members to utilise the flexibilities in the TRIPS Agreement. It thus left the door open for the powerful negotiators and corporate interests to frustrate these flexibilities by bilateral agreements, imposing stricter requirements and strengthening protection based on other norms, such as data exclusivity.⁵² The resulting heterarchy of global regulation connotes that the pharmaceutical companies may now largely choose the site that best secures their interests also for the subsequent legal decision-making.

Hence, some of the new forms of global regulation are not only determined by power-relations, but may also sidestep the nation-state legal space as increasingly irrelevant. However, Teubner's suggestion that the official legislation of nation states is moving from centre to periphery seemed to be premature.⁵³ The nation state legal system has an important function in integrating some of the multiple legal discourses under its procedures and decision-making instances. Similarly, often the official legislation of nation states and international institutions enables and facilitates the creation of the global laws.⁵⁴ The latter may build on state-based laws and create several linkages to their concepts, procedures and enforcement. Thus, even if we are able to talk about global, functionally oriented laws partially detached from nation state laws, none of them seems to function totally "without a state".

Technical standardisation may be used as an example.⁵⁵ On a global level, standardisation can be perceived as a mixture and co-ordination of private consortia's and fora's operation, formal (state-established) standards bodies' procedures, and direct governmental involvement in politically important areas like telecommunications. Nation-state -based laws, such as competition laws, partially structure and set constraints on standardisation. Furthermore, private consortia, fora and formal standards bodies alike are based on, and build on laws having their origin in nation-states, such as the laws of association, contract and intellectual property. Moreover, the European Union uses technical standardisation in promoting its policies and single market objectives, refers to standards

50 *Doha Declaration* (2001). See also *WTO Doha Implementation* (2003). For the implementation within the EU, see Regulation (EC) No. 816/2006 on compulsory licensing of patents relating to the manufacture of pharmaceutical products for export to countries with public health problems. See also its subsequent treatment in chapter 5.

51 For example *Abbott* (2002), p. 470, characterised it as "a significant milestone".

52 See *Sell* (2007), *passim*; *Drahos* (2007), *passim* and *Abbott & Reichman* (2007), *passim*, about these subsequent developments.

53 *Teubner* (1997), p. 158. Cf. With *Fisher-Lescano & Teubner* (2004), p. 1012-1014, now placing courts and arbitration instances in the "center" of law and diverse autonomous regimes populated by political, economic, religious etc. subjects of law in the "periphery" of law.

54 See the previous discussion under heading 2.5.3. See also the subsequent discussion of competition law and globalisation under heading 6.3.5.

55 See also the subsequent treatment of standards and standardisation in chapter 7, where the discussion also relates to intellectual property within standards.

in public procurement legislation and uses them as a basis of its New Approach -harmonisation. It also participates in the formal standardisation process on European level.

However, global standardisation is not centrally or even commonly co-ordinated by nation-states. It rather consists of network-type, dispersed and shared control. Traditional laws or governments generally neither determine the outcomes nor have a right of veto. The resulting rules typically become approved by the standard bodies' recognition of the agreed-upon specifications or merely by their wide enough adoption and promulgation on the markets. A heterarchy of privately established institutions participate in this regulation, often representing economic power, but sometimes also functionally differentiated fragments of the civil society. Nevertheless, formal standards bodies have assumed certain democratic standardisation ideologies and procedures. The same applies to many non-formal standard-setters, such as various permanent fora for standardising Internet-related technologies. As the nation-states are participants in and benefit from these processes, the resulting standards are generally accepted and endorsed by the states and their legal systems.

In conclusion, what globalisation processes imply for law is first the emergence of economic phenomena affecting simultaneously the jurisdictions of more than one site. From this follows the fragmented and partial control of the phenomenon by several sites. Usually different sites affect the economic phenomenon in question partially, but occasionally single sites may have a right of *veto* with respect to the whole phenomenon in question: a potential apparent in merger control. The second effect of globalisation processes for law is the emergence of functional forms of transnational or global regulation, following the globalisation and juridification of functional differentiation. These new forms of global regulation are not completely detached from nation-state laws, but are in many ways based on and relying on their existence. Governments also participate in the operation of many such regimes and seek to control aspects of their operation and outcomes. Governments also actively support some of the new forms of regulation and become dependent on their operation. Third, the intensifying globalisation connotes the intensification of linkages – interlegality – between different sites. This sometimes takes place through procedures enabling coordinated decision-making between sites. However, more typically there is no hierarchical or even common coordination, but network logic.

An External View on Legal Pluralism

From an *external* perspective, the plurality of overlapping normative orders and norm-producing centres is a social fact. Their interaction is seen from an outsider's perspective that enables a holistic view of the system. From this perspective, there does not emerge a need to establish hierarchies or other ultimate conflict rules between the norms emanating from various norm-producing centres, as there is no one ultimate point of reference, but several. In contrast, an *internal* perspective on legal pluralism is a view of a particular legal decision-maker in a particular case at hand. This perspective connotes that conflicting demands must somehow be resolved. The internal view is necessarily a more normative perspective on legal pluralism than sociological or legal-anthropological external perspective. The perspective developed immediately below is largely external. The internal perspective will be elaborated subsequently.

Scholars concentrating on one scale of law tend to see legal pluralism and the existence of overlapping legal systems as a threat to coherence, legal certainty, formal

equality and justice. It is common to label this development as *fragmentation*: the integrity and systematic nature of the legal order is thus being threatened.⁵⁶ Yet, legal pluralism in the form of functional differentiation of law and the emergence of quasi-autonomous normative sources could also advance contextual responsiveness and functionality of law, albeit at the expense of coherence conceived as consistency within conceptually and operationally distinct spheres of law.⁵⁷ Recognising the pluralist nature of law makes the decision between conflicting values and underlying rationalities visible. Denying the simultaneous existence of the conflict on the level values and underlying rationalities hides the inherent value-conflict into a formal disguise.⁵⁸

Norms with functional orientation are embedded with – and inform the decision-maker of – the context-specific values and interests characterising the social field in question.⁵⁹ The emerging norm interaction and conflicts representing the functionally differentiating social spheres require compatibilisation and compromising within law. The law emerging from this interaction has an important potential in easing and accommodating the underlying tensions of the differentiating social spheres. Hence, increasing interaction and conflicts of norms emanating from distinct norm-producing centres may be seen as a positive phenomenon to the extent some of the underlying social tensions and contradictions can be relieved by the creative solutions of law and lawyers. Such legal solutions, taken as a whole, develop the responsiveness of law to multiple sphere logics as well as to diverse values, interests and legal strategies deployed. Law has thus not only the important potential, but also an existing function in addressing the underlying tensions caused by functional differentiation of social spheres.

Fisher-Lescano and *Teubner* construct a heuristic model characterising norm conflicts on the global level from an external perspective.⁶⁰ It takes as its starting point the accelerating differentiation, fragmentation and collisions of social spheres leading to autonomous, issue-specific social systems transcending territorial boundaries. These fragmented social systems follow distinct rationalities and juridify themselves

56 See e.g. *Tuori* (2002a), p. 206-209 and (2002b), p. 159-161. See, however, also *Tuori* (2007), p. 308-311. As noted by *Besson* (2008), at p. 54, the term fragmentation implies an idea of a whole that has been broken and could be put together again to create a whole. The term pluralism seems to be more neutral with regard to the desirable state of the law and the relationships between the legal orders.

57 See also *N.W. Barber* (2006), p. 327; *J. Tolonen* (1991), p. 12 and *Wilhelmsson* (1995), p. 18 (contradictions could promote development and may thus be used to develop new legal approaches) and (2004), p. 216-217 and *Gustafsson* (2002), p. 27 and 45 (pluralism of law does not have to worsen the position of an individual in the legal system: quite the contrary, a rigid understanding of law's autonomy and coherence can deepen the conflicts inherent in law). In an EU law context see also *Koopmans* (1994), p. 202-203 and *Maduro* (2003a), p. 523. In an international law context see also *Koskeniemi* (2004b), at paragraphs 174-196.

58 See also *Gustafsson* (2002), p. 416-418 and 423 and *Wilhelmsson* (2004), p. 216-217 and 220.

59 Rules as generalisations are selective and pick up from situations some properties which are irrelevant for that rule in that context and will exclude some properties that are in some contexts highly relevant. See *Schauer* (2002), p. 33.

60 *Fisher-Lescano & Teubner* (2004), *passim*.

in order to secure normatively their own expansion and particular sphere logic.⁶¹ The origin of the normative conflicts is thus in *contradictions between society-wide institutionalised rationalities* which law cannot solve, but which demand a new legal approach to colliding norms: the law merely mirrors these conflicts between the fragmented and colliding social spheres which represent polycentric globalisation.⁶² Although the model concentrates on international law and conflicts on a global level, it could also characterise norm conflicts within nation state legal orders or within regional constellations, such as the European Union.⁶³ This is because legal pluralism is also inherent legal diversification of nation state legal orders and regional law.

The model is based on the insight that there is no metalevel at which the conflicts might be solved in either global law or global society. Beyond the unrealistic alternatives of central coordination (hierarchy) and autarky of closed regimes, one is left with network logic. The network logic implies that there is no final binding decision, but a sequence of decisions within a variety of observational positions in a network.⁶⁴ These decisions mutually reconstruct, influence, limit, control, and provoke one another without there being one final collective decision on substantive norms. The key is to strengthen mutual observation between the nodes in the network.⁶⁵ On one hand, the nodes seek compatibility with their social environments, but on the other hand, they also observe each other closely and build on the (fictitious) assumption of common reference points. By building on this fiction they subordinate themselves to a, necessarily abstract, seemingly common philosophical horizon, against which they orient their own rule making. In the absence of hierarchy, the regimes should develop their own *ius non dispositivum*, reference points for non-dispositive law to resist fundamental threats to their immediate human and natural environment. At best, a weak normative compatibility of the fragments may be achieved through network logic. This requires that legal unity be redirected away *from normative consistency towards operative interlegality*.⁶⁶

The norm conflicts are typically conflicts between legal regimes mirroring functional differentiation on a global level. Accordingly, collision rules should redirect their focus from the determination of applicable state law to addressing norm conflicts between functional regimes. Substantive rules must be created through the law of

61 As the authors say (*ibid.*, at p. 1007), one cannot explain such conflicts with a political paradigm only as the conflicts are caused by the fragmented and operationally closed functional systems of the global society. Many of the rationalities are not articulated through the political process.

62 *Ibid.*, p. 1003-1009. Due to structural coupling between the autonomous legal order and its environment constituting the social sector with independent logic, the legal regimes reproduce within law the structural conflicts existing between various functional systems (*ibid.*, at p. 1013).

63 See also Teubner (1991), p. 37, noting that although legal fields develop their own doctrinal structures according to the demands of the social field involved, they must in intersystemic conflicts “respect fundamental principles and policies of other legal fields, incorporating them as self-restrictions in its own doctrine”.

64 See also Koskenniemi (2005a), p. 15-21.

65 Fisher-Lescano & Teubner (2004), p. 1004 and 1018.

66 *Ibid.*, p. 1004, 1008, 1018 and 1033.

inter-regime conflicts itself: *the decision-maker within each regime, simultaneously being a party to the legal collision, must create substantive norms that claim validity for both regimes involved.* Courts and other conflict resolution bodies will thus have to create transnational substantive norms by seeking appropriate legal norms beyond their territorial, organisational and institutional legal spheres. They have to take the responsibility for combining them in order to develop a transnational body of law. While doing so, conflicts should not be reduced to reconstructing the different policies and political interests identified. Rather, the transnational law created must concern itself with the underlying social conflicts themselves and understand the legal collisions of the regimes involved as an expression of the fundamental collisions between organisational principles of social systems. Conflicts law would thus have as its main function *to establish compatibility between colliding rationality principles of global sectors.*⁶⁷

Although the model introduces operative principles with which most destructive conflicts could be resolved creatively, it lacks some descriptive realism and prescriptive potential. Powerful actors, be they states, corporations or other organisations, often manage to dominate sites or shift the forum of negotiations or legal decision-making to another site where they may exert decisive influence regarding the substantive outcomes. The Doha Declaration, for Fisher-Lescano and Teubner the primary example of inherent reconfiguration of the trade-oriented WTO law based on another rationality,⁶⁸ is an illustrative example. As discussed previously, by simply shifting the forum to bilaterally negotiated free trade agreements the US, and to a lesser extent the European Union, representing the interests of their pharmaceutical industries, largely managed to frustrate the celebrated compatibilisation of the rationalities within the WTO framework. In terms of access to medication, what matters are the substantive outcomes, not declarations of principle overridable by subsequent actions within other sites.⁶⁹ Moreover, it is important to note that initially the WTO, not for example the WHO, became the site of such compatibilisation. This is because only the WTO has an effective enforcement and sanctioning mechanism, and only its rules are so detailed and non-compromising that specific further compromising is needed to maintain the WTO-system's existing legitimacy.

Such exclusion of power is generic to systems theoretical models.⁷⁰ In the context of intellectual property protection the exclusion ignores what may be depicted with the notion of *structural bias*.⁷¹ To the extent interests in favour of strong intellectual

67 *Ibid.*, p. 1021-1024.

68 Fisher-Lescano & Teubner (2004), p. 1024-1030.

69 See also Drahos (2007), p. 23-24 (recognising the importance of institutionalising the principles effectively and noting how little compulsory licensing of pharmaceuticals has taken place in practice).

70 See also Tuori (2007), p. 303.

71 See about the concept structural bias Koskenniemi (2005b), p. 606-614. Structural bias connotes that some choices or distributional outcomes, among the range of potential choices available, become methodologically preferred in the relevant institutions. These typical, deeply embedded preferences are usually conservative or *status quo* -oriented (*ibid.*, at p. 607 and 610). See the treatment of intellectual property protection in the subsequent chapters for a concretisation of this bias.

property protection exert decisive influence over the majority of sites affecting various dimensions of intellectual property protection, the formulation of regime-specific principles of *ius non dispositivum* and their sequential compatibilisation within the sites on the abstract may merely reflect, further strengthen and legitimate the structural bias. This leads to the loss of prescriptive or emancipatory potential, as the model contains no concrete, substantive standards of the good, except the avoidance of destructive regime conflicts in the abstract. It can also be asked whether it could be required from the regimes that in addition to explicating their specific *ius non dispositivum*, they also reflexively recognise the limitations of their own legitimacy and the partiality of their own systemic perspective.⁷² As the regimes generally do not have a monopoly in interpreting and applying their rules, this may in any case result from the application of their norms within the sites of other regimes.

Finally, the model is based on an external perspective. The institutional roles and restrictions, as well as the particular legal cultures of conflict-resolving decision-makers imply that compatibilisation takes place to different degrees and based on different premises, depending on the conflict-resolving legal instance and its background normative order. Nation state and regional scales of law, in particular, enable broad accommodation of norms emanating from other scales of law. This is simply because they are in-between small-scale and large-scale legality and have an embracive focus, as discussed above. Relatedly, these middle-scales of law are most clearly based on the normative objective of coherence: the idea of coherence – if not as a pre-existing systematisation – as something achievable in judicial practices to the extent required. The accommodating function of European law is particularly important as it also channels the effects of many international norms to the domestic level through its doctrines of direct and interpretive effect and primacy (supremacy), as well as through other methods, such as intersystemic dialogue and legal transplants, as will be discussed in more detail subsequently.

Within the legal decision-making instances of these scales, multiple rationalities, values and interests underlying the norms and norm-fragments typically interact in a single case. Rather than discrete instances of bi-polar rationality-compatibilisations, the decision-making appears as messy, culturally bounded and as requiring both description and prescription going beyond rationality compatibilisation. For the starters, compatibilisation seems to take place against the horizon of multiple loyalty obligations of the decision-maker *and* the inevitable fiction of unity of the comprehensive legal order – unity to the extent required for deciding the case at hand. In the following, such an internal view of legal pluralism will be further elaborated.

An Internal View on Legal Pluralism

There seems to be a gap in legal theory between the one-scale, typically nation-state-oriented models of legal decision-making on one hand and the predominantly sociologically or anthropologically oriented characterisations of legal plurality on

72 See also the discussion under heading 3.3.2.

the other hand. Yet, an internal view of a decision-maker or a person regulated by a plurality of legal systems must somehow form a unity of the law in order to remain normative in instances of inter-systemic conflicts.⁷³ Far from implying unity, such normative coherence could be seen as an ideal required in legal decision-making under the conditions of legal pluralism.⁷⁴

What enables legal pluralism from an internal perspective is multiple loyalty obligations of the decision-maker: the need to satisfy the demands of more than one distinct but overlapping legal order simultaneously. The possibility of multiple loyalty obligations is based on the fact that legal obligations are not based on a single criterion, such as nationhood.⁷⁵ Instead, they may also be based on other criteria, such as faith in shared legal destiny like constitutional patriotism (*Verfassungspatriotismus*) in the case of the European Union.⁷⁶ The decision-makers may also act under the pressure of the decisions being rejected on the basis of norms originating in different norm-producing centres. Individuals and institutional actors, as well, base their expectations on norms produced in diverse norm-producing centres. Hence, the decision-makers should try to make the norms originating in various centres interact in a meaningful way in order to fulfil these expectations and in order to satisfy their own loyalty obligations as far and as well as possible.

As *Raz* observes, societies confront several discrete issues of conflict, and decide on solutions to them as they appear, each solution giving rise to considerations of coherence within its scope, based on the need to secure co-ordination on one hand and rule of law values on the other hand. *Raz* argues that we would do well with *local coherence*. There is no need to bring all particular compromises between conflicting values (made when deciding societal conflicts) together under comprehensive universalistic coherence on the level of the whole legal system.⁷⁷ Thus, the legal systems even in the presence of societal value pluralism and overlapping normative orders are capable of resolving most conflicts they confront satisfactorily, without a system error,

73 See von Roermund (1997), p. 370-371; Richmond (1997), p. 409; Schlag (2002), p. 1089; N.W. Barber (2006), p. 316 and Besson (2008), p. 61 and 67. A judge or a person under conflicting legal obligations based on two systems must somehow find a way to resolve the conflict. They are not content with an external point of view, a characterisation of the situation as presenting legal pluralism or multiple perspectives.

74 See also e.g. Besson (2008), p. 54-55.

75 See McCormick (1997), p. 11-12.

76 See Habermas (1996), p. 500-507 and (2001), p. 74-78 and Calhoun (2002), *passim*.

77 *Raz* (1994), p. 318-319. *Raz* does not mean with “local coherence” specific branches of law, but simply coherence within a restricted set of norms (typically) applicable in a given case. Cf. with Gustafsson (2002), p. 441-443, who seems to define local coherence as coherence within a specific branch of law. Branches of law are predominantly pedagogical and science-political constructions. Coherence is neither limited according to their boundaries, nor existing within specific branches of law, which always contain contradictory elements and tensions. At times, a branch of law may seem internally more consistent than a broader constellation of law due to the relative consensus reached among the experts of that branch of law.

or even creatively case-by-case.⁷⁸ On a more general level, Rawls,⁷⁹ Rosenfeld⁸⁰ and Günther⁸¹ have developed political (Rawls) and legal (Rosenfeld and Günther) models intended to provide an internal perspective on pluralism. Their detailed discussion is beyond the limits of this research.

Such a pragmatic approach is also endorsed by Sunstein, who recommends the judges to pursue *incompletely theorised agreements* on particular outcomes rather than compatibilisation of the foundations of the competing approaches or norm-systems.⁸² The aim of this strategy is to enable the continuation of societal value pluralism represented by the multiplicity of the competing approaches and norms. It also seems to reflect the reality of most judicial practices. It is common for legal decision-makers to avoid abstract theories. They rather tend to believe that a specific outcome is correct if all normatively relevant positions lead to it. However, as Sunstein notes, there is often no readily available agreement on the outcomes either. Importantly, the disagreement concerning the outcomes may result from the different underlying premises *or* from the same general commitments. Moreover, being content with pursuing agreement on particular outcomes only could lead to conservatism and loss of dynamics created by conflict and failure to converge. Incompletely theorised agreements should thus be challenged over time.

Coherence could be seen as a non-foundationalist concept recommending the decision-maker to arrive, in a particular context, at an intelligible interpretation.⁸³ This emphasises *coherence of legal reasoning* instead of coherence in the legal system.⁸⁴

78 See also Sunstein (1997), p. 84-86, who distinguishes *radical incommensurability* from *normal incommensurability*. The former is present particularly in cases where people belong to different cultures and value things in entirely different ways. Most of the time radical incommensurability is not present and there can be rational decisions based on practical reason even in the presence of (normal) incommensurability. Also MacCormick accepts that most overlaps of norms do not necessarily create open or unreconcilable conflicts. See MacCormick (1993), p. 17.

79 Rawls (1996), *passim*. One of its central ideas is the maintenance of reasonable value pluralism in a democratic society. Even though competing and to some extent incompatible comprehensive doctrines exist in societies, it is possible to construct an *overlapping consensus* based on tolerance and readiness to meet others halfway. See also Mouffe (2000), p. 23-32, who criticises Rawls of postulating a possibility of rational consensus which, according to Mouffe, could only be based on exclusions. Mouffe stresses antagonism and confrontation as essential parts of democracy based on pluralism. See also Mouffe (2005), p. 120-130.

80 Rosenfeld (1998), *passim*.

81 Günther (2008), *passim*.

82 See Sunstein (1995), *passim*. Schlag (2002), at p. 1091, calls this approach “going mini”.

83 See e.g. Berteaux (2005), p. 157-158 and 170 (foundationalist approach to coherence relates to claims what the law is, while non-foundationalist approach concentrates on the desired outcome, whatever the nature of law in general).

84 See also Soriano (2003), p. 296-297 and 306 (a modest notion of coherence concentrates on arguments, and how these arguments support a particular ruling) and Bengoetxea, MacCormick & Soriano (2001), p. 64-65. Also Gustafsson (2002), at p. 428 and 431, seems to accept that in practice coherence relates to argumentation level. See also Wilhelmsson (2004), p. 212 who seems to support the view developed by Pöyhönen (2000), *passim*, that coherence is largely contextual and points to relevant arguments.

It would favour contextually determined argumentation over argumentation on an abstract level. Such a pluralist approach to coherence would facilitate compatibilisation and compromise seeking to preserve the values and rationalities underlying the applicable norms and normatively relevant perspectives emanating from diverse norm-producing centres and discourses.⁸⁵

The legal positivist conception of coherence based on the systemic and consistent nature of law produced within one norm-producing centre or within separate branches of law may be conflictual with coherence perceived as an expression of legal pluralism.⁸⁶ Even though law produced by one norm-producing centre or restricted to one branch of law may appear as a more systematised and consistent entity than broader constellations of law, restricting coherence either to specific branches of law or specific norm-producing centres excludes interests, values and rationalities inherent to other potentially applicable norms. Inclusion of “foreign” norms may disturb the pre-existing systematisations achievable on a local level and the legal outcomes such systematisations tend to produce in society. Thus, coherence as an expression of legal pluralism may appear as a threat to coherence as pre-existing systematisations of nation-state law – coherence as one scale of law, formal consistency, and exclusionary strategy. The notion of coherence is thus not only connected to the basic apprehensions of the law in general. It is also a politically charged notion capable of being harnessed in its typical legal positivist form for the preservation of the *status quo* in society.

A legal pluralist understanding prevents neither systematisations based on closely related branches of law nor local compatibilisation of specific norms and their underlying justifications on a contextual basis. The latter may sometimes be a sufficient strategy. Such an approach would emphasise sectoral knowledge in decision-making and could importantly open up entrenched norms towards their first-level justifications.⁸⁷ For example, the immediate objectives of intellectual property protection could be better served by a competition law strategy emphasising the first-level justification of the intellectual property norm than a strategy based on immunising the intellectual property norm formulation or a core of inviolable rights from the application of competition law. The intellectual property norm formulation may be entrenched at the expense of its first-level justification. As the competition law norm may restrict the scope of the intellectual property norm formulation in yet unidentified situations, the application situation opens up the entrenched intellectual property norm formulation towards its first-level justification. This could also enable the integration of economic analysis in decision-making. To an extent satisfying the competition law norm *and* the first-level justification of the intellectual property norm is possible, there may be no reason to proceed to further justifications. The decision-maker should also evaluate the extent to which the first-level justification of

85 In other words, coherence as an expression of legal pluralism would advance tolerance and value-pluralism manifested in law's polyvalence. See also e.g. *Raz* (1994), p. 317-318; *Rosenfeld* (1998), p. 207-209 and 232; *Berteau* (2005), p. 158-159 and *Hage* (2004), p. 95 and 103.

86 Also *Alexy & Peczenik* (1990), at p. 143, note that general and restricted coherence may conflict.

87 See more closely *Schauer* (2002), p. 42-76.

the competition norm may be taken into account in the application of the intellectual property norms. If there are adequate safeguards regarding the latter, the application of the competition norm could prove unnecessary or premature.

Yet, often outcomes thus achieved, which represent branch of law -specific knowledge and values, may not be acceptable from the perspective of other norms present in the application situation or a broader justificatory scheme or systematisation. Competing and overlapping reconstructions or systematisations of law considered simultaneously could enable contextuality and the underlying value pluralism of law, as the situation at hand could instruct the decision-maker of the appropriate weights between the competing perspectives or systematisations based on diverse background premises.⁸⁸ Existing case law indicates that norms emanating from different scales of law are often explicitly present in the relevant application situations. Similarly, sectoral norms, such as communications, medication, cultural, environmental, and industrial policy norms and their respective justifications, intersect with intellectual property and competition law norms. As will be argued in the subsequent chapters in more detail, also fundamental rights norms and forms of private or public-private ordering like standardisation and patent pools increasingly participate in constituting the relevant normative contexts of decision-making. These plural forms and areas of regulation can be seen to constitute a contextually determined and evolving regime structuring communication and the usage of information generally and with regard to the specific sectors involved in the contexts at hand, in particular.

The problem inherent to finding institutional support for coherence perceived as an expression of legal pluralism is that each legal system seeks to establish its own rules for dealing with intersystemic conflicts. As there is no recourse to an additional level above the legal orders within which the competing claims could be resolved, the resolution of systemic conflicts cannot take place on the surface level of the law. Multiple loyalty obligations imply the possibility of multiple incompatible lines of institutional support and thus the permanence of norm conflicts.⁸⁹ The proposition that the decision-maker should as a standard measure address the principles and political values underlying the relationships between different norm-producing centres does not provide the institutional support sought for either.⁹⁰

In the absence of hierarchy, the current research addresses the problem from the perspective of *legal culture* as elaborated by *Tuori* in the context of one scale of

88 See more closely subsequently sub-chapters 4.4.4 (alternative systematisation based on fundamental rights) and 5.6.1 (characterisation of the interplay between alternative reconstructions of intellectual property law).

89 See also N.W. Barber (2006), *passim*, who says that "a legal system can contain multiple rules of recognition that lead to the system containing multiple, unranked, legal sources. These rules of recognition are inconsistent, and there is the possibility that they will, in turn, identify inconsistent rules addressed to individuals. In addition, pluralist systems lack a legal mechanism able to resolve the inconsistency; there is no higher constitutional body that can resolve this dispute through adjudication or legislation. Consequently, pluralist legal systems contain a risk, which need not be realised, of constitutional crisis; of officials being compelled to choose between their loyalties to different public institutions".

90 For such a proposition see *Rosenfeld* (1998), p. 208-232.

law (the nation state scale).⁹¹ The notion of legal culture could enable an internal normative perspective on legal pluralism. The existence of multiple loyalty obligations means that norms and norm fragments (including case law) emanating from several norm-producing centres affect the decision-makers' conceptions of sources of law, their interaction and the use of principles or maxims for resolving intersystemic conflicts.⁹² Thus, surface level developments of plural legal orders sediment to the practical knowledge of the legal profession having multiple loyalty obligations. For example, the judges of the European Union member states act as both European and national judges: they have loyalty obligations towards three (or more) parallel, but overlapping and interacting legal orders. The Community Courts, too, in practice must recognise the constitutional positions of the member state courts, and the case law of the European Court of Human Rights, in particular. Thus, the relevant constitutional decisions affecting the decision-makers' conceptions of sources of law and intersystemic interaction emanate from the national and European Union legal orders, as well as the European Convention *acquis*, among others.⁹³

Constructing the sources of law ideology and intersystemic interaction on the level of legal culture permits intersystemic critique, dialogue and diverse interpretations to the extent not permitted by monist constructions of law and sources of law doctrine. On the level of legal culture some patterns of settling the intersystemic conflicts become somewhat entrenched. Occasionally, these patterns of intersystemic effects and interpretations characteristic to legal culture may prove problematic in any given instance. Such *recalcitrant experiences* of standard intersystemic interaction may lead to the legal decision-maker deviating from such patterns.⁹⁴ Such inputs, if important or repeated, may lead to changes in legal culture. Courts and other legal decision-makers are thus deeply intertwined in constructing such an emerging pluralistic legal culture. They participate in an ongoing discourse about the desired interaction and weight

91 For the concept of legal culture generally see *Tuori* (2002a), p. 166-183. The legal culture is sedimented in the minds of lawyers as practical knowledge and functions as a whole. It also comprises methodological elements, such as metanorms and the doctrine of sources of law. See the discussion of this model above under heading 3.2.1.

92 As *N. W. Barber* (2006), at p. 326-329, notes, the national judges may not be presumed to follow their national highest courts but the European Court of Justice (and the European Court of Human Rights). Thus, there may exist inconsistent rules of recognition within a pluralist legal order. This also applies to the European Union legal system as it comprises also the judges and courts of the national legal orders. Within such constructed European Union legal system there is no agreement concerning the primacy of EU law and thus inconsistent rules of recognition also characterise the European Union legal system.

93 This does not dispute that in practice decision-makers tend to construct the applicable norms through the lens of local legal culture and systematisation of a specific branch of law they are familiar with. Each legal order has its own viewpoint even on the same set of norms. See e.g. *Wilhelmsson* (1997), p. 189-190; *Maher* (1998), p. 244-245 and *Ojanen* (1998), *passim*. The point is only that the lens of local legal culture is increasingly ground by the decisions emanating from plural legal orders. In other words, the legal culture becomes gradually pluralistic in its character.

94 See *Schauer* (2002), p. 38-47 about rules as entrenched generalisations and about recalcitrant experiences leading to modifications of the rule on the basis of deeper level justification(s).

of norms, norm fragments, normatively relevant considerations and intersystemic relations. These ideas will be further developed in the context of European law subsequently.

There may be a structural bias in favour of giving more weight in legal decision-making to the norms of some legal systems at the expense of others. The level of detail of regulation tends to affect the penetration of the norms in question. Although not being a *lex specialis*, a more detailed norm typically prevails over a more general and abstract norm. This is simply so because it is easier for a judge to know the demands of the more detailed norm and to interpret the more general and abstract norm accordingly: courts have a natural and welcomed tendency to avoid open conflicts. For example, the provisions of the TRIPS Agreement are formulated as exact minimum requirements. In contrast, human rights norms are by their nature more generally worded, and by definition require weighing with other rights and collective goods of various kinds. Furthermore, there is an effective enforcement and sanctioning mechanism in place behind the TRIPS Agreement. Such a centralised, *de iure* and *de facto* binding interpretation, enforcement and sanctioning mechanism is lacking in the area of international human rights law. Such differences could mean that legal decision-making silently leans in favour of norms emanating from legal systems such as the WTO. It is typically easier for a judge to comply with the exactly and unconditionally worded norm of the TRIPS Agreement and interpret human rights norms accordingly. Such a premise *strengthens* the structural bias: the WTO-compliant interpretation of international human rights law obtains institutional support.⁹⁵

Yet, the norms emanating from a certain norm-producing centre may be the result of more or less democratic decision-making and inclusion or exclusion of diverse values and interest-holders. Such differences may affect the penetration and weight of such norms in legal decision-making.⁹⁶ For example, the partial trade-related perspective of the TRIPS Agreement could be taken into account in legal decision-making on national or regional levels.⁹⁷ On the other hand, the fundamental moral values behind human rights norms, that is, their specific substantive content, should turn the interpretive situation described above the other way around.⁹⁸ Similarly, the democratic features of standard-setting procedures may legitimately affect the acceptability of standard-setting activities and the penetration of the norms thus produced (standards) in the application of domestic and regional competition laws in Europe, as will be argued in chapter 7.

Such differences are already partially reflected in legal culture. The refusal by the Community Courts to accord direct effect to WTO norms in the Community legal

95 See more closely also the next main chapter and its sub-chapter 4.5.3, in particular.

96 See e.g. Günther (2008), p. 19 and Besson (2008), p. 67.

97 See more closely the subsequent discussion under heading 3.3.2.

98 See on a general level of analysis also Scheinin (2009), p. 30. See also sub-chapter 3.3.2 subsequently.

system may be seen as such an instance.⁹⁹ Another example is provided for by the refusals of some highest national courts to acknowledge the supremacy of Community law over nationally defined basic rights in the absence of adequate fundamental rights guarantees on Community level.¹⁰⁰ A more recent example relates to the refusal by the European Court of Justice to accord supremacy to United Nations law over fundamental rights protection as guaranteed in the Community legal order.¹⁰¹ Such discourse is continuous and dynamic in nature, and is not restricted to these or other historical examples, or existing legal culture. In the absence of fixed hierarchy, the courts must increasingly be involved in such a substantive constitutional dialogue. Also this idea will be more fully developed in the present and the subsequent chapter, which connects the topic to rights constitutionalism.

3.3 European Law and Norm Interaction

3.3.1 European Legal Pluralism

Introduction

It is usual to consider the European Union and its legal system as *developing towards a federation* and as still being an incomplete constitutional and legal order.¹⁰² The future choices, according to these views, thus seem to be limited either to a federation or to a loose intergovernmental organisation.¹⁰³ Through the legislative activities of the Union and the pre-emption of comparable national competences, many areas of law in Europe *are* federalising, including intellectual property and competition laws. However, the European legal system as a whole can be characterised with good reasons as a *sui generis* order between a federal state and an international organisation. The European Union and national legal orders co-exist and partially overlap.¹⁰⁴ Accepting the multilayered structure to be the fundamental features of the European legal order

99 Yet the expressed reasons have related more to trade policy considerations. See the discussion under heading 3.3.2.

100 See more closely the discussion under heading 4.2

101 See joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351. See also subsequently under heading 3.3.2.

102 See e.g. *Baquero Cruz* (2002), p. 20-22, approaches the relationship between Community law and member state law in terms of sovereignty, federalism and clear rules of conflict deriving from Community law only. See also *Dowrick* (1993), p. 237, who ultimately chooses to describe the EC in federalist terms.

103 *Eleftheriadis* (2003), p. 241, calls this dichotomy “the federalist dilemma”. As he points out, this dichotomy has its basis in positivist ideas of law and international law (*ibid.* at 258). See also *Wind* (2003), p. 124.

104 *MacCormick* (1993), p. 17; *Besson* (2004), p. 268. Although the EU has gained new political powers typical of federations, there is no reason to jump into the conclusion that the relationship between EU and national legal systems is federal. See e.g. *Dowrick* (1983), p. 235, who mentions grounds for not characterising the then EC as a federation, and which still apply to the current EU. For an understanding of the EC as not *sui generis* but based on international law, see e.g. *Wyatt* (1982), *passim*.

may be seen to be at odds with the idea of coherence as developed by Dworkin, for example.¹⁰⁵

European Union law may further seem inherently more contradictory, heterogeneous and less developed than nation-state legal orders.¹⁰⁶ Although specific branches of law develop in European Union law (for example environmental law and labour law), their fragmented and often sporadic evolution hardly helps the endeavours to form a coherent picture of it. Furthermore, many branches of European Union law have until recently remained underdeveloped, such as contract and criminal law. Within such areas, in particular, the general European Union norms (specifically the law related to the basic freedoms) may have the effect of messing with the domestic systematisations. Within harmonised areas of law the applicability of the basic freedoms is more restricted, thus reducing the jack-in-the-box effect of European Union law. Nevertheless, harmonisation could also contrary to its goals lead to extensive domestic variations or fragmentation of domestic systematisations within the branch of law harmonised.¹⁰⁷ European law thus seems to present particular theoretical challenges. Should European law “*speak with one voice*”?¹⁰⁸ Answering the question requires defining what is meant with “European law” and a characterisation of that law in constitutional terms.

The question posed above can be approached from at least two distinct perspectives. The more traditional perspective concentrates on norm interaction restricted to European Union policies, primary and secondary law as well as the case law of the Community Courts. The focus is centrally on one scale of law, the regional level. The relevant coherence is within the system established by the basic EU Treaties, often to the exclusion of other regional arrangements, such as the European Convention of Human Rights (the European Convention).¹⁰⁹ Yet, it seems possible that the principal teleology or deep structure of European law may have started to shift from the sphere of market freedoms to fundamental rights, liberty and democracy, as now enshrined in Article 2 EU as amended by the Lisbon Treaty.¹¹⁰ This potential

105 See e.g. *Berteia* (2005), p. 155. Berteia suggests that there is a contradistinction in the nature of the Community as a network of local, national and supranational normative systems and coherence representing the idea of unity. Yet, this does not have to be the only possible construction, as will be discussed subsequently.

106 See e.g. *Wilhelmsson* (1995), p. 17 and (1997), *passim*.

107 *Teubner* (1998), p. 13. There has been vivid academic discussion on whether globalisation results in convergence of legal systems. See e.g. *Friedman* (1996), p. 74 (“*Convergence, then, is a real process – powerful, massive, and unstoppable.*”). Cf. *Legrand* (1996), whose title “*European Legal Systems Are Not Converging*”, is already telling.

108 See *Besson* (2004), p. 258-259.

109 European Convention for the Protection of Human Rights and Fundamental Freedoms, signed in Rome on 4 November 1950.

110 Formerly Article 6(1) EU. See about the discussion preceding the entry into force of the Lisbon Treaty e.g. *Ojanen* (1998) (however also expressing doubts at that time) and *Lindfeldt* (2007) (arguing for there to have occurred a change of paradigm), both *passim*. See also joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351 (at paragraphs 303-304). The fundamental rights dimension of the topic will be handled in more detail in the next main chapter.

on-going transformation has generated vivid discussion about the European Union's constitutional nature. It also makes it necessary to discuss the inter-systemic relations involved. However, the traditional perspective excludes from its scope of interest inter-systemic conflicts: conflicts between norms emanating from distinct scales of law. In other words, interlegality, the interaction and intersection of different legal orders in socio-legal life, is excluded from this model. At most, it is taken into account in the characterisations of European Union law as heterogeneous due to European Union legislation and patterns of argumentation being based on diverse national legal traditions and argumentation models.¹¹¹

The other perspective construes European law more broadly. European law covers not only the legal norms emanating from the basic EU Treaties and the institutions of the Union, but also the laws having their origin in other regional legal regimes, in the member states of the European Union, as well as in the international measures binding the European Union and/or its member states. The broadening of perspective entails the possibility of vertical conflicts between norms emanating from different scales of law. There are two main strategies for addressing such conflicts: the strategy based on an idea of established hierarchy between the different scales of law and the strategy of concentrating on an idea of coherence perceived as an expression of legal pluralism.

The present sub-chapter will first introduce the concept of coherence internal to the system established by the basic EU Treaties. It will also discuss the basic methods of interpretation used by the Community Courts. The perspective on norm interaction based on European Union legal sources and the interpretive methodologies of the Community Courts continues to be an important one. The interpretations of the Community Courts must have roots somewhere in the basic EU Treaties.¹¹² Moreover, an increasing number of conflicts or interactions of norms (have) become horizontal in the sense of being resolvable, at least in theory, within the scale of European Union law. This phenomenon is caused by the harmonisation and federalisation of ever-broader areas and the inclusion of new subject matter under the basic EU Treaties.

For example, the European Union -wide harmonisation of most intellectual property rights connotes that European Union competition law increasingly interacts not only with nationally, but with regionally defined intellectual property rights. As another important example, the inclusion of a comprehensive list of fundamental rights in the basic EU Treaty framework with the coming into force of the Lisbon Treaty will probably mean that conflicts between nationally defined fundamental rights and European Union law will decrease to the extent fundamental rights become adequately secured on the European Union level. Obviously, this does not abolish fundamental rights conflicts within the European Union.¹¹³ The conflicts manifest themselves on a horizontal level as different interpretations, conflicts between fundamental rights

111 See e.g. *Wilhelmsson* (1997), *passim*.

112 See e.g. *Bengoetxea, MacCormick & Soriano* (2001), p. 44.

113 See also *Kumm & Comella* (2005a), p. 486.

ideologies and democratic background theories, as well as competing perspectives on the relative weight of the economic integration objective with regard to fundamental rights protection.

However, a focus restricted to one scale of law is not sufficient as it excludes the critical questions of inter-systemic conflicts and interactions penetrating the broader constellation of European law. Addressing such deep-level conflicts requires recourse to metanorms addressing conflict situations between the norms stemming from different systems. Yet, there is no universal metanorm addressing the conflicts between metanorms of the parallel systems, such as the primacy of European Union law, peremptory norms of public international law, demands of WTO law or constitutional provisions of a member state of the European Union. Hence, the systems are not in a hierarchical relationship.¹¹⁴ The latter part of the discussion concentrates on pluralist perceptions of European law and the idea of constitutional pluralism, in particular.

I will argue that the *prima facie* but *contestable* primacy of European Union law over national law should be understood as a phenomenon operating on the level of legal culture. In the absence of hierarchy and ultimate metanorm resolving inter-systemic conflicts, constructing such contestable primacy of European Union law as a phenomenon of legal culture is a possible way out from some of the indeterminacy and lack of legal security legal pluralism might otherwise produce. It may enable construing the national and European Union legal orders as a unity – connected by shared perception of inter-systemic conflict rules – on the level of legal culture. At the same time, such a conception of European Union law's primacy has a pluralistic and dynamic character as it is based on an evolving set of laws and cases emanating from both the European Union and domestic levels.

These perspectives will be complemented with an analysis of the interaction between international law norms and European Union law. International law norms constitute a diversified but increasingly important part of European Union law and European constitutional pluralism.

Internal Coherence of European Union Law

Like with nation state scale of law, it is possible to address coherence from a one-scale perspective of norms stemming from the EU Treaties, including secondary legislation and the case law of the Community Courts. The idea of coherent interpretation can be found in the EU Treaties. Articles 13 EU and 7 FEU emphasise the consistency of the Union's actions and policies in the light of the Union's values and objectives. This implies not only the absence of inconsistencies but also the presence of positive connections on the level of principles between different parts of European Union law and to some extent even between the European Union norms and the member

114 See e.g. *MacCormick* (1993), *passim* (addressing the relationship between Community and member state law, in particular, and arguing that their relationship is not based on any hierarchy).

state legal orders.¹¹⁵ The French language version term “*cohérence*” better captures the meaning of the Articles as coherence (in distinction to consistency) relates the norms of different departments of law and their connections to moral norms, ethical values and objectives of the community in question.¹¹⁶ Securing consistency of Community law understood as *cohérence* also seems to be one of the central tasks entrusted for the European Court of Justice, in particular.¹¹⁷

The Lisbon Treaty thus seems to be strongly based on the objective of coherence among European Union policies, as set out in different parts of the Treaties and further implemented in European Union laws. Importantly, the requirement of coherence also extends to the European Union’s external action.¹¹⁸ The reference to Union’s objectives implies coherence at the level of the basic values and principles of the Union. The coherence between different policies can thus be achieved, when necessary, through recourse to the objectives of the Union. From another perspective, the objectives of the Union should be consistently pursued in the implementation of the Union policies. Achieving coherence between laws belonging to separate Union policies is thus by no means automatic, but requires recourse to the underlying objectives of the Union.

The objectives of the Union are mentioned in Article 3 EU, as amended by the Lisbon Treaty.¹¹⁹ These include promoting the values of the Union. The values are listed in Article 2 EU. They include respect for human dignity, liberty, democracy, equality, the rule of law and respect for human rights. These are connected to the status of the Union as a society based on pluralism and tolerance. Article 3 EU furthermore states that the Union shall respect its rich cultural and linguistic diversity. According to the European Court of Justice, these principles formed “*part of the very foundations of the Community legal order*” also before the entry into force of the Lisbon Treaty.¹²⁰ They should thus constitute a central underlying teleology for the interpretation of the EU Treaties.

Many of the objectives recognised in Article 3 EU can be related to the values and rights recognised in the Charter of Fundamental Rights of the European Union (later “EU Charter”), now incorporated as part of the EU Treaties as amended by the Lisbon Treaty.¹²¹ The concept of coherence within the Treaty framework corresponds first to the idea of consistency in principle through reference to the objectives of the Union. The values and objectives of the Union furthermore connect to the ideas of *normative*

115 At least regarding coherence with national laws and decisions on the part of European authorities when implementing a European competence. See Besson (2004), p. 263.

116 See on a general level Tuori (2002a), p. 170 (without discussing European Union law).

117 See Article 256(2) and 256(3) FEU. See also Article 62 and 62b of the Protocol (No 3) on the Statute of the Court of Justice of the European Union, as amended by the Lisbon Treaty.

118 See Article 21(3) EU as amended by the Lisbon Treaty.

119 See also Article I-2, I-3 and III-1 of the Constitutional Treaty (which did not enter into force), which are substantively similar to the EU Treaty as amended by the Lisbon Treaty.

120 As then recognised in Article 6(1) EU. See joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351. See also the discussion under the next main chapter.

121 See article 6 EU as amended by the Lisbon Treaty. For example, Article 22 of the EU Charter provides that “*The Union shall respect cultural, religious and linguistic diversity*”.

coherence seeking to advance pluralism, tolerance and some basic fundamental values preserving such pluralism as far as possible. There are no reasons why achieving this should be restricted to coherence in European Union legislative procedure. It seems obvious that it forms a basic principle of interpretation in adjudication, as well.

Coherence as a normative objective has traditionally played an important role in the argumentation of the Community Courts.¹²² This is no surprise. European Union law often develops on a selective and heterogeneous basis. It reflects the heterogeneous traditions and ideologies of the member states, diverse underlying models of integration and compromises among them.¹²³ Moreover, the European Court of Justice itself is composed of 27 judges representing diverse European legal cultures, political views and professional backgrounds. There is no more a clear unifying vision or overall teleology guiding the interpretations of the Court: the common or single market programme is no more so central and Community law has already solidified as an independent legal order penetrating the member state legal systems by virtue of its own doctrines of application and effects. The plurality of the judges is reflected in the judgements of the Court. On one hand, the judgements of the European Court of Justice diversify and become increasingly dependent on the composition of the Chamber deciding the case. On the other hand, the Court is likely to seek consensus and compromise on the level of practical outcomes rather than on the level of underlying theories, thus also enabling the underlying pluralism of values, ideologies and legal traditions.

Coherent interpretation is further facilitated by the interpretive methods used in European Union law. Depending on the context, *Ojanen* sees teleologism as the first interpretive method, structuralism the second and textualism the third in a *prima facie* order of ranking between the interpretive strategies of Community law.¹²⁴ *Maduro* has stated in his capacity as an Advocate General that should a Community norm be invoked against its purpose, the general principle of interpretation prohibiting abuse of Community law may require that, even contrary to an express wording of a norm indicating otherwise, the provision in question does not confer the right invoked. Thus, cases where advantages or rights relied on are manifestly contrary to the purposes and

122 See, in particular, *Berteaux* (2005), at p. 166-170, pointing out that the European Court of Justice has taken a non-foundationalist approach to coherence, sometimes restricting it locally and sometimes broadening it to global coherence, sometimes giving it a backward-looking, but more often a forward-looking and teleological connotation. See also *Bengoetxea, MacCormick & Soriano* (2001), p. 64-85.

123 See e.g. *Joerges* (1994), p. 32-35 and *Wilhelmsson* (1995), p. 17 and (1997), *passim*.

124 *Ojanen* (1998), p. 39-41 and 351. See also e.g. *Bengoetxea* (1993), p. 188 and 192 and 233-262 (reminding that both the purposes of the Treaties and the means to achieve them are clearly expressed in the Treaties). *Klami* (1994), at p. 38, notes that the European Court of Justice sees the norms of the basic EU Treaties as “elastic legal principles that are context-bound in such a sense that they are capable of coping with the social, economic and political change within the Community”. See also *Bengoetxea, MacCormick & Soriano* (2001), *passim*, regarding the European Court of Justice’s interpretive methodology.

objectives of the relied norm, but manifestly in accordance with the literal meaning of the norm, should be decided in favour of the teleological purpose.¹²⁵

In horizontal norm conflict situations textualism is typically of limited use, as the conflicting statutory texts point to different directions. The same usually applies to structuralism, unless the norms belong under the same systematisation, for example under the same sets of directives or regulations. Teleological interpretation, in turn, furthers coherence as a normative ideal as it requires going beyond the individual text-fragments and recommends settling the collisions of norms on the level of the purposes and functions of the norms in question. It thus appears that teleologism is the foremost interpretive method of normative coherence and normative coherence is an important and characterising objective of European Union law, which may otherwise present particular challenges for systematisation attempts on an abstract level. Striving for normative coherence in legal decision-making may lead to addressing the norms in question from the perspective of a comprehensive background theory. Alternatively, it may lead to avoiding the articulation of such a broad theory and being content with the more restricted compatibilisation of the particular outcomes. Generally, the decision-maker must construct normative unity only as far as required by the case at hand, as argued previously.

However, what was said about the potential conflictual relationship between coherence restricted to nation state or branch-specific law and coherence perceived as an expression of legal pluralism, applies equally to the relationship between coherence restricted to the European Union norms and coherence as an expression of constitutional pluralism. The broadening of the coherent reference set introduces norms of different origin, embedded with potentially conflictual interests, values, legal strategies and rationalities, thus likely interfering with the pre-existing systematisations achievable on a local (this time the European Union) level.

Constitutional Pluralism of European Law

Coherence as a normative objective as written in the basic EU Treaties cannot decide norm conflicts between different levels of regulation. The same applies for the case law of the Community Courts: giving their pronouncements on the status of European Union norms within member states or international law norms within the Community decisive weight is already a normatively postulated choice. When the conflicting norms originate in different levels, the conflict situation at hand cannot be analysed with reference to the standards and principles originating in one level only, as each level can have its own particular metanorms for solving systemic conflicts, thus leading to different outcomes in systemic conflicts between the levels.¹²⁶ The analysis of such conflict situations hence requires an understanding of the interaction between

125 See more closely joined cases C-255/02, C-419/02 and C-223/03, *Halifax plc and others v Commissioner of Customs and Excise* [2006] ECR I-1609. See about the abuse of rights –doctrine subsequently under chapter 5.6.3.

126 See also e.g. *MacCormick* (1993), p. 17-18; *Maduro* (2003c), p. 95-96;

the systems. This analysis can be a description of the factual interactions between the levels or it can be based on normative, theoretical argumentation. The ideal approach seeks to combine the patterns of factual interaction with a theoretical background theory, thus avoiding both excessive utopianism and apologism.¹²⁷

A pluralistic and interactive analysis of the European Union legal system is preferable to a monist and a hierarchical one (taking as its starting point either the state or the European Union).¹²⁸ Several theoretical models have been developed to address the European Union legal order from such a perspective. As discussed above, non-foundational coherence can be seen as advancing societal value pluralism in accommodating diverse perspectives and communal values. These, in turn, facilitate the contextual sensitivity of law by highlighting the cases at hand simultaneously from multiple norms' viewpoints. *Besson* captures the idea by holding the European integrity principle to mean that "each jurisdiction or legislature in Europe, be it European or national, would have to do more than just speak with a single voice in its legal order; it would have to try to do so in a way that is representative of the entire European political community's expressed legal views, thus revealing the true sense of constituting such a community in the face of diversity in Europe".¹²⁹ Similarly, *Eleftheriadis*, developing on Kant's notion of cosmopolitan law, describes the European Union legal system as "a principled federation, a synthesis of national constitutions, international treaties and an area of cosmopolitan law which applies regardless of hierarchies of sources or state sovereignty".¹³⁰

Eleftheriadis' idea of cosmopolitan law in a European Union law context ultimately connotes the rejection of a strict hierarchy of sources and institutions. Even though one would not subscribe to *Eleftheriadis*' ideas of cosmopolitan law, the European Union legal system does not have to be seen as superimposed on the national legal orders as a hierarchically superior source of law. However, this does not preclude recognising the principles of primacy and direct effect of some European Union law provisions over domestic ones.¹³¹ What it means is that it is not necessary to deduct all applicable norms top-down either from a federation (the European Union as a federation thesis) or from the constitutions and the sovereignty of the member states (the European Union as a loose intergovernmental organisation thesis). The European Union legal system, in this respect, is not a unique phenomenon: it can be seen as part of a general development towards domestically effective non-state law.¹³²

127 See generally *Koskenniemi* (1989), p. 25.

128 See also *MacCormick* (1995), p. 264-265; *Weiler* (1999), p. 322 and *N.W. Barber* (2006), p. 237-329.

129 *Besson* (2004), p. 259. See also *Bengoetxea, MacCormick & Soriano* (2001), p. 82-85 and *Berteau* (2005), p. 170.

130 *Eleftheriadis* (2003), p. 259. *Eleftheriadis* seems to limit his idea of cosmopolitan law in an EU context to certain fundamental EU law principles and the general relationship between EU and national law. See also *Weiler* (1995), p. 250.

131 Cf., however, *Baquero Cruz* (2002), p. 19-23, who seems to reject *MacCormick*'s pluralism as being too abstract and unclear in practical situations. *N.W. Barber* (2006), p. 325-326, seems to reject it as not being pluralist enough.

132 See also *Eleftheriadis*, p. 259.

Walker and Maduro argue in favour of conceiving the European Union in terms of *constitutional pluralism* based on mutual recognition and interpenetration of constitutional sites located at different levels.¹³³ Maduro raises the question whether the very foundation of European integration could be legal pluralism in a form of leaving the ultimate question of “*kompetenz/ kompetenz*” open, thus enabling added value arising from different political communities and maintaining a system of mutual correction of each other’s constitutional malfunctions.¹³⁴ Although from the perspective of the Community Courts certain European Union norms have primacy over conflicting member state norms, from the perspective of member state constitutional courts the “*kompetenz/ kompetenz*” may belong to national constitutional courts.¹³⁵ The Community Courts and national courts acknowledge this discursive and interdependent relationship between the legal orders.¹³⁶ This connotes a form of cooperative sovereignty and the existence of cooperative and reflective constitutionality controls on both European and national sides.¹³⁷

It should also be noted that *primacy* and *direct effect* of European Union law are not as inflexible and unconditional as often thought. Primacy is an umbrella concept under which different options to give effect to Community norms are available, such as direct or interpretive effect and damages for a breach of Community law.¹³⁸ The notion of direct effect is attached to particular norms in a particular context by a particular site (typically domestic or Community Courts). Taken out of that particular normative and factual context the same norms may be embedded in an institutional and normative setting where

133 Walker (2003), p. 4 and (2005), *passim*; Maduro (2003a), p. 513-514; (2003c), p. 98-100 and (2005), p. 347-352 and Pernice (1999), *passim*.

134 Maduro (2003a), p. 523 and (2005), p. 347. See also *de Búrca & Aschenbrenner* (2004), p. 11 and *N.W. Barber* (2006), *passim*. In the context of constitutional law of a member state, see *Lavapuro* (2009), *passim*.

135 See e.g. contributions in *Guild* (2006), for an example of member state constitutional resistance towards European measures (in this instance the European arrest warrant). As argued by *N.W. Barber* (2006), p. 326, national courts do not necessarily follow their national highest courts in cases of intersystemic conflicts, but possibly the European Court of Justice. The national legal order may thus contain inconsistent rules of recognition. The same goes for the European Union legal system which also comprises the domestic courts and judges disagreeing at sometimes with the primacy of EU law as seen by the European Court of Justice.

136 See *Maduro* (1998), p. 30-31.

137 See also *Besson* (2004), p. 277-278 and *N.W. Barber* (2006), p. 327-329.

138 Regarding primacy, see *Helander* (2001a), *passim*; *Bengoetxea* (1993), p. 47 and *Weiler* (1991), p. 2414-2415. *Lenz, Tynes & Young* (2000), p. 521, suggest that primacy should be considered as an umbrella concept under which different options to give effect to Community norms would be available (such as direct or interpretive effect and damages for a breach of Community law). Case C-224/01, *Köbler v Austria* [2003] ECR I-10239, confirms that an action in damages lies when a final court of appeal makes a sufficiently serious error in its application of EC law. As *N.W. Barber* (2006), p. 325, notes, national courts of first instance will thus occasionally be compelled to pass judgment on decisions of higher courts in their system, which may sometimes intentionally disagree with the European Court of Justice. As Barber notes, the instruments used to protect the primacy claims of the European Court of Justice have thus “*the potential to fragment the national legal system in the event of a dispute, subverting existing judicial hierarchies*”.

those effects should not apply.¹³⁹ The inner logic of the metanorms also allows value-based modifications, such as the application of a national abuse of rights -doctrine in case of direct effect and primacy of European Union law. The application of the abuse of rights -doctrine, for its part, enables the application of principles stemming from national level, often embedded with constitutional values.¹⁴⁰

In addition to the *de facto* flexibility of the metanorms, the substantive norms and principles of the parallel systems bend towards each other due to deep interlegality. The interaction and discourse between sites should thus merit particular attention. It may be based on structural rules, such as the preliminary ruling procedure under Article 267 FEU (formerly 234 EC). The substantive norms may be interrelated as well, as evidenced by the emerging interaction between fundamental rights charters and catalogues at member state, European Union and international levels. The effects of other constitutional values of the member states in the interpretations of European Union provisions provide yet another important example of interlegality. Interpretive effect as the primary method for addressing intersystemic conflicts is capable of alleviating excessive and inappropriate claims based on one system's direct effect and primacy.¹⁴¹ It is a doctrinal notion more compatible with legal pluralism than the doctrines of direct effect and primacy.¹⁴²

In addition, institutional arrangements, such as the current system of European Union competition law enforcement, create interaction between different sites.¹⁴³ Legal outcomes and interpretations of European Union law are based on this broader legal community involving multiple sites and institutional actors. The nature, formation and operation of European Union law cannot be adequately understood without taking its discursive nature and its dependency on other social and legal actors adequately into account.¹⁴⁴ The conflicts are normally dissolved through value-based,

139 See also e.g. Ojanen (1993), p. 112-113; Hilson & Downes (1999), p. 138 and Ojanen (2006), p. 92-93.

140 See Brown (1994) and de la Feria (2008), both *passim* (about the abuse of rights doctrine in EU law) and case C-367/96, *Alexandros Kefalas and Others v Elliniko Dimosio (Greek State) and Organismos Oikonomikis Anasygkrotisis Epicheiriseon AE* [1998] ECR I-2843 and case C-373/97, *Dionysios Diamantis v Elliniko Dimosio ja Organismos Oikonomikis Anasygkrotisis Epicheiriseon AE* [2000] ECR I-1705; and opinion of Advocate General (and additional cases referred to) in joined cases C-255/02, C-419/02 and C-223/03, *Halifax plc and others v Commissioner of Customs and Excise* [2006] ECR I-1609. The cases confirmed that it is in some limited instances possible to rely on the domestic doctrine of abuse of rights to the preclusion of direct effect of a directive. See also the subsequent discussion of the abuse of rights doctrine in chapter 5.6.3.

141 See e.g. case 157/86, *Mary Murphy v Bord Telecom Eireann* [1988] ECR 673. The case confirms that the interpretive effect extends to directly effective provisions of EU law, including the Basic Treaties, and is the primary method for reconciling EU law and the laws of the member states.

142 See also Bengoetxea, *MacCormick & Soriano* (2001), p. 64, noting that the rule of formal justice may frustrate both the value pluralism and the importance that each reason has in a particular case. Similarly *von Bogdandy* (2008), *passim*.

143 See also Walker (2003), p. 29.

144 See also *Maduro* (2003a), p. 514 and 517. For an early argument in this direction see *Koopmans* (1994), *passim* (emphasising the mutual interdependence of EU and domestic norms and principles). It should be obvious that the EU legal order is deeply dependent on the national legal orders of its member states in multiple ways: in implementation, enforcement etc.

context-specific interpretation of the totality of norms, enabled by deep interlegality between the systems. Hence, normally the need to exclude any of the metanorms does not rise. This explains why there are relatively rarely open clashes between European Union norms and norms of domestic origin. European law has a discursive nature and reflects constitutional pluralism.¹⁴⁵

How then to secure an adequate level of coherence in European law without jeopardising its legal pluralism? According to Maduro the coherence and integrity of European Union law can be secured by vertical (international-European Union-national) and horizontal (consistency at the same level) discourse and interaction.¹⁴⁶ As he points out, both the European Union and national legal orders already make even explicit concessions towards the claims of authority of the other legal order and adjust themselves in order to avoid open conflicts.¹⁴⁷ Maduro maintains that to take full advantage of legal pluralism, we should discover ways to reduce the potential for open conflicts between legal orders. We should increase communication between them, and insist the courts to conceive of the conflicts at hand in the light of a broader European legal order emerging from the discourse between European Union and national legal orders.¹⁴⁸

For this purpose, Maduro develops a set of framework principles that must be shared by all participants in order to form a common basis for discourse and to enable agreeing on particular legal outcomes without an agreement on the fundamental values that may justify those outcomes. The framework principles would thus promote both legal pluralism and normative coherence by steering the construction of European Union law in a direction that is compatible with the other conceptions and with a coherent European legal order.¹⁴⁹ The first framework principle *pluralism* connotes a reciprocal recognition and adjustment of each legal order to the plurality of equally

145 See *MacCormick* (1995), p. 264; *Maduro* (2003a), *passim*; *Walker* (2003), *passim*; *La Torre* (2000), p. 136; *Weiler* (2000b), p. 218 and (2003), p. 18 (using the term “constitutional tolerance”); *Verhoeven* (2002), p. 299-319 (arguing that loyalty, not hierarchy forms the paradigmatic relation between EU and member states).

146 See *Maduro* (2003a), p. 519-529 (however leaving the international dimension of EU law largely outside the scope of his analysis). *Besson* (2004), p. 263 also uses the terms *supranational integrity* to imply coherence between EU and national laws and decisions, and *transnational integrity* to imply coherence among laws and decisions between member states.

147 *Maduro* (2003a), p. 522.

148 *Ibid.*, p. 524. See also *N.W. Barber* (2006), p. 328, who holds that “the pluralist model provides a compromise framework within which these inconsistent claims can coexist. Provided that the practical conflict within this model remains potential, and actual disputes are avoided, this can provide a stable, even a long-lasting, form of settlement. The advantage of such a settlement is that it avoids unnecessary and potentially destructive conflict, and allows the protagonists to work together on beneficial projects where agreement exists”.

149 *Maduro* (2003a), p. 524-525 and 534 and *Maduro* (2003b), p. 298-299 (these principles do not offer solutions, but regulate the constitutional discourse by setting their margins and the acceptable arguments). What Maduro is trying to achieve is actually a political theory based on value pluralism and the possibility of overlapping consensus based on political justice. This comes close to what Rawls developed in “Political Liberalism” (see the short description of Rawls’ theory previously).

legitimate claims of authority made by other legal orders. It requires the discourse to proceed so as to promote the broadest participation possible. The second and related framework principle is *consistency and vertical and horizontal coherence* in the form of commitment in a coherent construction of a common legal order so as to fit with the previous decisions of the other participants (including national courts). The third framework principle *universalisability* entails justification of decisions regarding European Union law in the context of a coherent and integrated European legal order, connoting the need to base the decisions regarding European Union law so that they could be applied by any other national court in a similar manner.¹⁵⁰

Even though *de facto* flexibility of the metanorms and the bending of the substantive norms and principles towards each other due to deep interlegality, European Union norms are still given a strong position in domestic courts. It is still more likely that the domestic norms bend towards the European Union norms than *vice versa*. If the domestic norms do not otherwise enable conformity with European Union norms, the former give way for the directly applicable European Union norms in the vast majority of cases. Primacy and direct effect of European Union norms as developed by the Community Courts are thus rarely contested.¹⁵¹ Does not this, in the end of the day, question constitutional pluralism as an adequate characterisation of European law? Besides political or philosophical background theories of political liberalism or transnational communities of common faith or pragmatic argumentation models based on avoidance of conflicts and contradictions, is one ultimately left with hierarchical, federalist models of law only as an explanation of European Union law's rarely contested primacy? If not, then why the national courts rarely contest the primacy of European Union law?

As indicated earlier, it is possible to construe the strong position of European Union norms in domestic courts as a phenomenon of legal culture. The idea of *prima facie* but *contestable primacy of European Union law* could thus be seen to constitute part of European lawyers' practical knowledge. It is based on the sedimentation of the Community Courts' and domestic courts' case law of inter-systemic conflicts on one hand, and domestic laws routinely implementing and following European Union norms, on the other hand. It is further affected by the European Convention *acquis* – the pronouncements of the European Court of Human Rights, which provide the minimum standards in matters, related to fundamental rights. It may contain additional elements, such as the law emanating from transnational arbitration or the dispute resolution practices within the WTO. These surface level developments sediment to the practical knowledge of the legal profession in the European Union member states and the European Union institutions. Taken as a whole, they are the building blocks of a professional legal culture or the constituents of an emerging collective

150 *Maduro* (2003a), p. 526-530.

151 See e.g. *Weiler* (1987), p. 584. See also Declaration No. 17 concerning primacy, annexed to the Final Act of the intergovernmental conference which adopted the Treaty of Lisbon, signed on 13 December 2007.

(sub-) consciousness of European lawyers based on multiple loyalty-obligations and overlapping legal systems.

Thus, even in the absence of an over-arching metanorm on the surface-level, it is possible to recommend giving primacy to European Union norms in most conflicts with norms of domestic origin. This conflict principle, operating on the level of legal culture, is not based on hierarchy. Nor does it have to be based on political philosophy or Hart's rule of recognition, that is, on the acceptance of European Union norms on the domestic level as a matter of fact.¹⁵² It rather accommodates surface level rules and case law of both European Union and domestic legal systems and other legal regimes, in particular the European Convention and the WTO *acquis*, in an evolutionary fashion. As the focus of attention is on the pronouncements of multiple systems simultaneously due to multiple loyalties and interlegality, the ensuing conflict principles are not as unconditional as the Community Courts' case law on primacy. European Union norms are contestable to the extent and on the grounds defined by legal culture – a standard in turn modified by multiple sites and legal systems on a lasting and evolutionary basis. According to the current understanding, severe enough instances of *ultra vires*, fundamental rights problems and other constitutional conflicts may enable sidestepping the *prima facie* primacy of European Union norms.¹⁵³

Admittedly, *prima facie* but contestable primacy of European Union law and the more general systemic interaction as a phenomenon of legal culture is perhaps thin and heterogeneous throughout the European Union, as it functions on top of diverse domestic legal cultures and the yet relatively thin legal culture of European Union law professionals. Nevertheless, it contains transnational or regional elements not only through the pronouncements of the Community Courts and the European Court of Human Rights, but also in the form of European-wide legal and jurisprudential discourse, education and professional awareness of challenges to European Union law's primacy in other member states and the institutions of the European Union. Construing *prima facie* but contestable primacy of European Union law as an expression of legal culture could enable a pluralist conception of European law while explaining its strong, but not incontestable position in domestic courts.

When discussing European Union law, Tuori maintains that the European Union legal order mostly consists of the laws and individual decisions on the surface level, whereas the legal culture and the deep structure have not *yet* developed, thus questioning the autonomy of the European Union legal order as advocated by the Community Courts. He also suspects whether a specific European Union legal culture could develop in addition to the national ones, but seems to accept the view that fundamental rights, democracy and the rule of law could ultimately constitute

152 For an approach applying H.L.A. Hart's theory to EC law see Jones (1984), *passim*. See also Dowrick (1983), p. 197-237 (discussing also the conceptual problems in attempts to apply Hart's theory to EC law and its relationship to domestic laws of the member states).

153 See for an analysis of such instances e.g. Kumm & Comella (2005a), *passim*.

a European Union -wide deep structure of law.¹⁵⁴ Some of these arguments can be problematical.¹⁵⁵ However, it is important to remark that what Tuori identifies as the central elements of the deep structure of law have in practice strong resonance with the domestically defined grounds of departure from the primacy of European Union norms: basic and human rights, other domestic constitutional values and instances of European Union acts done *ultra vires* or following serious procedural deficits.

Thus, seen from a holistic perspective of European law, comprising not only the EU Treaties and the law emanating directly from them, but also the law based on domestic level and the legal culture based on both, Tuori's layered model of law is not incompatible with pluralist perceptions of European law. Yet, contrary to what Tuori maintains, the admittedly thin European legal culture of intersystemic interaction is there, and has an important function. It is thus possible to construct this totality as a system of polycentric rules, partly overlapping but capable of compatibility due to deep interlegality, shared understanding of sub-systemic metanorms as an expression of legal culture, shared sense of political and legal community, as well as fundamental rights, democracy and the rule of law functioning not only as the law's self-limitation in each sub-system separately, but also as a limitation of other sub-system's legal claims. Evidently, there are diverse interpretations of what fundamental rights, democracy and the rule of law mean in practice.¹⁵⁶ This, however, does not prevent them from constituting a common horizon or reference point for the total legal community thus construed: possibility of disagreement about their more detailed content is part of the common horizon constituting the community in question, also expressed in the comprehensive institutional structure enabling multiple constitutionality controls.

154 Tuori (2002a), p. 206-207. See also Wilhelmsson (1997), p. 189 (also applying Tuori's layered model of law in Community law context with broadly similar conclusions). The European Court of Justice seems to be moving to the direction suggested by Tuori in that fundamental rights, democracy and the rule of law are now recognised as the fundamental base values underlying the Union. See joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351.

155 Both Tuori and Wilhelmsson (see the previous footnote) seem to underestimate the extent to which the doctrines and principles of EU law have developed through case law, in particular, where several refined doctrines, legal principles and argumentation patterns have been developed in a relatively systematic and enduring manner. In some areas, when combined with the related EU law commentaries and academic discussion, the resulting common European legal language and ultimately the shared legal culture of EU law specialists, is more real and nuanced than e.g. the corresponding Finnish ones. This does not apply similarly in all areas of law, such as many areas of private law, including contract law (the primary example used by Wilhelmsson). EU law is still a partial legal order dependent on the national legal systems in many issues (implementation, enforcement etc.) and areas of law. One should not expect doctrinal developments or shared standards and principles within areas largely beyond the scope of current EU law. Similarly, the autonomy of the EU legal order as advocated by the European Court of Justice connotes neither completeness of the EU legal order, nor independence from national legal orders, a fact clearly observable from the case law of the European Court of Justice.

156 von Roermund (1997), p. 368-370, distinguishes the French, German and English ideal types of what constitutes a legal order. See also the next main chapter (discussing rights constitutionalism).

3.3.2 International Law and European Constitutional Pluralism

The discussion of constitutional pluralism often excludes international law: the analysis is usually restricted to the relationship between member state and European Union levels. Yet, introducing international law into the discourse is necessary, as the Community legal system “*is characterised by the simultaneous application of provisions of various origins, international, Community and national: but it nevertheless seeks to function and to represent itself to the outside world as a unified system*”.¹⁵⁷ This is particularly so with regard to intellectual property law due to the long history of international intellectual property measures and more recently, potential conflicts of intellectual property norms with international measures other than intellectual property law. A plurality of legal regimes functioning on different scales thus affects the European lawyers’ patterns of argumentation and the comprehension of the sources of law and their interaction.

Hence, also the norms and norm fragments present in a case involving intellectual property law may emanate from international intellectual property instruments, such as the Paris and the Berne Conventions and the TRIPS Agreement, from European Union harmonisation measures, and domestic intellectual property regulation. Depending on the subject-matter of the case at hand and the arguments presented, also European and international fundamental rights norms, international and European cultural or environmental policy norms or specific communications or pharmaceutical laws emanating from international, European Union and domestic levels may also become applicable, as demonstrated by existing case law.¹⁵⁸ One should not insulate the interactions of intellectual property and competition laws from this broader legal environment. The interplay of international instruments with European Union norms should thus be addressed in more detail.

How international law permeates the Community legal order and affects the legal decision-making reflects the *sui generis* nature of the European integration project and

¹⁵⁷ As formulated by Advocate General *Tesouro* in case C-53/96, *Hermes International v FHT Marketing Choice BV* [1998] ECR I-3606, at paragraph 21.

¹⁵⁸ See e.g. cases case C-200/96, *Metronome Music v Music Point Hokamp* [1998] ECR I-1953 (where the Advocate General discussed fundamental rights law); Joined Cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* [1995] ECR I-743 (where the Berne Convention was discussed); case C-377/98, *Netherlands v Council and Parliament* [2001] ECR I-7079 (where, among others, the TRIPS Agreement, human rights instruments and the Convention on Biological Diversity signed on 5 June 1992 in Rio de Janeiro were discussed by the Advocate General and the European Court of Justice as potential sources of challenge and interpretation for the Community intellectual property harmonisation measure); case C-53/03, *Syfait and Others v GlaxoSmithKline plc, GlaxoSmithKline A EVE* [2005] ECR I-4609 (where the Advocate General interpreted the competition norms contextually in the light of pharmaceutical regulation); case C-109/03, *KPN Telecom BV Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)* [2004] ECR I-11273 (where telecommunications law constituted an important normative environment for the competition law application and where the Advocate General also referred to US case law) and case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, Commission’s Decision Case COMP/C-3/37, 792 *Microsoft* (where the interpretation of European Union harmonised intellectual property law and the TRIPS Agreement constituted part of the competition law analysis).

the often indeterminate and dynamic division of competencies between the member states and the European Union.¹⁵⁹ The Community has been an important actor on the international stage: it pursues its policies also through its outer relations and seeks to secure the consistency of these actions with its internal policies. In line with this approach, also the application and interpretation of European Union law is based on the presumption that the Community honours its international obligations.

However, ultimately the Community Courts seek to determine the effects of international obligations within the Community legal order by reference to conditions set by Community law. As noted by Advocate General Maduro, the Community Courts seek to preserve the constitutional framework created by the EU Treaties. From a perspective internal to European Union law, the relationship between international law and the Community legal order is thus governed by the *sui generis* Community legal order itself: international law penetrates Community law only under the conditions found from the constitutional principles of the Community legal order itself.¹⁶⁰ The statement made in previous case law that international treaties “*form an integral part*” of the Community legal order could hence be treated as “*hollow rhetorics devoid of content*”.¹⁶¹ It is necessary to address these constitutional principles internal to Community law before connecting the discussion to constitutional pluralism characterising European law.

In the area of intellectual property law, the basic premise has been *shared competence* between the Community and the member states.¹⁶² Thus, both the member states and the Community have had the competence to regulate intellectual property. In external relations, they have exercised their competencies together. As is well known, the exercise of the internal competence to legislate gives the Community the corresponding implied powers in its external relations.¹⁶³ Community regulation thus pre-empts the competence of the member states to regulate or conclude external agreements covered by the Community regulation in question. By the amended Article 207 EU, the Lisbon Treaty seeks to extend the Common Commercial Policy of the Community to include the conclusion of agreements relating to commercial aspects of intellectual property. However, the exclusivity of the external competence does not affect the delimitation of internal competences between the Union and the member states. Furthermore, the Common Commercial Policy shall be exercised in the context of the principles and objectives of the Union’s external action, including democracy, the rule of law, the universality and indivisibility of human rights and fundamental freedoms. This

159 See e.g. MacLeod, Hendry & Hyett (1996), *passim* (a general introduction to the topic) and Cheyne (1994), *passim*. For a survey of problems related to mixed agreements see Heliskoski (2001) Neuwahl (1996), and Rosas (1998), all *passim*.

160 See the Opinion of Advocate General Maduro in joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351 (at paragraphs 22-24 of the Opinion). The European Court of Justice followed its Advocate General for the relevant parts.

161 See *Klabbers* (2002), p. 294. See e.g. case 181/73, *R. & V. Haegeman v Belgium* [1974] ECR I-449.

162 See Opinion 1/94 (WTO) [1994] ECR I-5267.

163 See case 22/70, *Commission v. Council (ERTA)*, [1971] ECR 263.

approach promotes coherence across the Union's external policy, on one hand, and between external and internal policies of the Union, on the other hand. It also enables broadening the objectives of the Common Commercial Policy beyond the uniformity inspired by its internal market rationale and WTO-inspired trade liberalisation.¹⁶⁴

General principles of international law, for example the norms of customary international law, also form part of European Union law. This connotes, among other things, that the legislative organs of the European Union must consider customary international law when enacting secondary legislation.¹⁶⁵ The formal status of *member states' international obligations* in European Union law is relatively complex.¹⁶⁶ The basic Treaty does not affect the obligations of a member state towards third countries arising from agreements concluded before the entry into force of the basic Treaty or prior to a member state's accession to the European Union.¹⁶⁷ Such obligations may justify a member state's derogation also from the Treaty provisions.¹⁶⁸ However, the provisions of an earlier agreement cannot have such effects in intra-Union relations if the rights of non-member countries are not involved.¹⁶⁹ Importantly, an earlier agreement does not enable derogation from principles that form part of the very foundations of the Community legal order, which according to the *Kadi*-ruling comprise liberty, democracy and respect for human rights and fundamental freedoms.¹⁷⁰

International agreements concluded by the Community may produce diverse effects in Community law, including interpretive and direct effects. The potential for their direct effect depends on the basic character of the international agreement as a whole (their *structure* and *purpose*) and the clarity and preciseness of the particular norms in a given context of application, among other factors.¹⁷¹ The notion of direct effect of international treaties may be seen as opening the Community legal order for challenge

164 See more closely Articles 21 and 205-207 EU as amended by the Lisbon Treaty. See also *Cremona* (2003), p. 1363, who analysed the corresponding provisions of the Constitutional Treaty, namely its Articles III-217 and III-216.

165 The most informative legal source in this respect is case C-162/96, *A. Racke GmbH & Co. v Hauptzollamt Mainz* [1998] ECR I-3655. See more closely about this issue and more references to case law *Klabbers* (2002), p. 288-292.

166 See generally e.g. *Giardina* (1987), *passim* for a general introduction to this topic and *Ress* (1989), *passim* for an analysis of the status of the Berne Convention prior to the conclusion of the WTO Agreements.

167 See Article 351 FEU, formerly 307 EC, and the case law referred to in the subsequent footnotes.

168 See e.g. case C-124/95, *The Queen, ex parte Centro-Com Srl v HM Treasury and Bank of England* [1997] ECR I-81. Derogation from the EU obligations is not possible for the benefit of third country if the earlier agreement only authorises something, but does not require it.

169 See e.g. joined cases C-241/91 P and C-242/91 P, *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission (Magill)* [1995] ECR I-743, at paragraph 84.

170 Articles 2-3 EU as amended by the Lisbon Treaty, formerly stated in Article 6(1) EU. See joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351 (paragraphs 303-304).

171 See more closely e.g. joined cases 21-24/72, *Internationale Fruit Company v Produktschap voor Groenten en Fruit* [1972] ECR 1219 and case 104/81, *Hauptzollamt Mainz v C.A. Kupferberg & Cie KG a.A.* [1982] ECR I-3641. See also e.g. *Klabbers* (2002), *passim* and *Bronckers* (2008), p. 894-897.

on one hand, but due to its selective and ultimately political nature as protecting the Community legal order from international law, on the other hand.¹⁷² The effects of the WTO norms in European Union law have been an area of particular activity in terms of both court decisions and legal analysis.¹⁷³ This question will be discussed in more detail below.

The relationship between international law norms and European Union law can also be seen from a broader perspective. *Betlehem* has endorsed a functional approach where the primary obligations are seen to exist in general terms on the international level.¹⁷⁴ Secondary obligations give effect to the former and they are typically enacted at European Union and domestic levels. Enforcement takes place simultaneously at all three levels in cooperative interaction. The level of enforcement is largely dependent on the identity of the persons allegedly in breach and the place of the alleged breach. In the private sphere, the relevant machinery is usually on national or European Union level, but sometimes the cases could be escalated to international level.¹⁷⁵ Yet, international measures could also include more detailed obligations than national or regional regulation of the same area. This may apply with regard to certain provisions of the TRIPS Agreement, for example.

Instead of building the analysis on traditional case law commentary of the Community Courts' decisions, the present treatment rather endeavours to connect the topic to the previous conversation of constitutional pluralism. The TRIPS Agreement will function as an example. It has potential relevance in many cases dealing with intellectual property and its interactions with competition law. The effects of international human rights instruments in European Union law will be discussed in more detail in the subsequent chapter. Before connecting the topic to constitutional pluralism, it is necessary to briefly characterise some developments of international law under the label of *fragmentation* and the position and effects of diverse international law norms in European Union law in more detail as developed in the case law of the Community Courts.

International norms may be a source of both European Union law and national law. Despite the fact that the European Court of Justice sees international agreements concluded by the Community as having primacy over secondary Community law but not over primary Community law,¹⁷⁶ it is still somewhat misleading to characterise their relationship in hierarchical terms by placing one level systematically above the

172 *Klabbers* (2002), at p. 295-296, arguing that the notion functions as a bridge between monism and dualism. *von Bogdandy* (2008), at p. 397 characterises the notions of monism and dualism as "intellectual zombies of another time and should be laid to rest".

173 For a summary of the European Court of Justice's relevant case law and references to the most important sources see e.g. *Bronckers* (2008), *passim*. For earlier accounts, see e.g. *Peers* (2001), p. 111-119; *Eeckhout* (1997), *passim* and *Lee & Kennedy* (1996), *passim*. See also the discussion below.

174 See *Betlehem* (1998), *passim*.

175 For the possibilities of firms to initiate proceedings on the WTO level see *T. Nieminen* (2004), *passim*. See also the discussion of the competition provisions of the TRIPS Agreement in chapter 7.

176 See joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351 (at paragraphs 307-308).

other.¹⁷⁷ National, European Union and international law overlap and interact to the extent that it is for many purposes artificial to demarcate them sharply or to describe them as neatly separate systems intersecting only at the level of legal obligations. The manner in which obligations derived from one system enter into another system is only a fraction of the cooperative and sometimes competitive interaction between the systems.¹⁷⁸ Which of the levels has the greatest impact on outcomes depends on the institution of enforcement, subject matter of the case at hand, as well as the substance of the concrete applicable norms, among other factors.

International treaties do not form one monotonic block. Their substance varies from human rights to regulation of technical cooperation between authorities. The level of generality and the potential of the norms to define individual rights vary considerably. One may distinguish general and special rules of international law, albeit this cannot be done in the abstract, but always in relation to some other rule.¹⁷⁹ Some international legal instruments constitute largely self-referential special regimes (or legal systems) by forming a union of autonomously functioning norms laying down particular rights, duties and powers as well as rules and institutional mechanisms related to the administration of such rules.¹⁸⁰ The institutional mechanisms for binding dispute settlement tend to constitutionalise such regimes through judicial norm-creation.¹⁸¹ These developments have led to the diversification of international

177 Cf. e.g. with *Cheyne* (1994), p. 586-588, who constructs the relationships between directly applicable international norms, secondary EC legislation and provisions of the EC Treaty in hierarchical terms. In this hierarchy, directly applicable international norms exist between the EC Treaty and secondary legislation. Also *Bourgeois* (2000), p. 97-98, seems to argue that there is a hierarchical relationship between international agreements and the EC Treaty for the benefit of the latter (basing his argument on Opinion 1/91 on the Agreement establishing the European Economic Area (EEA) between the EC and the EFTA countries) on one hand and between international agreements and EC secondary law for the benefit of the former. However, the interaction between international law and EU law is complex and diversified to the extent that such a general statement is misleading as the multiple directions of interaction cannot be reduced to a question of hierarchy between the levels taken as abstract blocks. See also *von Bogdandy* (2008), *passim*.

178 See *Betlehem* (1998), p. 194-195; *Walker* (2001), p. 40; *de Búrca & Scott* (2001), p. 12 and *Brockers* (2008), *passim* (emphasising the more indirect forms of impact in the relations between EU and WTO law).

179 *International Law Commission, Study Group on Fragmentation* (2003), p. 5 and *Koskenniemi* (2004a), *passim*.

180 See *Simma* (1985), *passim*; *International Law Commission, Study Group on Fragmentation* (2003), p. 8-9; *Lindroos* (2005), p. 30-35 and *Lindroos & Mehling* (2006), *passim* (with regard to the WTO in particular).

181 *Koopmans* (1994), p. 190. About the constitutionalisation discussion related to the WTO see *Petersmann* (2001), p. 107-110, proposing changes to further constitutionalise the WTO; *Cass* (2001), *passim*, seeing constitutionalisation foremost as judicial norm-creation; and *Walker* (2001), *passim*, treating the constitutionalisation discussion critically and proposing a new agenda based on the principles governing the interaction between the sites of authority.

law into distinct specialised sets of rules, many of them increasingly claiming relative autonomy and constitutional status.¹⁸²

For example, in the *Hormones*-case the Appellate Body of the WTO considered that the precautionary principle of international environmental law was not binding on the WTO.¹⁸³ Such statements represent the idea of WTO being a self-contained or special treaty regime governed by its own laws and principles.¹⁸⁴ In the framework of the TRIPS Agreement the so called *three-step test*, included in Articles 13 (copyright), 17 (trademarks), 26(2) (industrial designs) and 30 (patents), has started to function as specialised constitutional law of intellectual property exceptions and limitations. The test purports to censor exceptions and limitations based on intellectual property logic reflecting an idea of *prima facie* absolute exclusive rights capable of being restricted only by narrow and clearly defined exceptions.¹⁸⁵ The exceptions and limitations are often based on fundamental rights and related collective goods, as protected in constitutions.

The European Patent Convention (EPC) functions as another example. In its *Priorities of India/AstraZeneca* -decision the Enlarged Board of Appeal of the European Patent Office (EPO) took the view that the obligations deriving from the TRIPS Agreement do not directly bind the European Patent Organisation or the

182 See generally about “fragmentation” of international law *International Law Commission* (2003), p. 267-275 and *Koskenniemi* (2004b), *passim* and (2007), p. 4-9. *Koskenniemi* (2004b), argues (at paragraph 174) that the emergence of specialised law in the form of special treaty-provisions, special regimes and specialised branches corresponds with the increasing functional diversification of the international world, which causes the need to tailor legal rules so as to take account the requirements of context and legal subjects’ special priorities. In this sense, “fragmentation” of international law is about the emergence of a *principle of subsidiarity* in the international field. See also *Fisher-Lescano & Teubner* (2004), *passim*.

183 *EC Measures Concerning Meat and Meat Products (Hormones)*, Appellate Body, AB-1997-4, WT/DS26/AB/R and WT/DS48/AB/R, (16 January 1998) (Adopted 13 February 1998), at paragraph 125. Cf., however with *Korea – Measures Affecting Government Procurement*, Report of the Panel WT/DS163/R (1 May 2000). There (paragraph 7.96) the panel held that Article 3(2) of the DSU requires that the WTO agreements must be interpreted in accordance with customary rules of interpretation of public international law. Furthermore, the panel stated that: “*Customary international law applies generally to the economic relations between the WTO Members. Such international law applies to the extent that the WTO treaty agreements do not “contract out” from it. To put it another way, to the extent there is no conflict or inconsistency, or an expression in a covered WTO agreement that implies differently, we are of the view that the customary rules of international law apply to the WTO treaties and to the process of treaty formation under the WTO.*”

184 See *International Law Commission, Study Group on Fragmentation* (2003), p. 2 and *Koskenniemi* (2004a), at paragraph 15, treating the case as an example of fragmentation as differentiation between types of special law. See also *Pauwelyn* (2003), *passim*; *Lindroos* (2005), p. 42 and *Lindroos & Mehling* (2006), *passim*, for research analysing the relationship between the WTO and other international law.

185 See *Canada – Patent Protection of Pharmaceuticals*, Report of the Panel WT/DS114/R (17 March 2000); *United States – Section 110(5) of US Copyright Act*, Report of the Panel, WT/DS160/R (15 June 2000); *EC Protection of Trademarks and Geographical Indications for Agricultural Products and Foodstuffs*, Report of the Panel, WT/DS174/R and WT/DS290/R (15 March 2005). See about the three-step test also sub-chapters 5.5.3 and 5.6.3.

European Patent Office, but only Members of the WTO.¹⁸⁶ It stated that the European Patent Organisation is a public international organisation having an internal legal system of its own: the EPC provides an autonomous legal system for the granting of European patents. In its view, the legislation of the Contracting States or the international conventions signed by them is not part of this autonomous legal system. Hence, the boards of appeal of the EPO have the task of ensuring compliance with the autonomous legal system established by the EPC and are bound by the provisions of the EPC alone. Other international norms and decisions of European or national courts were seen merely as elements to be taken into consideration by the boards of appeal, but not binding on them.¹⁸⁷

Semi-autonomous fields could even develop within European Union law. The proposal for a Council Regulation on the Community patent¹⁸⁸ seems to solidify the status of European patent law as a semi-autonomous field of law not intended to interact with other areas of law. It is namely stated in its Article 2(2) that the Community patent “shall have an autonomous character. It shall be subject only to the provisions of this Regulation and to the general principles of Community law. However, the provisions of this Regulation shall not exclude the application of Community competition law, nor of the law of Member States with regard to criminal liability, unfair competition and mergers, nor of the provisions of the Munich Convention to the extent that they are not covered by this Regulation”. Even though the reference to the general principles of Community law could considerably open up the Community patent system towards fundamental rights and (other) general doctrines and principles of European Union law, the emphasis on the inherent autonomy of patent law is striking and without precedents in other areas of European Union law.

The foregoing implies that any discussion concerning the status of one international instrument in European Union law is not directly transferable to another international instrument. International instruments binding the Union have been seen as concentric circles: the closer the instrument is to the purpose of the Community, the more likely it is that direct effect will be found. Thus, bilateral agreements of the Community,

186 EPO Enlarged Board of Appeals Decision G 2/02 and G 3/02, dated 26 April 2004, *Priorities from India/AstraZeneca*. The Enlarged Board of Appeals endorsed the opinion of the Legal Board of Appeal that the obligation to recognise priority rights laid down in the TRIPS Agreement cannot be considered to impinge on the fundamental rights of the persons involved. See also Article 1 of EPC 2000, according to which “A *system of law*, common to the Contracting States, for the grant of patents for invention is established by this Convention” (emphasis added). See also EPO Boards of Appeal Decision T 1173/97, dated 1 July 1998, *Computer program product/IBM*.

187 See also EPO Boards of Appeal Decision T 1173/97, dated 1 July 1998, *Computer program product/IBM* and EPO Boards of Appeal Decision T 935/97, dated 4 February 1999, *Computer program product II/IBM* and EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*.

188 Proposal for a Council Regulation on the Community patent, COM/2000/412 final (OJ C 337 E, 28/11/2000, p. 278-290. See also the revised text: Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent, dated 8 March 2004.

as well as non-reciprocal plurilateral agreements with the developing countries have typically been accorded the possibility of direct effect.¹⁸⁹

The Community Courts see the WTO norms as binding the Community in terms of international law, *but lacking the potential of direct effect* as a Community law –based notion.¹⁹⁰ Only where the Community *intended to implement* a particular obligation assumed in the context of the WTO, or where the Community measure *expressly refers* to the precise provisions of the WTO agreements, may the Community Courts review the legality of the Community measure in question in the light of the WTO rules.¹⁹¹ However, direct effect is only precluded in areas where the Community competence is exclusive or where it has already legislated. In other areas, member states may individually grant direct effect to WTO obligations.¹⁹² Whether they utilise this opportunity depends on their approach to international law generally, and to the WTO norms, in particular. The direct effect of international agreements in European Union law is thus ultimately selective. The European Court of Justice may regulate through its case law the effects of international law in the European Union legal system, thus being capable of protecting its integrity and specific aims.

The Community Courts give effect to the WTO norms also through the interpretation of secondary European Union norms in the light of the WTO norm in question.¹⁹³ This indirect effect may bring in most cases the European Union norms satisfactorily in compliance with the WTO obligations.¹⁹⁴ It was argued previously

189 Regarding the last-mentioned, see e.g. *Cheyne* (1994), p. 592 and *Lee & Kennedy* (1996), p. 83.

190 See case C-149/96, *Portugal v Council* [1999] ECR I-8395 (the European Court of Justice stated that “the WTO agreements are not in principle among the rules in the light of which the Court is to review the legality of measures adopted by the Community institutions” and thus also precluded direct effect).

191 See cases 70/87, *Fediol v Commission* [1989] ECR 1781; C-69/89, *Nakajima All Precision v Council* [1991] ECR I-2069; case C-76/00 P, *Petrotub SA and Republica SA v Council and Commission* [2003] ECR I-79 and Case C-93/02 P, *Biret International SA v Council* [2003] ECR I-10497. See also the discussion in *Eeckhout* (1997), p. 42-48. The European Court of Justice stated in Case C-238/06 P, *Develey Holding GmbH & Co. Beteiligungs KG* [2007] ECR I-9375, that a direct reference to an Article of the Paris Convention (signed 20 March 1883) in a Community legislative instrument similarly produces direct effect, such as in Article 7(1)(h) and (i) of the Community Trade Mark Regulation N:o 40/94.

192 See joined cases C-300/98 and C-392/98, *Parfums Christian Dior SA v TUK Consultancy BV and Asco Gerüste GmbH and Rob van Dijk v Wilhelm Layher GmbH & Co. KG and Layher BV* [2000] ECR, I-11307; case C-431/05, *Merck Genéricos v Produtos Farmacêuticos Lda v Merck & Co. Inc., Merck Sharp & Dohme Lda* [2007] ECR I-7001 and case C-238/06 P, *Develey Holding GmbH & Co. Beteiligungs KG* [2007] ECR I-9375. However, the applicability of the WTO norms in the relations between member states not involving third country nationals or firms is uncertain, as there was probably the intention on the part of the Community and its member states to be treated as one unit, but nevertheless there is no express confirmation of this view anywhere. See *Kuijper* (1995), p. 227-228.

193 This effect was already emphasised by the European Court of Justice in its *Hermes*-decision (C-53/96) referred to above. See also case C-306/05, *Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA* [2006] ECR I-11519, at paragraph 35 and case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271 (at paragraph 60). *de Búrca & Scott* (2001), at p. 16, rightly point out that the absence of direct effect on the part of the WTO Agreement does not connote its irrelevance in the European and national courts.

194 See also *de Búrca & Scott* (2001), p. 16 (rightly pointing out that an absence of direct effect on the part of the WTO Agreement does not connote its irrelevance within the European and national courts).

that the TRIPS norms' high level of detail and the presence of an effective enforcement and sanctioning procedure easily leads to giving decisive interpretive effect to these norms at the expense of more general and vague norms which lack a centralised enforcement and sanctioning mechanism.¹⁹⁵ However, in the *Microsoft*-case the Court of First Instance opined that the principle of consistent interpretation does not at all extend to primary Community law, such as the prohibition on the abuses of a dominant position.¹⁹⁶

This categorical statement is problematic. It demonstrates the danger of conceiving the relationship between international and Union Law in hierarchical and formalistic terms. In any event, the TRIPS Agreement binds the Union on international level and, despite the lack of direct effect, should constitute according to existing case law “an integral part of Community law”.¹⁹⁷ As the European Court of Justice has more recently indicated, there are *substantive* limits on how far international Treaties may interfere with the fundamental principles underlying the EU Treaties.¹⁹⁸ Hence, there is no reason to exclude interpretive effect categorically as regards primary Community Law.

Secondary and primary Community law also often intersect in application and interpretation. For example, cases regarding intellectual property and competition law typically involve the interpretation of intellectual property directives and Regulation 1/2003,¹⁹⁹ in addition to the Treaty Articles. This was also the situation in the *Microsoft*-case, where the Software Copyright Directive²⁰⁰ and Regulation No 17²⁰¹ formed part of the legislative environment for interpretation. In such instances, it is artificial to maintain that only the secondary norms should be interpreted in the light of the international agreement in question. In any case, the natural tendency of judges to avoid open intersystemic conflicts easily leads to the construction of primary Community norms in the light of the TRIPS Agreement or WTO panel reports applying them.²⁰² Also in the *Microsoft*-case, the Court of First Instance initially discussed the substantive TRIPS provisions and pursued an interpretation seeking coherence with them.²⁰³ However, it did not pursue this analysis to its end regarding all the questions

195 See the discussion under heading 3.2.2.

196 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, at paragraph 798.

197 Case 181/73, *R. & V. Haegeman v Belgium* [1974] ECR I-449; Case 104/81, *Hauptzollamt Mainz v C.A. Kupferberg & Cie KG a.A.* [1982] ECR I-3641.

198 See joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351.

199 Council Regulation (EC) No. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1 [2003].

200 Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, OJ L 122, 17 May 1991, p. 42-46. See more closely about the Directive in chapter 5.5.4.

201 Council Regulation No 17 (EEC): First Regulation implementing Articles 85 and 86 of the Treaty.

202 See also *Bronckers* (2008), p. 889-891 (talking of the European Court of Justice's “muted dialogue” with the WTO tribunals and of substantiating EC law principles in the light of the WTO-obligations).

203 See more closely the discussion of the *Microsoft*-case in chapter 7.

involved, and thus felt the need to pronounce on the intersystemic interpretive effects of the TRIPS Agreement in general.²⁰⁴

On the other hand, an international human rights instrument, which does not even formally bind the European Union, may have strong indirect effect by affecting the interpretation of the EU Treaty Articles, as well.²⁰⁵ In contrast to subject matters that are more technical such norms may *form part of the standard* derived from international human rights instruments, constitutional traditions of the member states and explicit European Union fundamental rights norms.²⁰⁶ The substance and more specific contents of international instruments thus affect their status and effects in European Union law. For example, although the European Court of Justice stated in its *Kadi*-judgement²⁰⁷ that the Charter of the United Nations does not have primacy over primary Union Law, in particular over the general principles of which fundamental rights form part, other United Nations law, namely the human rights instruments, participate in defining the fundamental rights standards as applicable in the Union. It is thus erroneous to see all United Nations Law in a hierarchical relationship with regard to Community Law (between secondary and primary Union norms). The interaction between United Nations and European Union Law is more refined, context- and issue-specific.

On a more general level, sweeping statements about the status of international law in the European Union legal system are unfounded. To enable normative statements about the desired effects of international norms in European Union legal order, it is necessary to make further distinctions and qualifications among various types of international norms and application situations reflecting diverse constitutional concerns. This enables going beyond the often-formalistic discussion about the direct effect and hierarchical position of international law in the Community. Policy goals have in any case greatly affected the finding of direct effect in the European Court of Justice's case law. As pointed out by *Klabbers*, "the rule of law is definitely not served by continuing to ignore the political nature of the direct effect doctrine and the way it is used by the Court."²⁰⁸ Instead of conceiving the effects of international law in the European Union legal order in technical or formalistic terms as often done in legal dogmatic treatments of the case law, their effects should be embedded in a discourse involving constitutional values.

Many international instruments represent narrow interests and specialised fields of application. Their paths of development vary. They may contradict each other and be based on different underlying values, rationalities and legal strategies. It is thus feasible

204 See also *Nguyen* (2008), p. 572, who notes that the Court of First Instance could have adopted a different strategy by holding that the TRIPS competition provisions do not substantively prevent the intended application of competition law, like it did with regard to Microsoft's illegal tying.

205 See e.g. Case C-432/04, *Commission v Édith Cresson* [2006] ECR I-10653.

206 See in more detail the discussion of fundamental rights under the next main chapter.

207 Joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351 (at paragraphs 307-309).

208 *Klabbers* (2002), at p. 298.

that the international instruments could place conflicting obligations regarding a particular matter. The reasons for this include the increasing international regulation reflecting functional differentiation, as well as the fact that the boundaries between different sets of specialised rules are not clear-cut, but overlapping and dynamic.²⁰⁹ Increasingly, international norms, such as the TRIPS Agreement, regulate domestic or regional issues also addressed by existing national or regional laws.²¹⁰ This may lead to increasing conflicts with national or regional regulation.²¹¹ The development of self-referential specialised international regimes claiming constitutional status connotes that interlinking and compatibilisation between the regimes takes place only occasionally when a pressing need arises, thus increasing the potential of inter-systemic conflicts. As there is no single authority having the ultimate say in such situations, the alignment of the competing demands rests on several levels.²¹²

Walker insightfully observes that the claims of the specialised international regimes to constitutional status referred to above often represent symbolic capital within global power politics. These claims thus possess a strong ideological and political dimension.²¹³ Any attempt to construct constitutional principles covering the relations between the various scales of law and sites of authority is accordingly one out of multiple perspectives. Transcending the partial governance projects characteristic to fragmenting international law and moving into transsystemic interests and legitimacy concerns seems ultimately inevitable, as a decision's legitimacy is also dependent on the way it handles the conflict of values held by diverse stakeholders, broadly understood.²¹⁴ *Legitimate site-specific solutions to governance problems should thus reflexively recognise the limitations of their own legitimacy and the partiality of their own systemic perspective.*²¹⁵ To an extent a particular site of authority does not display such institutional sensitivity in its treatment of the legal interests outside its own partial competence, the other sites of authority must recognise the partiality of values, interests and rationalities involved in its operation.²¹⁶

This implies that refusing direct or even strong interpretive effect could be a rational strategy. In case of multiple international norms applying to the same situation,

209 For a more comprehensive analysis of the types of conflicts see *International Law Commission, Study Group on Fragmentation* (2003) and *Koskenniemi* (2004a), both *passim*.

210 The possibility that the WTO trade norms may be converging with the principles of Union's free movement of goods interpretations towards "a common law of international trade" does not apply to the TRIPS Agreement. The idea of international economic law sharing a common doctrinal core is developed by *Weiler* (2000a), p. 1-4. Such efforts probably collapse with any harder cases linking trade with other values.

211 See e.g. *von Bogdandy* (2008), p. 401.

212 See also *International Law Commission, Study Group on Fragmentation* (2003), p. 2 (the states involved may adopt a new law settling the conflict or the institutions in charge for the interpretations of the existing international rules may seek to coordinate their future interpretations).

213 *Walker* (2001), p. 52. See also *Walker* (2002), p. 344.

214 In addition to *Walker* (2001), *passim*, see *Howse* (2000), p. 58.

215 *Walker* (2001), p. 54-57.

216 In more general terms see *Walker* (2001), p. 55.

granting direct or decisive interpretive effect to some of them (or their authoritative interpretations) would be to the exclusion of the other international instruments and the values, interests and rationalities embedded in them. Establishing interaction between international instruments and construing their effects should thus not be primarily based on direct effect or other formalistic grounds, as this would effectively exclude the possibility of compatibilisation of the underlying value and rationality conflicts.²¹⁷

The interpretation of an international norm is also dependent on the relevant machinery interpreting it. Interpretation and effects are dependent on the level of enforcement due to institutional factors, different levels of consequential analysis and embeddedness of the norm in the surrounding legal order and interpretive community.²¹⁸ The contents of the *functional* norm thus depend on its interaction with the surrounding legal order, its constitutional structure, institutional restrictions related to the level of enforcement (for example the particular competence of the institution interpreting the norm) and consequential analysis taking place in such a framework.

For example, the WTO dispute settlement organs see the TRIPS norms foremost embedded in the multilateral trade regime having little to do with fundamental rights or general concepts of private law.²¹⁹ The relevant interpretive community for the WTO organ is the global trading community, being generally uninterested in questions of democracy, forms of social life or shared cultural values of a given community, as also recognised in modern constitutions. The panels or the Appellate Body of the WTO focus on the compatibility of national or regional measures with the WTO *acquis*,

217 Cf. with *Eeckhout* (1997), *passim*, who argues in favour of direct effect of the TRIPS Agreement and direct effect of WTO dispute settlement decisions due to the need to establish an efficient interconnection between WTO and EC law. See also *Drexel* (1994), *passim* (analysis of the TRIPS Agreement's position in EC law).

218 On a general level see *Johnstone* (1991), at p. 385-391, who argues that international law mediates the relations between states through the activities of the relevant interpretive communities of professionals, which are defined and constituted by a set of conventions and institutional practices structuring the interpretive process. These constrain interpretive discretion. In the context of the WTO law, in particular, see *Howse* (2000), *passim*; *Alvarez* (2002), *passim* and *Palmetier & Mavroidis* (1999), at p. 35-60, who discuss the sources of law in the WTO-context.

219 See *Alston* (2002), p. 836, noting that the WTO Agreements are not constitutional instruments in the sense of constituting a political or social community, but that the WTO's mandate and objectives "are narrowly focused around the goal of expanding the production and trade in goods and services". See also *Koskenniemi* (2005b), p. 607, noting that "though both free trade and social regulatory objectives are written into the WTO treaties, the former are always taken as the starting-point while the latter have to struggle for limited realization". See also *von Bogdandy* (2008), p. 407, saying that ordinary meaning, systematic analysis, and state practice do not implicate any existing human rights dimension in the WTO *acquis*.

restricted in its scope, underlying values and interests.²²⁰ This institutional setting places constraints on the willingness, competence and capacity of the WTO dispute settlement organs to extend interpretations into areas of human rights, environmental law, and so forth.²²¹

At European Union level, the Community Courts see the same TRIPS norm in the European Union legal order as part of binding WTO rules but lacking the potential of direct effect, as discussed above. The lack of direct effect of the WTO Agreements has been widely criticised. The criticisms consist of what *Peers* names legal critiques, on one hand, and constitutional critiques, on the other hand. The former are based on the detected inconsistencies in the Community Courts' reasoning with the general standards for direct effect of international agreements. The latter are based on the conception of "*right to trade*" implicit in the WTO Agreements as a fundamental right and thus meriting direct effect in European Union law. *Petersmann* has advocated this view, in particular.²²² *Peers* seems to understand the main argument of the European Court of Justice against the possibility of direct effect of the WTO Agreements, namely the lack of reciprocity and the ensuing *realpolitik* need for deference to European Union politicians and civil servants. He also rejects the constitutional critique as presented by *Petersmann* as being both without a solid legal basis and otherwise problematic.²²³ On the other hand, the reasons accepted by *Peers* may be seen as another form of constitutional argumentation based on the constitutional division of powers.

There are additional arguments against formal direct effect of the WTO Agreements. To an extent the international norm in question may conflict with other international obligations or has the potential of negatively re-structuring the local

220 See *Weissbrodt & Schoff* (2003), p. 14. See also *Alston* (2002), p. 836 and the *Hormones*-decision of the Appellate Body discussed above. For another example see United States – Section 110(5) of US Copyright Act, Report of the Panel, WT/DS160/R (15 June 2000), and its analysis in *T. Nieminen* (2004), p. 153-188 and *Senftleben* (2006), *passim*. The panel found the exemption in US Copyright Act contrary to the TRIPS Agreement. The infringing provision exempted certain businesses (based on the size limits of their premises) from the obligation to pay royalties for non-dramatic musical works originating from radio or TV.

221 *Howse* (2000), at p. 62-68, discusses *institutional sensitivity* as a constraint in interpretations. However, he also notes Article 31(3)(c) of the Vienna Convention, which according to *Howse* mandates the consideration of non-WTO international rules in the interpretation of WTO treaties. See also *Palmeter & Mavroidis* (1999), at p. 52-60 (generally on the effect of other international agreements on the interpretation of WTO treaties); *Alvarez* (2002), at p. 151, who notes that regimes such as the WTO may encourage the formation of international subcultures flattening diversity or being inattentive to contextual and pluralistic concerns; and *Lindroos & Mehling* (2006), at p. 876-877, who conclude that whereas procedural norms of international law have been adapted to the WTO *acquis* to a certain extent, thus excluding the claim that the WTO is a self-contained regime, the substantive rules of international law have been far less important in the judicial practice of the WTO.

222 See e.g. *Petersmann* (2001), p. 100-103. See also *Eeckhout* (1997), p. 49-50.

223 See *Peers* (2001), p. 119-130. For a comprehensive and rather compelling critique of *Petersmann's* main arguments see *Alston* (2002), *passim*. Also *Bronckers* (2008), at p. 897, accepts the refusal to grant direct effect for the WTO norms as this accords more negotiating power to the EU, and puts more implementation responsibility on the other EU institutions. See about reciprocity as a condition for direct effect *Klabbers* (2002), p. 278-280.

forms of social life or constitutional values, it is preferable to refuse direct effect. The WTO norms represent a narrow focus of interests. Even though the material scope of the WTO *acquis* is broad, it is less developed than nation-state and European legal orders and it lacks adequate democratic decision-making procedures. In this sense, the limitations of the legitimacy of the WTO norms, their inescapably partial nature and their potential for conflict with other legal orders should form part of the analysis when deciding on their legal status in the European Union and nation-state legal orders. The WTO norms represent what Sousa Santos calls small-scale legality. Giving direct effect and primacy to small scale over medium and large scale legality on formalistic grounds could undervalue the characteristics of medium and large scale legality in producing contextually sound and just outcomes.²²⁴ As small-scale law is poor in contextualising behaviour and details, but captures within its potential scope of application a vast number of situations regulated by medium- and large-scale laws, attaching direct effect and primacy to WTO norms could re-structure the local forms of social life regulated by more democratic medium- and large-scale regulation on the basis of a monotonic set of trade-related interests.

The TRIPS Agreement, in particular, possesses these capacities. It may be in conflict with other international obligations, domestic or European laws, and constitutional values. For example, the three-step test could conflict with human rights instruments, domestic or regional laws and constitutional values. Even if the TRIPS Agreement could be argued to regulate individual rights,²²⁵ it should be subject to political discretion and separate implementation.²²⁶ It needs to be embedded in the constitutional structure of the Union instead of the constitutional structure of the Union being reconfigured on the basis of the TRIPS Agreement. The fact that the WTO Agreements are backed up by the dispute settlement procedure and the possibility of sanctions should not place the WTO Agreements above other international obligations of the European Union or its member states. Even though the former obligations are defined in a more detailed manner in both the WTO Agreements and in the dispute settlement procedure, *this should not obscure the (at least) equally binding nature of other international norms which may be in conflict with the TRIPS-based obligations or at least legitimately affect*

224 Also Bronckers (2008), at p. 897 and von Bogdandy (2008), p. 408, note that because direct effect of an international treaty leads to its supremacy over secondary Community Law, the EU legislature could not practically correct the Community Courts' interpretations of that international treaty.

225 See the Preamble to the TRIPS Agreement which recognises that "intellectual property rights are private rights". Article 1(3) of the TRIPS Agreements states that "*Members shall accord the treatment provided for in this Agreement to the nationals of other Members--*" See also Alston (2002), p. 826 and Eeckhout (1997), p. 33.

226 Cf. however, with Petersmann (2001), p. 106 (arguing that the private rights -nature of intellectual property rights, as recognises in the Preamble to the TRIPS Agreement, speaks in favour of granting direct effect).

*the interpretations of the latter.*²²⁷ Due to the inherent value of fundamental rights, the situation should be the other way around, as argued previously. The EU Treaties as amended by the Lisbon Treaty could now *require* such an interpretation (Articles 2, 3 and 6 EU).

The TRIPS norms should thus be taken into account in the interpretation and application of European Union law on a contextual basis, by embedding them in constitutional discourse comprising the current Treaty framework and the constitutional values of the Union. *Such an approach would exclude both formalistic direct effect of one international law instrument in Union law as well as categorical exclusion of its interpretive effects when applying primary European Union law.* In other words, embedding specific international law norms in European Union law calls for a principled and contextual discourse evaluating the effects of several international law instruments on constitutional values and inter-institutional legitimacy concerns. Such an approach could build on existing solutions whereby the Community Courts give effect to the TRIPS norms in the European Union legal order primarily through interpretive effects. It could also build on the *Kadi*-judgement referred to above, where the effects of international norms were subjected under constitutional discourse and the constitutional aims of the Union.

3.4 Concluding Perspectives and Transitional Thoughts

The current chapter has purported to characterise a pluralist model of law and legal decision-making in the context of the European Union. Instead of systemic coherence, a non-foundationalist conception of coherence was preferred: in a pluralist society, *coherence of legal reasoning* could enable solving most conflicts and addressing the interaction of norms satisfactorily. This approach emphasises broad inclusion of norms and norm fragments present in application situations, and their compatibilisation and interpretation on a contextual basis.

Such a strategy may often interfere with legal positivist systematisations of law operating on one scale or specific branches of law. Yet, it was also recognised that a legal pluralist understanding neither excludes considering systematic efforts based on closely related branches of law, nor local compatibilisation of specific norms and their underlying justifications on a contextual basis. However, relatively often outcomes thus produced may not be acceptable from the perspective of other applicable norms or broader reconstruction of law. For example, intellectual property and competition laws are regularly applied in contexts involving sector-specific norms, international

²²⁷ See also *Weissbrodt & Schoff* (2003), p. 12-14 (noting that despite stronger implementation procedures of the WTO, governments are obligated to seek interpretations of both TRIPS and the human rights treaties avoiding violations of either treaty regime). See also *von Bogdandy* (2008), *passim* (emphasising the need to reject direct effect of WTO law on the basis of legal pluralism and constitutional grounds, among other reasons).

law instruments, fundamental rights and related collective goods and private or public-private regulation, such as standardisation.

An interpretive approach restricted to the constitutional structure of the basic European Union Treaties suggests that diverse Union policies should be interpreted consistently with other Union policies and the values and objectives of the Union, which now comprise pluralism, liberty, democracy and respect for human rights and fundamental freedoms. The objective of principled coherence as explicated in the basic Treaties, the teleological method of interpretation used by the Community Courts, and the potential transformation of the principal teleology or deep structure of European Union law from the sphere of market freedoms towards democratic and fundamental rights-based values as now recognised in the Treaties opens a window of opportunity to integrate democratic and constitutional values also to the interpretations of sectoral laws, such as intellectual property and competition law.

Moreover, the notion of constitutional pluralism and the emerging transnational legal culture of inter-systemic conflict rules largely based on fundamental rights and other constitutional and democratic values proposes that when applying and formulating the metarules intended to govern the systemic relations between domestic, European, international and private forms of regulation, the legal decision-makers are already involved in a pluralist constitutional discourse. From the perspective of transsystemic legitimacy, the biased and partial nature of some systems and the norms they produce, as well as the lack of democratic procedures in their generation, could legitimately affect their penetration of and interaction with other systems.

The next chapter will analyse private informational power from the perspective of rights constitutionalism. Even if the general model of legal decision-making characterised in this chapter, and the constitutional structure of the Union Treaties permit or even recommend the integration of constitutional and democratic values in the interpretations of intellectual property and competition laws, the mainstream fundamental rights doctrine may not be prepared for it. The concrete pronouncements of the Community Courts, in particular, reflect the institutional fundamental rights approach to intellectual property rights. The subsequent discussion has also the function of critically evaluating the contents and directions of these understandings.

4 Rights Constitutionalism and Private Informational Power

4.1 Chapter's Contents and Central Arguments

In this chapter, intellectual property and informational power will be analysed from the perspective of fundamental rights protection and rights constitutionalism. Ordoliberalism separated the economy from the other parts of the society and treated the competitive order as an “*economic constitution*” distinct from the constitution in general. Such an approach is not tenable. Fundamental rights apply generally throughout the legal order due to their dual nature as subjective rights and objective principles. They provide the most basic norms and principles to which all areas of law are somehow connected.¹ Neither intellectual property rights nor competition norms form an exception to this general idea. Fundamental rights play a particular role due to their effects pervading the whole legal order and – above all – due to their substantive content: their largely recognised inherent value and status in the application of law. Even when we accept that there is broad disagreement about the exact contents of individual rights, their desired balance with other rights and collective goods, as well as their effects in the private sphere in particular, it is still possible to agree that they have a particular position and specific value in the legal systems.

The interaction between fundamental rights and private law could thus *ideally* function as a check on privately exercised power disturbing or jeopardising others' constitutionally protected rights, excesses or inadequacies of legislation, or one-sided doctrinal developments threatening the balance of fundamental rights or the realisation of the collective goods underlying them.² However, the following analysis questions whether this ideal function corresponds with the fundamental rights doctrine. One purpose of the discussion is thus also to broaden the discourse and to overstep the inherent doctrinal limitations of traditional rights constitutionalism. This is why the

¹ See e.g. *Habermas* (1992, 1996), p. 247-248; *Gerstenberg* (2004b), p. 769 and *V-P. Viljanen* (2002) and (2003), both *passim*. From the perspective of private law see *Pöyhönen* (2000), p. 70 and *Kumm* (2006), *passim*.

² *Lämsineva* (2002), at p. 24, argues that the primary function of fundamental rights protection is to protect private individuals and the structures of the civil society from diverse forms of power, irrespective of the source of that power. Inhibition and control of power, including privately exercised power, would thus become the core orientation of fundamental rights jurisprudence.

notion of economic constitutional law is preferred over an approach solely based on traditional fundamental rights doctrine, indicating dialogical interaction between traditional constitutional law, the institutions of private law – which themselves seek to constitutionalise their core areas against challenge from the outside – and privatised regulation by enterprises, in particular. In this interaction, the institutions of private law and private regulation may also affect the application, interpretation and the underlying ideas of traditional rights constitutionalism.

Rather than in adjudication of concrete cases, I see the relevance of fundamental rights analysis primarily to lie in opening up the narrow debate of specialised experts to deeper levels of law, and their alternative reconstructions. Fundamental rights analysis may thus also function *as a heuristic methodology capable of distinguishing and weighing constitutionally relevant rights, interest positions and values in application discourse*.³ As there is no single pre-determined fundamental rights theory one could take as given, also private law and fundamental rights are to be seen in a dialogical relationship. Rather than eliminating choice, autonomy and experimentalism, such a dialogue ideally enables the realisation of these values.⁴ Constitutionalising private law would thus not have to mean anything more (or less) than a way of structuring debates in private law. This open and flexible structure could accommodate a libertarian, social democratic or any other substantive agenda. As said by *Kumm and Comella*, “*the only bias inherent in such a construction is that it requires reasoned construction of any tradition-gilded baselines that lawyers are socialized into as part of a private law culture*”.⁵

Fundamental rights do not normally define material outcomes on their own or settle the competing claims and values of various cultural communities or forms of life in a definite manner. They rather set certain limits for and direct interpretations and require weighing of diverse values, thus enriching and broadening argumentation and enabling value pluralism characteristic to modern societies.⁶ The concrete applicable norm is typically constructed of norms and norm fragments covering several fundamental rights provisions requiring mutual weighing and adjustment,

3 For a similar approach see *Karhu* (2003), p. 803-806.

4 See also *Gerstenberg* (2004b), at p. 767-770, and in the context of intellectual property law *T. Mylly* (2005), p. 188. See generally also *Kumm* (2006), p. 362-363 and *Lämsineva* (2002), p. 5.

5 *Kumm & Comella* (2005b), p. 249. See also *Pöyhönen* (2000), p. 138, noting that systematising private law on the basis of fundamental rights does not have to connote absolute primacy of fundamental rights in the decision-making practices, but rather that fundamental rights considerations are systematically brought to guide judicial decision-making, thus avoiding in advance the function of rights as “trumps” in legal proceedings. See also *Lavapuro* (2009), at p. 281, also emphasising that branch of law -specific fundamental rights analysis could serve to question formalistic rights constitutionalism and *G. Anderson* (2005), at p. 133-134, saying that when courts have functioned as constitutional actors they tend to find constitutional rights consonant with the private law values that they themselves have helped to shape. The latter “*have generally been in the service of maintaining liberal ideals of individual freedom*”.

6 See *Tuori* (2003b), p. 941; *Gerstenberg* (2004b), p. 767 and *Lavapuro* (2007), p. 161 (the basic and human rights catalogues accord diverse types of rights the status of fundamental societal values, thus expressing societal value pluralism and requiring its recognition in judicial decision-making).

substantive provisions from various branches of law equally requiring mutual adjustment, and procedural provisions regulating the competence of the decision-maker, among others.⁷ Their interaction should not be seen in terms of hierarchy, but in terms of dialogue and complementarity of values, interests, rights and competencies inherent to the norms in question. Thus, fundamental rights analysis could be seen – among its other functions – as a methodology capable of fostering the sensitivity of judicial decision-making towards societal value pluralism and principled orientation. Fundamental rights analysis ideally does not frustrate private autonomy cherished in private law, but takes it as one relevant value in a comprehensive analysis.⁸

Principles governing the market order also affect the ability of individuals to enjoy their fundamental rights. Due to an increasing reliance on market mechanism and private transactions during the last decades, it is necessary to align the principles governing the market with constitutional principles. The latter could be seen as one conceptual framework for the analysis of the principles and norms governing the market order.⁹ Fundamental rights analysis may provide a critical tool to evaluate not only the specialised branches of law with their own *allgemeine Lehren*, but also alternative models of broader constellations of law: as a specialised branch of law it is in a relationship of critique with regard to economic constitutional law and *vice versa*. It could identify a structural bias or an inability to consider fundamental rights in alternative constructions of economic constitutional law, like in the ordoliberal economic constitution. On the other hand, economic constitutional law could provide means to critique the doctrines of constitutional law courts and experts. The notion of economic constitutional law thus opens the constitutional debate for scholars coming outside the genre of constitutional law narrowly understood.

Intellectual property and competition laws could both restrict and advance fundamental rights and collective goods. Fundamental rights discourse enables construing the connections of both legal institutions to the fundamental values present in legal order and structuring their relations on this basis. Such legal argumentation could also integrate economic analysis typical for both legal fields and the study of their relationship. The focus of economic analysis may shift after the connections of both legal institutions to the realisation of fundamental values have been elaborated. Intellectual property law presents an area involving hotly debated issues of general

⁷ See more closely *Scheinin* (1991), p. 34-38.

⁸ On the last mentioned point see *Kumm* (2006), p. 362-363 and *Pöyhönen* (2000), at p. 65-71, who also emphasises that systematisation of private law based on the comprehensive system of fundamental rights does not question the value of private autonomy as such, but necessarily connects it to basic rights, complements it with other rights and collective goods identifiable in modern constitutions, and requires its weighing against these.

⁹ See *Pöyhönen* (2000), p. 66-139 and also *passim* (systematisation of private law based on the system of fundamental rights) and *Study Group on Social Justice in European Private Law* (2004), p. 655-668. See also *G. Anderson* (2005), *passim* (based on the need to control private power facilitated by globalisation and privatised norm-production) and *Fitzgerald* (2000a), *passim* (with regard to regulation of meaning and discourse through software).

fundamental rights theory.¹⁰ Control over information and communication have become central forms of societal power. Private actors hold this power. It affects the realisation of rights both directly and indirectly by affecting collective goods. Hence, the fundamental rights discourse must comprise non-individual expressions of freedoms guaranteed by fundamental rights (collective goods) and the effects of fundamental rights in the relations among individuals, firms and other private entities.

What was stated above does not prevent the more practical relevance of fundamental rights considerations in case law and jurisprudence related to intellectual property and competition law. Some of the intellectual property directives refer to the protection of fundamental rights in their recitals.¹¹ The most usual reference to fundamental rights protection in these contexts has been the notion that intellectual property rights are protected under property ownership. The relevance on fundamental rights in the application of European competition law is further recognised in the most central piece of secondary competition law in the European Union. Regulation 1/2003 states that it “*respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union. Accordingly, this Regulation should be interpreted and applied with respect to those rights and principles*”.¹² Although this was likely included in response to the enhanced powers of the Commission to conduct on-the-spot investigations extending to the private sphere, it can also be interpreted as a general commitment to evaluate competition law enforcement from the perspective of fundamental rights and the EU Charter. Not only fundamental individual rights affect the interpretation and application of European competition law, but also fundamental rights as objective principles. Collective goods thus also form part of the competition law’s interpretive matrix. An Advocate General has already given fundamental rights significance in the competition law evaluation of a refusal to license.¹³

One important premise of the discussion pursued here is that fundamental rights form an indivisible, interdependent and interrelated whole.¹⁴ This connotes that individual rights cannot be seen in isolation. One should not over-emphasise some

10 Also *Vesting* (2001), at p. 18, notes that the expansion of intellectual property rights affects not only intellectual property law, but also constitutional law. As he argues, “[i]t affects particularly the construction of property rights as basic rights and their relationship to the freedom of expression and information. On a more general level, the expansion compels us to re-think the role and function of public law in the new information society and to reconsider the traditional departmentalisation that divides the public and the private”.

11 Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society (at recital 3); Directive 2004/48/EC on the enforcement of intellectual property rights (at recitals 2 and 32) and Directive 98/44/EC on the legal protection of biotechnological inventions (at recital 16). See also *Geiger* (2006a), p. 387-388 and *Pila* (2005), p. 186-187, restricting the analysis to patents and the Biotechnology Directive.

12 Council Regulation (EC) No. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1 [2003].

13 See the Opinion of Advocate General in case C-200/96, *Metronome Music v Music Point Hokamp* [1998] ECR I-1953 and the subsequent discussion.

14 See e.g. the Vienna Declaration and Programme of Action, adopted by the World Conference on Human Rights on 25 June 1993. UN Doc A/CONF/157/23, at paragraph I.5.

rights at the expense of others, as this would simplify the complex relationship and interdependency between rights. Freedom of speech and information is relevant for the enjoyment of political rights and for the protection of socio-economic rights, among others.¹⁵ The protection of property ownership is important from the perspective of individual autonomy and thus also from the perspective of freedom of expression. On the other hand, property rights may also undermine freedom of expression when the property in question constitutes a bottleneck for others' expression.¹⁶ Fundamental rights thus constantly interact, overlap and conflict in individual instances of application. The indivisibility and interdependence of fundamental rights should reflect the European Union fundamental rights law, as well.¹⁷

The chapter concludes that the prevailing doctrines of fundamental rights law in Europe do not enable effective and consistent control of intellectual property -enabled private power threatening the rights of others or the realisation of the related collective goods. As argued by G. Anderson, by treating the application of fundamental rights norms to private power as an exceptional instance whereby the state is usually the ultimate perpetrator, the traditional doctrines can be criticised of legitimating the exercise of private hegemonic power.¹⁸ Fundamental rights – far from controlling informational power affecting collective goods and the rights of others – have had the function of legitimating a strong form of intellectual property ownership and the intellectual property institution in general. In the European Union context the function of fundamental rights has largely been to legitimate the choices of the intellectual property legislator irrespective of the threats to fundamental rights.¹⁹

Nevertheless, as G. Anderson and others recognise, fundamental rights law also comprises counter-hegemonic potential.²⁰ Positive obligations of states to protect fundamental rights could require, for example, that communicative, cultural and entrepreneurial diversity and freedom of action must be taken into account in the interpretations of intellectual property and competition law alike. The chapter also argues that fundamental rights norms should be more actively applied to private regulative practices and the design of essential technological environments, in particular, as in the information society, these may affect the rights of others and the related collective goods often more pervasively than measures taken by individual

15 See e.g. *Banning* (2002), p. 174. See also *Bullinger* (1985), p. 93-137 (addressing the different functions of freedom of speech under the European Convention). See also *Handyside v United Kingdom*, 7.12.1976, A 23, at paragraph 23 (the democratic society is marked by pluralism, openness and tolerance and “freedom of expression constitutes one of the essential foundations of such a society, one of the basic conditions for its progress and the development of every man”).

16 Waldron (1993), p. 885-886 and Balkin (2004), p. 32-33.

17 See also e.g. *Alston & Weiler* (1999), p. 31.

18 G. Anderson (2005), p. 4, 14 and 143 and also *passim*.

19 This reflects a more general practice of the European Court of Justice to abstain from giving practical significance to fundamental rights claims when legislative acts are challenged.

20 G. Anderson (2005), p. 123, 136-143 and also *passim*. Clapham (2006), at p. 552, says that “[t]he conservative effect of judicial protection of property rights in the past should not automatically lead us to reject the progressive possibilities of using human rights law in the future.”

nation-states. Constitutional law should be opened towards legal pluralism. It should recognise the presence and effects on fundamental values of multiple norm-producing centres, some of which are constituted of private profit-seeking entities.²¹

I further argue that, rather than placing extensive fundamental rights obligations on private individuals on the abstract, constitutionalisation should be expanded from the domain of traditional constitutional law experts to other legal spheres like intellectual property and competition law. The latter spheres should be more extensively constitutionalised, implying *principled, critical discourses challenging the democratic and constitutional legitimacy of the branch of law -specific developments which may already be characterised by internal constitutionalisation in neoliberal spirit*. Rights constitutionalism and fundamental rights discourse offer a potential counterweight to such developments. Traditional rights constitutionalism alone cannot and should not even try to resolve all the underlying problems (or worse, pretend that it has done so), and may not seek to reserve constitutional discourse for its own exclusive privilege.²² It may provide a partial solution only.

Hence, also alternative reconstructions or systematisations of private law in general and intellectual property and competition laws in particular on the basis of constitutional values could be utilised to produce alternative bases for interpretations of the relevant laws. Such efforts could enable the connection of the existing principles and doctrines to the system of fundamental rights, and facilitate the challenge of overly strong property rights and private power positions threatening basic values, as well as provide a counterweight to neoliberally oriented constitutionalisation, thus introducing a counter-hegemonic potential to the new constitutionalism.²³

The discussion will proceed in the following way. First, I will present the European Union context of fundamental rights protection. This will be followed by an analysis of collective aspects of fundamental rights protection. The analysis of private threats to fundamental rights protection will be more extensive, as well. This is simply because intellectual property rights are used by private actors. Yet their exercise enables societally perhaps the most significant form of power over information and communication. Finally, I will review the treatment of intellectual property rights in the fundamental rights case law of the European Court of Human Rights and Community Courts. References to national case law will be scarce to enable fuller treatment of the European-level case law, even at the expense of constitutional pluralist nuances.

21 G. Anderson (2005), p. 145-151 and also *passim*.

22 In this direction see also G. Anderson (2005), p. 117 and 146. See also Fitzgerald (2000a), p. 47 and 52-55 and (2000b), p. 382-385 (“-- the new constitutionalism will depend on courts realizing that fundamental issues of copyright, patent, contract, and competition/antitrust laws are the constitutional questions of the information age”, *ibid.*, at p. 385) and (2001b), p. 143-149 (characterising *digital constitutionalism*, which “seeks to implement a principled allocation of power/rights over information”, further combining “aspects of public constitutionalism, statutory and common law adjudication and perhaps new legislation in relation to technology/code”, *ibid.*, at p. 143).

23 For an ambitious attempt to construct private law in general from the perspective of fundamental rights see Pöyhönen (2000), *passim*. For an attempt to constitutionalise intellectual property law, see Geiger (2004), (2006a) and (2008b), all *passim*.

4.2 Fundamental Rights in European Union Law: General

The fundamental rights dimension of the European Union is typically characterised by a progressive enhancement of protection whereby the European Court of Justice developed fundamental rights in Community law on a case-by-case basis after the national highest or constitutional courts (in Germany in particular) had challenged the primacy of Community law in the absence of adequate protection on Community level. The gradual development of the fundamental rights dimension in European Union law is well documented and researched: there is no need to repeat it here.²⁴ The four basic freedoms formed the core of the Community's (economic) constitution. Fundamental rights assumed the role of negative limits to the exercise of existing powers by the Community and functioned as exceptions and possible limits to the four basic freedoms.²⁵

Fundamental rights have gradually moved from the periphery of European Union law towards its core. This is so especially in the Lisbon Treaty which recognises fundamental rights among the aims of the Union.²⁶ Yet the Union's *competence* with regard to fundamental rights protection is still limited: it lacks a general competence in the Treaties to legislate based on fundamental rights.²⁷ However, this does not mean that the Union would not have an obligation to protect fully fundamental rights when legislating or adopting other legally binding acts within its existing competences.²⁸ The Union's legislative measures may also sometimes have the aim and effect of protecting fundamental rights. Such measures could be based on existing competences, for example on the competence related to the functioning of the internal market.²⁹ The Union also has limited competence with regard to fundamental rights in its external relations by virtue of Treaty Articles and international law.³⁰ Importantly, when applying and interpreting European Union legislation, both domestic and Community Courts have an obligation to protect fundamental rights, as will be discussed subsequently in more detail. The lack of formal competence to legislate on the basis of fundamental rights

24 See e.g. *Weiler* (1991); *Ojanen* (1998) and contributions in *Alston, Bustelo & Heenan* (1999), all *passim*. As the focus of this research is neither on the evolution of the European Union fundamental rights doctrine in general, nor on the contents of particular rights in Europe in particular, there is no need for an extended general discourse.

25 See also e.g. *Ojanen* (2009), *passim*. See more closely the discussion under sub-chapter 4.3.2.

26 See more closely Articles 2, 3 and 6 EU as amended by the Lisbon Treaty.

27 See Article 6 EU and Articles 2-6 FEU as amended by the Lisbon Treaty, Opinion 2/94, (ECHR) [1996] ECR I-1759 (at paragraphs 27 and 30) and Article 51(2) of the EU Charter. See also e.g. *Helander* (2001b), p. 100-101; *Bernard* (2003), p. 259; *de Búrca* (2004), p. 686 and *Ojanen* (2009), *passim*.

28 See also Opinion 2/94, (ECHR) [1996] ECR I-1759 (at paragraph 31) and *Helander* (2001b), p. 110.

29 See e.g. Directive 95/46/EC on the protection of individuals with regard to the processing of personal data and on the free movement of such data, OJ 1995 No L 281 p. 31. See also *de Schutter* (2008), p. 529-530 and 550-555 and *de Búrca* (2004), p. 686 (also mentioning fundamental rights measures based on the general residual powers clause in Article Article 352 FEU, ex. 308 EC).

30 See Articles 19 FEU, ex. 13 EC; Article 208 FEU, ex. 177 EC; Article 211 FEU, ex. 181 EC. The use of human rights clauses in external trade agreements under Article 207 FEU, ex. 133 EC is said to be based on international law. See *de Búrca* (2004), p. 686.

only does not prevent the potential effects of fundamental rights in the interpretation and application of all European Union law. In fact, the lack of formal competence to legislate emphasises the role of fundamental rights in the application of European Union law.

In addition to international treaties for the protection of human rights protection on which the member states have collaborated or of which they are signatories, the protection of fundamental rights in the European Union is based on the European Convention.³¹ It is also based on the basic rights protection originating on national level (mostly based on constitutional provisions of member states), the fundamental rights protection as general principles of Community law (based on the case law of the Community Courts), and now importantly on the EU Charter, as well.³²

Although the original objective of the *EU Charter* was not to change the substance of fundamental rights protection in the European Union, it constitutes the most comprehensive catalogue of rights adopted in many years and has the potential to affect the fundamental rights protection in the European Union legal order in many ways.³³ The Lisbon Treaty makes the EU Charter formally binding through a reference to it in Article 6 EU. The Court of First Instance and more recently also the European Court of Justice had referred to the EU Charter even when it was not formally binding.³⁴ Moreover, the European Union legislator has referred to the EU Charter before the entry into force of the Lisbon Treaty in both an intellectual property and competition law context.³⁵ Importantly, the EU Charter provides a comprehensive list of social and economic rights. In principle, the Community Courts could thus in future recognise the increased value of economic and social rights in the European Union legal order.³⁶

31 European Convention for the Protection of Human Rights and Fundamental Freedoms, signed in Rome on 4 November 1950. See about the recent evolution of the relationship between the ECHR and the European Union *de Schutter* (2008), *passim*.

32 See also the European Social Charter and the Community Charter of Fundamental Social Rights of Workers. For comprehensive treatments of European Union fundamental rights dimensions see e.g. *Craig & de Búrca* (2008), p. 379-427; *Alston & Weiler* (1999), *passim*; *Ojanen* (1998), p. 97-136, 291-321 and 351-359 and (2009), *passim*.

33 See e.g. *Maduro* (2003b), p. 277-298. However, as *Maduro* at p. 279 notes, it will probably not produce any dramatic changes in the *standard* of fundamental rights protection currently existing in the EU legal order. Yet it could help the Community Courts to develop a more structured and coherent fundamental rights theory and enhance judicial activism in the review of legislative and administrative acts of the EU institutions. See *ibid.* at p. 280-286 and *Kenner* (2003), p. 15 and 24-25.

34 Cases T-54/99, *max.mobil Telekommunikation Service GmbH v Commission* [2002] ECR II-313; T-177/01, *Jégo-Quéré et Cie SA v Commission* [2002] ECR II-2365 and C-540/03, *European Parliament v Council* [2006] ECR I-5769. See also *Maduro* (2003b), p. 282-283; *Salminen* (2007), *passim* and *Craig & de Búrca* (2008), p. 385, 401-402 and 412-418.

35 See Directive 2004/48/EC on the enforcement of intellectual property rights (at recitals 32) and Council Regulation (EC) No. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1 [2003].

36 See e.g. *Kenner* (2003), p. 25.

However, Article 52(5) of the EU Charter makes a problematic distinction between *principles* and *judicially cognisable rights*. The provisions of the Charter containing principles “*may be implemented by legislative and executive acts taken by institutions, bodies, offices and agencies of the Union, and by acts of Member States when they are implementing Union law, in the exercise of their respective powers. They shall be judicially cognisable only in the interpretation of such acts and in the ruling on their legality*”. The Charter does not otherwise inform which provisions are principles and which judicially cognisable rights. The explanations relating to the horizontal provisions of the Charter (Articles 51-54) assume special significance, as they are referred to in Article 6(1) EU as amended by the Lisbon Treaty.³⁷ Yet the explanations do not cover provisions amended or added later in the process leading to the EU Charter, such as Article 52(5).

Many provisions of the Charter typically regarded as rights are worded like principles, and *vice versa*.³⁸ Social and economic rights mentioned under Title IV of the Charter are the most likely candidates for “principles”, as the negotiation history of the Charter proposes. The interdependent nature of fundamental rights and the dual nature of all rights as objective principles makes the exclusion of some rights/principles from direct judicial effects problematic. Moreover, the Union’s lack of general competence to legislate based on fundamental rights could also make “*legislative and executive acts*” intended to *implement* such principles difficult to achieve for the Union legislator.

Even if a particular provision of the Charter could not be used to challenge the legality of secondary legislation not intended to implement that provision, the exclusion of that provision’s effects in the interpretation of primary and secondary legislation would be very artificial, if not impossible in practice. This is the core effect of principles. Moreover, the EU Charter confirms in its Articles 52(3) and 53 that its interpretations shall not restrict or adversely affect fundamental rights as recognised in the European Convention, among other human rights instruments. Article 52(5) of the Charter should not be interpreted to mean that the dual nature of rights as objective principles would lead to the latter being non-cognisable. Doing otherwise would frustrate the inherent dual nature of rights and seriously distort their interpretation and effects.

When elucidating the protection of human rights under the rubric of general principles of European Union law, the European Court of Justice has used the European Convention and “*constitutional traditions common to the Member States*” as its central

37 The text of the explanations relating to the complete text of the Charter (CHARTE 4487/00 CONVENT 50).

38 Vranes (2003), p. 8.

references and sources of inspiration.³⁹ The basic framework of fundamental rights protection in the European Union is codified in Articles 2-3 and 6 of the Treaty on European Union as amended by the Lisbon Treaty. In addition to the EU Charter, which now has the same legal value as the basic Treaties, fundamental rights constitute general principles of the Union's law as guaranteed by the European Convention, and as they result from the constitutional traditions common to the member states.

All member states of the Union are contracting states to the European Convention. European Union membership does not free them from their obligations related to it.⁴⁰ The European Convention thus functions as a limited set (political and civil rights) of minimum standards for the Community Courts when constructing the Community standard of fundamental rights protection. The European Union fundamental rights standard could thus be both more extensive and more stringent than the one adopted in the framework of the European Convention.⁴¹ Now the Community Courts seem to follow the case law of the European Court of Human Rights. They also modify their previous stances, should the judgments of the European Court of Human Rights so require.⁴² When referring to the basic rights protection of the member states as a source for the European Union fundamental rights protection, the Community Courts are not bound to any universal maximum standard and certainly not to the

39 The European Convention has “*special significance*” as an inspiration among international treaties for the protection of human rights on which the member states have collaborated or of which they are signatories. See e.g. Case C-260/89, *Elliniki Radiophonia Tiléorassi AE and Panellinia Omospondia Syllogon Prossopikou v Dimotiki Etairia Pliroforissis and Sotirios Kouvelas and Nicolaos Avdellas and others* [1991] ECR I-2925, at paragraph 41 and Case C-112/00, *Schmidberger v Austria* [2003] ECR I-5659, at paragraph 71.

40 The European Court of Human Rights has taken this position in its case law as well. See case App. no. 24833/94, *Matthews v United Kingdom*, judgment 18 Feb. 1999, ECHR 1999-I. See, however, also case *Bosphorus v Ireland*, (Appl. no. 45036/98) judgement 30 June 2005 (at paragraphs 148 and 155), where the ECtHR sought to actively avoid conflicts with European Union law.

41 See e.g. *Ojanen* (1998), p. 108-109. See also Article 52(3) of the EU Charter of Fundamental Rights, which recognises that the EU can develop more extensive protection than what is provided for under the European Convention. The text of the explanations relating to the complete text of the Charter (CHARTE 4487/00 CONVENT 50), at p. 48 states that the EU legislator must comply with the [minimum] standards laid down in the European Convention and as specified by the European Court of Human Rights.

42 See case C-94/00, *Roquette Frères SA v Directeur Général de la Concurrence, de la Consommation et de la Répression des Fraudes* [2002] ECR, p. I-9011, where the European Court of Justice changed its former stance (explicated in joined cases 46/87 and 227/88, *Hoechst v Commission* [1989] ECR, p. 2859) concerning the protection of privacy (Art. 8 of the European Convention) and the Commission's power to investigate business premises in competition law proceedings. The change was due to European Court of Human Rights judgments. The European Court of Justice stated that for the purposes of determining the scope of privacy of business premises, “*regard must be had to the case law of the [European Court of Human Rights] subsequent to the judgment in Hoechst*”. *Lienemeyer & Waelbroeck* (2003), at p. 1483-1484, pinpoint to the change of wording regarding the status of the European Convention in EU law: from mere source of inspiration to something (including the case law of the European Court of Human Rights) that “*regard must be had*”.

lowest common denominator.⁴³ They rather develop relatively autonomous European Union law principles on a case-by-case basis.⁴⁴

The European Court of Justice has declared that it draws inspiration “*from guidelines supplied by international treaties for the protection of human rights on which the Member States have collaborated or of which they are signatories*”⁴⁵ Of special significance in this respect are the Universal Declaration of Human Rights (Universal Declaration) and the International Covenant on Economic, Social and Cultural Rights (International Covenant), as the member states of the Union were involved in their drafting and are parties to the International Covenant. The European Union and its institutions also refer to these instruments in various resolutions and in human rights clauses of trade agreements with third countries.

Thus, when defining the standard of fundamental rights protection within the European Union, it is appropriate to take this broader framework of human rights protection as a basis. The objective to ensure harmony with other human rights instruments cannot be restricted to the European Convention for the simple reason that it does not cover the protection of all human rights.⁴⁶ In addition to this, other human rights instruments and their applications may provide protection that is more advanced or they may provide alternative or fuller interpretations concerning some issues. As argued before, categories of rights are interdependent and cannot be compartmentalised logically or practically. However, so far the Community Courts have taken limited use of international human rights instruments other than the European Convention. For legal scholarship, this provides an opportunity for critique, broadening the potentially applicable norms, and hence for introducing values and interests in the application discourse typically excluded or neglected. Although the EU Charter will now likely form the core legal source in the argumentation of the Community Courts, its standards are connected to other human rights instruments and their interpretations, as well as to the constitutions of the member states.

The European Court of Justice has confirmed in its case law that measures, which are incompatible with the observance of fundamental rights, are not acceptable in the Community.⁴⁷ However, the Court has been prepared to strike down individual

43 See e.g. *Weiler* (1999), p. 109; *Craig & de Búrca* (2008), p. 388- 389 and *Verhoeven* (2002), p. 335-340.

44 As noted by *Craig & de Búrca* (2008), at p. 389, the differences between national conceptions of particular human rights are sometimes remarkable. Hence, the common constitutional traditions of member states may not always provide guidance for the Community Courts.

45 See e.g. joined cases C-204/00 P, C-205/00 P, C-211/00 P, C-213/00 P, C-217/00 P and C-219/00 P, *Aalborg Portland A/S and others v Commission* [2004] ECR I-123 at paragraph 64 and joined cases C-20/00 and C-64/00, *Booker Aquaculture Ltd, Hydro Seafood GSP Ltd and the Scottish Ministers* [2003] ECR I-7411 at paragraph 65 and Case C-112/00, *Schmidberger v Austria* [2003] ECR I-5659, at paragraph 71.

46 This applies e.g. to cultural rights, which are not expressly protected in the European Convention. However the European Court of Human Rights has extended some other provisions of the European Convention (such as Article 10) to protect these values. See *Adalsteisson & Thórhallson* (1999), p. 584-587.

47 See e.g. Case C-299/95, *Kremzov v Austria* [1997] ECR I-2629, paragraph 14 and Case C-112/00, *Schmidberger v Austria* [2003] ECR I-5659, paragraph 73.

administrative acts on this basis, rather than general legislative acts.⁴⁸ Fundamental rights thus obligate the institutions of the European Union directly when legislating generally applicable norms, but also, and in practice with greater rigour, in cases of individual administrative decisions. In addition to this, the European Union standard of fundamental rights protection obligates the member states of the European Union when implementing European Union law or when relying on derogations to European Union norms.⁴⁹ Although the English language version of Article 51(1) of the EU Charter obligates the member states to abide by the Charter provisions only when implementing Union law, in other languages the obligation also covers situations where they derogate from the European Union norms.⁵⁰ Some Treaty Articles having fundamental rights-character also obligate individuals directly, such as the prohibition of discrimination based on sex, as will be discussed more fully subsequently.⁵¹

Fundamental rights have indirect effect through their effects on interpretation of other legislation. This appears to be their primary function in adjudication.⁵² The duty to interpret European Union law in a fundamental rights-compliant manner extends in principle to the whole *acquis communautaire*, including the Treaties.⁵³ This corresponds with the dual nature of fundamental rights norms as objective principles and subjective rights. For example, in the *ERT*-decision the European Court of Justice interpreted the scope of the freedom to provide services “*in the light of the general principle of freedom of expression*”, as embodied in Article 10 of the European Convention.⁵⁴ Fundamental rights thus affect the interpretation of the basic market freedoms of the Union. However, as will be argued subsequently, conforming interpretation may be selective.

It is possible to distinguish the obligations to respect, to protect and to fulfil fundamental rights. The *obligation to respect* would be restricted to abstention on the

48 See e.g. case C-432/04, *Commission v Édith Cresson* [2006] ECR I-10653. See also *Craig & de Búrca* (2008), p. 390-394 and the subsequent discussion under sub-chapter 4.5.

49 See case 5/88, *Wachauf v Germany* [1989] ECR 2609, at paragraph 22; case C-260/89, *Elliniki Radiophonia Tiléorassi AE and Panellinia Omospondia Syllogon Prossopikou v Dimotiki Etairia Pliroforissis and Sotirios Kouvelas and Nicolaos Avdellas and others* [1991] ECR I-2925; case C-2/92, *The Queen v Ministry of Agriculture, Fisheries and Food, ex parte Dennis Clifford Bostock* [1994] ECR I-955, at paragraphs 12-14; case C-107/97, *Criminal proceedings against Max Rombi and Arkopharma SA* [2000] I-3367, at paragraph 65; case C-540/03, *European Parliament v Council* [2006] ECR I-5769, at paragraphs 104-105. See also *Ojanen* (1998), p. 298-302; *Bernard* (2003), p. 257-258 and *Craig & de Búrca* (2008), p. 395-402.

50 *Helander* (2001b), p. 106. See also the text of the explanations relating to the complete text of the Charter (CHARTER 4487/00 CONVENT 50), at p. 46.

51 See Article 157 FEU (ex. 141 EC) and the discussion in *Craig & de Búrca* (2008), p. 877-896. The effects of fundamental rights in the private sphere will be addressed subsequently under sub-chapter 4.4.

52 *Ojanen* (1998), p. 134. See also e.g. Case C-49/88, *Al-Jubail Fertilizer Co. v Council* [1991] ECR I-3187, paragraph 15 and case C-100/88, *Oyowe and Traore v Commission* [1989] ECR 4285, paragraph 16.

53 See e.g. case C-432/04, *Commission v Édith Cresson* [2006] ECR I-10653 as well as *Brown* (2003), p. 1504; *Geiger* (2006a), p. 388 and *Ojanen* (2009), at footnote 34.

54 Case C-260/89, *Elliniki Radiophonia Tiléorassi AE and Panellinia Omospondia Syllogon Prossopikou v Dimotiki Etairia Pliroforissis and Sotirios Kouvelas and Nicolaos Avdellas and others* [1991] ECR I-2925. See also *Weatherill* (2004), p. 203.

part of state from interference. *Obligation to protect* would also oblige the state to prevent interference from others, thus extending to horizontal relations and designing institutions preventing and controlling private infringements of fundamental rights. *Obligation to fulfil* would require positive measures on the part of the state to enable the individual to enjoy the rights concerned. Making many of the fundamental rights effective often requires broad positive action by the political institutions.⁵⁵ Most fundamental rights entail all these elements. The wording of a particular fundamental rights norm is not typically decisive. Rather, these elements comprise an inherent and logical part of many rights.⁵⁶

Article 51(1) of the EU Charter provides that the institutions of the Union must “*respect the rights, observe the principles and promote the application thereof*” in conformity with their respective powers and within the limits of the powers of the Union. The formal competence of the Union to legislate or give other legally binding acts on the basis of fundamental rights is restricted and is according to Article 51(2) of the Charter not extended by it. However, the obligation of the institutions (including the Community Courts) to observe the principles and to promote the application of the rights and principles recognised in the Charter could provide an opportunity to enhance the role of at least some Charter rights also in disputes between private parties. Hence, for example in the interpretations of competition law or harmonised intellectual property laws the Community Courts could well consider the effects of the provisions of the Charter in their interpretations, as also proposed by Regulation 1/2003 in the area of competition law and harmonisation measures in the area of intellectual property. As proposed above, such interpretive effect should not be excluded even from “principles” referred to in Article 52(5) of the Charter. Such a premise would also be supported by the recognition of fundamental rights among the aims of the Union in Articles 2 and 3 EU as amended by the Lisbon Treaty.

The following will consider the relationship between collective goods and fundamental rights generally and in European law, in particular. This will be followed by a more extensive discussion of the effects of fundamental rights in relations among private individuals, firms and other private entities. After this, the research will analyse European fundamental rights case law concerning intellectual property rights. On one hand, the case law demonstrates the need to design intellectual property legislation properly in the first place, as the European Court of Justice is protective of the European legislators’ choices even when they comprise apparent fundamental rights problems. On the other hand, the case law also reveals the need to develop the competition law doctrine so that it enables the control of societally harmful exercises of intellectual property -enabled power: such private exercises of power seem to lie largely beyond the fundamental rights doctrine as reflected in the case law of the Community Courts, in particular.

55 Weiler & Fries (1999), p. 157. See also Eide (1995a), p. 37-40 and Eide (1995b), p. 234.

56 See more closely Banning (2002), p. 219-235 and Günther (1999), p. 141-142.

4.3 Individual Rights and Collective Goods

4.3.1 Theoretical Background

In practice, rights tend to overlap and strengthen or limit each other's reach. Furthermore, they are self-limiting, as well.⁵⁷ The overlapping, self-limiting and conflictual nature of rights makes it obvious that most rights are not absolute in their nature. In addition to being connected to individual rights, fundamental values are connected to societal objectives as collective goods.⁵⁸ The latter do not exist in opposition to individual freedoms. The obligation of states to fulfil their human rights obligations requires the states to take active measures ensuring for each person opportunities permitting them to enjoy the rights that cannot be achieved by personal efforts. This includes, among other things, the creation of enabling environments for the realisation of fundamental rights. Likewise, the obligation to *protect* fundamental rights requires positive preventive measures against private interference at both general level and in particular instances. Taking such positive measures may entail an inherent controversy between the obligation to respect, on one hand, and the obligation to protect or fulfil, on the other hand.⁵⁹

Habermas understands the constitution as a system of rights in which private and public autonomy is internally related and must be simultaneously enhanced. "*Bold constitutional adjudication*" in cases concerning the implementation of democratic procedure and the deliberative form of political opinion- and will-formation are sometimes required. The public sphere is vulnerable to the exclusionary and repressive practices of social power. Its structures must be protected constitutionally to guarantee its pluralistic and spontaneous nature.⁶⁰ Fundamental rights do not merely protect the freedom of individuals, but extend to non-individual expressions of freedom and social spheres of action in society. The individualistic interpretation should be complemented with an institutional interpretation as freedom in society is realised not only in the individual sphere, but also in various communicative spheres. Protection of individual freedom of opinion, for example, would be empty without protection for the communicative processes. The latter need protection against the colonising tendencies of state politics and privately possessed social power alike.⁶¹

57 See *Rawls* (1996), p. 341 (based on the fact that the basic liberties are to be the same for everyone and we can accordingly obtain a greater liberty for ourselves if the same greater liberty is granted to every one. This, in turn, could lead to unworkable and socially divisive extensions reducing the effective scope of the freedom in question).

58 Collective goods can be based on moral principles as pointed out e.g. by *MacCormick* (1978), p. 263-264 (analysing the desirability of a certain policy goal equals to raising a question of principle) and *Tuori* (2002a), p. 182 (recognising that not all policy goals are reducible to moral principles, as they may also be based on particular group interests and compromises between them).

59 See e.g. *Banning* (2002), p. 230, 252 and 274-275. See also *Krause* (1995), p. 156-157.

60 *Habermas* (1992, 1996), p. 279-280, 307-308, 358 and 368.

61 *Graber & Teubner* (1998), p. 64-65 and *Teubner* (2006), p. 342 and also *passim*. See also *Raz* (1986), p. 253 and *Habermas* (1992, 1996), p. 171, 176 and 280.

In application discourse fundamental values may take the form of an individual right relied upon by an individual or they may take the form of a collective good, often having no individual bearer. Sometimes fundamental values cannot be expressed in rights language. Giving individual rights presumptive priority over collective goods would neglect the complex interaction between individual rights and the promotion of structural conditions and enabling environments for the realisation of individual rights.⁶² In conflicts between individual and social autonomy the relative weights of the individual right and the collective good involved may legitimately lead to a situation whereby constitutional rights should be protected against their individual bearer.⁶³ Deciding such cases in favour of the individual right should not be automatic as the individual interest may be weak (in particular in case of a large corporation being the bearer of the individual right in question) and the collective interest strong.⁶⁴ A distinction made by *Drahos* between violating an individual's right and acting inconsistently or interfering indirectly with individuals' fundamental interests may clarify the relationship between individual rights and collective goods.⁶⁵ Violating individual's right involves a direct act or transgression, while acting inconsistently with individuals' fundamental interests involves conduct producing consequences inconsistent with individuals' fundamental interests over time. Such longer-term aggregate effects are typically not well addressed in fundamental rights analysis, thus often leading to shortsighted and mechanical analysis.

Private entities, too, may be able to jeopardise the realisation of collective goods related to fundamental values by colluding or acting individually, or through the aggregate effects of uncoordinated actions by multiple private entities. Courts should actively evaluate such effects, consider them to an extent possible and discuss them as part of their argumentation. Quite often, this would also be in line with the objectives of the applicable laws, as many laws may be seen to have the function of advancing collective goods related to fundamental values.

For example, competition law may be seen as an institutional response to such effects caused by unregulated markets and concentration of market power: the realisation of individual rights of entrepreneurship, freedom of action, property and expression,

62 See e.g. *Singer* (2000), p. 145 (discussing property protection in particular) and *Koskenniemi* (1999), p. 104-105 (arguing that rights are not foundational but depend on collective goods which are evaluated independently of the rights through which we look at them). See also *Habermas* (1992, 1996), p. 433.

63 *Graber & Teubner* (1998), p. 66-67. The authors emphasise that they are not advocating an anti-individualist view but that constitutional rights can be seen as polyvalent in their functions. See also *Lessig* (1999a), p. 209, noting from the US constitutional law perspective that sometimes collective values may restrict individual liberty because of some other value that is weighed more strongly than liberty.

64 The individual right, for example the right to property, may be relied upon by a powerful corporation having only relatively small interests in the decision while the collective good involved may have large societal implications for the realisation of fundamental rights (for example concerning the openness of communications infrastructure or media pluralism, see the subsequent treatment of communicative diversity and the discussion of the *Microsoft*-case).

65 *Drahos* (2002c), p. 216-217.

in particular, would be threatened by the unrestricted concentration of markets, collusion restricting the rights of others, and frequent abuses of market power. Hence, workable markets characterised by pluralism of actors and communicative diversity may be seen to represent the collective good aspect of such rights among the objectives of competition law.⁶⁶ By enacting and enforcing competition laws, states may thus protect and fulfil their fundamental rights obligations. The subsequent discussion also seeks to expose similar connections between intellectual property protection and fundamental rights -related collective goods. Recognising such connections between specific branches of law and fundamental rights protection affects the way we conceive the objectives and interpretive premises of the relevant laws, and how we construct their *allgemeine Lehren*. This seems to be a necessary (and often sufficient) strategy, capable of preventing many serious or large-scale violations of rights of others, or systematic threats to collective goods reflecting fundamental values.

4.3.2 Collective Goods and European Union Law

The European Court of Justice has been described as a court “*steeped in a culture of individual rights*”, usually preferring individualistic interpretations of fundamental rights.⁶⁷ On the other hand, through the development of the principle of proportionality, in particular, it has adopted a balancing approach to rights claims. This facilitates compromise more than the rights-absolutism often associated with US constitutional jurisprudence.⁶⁸ The European Court of Justice has thus consistently upheld the view that fundamental rights are not absolute in nature, but must be weighed against other interests.⁶⁹ In particular, the European Court of Justice has subjected fundamental rights of economic nature to the limitations laid down in accordance with the public interest.⁷⁰ The rights of property ownership, according to the European Court of Justice, are not unfettered prerogatives. They “*must be viewed in the light of the social function of the property and activities protected thereunder*”. In the context of Community law,

66 Similarly Pöyhönen (2000), p. 83-89 and 95-97.

67 Bernard (2003), p. 254.

68 *de Búrca* (1995), p. 52-53. It has been argued that the rights-laden public discourse in the US jurisprudence easily neglects the moral, the long-term, and the social implications. See Glendon (1991), p. 171.

69 With the exception of some rights which admit of no restriction, such as the right to life or the prohibition of torture and inhuman or degrading treatment or punishment. See Case C-112/00, *Schmidberger v Austria* [2003] ECR I-5659, paragraph 80.

70 *Ojanen* (1998), p. 133-134.

such rights may also be subject to limits justified by “the overall objectives pursued by the Community, on condition that the substance of these rights is left untouched”.⁷¹

The public interest limiting the effective scope of fundamental rights has most often related to the fulfilment of the Community’s integration objectives. The European Court of Justice’s case law has been said to place integration objectives, manifested in the four basic freedoms and the related Community policies, on the same line with fundamental rights.⁷² This has led some commentators to ask whether the European Court of Justice has merely used the language of fundamental rights as slogans, while in reality single-sidedly advancing the commercial goals of the common market.⁷³ The overall legal strategy of the Community Courts indeed has been different from the European Court of Human Rights in fundamental rights cases. The former have taken as their analytical premise whether a market freedom (free movement of goods, for example) or other Community objective could be legitimately restricted by a fundamental right, whereas the latter analyses whether a restriction of a fundamental right is justifiable.⁷⁴ Cases like *Schmidberger* have been said to indicate that in a conflict situation the European Court of Justice still considers the economic aims of the Treaty as the most fundamental guiding principles, against which human rights principles must be justified.⁷⁵ This seems to have been the case in particular if the fundamental right in opposition with an individual market right is a collective social

71 Case 4/73, *Nold v Commission* [1974] ECR 491, paragraph 14. See also e.g. Case C-200/96, *Metronome Music v Music Point Hokamp* [1998] ECR I-1953, paragraph 21 (“Consequently, the exercise of the right to property and the freedom to pursue a trade or profession may be restricted, provided that any restrictions in fact correspond to objectives of general interest pursued by the European Community and do not constitute in relation to the aim pursued a disproportionate and intolerable interference, impairing the very substance of the rights guaranteed”).

72 *Ojanen* (1998), p. 354.

73 *de Búrca* (1995), p. 44-54; *Ojanen* (1998), p. 352-354 *Craig & de Búrca* (2003), p. 363-364.

74 See also *Ojanen* (1998), p. 114-115. On the methodology and application of the limitation clauses of the European Convention in the European Court of Human Rights jurisprudence see *J. Viljanen* (2003), *passim*. For a comparison between the European Convention approach, the Community approach and the EU Charter limitation clauses, see *Peers* (2004), *passim* (also pointing out that the European Court of Justice applies the European Convention approach in some instances – particularly in cases concerning property ownership).

75 Case C-112/00, *Schmidberger v Austria* [2003] ECR I-5659, where the Court elaborated whether the protection of the freedom of expression and the freedom of assembly function as legitimate interests for justifying a restriction on the free movement of goods under Articles [now] 4(3) EU and 34 FEU. See also the case analysis of *Brown* (2003), *passim* (pointing out that it should not be for those who are invoking protection for their human rights to justify themselves). See also *Peers* (2004), p. 148-149 and *Ojanen* (2004), p. 134-135 (saying that the case demonstrates that the Habermasian legal paradigm of the EU still seems to be based on the market freedoms and that the juridification of the EU Charter does not necessarily change the situation dramatically). Cf. also with the interpretive approach suggested by Advocate General Colomer in *Überseering*-case (Case C-208/00, *Überseering BV v Nordic Construction Company Baumanagement GmbH* [2002] ECR I-9919, at paragraph 59 of the Opinion), where he described the EU Charter as a common denominator of the essential legal values prevailing in the member states, from which general principles of Community law in turn emanate.

right.⁷⁶ Hence, so far fundamental rights have not typically assumed a paradigmatic role in the reasoning of the Community Courts.⁷⁷

On the other hand, the problem is largely structural, built into the constitutional structure of the European Union, its basic Treaties and the operation of the basic freedoms as Treaty-rights capable of being restricted for legitimate reasons. It should also be noted that the basic freedoms are applied only if there is no secondary Union legislation in place regulating the subject matter in question. In contrast, the presence of secondary Union legislation does not prevent the application of fundamental rights norms.⁷⁸ *Kadi*-judgement from the year 2008 seemed to place fundamental rights at the core of the Union legal system, thus constituting a significant sign of a potential change of emphasis.⁷⁹ Moreover, the *substantive outcomes* in cases dealing with the interaction between internal market freedoms and fundamental rights have not typically been problematic from the perspective of fundamental rights protection.

Hence, to state that fundamental rights and the basic market freedoms operate on the same line in the European Union legal order is now somewhat inaccurate. The free movement and competition rules should obviously be distinguished from fundamental rights. Even though the former have a constitutional status in European Union legal order and may overlap with fundamental individual rights, like in the case of free movement of workers, they have an instrumental value in accomplishing the constitutional objectives of the Union. Hence, unlike fundamental rights, they cannot be characterised as ends in themselves.⁸⁰ The connection of competition law or any other norm complex to the advancement of collective goods or individual fundamental rights does not convert such norm complexes fundamental rights as such.

Articles 2-3 and 6 EU recognise that fundamental rights, not the operation of the internal market, constitute the core aims of the Union. This and the EU Charter's legally binding nature could ultimately lead to a discourse and practice leading to corresponding changes in the European Union's legal paradigm. In the light of the subsequent analysis involving intellectual property and fundamental rights, the primary focus of critique should perhaps shift from the traditional question and thesis of the hegemony of the basic freedoms over fundamental rights and the formal status of fundamental rights in the Union towards substantive constitutional critique over the way the European Court of Justice has so far shielded secondary Union legislation from fundamental rights challenges and has neglected to actively and systematically

76 See *Bernard* (2003), p. 253-254.

77 *Ojanen* (1998), p. 354 and *Alston* (2002), p. 821-823.

78 Regarding the last-mentioned aspects, see also *von Bogdandy* (2008), p. 407-408.

79 Joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351 (at paragraphs 303-304).

80 *Baquero Cruz* (2002), p. 118 and *von Bogdandy* (2008), p. 407-408. However, both the free movement and competition rules may advance collective goods related to fundamental values. For example, competition norms may advance pluralistic and diversified markets and free movement rules may further economic freedom related to trade. However, such connections do not convert the free movement or competition rules fundamental rights in themselves. See also the discussion of competition law in chapter 6, in particular.

integrate a comprehensive set of fundamental rights and collective goods in its interpretations.

The fundamental rights case law of the Community Courts thus recognises that there may be collective goods justifying the restriction of an individual fundamental right. This always requires weighing between the collective good in question and the restriction of the fundamental right in that context. The market integration objectives have most often played the function of a collective good justifying restrictions on fundamental rights. Collective good aspects of fundamental rights, too, have functioned as restrictions of individual rights in the case law of the Community Courts.

The *Familiapress*-case can be mentioned as an example.⁸¹ It demonstrates how the subsystem of the economy may threaten a collective good related to a fundamental value, namely media plurality. It also shows how an individual right related to freedom of speech can be in conflict with the collective element of the same right, and how the latter may legitimately deserve protection from the former. A company's freedom of expression could thus be in conflict with the related collective good of plurality in mass communication.⁸² Although the Court's core analytical premise was the free movement doctrine, and even though the weighing of the individual and collective aspects of freedom of speech was finally left for the national court in the preliminary ruling procedure, the case could function as one precedent in the process considered here inevitable, and now also enabled by the EU Charter and the changes in the basic Treaties, of substituting the market integration objective with collective goods related to fundamental rights as counterweights to individual rights and as objectives affecting the interpretation and application of other laws, such as intellectual property and competition laws.

4.3.3 Concretisation: Communicative Diversity and Commons

Protection of Communicative Diversity

I will concretise the foregoing by treating communicative diversity and commons, or the public domain, as examples of collective goods related to fundamental rights. The discussion will continue subsequently in the conclusions of this chapter as well as in the subsequent chapters, where intellectual property and competition laws will be more fully connected to collective goods.

It has been argued that one of the shortcomings of the classical theory on freedom of speech was its lack of consideration of the structures and conditions shaping all public spheres where communication takes place. The regulation of the structures of communication has often more impact on communication than direct measures with

81 Case C-368/95, *Vereinigte Familiapress Zeitungsverlags- und vertriebs GmbH v Heinrich Bauer Verlag* [1997] ECR, I-3689.

82 See also the analysis of *Holmes* (1990), p. 46-47 (regarding the US and the interpretations of the First Amendment).

regard to specific contents or expression.⁸³ In particular, the classical theory failed to address the self-paralysing nature of communications markets based on market criteria and the myriad ways in which communication markets restrict freedom of communication by generating barriers to entry, monopoly and restrictions upon choice, as well as by transforming information from a public good to a privately appropriable commodity. *Keane* has argued that those who control the market sphere of producing and distributing information decide, prior to publication, what products (books, newspapers, computer programmes etc.) will be mass-produced, thus gaining entry into the marketplace of opinions.⁸⁴

As has been implied before, rights related to economic freedom are dependent on a collective good, namely workable market. Workable markets characterised by a diversity of types of actors need constitutional protection against abuses of power in order to enable the exercise of fundamental rights in the economic sphere.⁸⁵ The same applies to freedom of expression in relation to the character of the society as an open society and freedom of the media, in particular. *Raz* argues that even the primary role of constitutional protection of freedom of speech could be connected to a collective good, namely to the protection of the democratic character of the society.⁸⁶ As discussed earlier, *Habermas* connects the whole legitimacy of law to undistorted forms of public communication and hence also to the characteristics of the communicative infrastructure of the private sphere.⁸⁷ Protecting pluralistic and inclusive structures of communication thus assumes an important function in discursive democracy. The principle of deliberative inclusion does not allow confining stringent protection to political speech only.⁸⁸ Protection cannot be restricted to communication structures enabling political discussion in a narrow sense, but should extend to all communication and information structures enabling informal communication processes of the civil

83 *Kortteinen, Myntti & Hannikainen* (1999), p. 395-396 and *Keane* (1991), p. 37-52 (arguing that the simplistic notion of the freedom of press should be replaced by a more complex and differentiated notion of liberty of communication). See also more generally *Barendt* (2005), p. 100-108 (what type of freedom is protected by freedom of speech) and 419-424 (on various perspectives on press freedom).

84 *Keane* (1991), p. 45-46, 68-69 and 88-90. See also *Holmes* (1990), *passim* and *Barendt* (1993), p. 122 (pointing out that competition for markets in the media sector often leads to concentration).

85 See e.g. *Petersmann* (1999), p. 148 and *Pöyhönen* (2000), p. 82-84 (also noting that the idea of constitutional protection of workable markets is open to different interpretations).

86 *Raz* (1986), p. 253-255 and 258. See also *Holmes* (1990), p. 52. *Barendt* (2005), p. 6-23 treats the four traditional arguments for protecting freedom of speech. Arguments relate to 1) discovering truth; 2) self-fulfilment; 3) citizen participation in democracy; and 4) suspicion of government. There is no need to restrict the protection interest behind freedom of speech to merely (one of) these arguments.

87 *Habermas* (1992, 1996), p. 408-409, in particular. However, *Habermas* recognises that not all basic rights are functionalised for the democratic process, as negative liberties have an intrinsic value as well. See *Habermas* (1992, 1996), p. 418. See also *Clapham* (2006), p. 533-559.

88 *J. Cohen* (1996), p. 104. See also *Balkin* (2004), *passim*.

society.⁸⁹ Freedom of speech values related to democracy (as understood in discursive democracy) could thus speak in favour of measures that could restrict private property and private relations.⁹⁰

In the current context of communication characterised by the convergence of media through digitisation and the Internet, as well as mergers and continuing concentration of media enterprises with other media enterprises and the providers of communications technologies, the guarantee of pure formal liberty to speak relies largely on a technological and regulatory infrastructure. The power over distribution channels and technologies may confer power over content reaching the users over the channels and technologies.⁹¹ Should the user have no choice of distribution channels and technologies, she is under the mercy of the owner of the distribution channel or technology. It is possible to agree with Balkin that we should shift our focus from free speech rights narrowly construed to *free speech values*.⁹²

Hence, the free press clauses and other provisions guaranteeing media freedom should be interpreted broadly to cover all communications media – not only the established press and broadcasting media.⁹³ In the Internet era, media should not be equated with traditional media companies, which act as intermediaries filtering and selecting content for particular media outlets and distribution channels. *Communicative diversity*, more broadly conceived, should be facilitated as one collective good aspect of freedom of expression. As the core information processing platforms now constitute of computer programs characterised by the presence of strong network effects, there are particular reasons for a positive obligation on governments and courts to promote communicative diversity in this environment. There are no less reasons to worry about excessive dependency of media companies and users on a dominant software platform than there is to worry about dependency on a single content provider.

The obligation to protect communicative diversity and the plurality of technological structures of communication may be connected to case law interpreting the European Convention. *Twomey* asserts that the European Court of Human Rights has not

89 In any case, as *Castells* points out, the Internet connotes the integration of all messages in a common cognitive pattern: different communication modes become increasingly less distinguishable from each others. Interactive educational programs have increasingly started to look like video games and news broadcasts have become similar to audiovisual shows, and so forth. See *Castells* (2000), p. 402. This implies that from the perspective of freedom of speech it is increasingly problematic to distinguish commercial speech from other speech, or give decisive meaning to such a distinction. The marketplace has become largely coexistent with the structures of communication and the structures of communication have become largely under private control. The regulation of freedom of speech thus increasingly takes place in this sphere through regulation affecting private control (and ownership) of the communication structures.

90 *Clapham* (2006), p. 533. As should be obvious from the discussion in chapter 2, the point is even stronger from the perspective of democratic culture or Mouffe's pluralist theory on democracy.

91 See also *Council of Europe, Steering Committee on the Mass Media* (2000), at paragraph 32 and *Chen* (2005), p. 1361 and also *passim*.

92 *Balkin* (2004), p. 51-52.

93 *Barendt* (2005), p. 424; *Rowbottom* (2006), p. 498; *Cooper* (2003), p. 194 and *Rotenberg* (2004), p. 35-37.

protected adequately the multiplicity of sources necessary for the right to receive information.⁹⁴ However, for example in the *Autronic*-case the European Court of Human Rights interpreted Article 10 of the Convention (freedom of speech) so that the Article “applies not only to the content of the information but also to the means of transmission or reception since any restriction imposed on the means necessarily interferes with the right to receive and impart information”.⁹⁵ The case implies that the Convention also protects the means of transmission or reception, which have a collective good-character. Where the information is otherwise available, the state may not obstruct access to it.⁹⁶ Article 10 of the Convention has been interpreted to include the freedom to impart information through all technical means of communication, as well.⁹⁷ This is also recognised in the protection of the freedom and pluralism of the media, as protected in Article 11(2) of the EU Charter. In addition to protecting the collective goods related to the transmission or reception from restrictions, states have a *positive* obligation to create enabling environments facilitating freedom of information and freedom of communication.⁹⁸

Despite the European Union’s dismal record of protecting media or communicative diversity through concrete actions,⁹⁹ the capacity to protect these interests in Europe lies predominantly on the Union legislature, administration and judicature. The Union’s lack of efforts in this field may only partially be explained by its lack of general competence to legislate in the area of fundamental rights protection. Concerns related to media plurality and communicative diversity could be integrated in other policies and legislation having its legal basis in the basic Union Treaties. In addition to the member states, the Union organs (including the Community Courts) thus also have an obligation to protect media plurality and communicative diversity in Europe within the limits of their respective competences.¹⁰⁰

I submit that such provisions and case law interpreting the European Convention and other relevant human rights instruments should be utilised to construct a positive obligation on the European Union to protect communicative diversity and the plurality of the technological structures underlying communications. As will be

94 Twomey (1995), p. 272 (basing his view on *De Geillustreerde* -case of the Human Rights Commission). See also Barendt (2005), p. 257 (also adopting a critical stance to the case).

95 *Autronic AG v Switzerland*, (Appl. no. 12726/87), 22 May 1990, Series A, vol. 178, at paragraph 47.

96 The European Court of Human Rights referred to technical and legal developments in the field of broadcasting by satellite, implying dynamic interpretation. See also Clayton & Tomlinson (2001), p. 167, who say that electronic information systems used for the expression of ideas or conveyance of information are probably protected by Article 10 of the European Convention.

97 See more closely Bullinger (1985), p. 102.

98 See also Holmes (1990), p. 47 and 53 (regarding the First Amendment of the US Constitution) and Barendt (2005), p. 65-66 and 104-108 (discussing the extent to which freedom of speech is and ought to be more than a narrow liberty right). See also Article 15(2)-(3) of the International Covenant.

99 See e.g. Hitchens (1994), *passim* and e.g. the *Green Paper on Pluralism and Media Concentration* (1992), which largely places the obligation to protect media plurality on the member states of the Union and identifies the predominant reason for Community action to advance media plurality to be the protection of the internal market.

100 See also Hoikka (2009), p. 98 and 256-259.

argued subsequently in more detail, this obligation could be pursued both in the interpretations of intellectual property and competition laws, when the context of application so requires. In the absence of a general competence to legislate based on fundamental rights protection, such interpretive or systematisation effects of fundamental rights in European Union law must be emphasised, as will be argued in more detail subsequently. Certainly, competition law is not perfect, and alone sufficient, instrument to secure communicative diversity. Typically complex concerns related to cultural and symbolic power may escape its traditional (market definition) methodologies and standard orientation. With regard to merger control, in particular, concentrations reducing pluralism may not always be regarded as impeding competition.¹⁰¹ Specialised regulation for the communications, media and broadcasting sectors is also required for the protection of communicative diversity.¹⁰²

However, competition law already partially overlaps with the positive obligation of governments to protect communicative diversity, when conceived as a flexible and generally applicable norm complex aimed at controlling harmful and excessive market power for the furtherance of workable and diversified competition, and hence not only aimed at maintenance of price competition. Price competition and economic efficiency should be complemented with other existing objectives of competition law overlapping with communicative diversity when the sector of application is about information and discourse. In such instances, interpretive flexibility in market definition and other competition law analysis should be utilised to favour an outcome being consistent with communicative diversity. This is so especially when communications, media and broadcasting laws do not apply to the situation at hand or do not sufficiently secure communicative diversity. In any event, such laws do not apply generally, thus precluding a consistent policy. Moreover, specialised communication regulation on Community level has increased rather than decreased the role of competition law in controlling market power in the communications sector.

Despite its practical problems in securing pluralism, merger control in the media sector demonstrates that the objectives of competition law are not always exhausted to the subsystem of the economy.¹⁰³ The state has a positive duty to take steps to avoid

101 See e.g. *Hitchens* (1994), p. 593; *Michalis* (1999), p. 163; *Wheeler* (2004), p. 367 and *van Cuilenburg* (2005), p. 306-307, all suspecting whether the economically defined relevant media markets coincide with the media plurality and the marketplace of ideas relevant to democracy. See also *Council of Europe Directorate General of Human Rights, Media Division* (2002), p. 4.

102 As emphasised by *Rotenberg* (2004), p. 30-31. See also *Council of Europe, Steering Committee on the Mass Media* (2000), at paragraph 65 (stating that the maintenance of plurality and diversity in the digital environment requires an array of different measures).

103 For the analysis of the need to consider communicative diversity in media mergers see also *Stucke & Grunes* (2001) and *Barton* (2004), both *passim* (discussing US antitrust law); *Llorens-Maluquer* (1998), and *Camesasca* (2000), both *passim* (discussing European responses to bottlenecks in digital pay-tv); *Hitchens* (1994), *passim* (discussing more broadly the control of media ownership policies in Europe) as well as *Ladueur* (2000) and *Idot* (2006), both *passim* and *Barendt* (2005), p. 429-434.

the threats arising from media monopolies to the value of pluralism.¹⁰⁴ However, the protection of communicative diversity should not be restricted to merger control, as also measures of already dominant entities may jeopardise aspects of communicative diversity and lead to the monopolisation of further markets through leverage or lead to additional barriers of entry to markets important for communicative diversity, like the *Microsoft*-case demonstrates.¹⁰⁵ The same is true for many collusive practices of owners of distribution technologies and providers of content on the communications sector.¹⁰⁶ What should be decisive are the effects of the (intended) measures on communicative diversity, not the classification of private action under diverse provisions of competition law. It has been emphasised that safeguarding communicative pluralism in the digital environment relies increasingly on access to digital platforms and technical interoperability. These have been identified as the central issues affecting communicative diversity in the digital environments.¹⁰⁷ It is thus feasible that concerns related to communicative diversity often emerge in contexts involving intellectual property law and its interaction with competition law, and the abuse of a dominant position, in particular.

The discussion of the regulative function of technological architecture in chapter 2 emphasised that the effective realisation of a right of an individual depends not only on what the law grants to her, but on other modalities as well. Technological architecture may be characterised as a collective good. It forms social structures and coerces physical compliance typically without any possibility for non-application, interpretation, adaptation or reflexivity characterising the application of traditional laws. At the same time, technological architecture as a collective good may affect the realisation of individual rights more intensively and on a larger scale than measures typically taken by individual nation states. The privatisation and globalisation of the communications infrastructure implies that private enterprises are increasingly in the position to regulate aspects of the technological environments constituting the core collective goods for the realisation of multiple individual rights. There are thus particular reasons to subject such power and form of regulation under constitutional review, as will be developed further subsequently. To an extent the measures in question also constitute restrictions of competition such review largely becomes the function of competition law. Communicative diversity as a collective good could thus

104 See case *Informationsverein Lentia v Austria* (Appl. no. 13914/88; 15041/89; 15717/89; 15779/89; 17207/90) 24 November 1993, Series A, vol. 276 from the European Court of Human Rights. Special competition laws are not only possible, but required by, this conception of press and mass media freedom. See *Barendt* (2005), p. 433 and *Hoikka* (2009), p. 98.

105 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, Commission's Decision Case COMP/C-3/37, 792 *Microsoft*. The case will be discussed more fully in chapter 7, in particular.

106 See e.g. *Barton* (2004), *passim* (analysing the contractual practices between content providers and owners of distribution channels, which have the potential to inhibit communicative diversity). See also *Hoikka* (2009), at p. 261-268, for an analysis of the Union's obligation to protect pluralism through competition law.

107 *Council of Europe Directorate General of Human Rights, Media Division* (2002), p. 16.

increasingly become something to be considered in the application of competition law, when the context so requires.

Hence, depending on the context, the application of competition law may assume objectives related to the safeguarding of democratic ideals in the form of maintaining media plurality, or more broadly, communicative diversity necessary in a democratic society. That such considerations should be integrated in the application of competition law is not new, as the example of the merger control in many countries and individual cases from other areas of competition law demonstrate. For example, in its *Associated Press* –decision the US Supreme Court stated the following:¹⁰⁸

“The First Amendment, far from providing an argument against application of the Sherman Act, here provides powerful reasons to the contrary. That Amendment rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public, that a free press is a condition of a free society”.

Promoting communicative diversity and openness of core communication networks and technologies through competition law would merely imply its contextual application and consideration of the effects of its interpretations on a broader set of values embedded in norms applicable in that context. Economic welfare should be complemented with considerations related to societal welfare. Competition law should thus strengthen its democratic function and integrate such complementary objectives in appropriate cases. Such an interpretation would broaden and deepen the existing connection of competition law with the non-individual expressions of freedom and social spheres of action in society. Moreover, as will be argued subsequently, the openness of the core communication networks, information platforms, as well as the freedom of information in general constitute central pre-requisites related to workable competition and freedom of market values in the information and network -based economy.¹⁰⁹ Protecting such values is thus often in line with the traditional interests and orientation of competition law to secure workable and diversified competition also in the longer-term perspective.

Communicative diversity should also be integrated in the application of intellectual property law, which increasingly regulates communication and discourse by enabling the control of both communications technologies and existing cultural resources and information. As discussed above, competition law has its limitations in promoting communicative diversity. Moreover, by directly connecting intellectual property protection to the collective good of communicative diversity, many of the problematic situations could be avoided in beforehand, thus reducing recourse to the burdensome and expensive competition law proceedings, which provide a relief capable of promoting communicative diversity in some situations only.

108 *Associated Press et al. v United States*, 326 U.S. 1 (1945), at paragraph 20. The case will be treated in chapter 7.

109 See more closely the discussion in sub-chapter 6.3.4 subsequently.

This is also in line with seeing communicative diversity in the Internet era as concerning not only media, communications and broadcasting enterprises, but also directly private individuals and civil society communities. As *Coombe* has noted already some time ago, cultural commodification through intellectual property law assumes at least an equally important role in the analysis of the pre-requisites for a democratic dialogue as material limitations on access to dialogue caused by concentration of capital and mass media monopolies.¹¹⁰ The Internet-mediated communications and social production processes imply increasing diversity of communications and expression. Intellectual property laws are one of the primary instruments with which these practices may be either inhibited or facilitated.

Determining the boundaries of patentability, patent scope and exceptions to patent protection greatly influences the number and types of operators capable of developing the technologies underlying communications and information processing, as will be discussed in sub-chapter 5.4.3. Deciding these questions also affects the diversity of technologies, their interoperability and thus the dependency of users on the providers of technologies and possibilities of the latter to determine the (types of) content accessible for the users. These also influence entrepreneurial diversity and barriers of entry, and hence the penetrability of the economy towards the civil society.

Copyright law now also regulates technologies underlying communications, as will be discussed in the subsequent chapter in more detail. It thus participates in the definition of the barriers to entry to the communications technologies markets. However, its more traditional capacity to directly regulate private individuals' use of existing cultural resources and information implies that copyright law also concretely defines the extent to which individuals and communities of the civil society may emerge as producers, publishers and activists capable of creating and interacting without a web of copyright licences, be they commercial or perhaps promisingly Creative Commons –type.¹¹¹ Such licensing inhibits their freedom of action and censors uses otherwise available for them. Copyright law thus directly regulates communicative diversity by defining the extent to which individuals and civil society groups, among others, may express, create, produce and critically reflect based on

110 *Coombe* (1991), p. 1866, 1879 and also *passim*.

111 On one hand, Creative Commons and similar licenses do enable more ethical licensing practices by reserving only some rights for the author. They also importantly place the control over cultural expressions to the forefront and hence politicise copyright. On the other hand, they may further privatise and place under contractual relationships the utilisation of cultural resources. Creative Commons licensing practices could also provide an argument in favour of strong protection, which can be contracted away through Creative Commons and similar licenses whenever wanted. Yet, the core cultural icons and expressions, forming the base for counter-hegemonic and critical expressions, are likely to remain outside such enabling licensing practices. Finally, different types and generations of licenses create a hardly navigable web of contractual obligations in case of multimedia, documentaries and similar works requiring the utilisation of different types of media. Like *Karhu* (2007), at p. 97, has noted, it is somewhat paradoxical that the licensing schemas developed in the open source and open access regimes greatly remind the terms developed for commercial licensing, intended to secure private ownership and control over the use of copyrighted works.

existing cultural and informational resources. Protecting communicative diversity should in the Internet era also extend to the collective interest of private individuals and civil society groups to participate in the discourses and meaning-making processes enabled by the Internet and other digital media. Integrating communicative diversity under copyright law would constitute a central element of such endeavours and the states' respective obligation.

Protection of the Public Domain or Commons

Protection of the *public domain* or *commons* provides a related example regarding the relationship between individual rights and collective goods.¹¹² The commons or the public domain comprises of things all can use but nobody can exclude from or dispose of. The idea of commons or the public domain provides an important counterweight to the strong rights rhetoric and the absence of the social dimension behind one standard justification of private property based on occupation.¹¹³ It is trivial that creation and innovation always builds on existing culture, ideas, information, theories, symbols and practices. Intellectual creation and hence also intellectual property is ultimately dependent on the freedom necessary for scientific and creative activity as a collective good.¹¹⁴ The latter furthers the same ends the intellectual property institution is supposed to further and functions as an enabling environment for intellectual creation.

Too strong intellectual property rights may act as restraints on this freedom, for example in the form of patent thickets, patenting of research instruments, too extensive copyright or patent protection, and so forth. The current strong rights -ethos adversely affects the collective good upon which intellectual property is dependent and thus ultimately disregards its basic societal legitimation. The collective good aspect is neglected in cultural and innovation policy, as establishing new exclusive rights and strengthening existing ones is the standard remedy intended to enhance innovation and creativity. The rhetorical focus on originality and one-sided economic incentive –argumentation undervalue the public domain, leading to its unprecedented privatisation in the relevant policies and case law. Sensible intellectual property policy thus inevitably comprises abstentions from protection, reductions of the scope of protection and wide construction of exceptions to secure a proportionate relation of the protection interests with such collective goods.

Freedom necessary for scientific and creative activity is protected under Article 27 of the Universal Declaration and Article 15 of the International Covenant as part of

112 See generally about the public domain in the context of intellectual property e.g. *Boyle* (1996), p. 25-34 and (1997), *passim*; *Lessig* (1999a), p. 26-99 and *Benkler* (1998), (1999) and (2001), (2003a) and (2003b), all *passim*.

113 See *Karhu* (2007), p. 102-103.

114 *T. Mylly* (2005), p. 213.

cultural rights.¹¹⁵ The Articles importantly connect the protection interests inherent to intellectual property rights to the protection of these aims having the nature of a collective good. Protecting the freedom necessary for scientific and creative activity also intertwines with the collective good side of freedom of expression. Restricting the scope of freely usable and available information, ideas, expressions and symbols inevitably affects the freedom of expression values negatively, as transforming these from public goods into privately appropriable commodities enables private censorship. As implied before, copyright, in particular, has this effect through its restrictive effects extending to the relations of private individuals. The mere act of transforming assets into privately appropriable commodities creates self-restriction and self-censorship. This is one reason why we must consider the effects of intellectual property laws on the collective good aspect of freedom of speech. Yet, what has been stated in the context of US law applies to Europe as well: the failure to protect individuals from excessive commodification of their information and cultural environment introduces a moral inversion in freedom of speech law.¹¹⁶

If one construes the primary functions of intellectual property rights to relate to the promotion of innovative and creative activity, facilitating the freedom necessary for scientific, innovative and creative activity as a collective good should be an objective on a par with creating the necessary economic incentives for commercial creation and invention. From this perspective, among other things, liability rules could often be sufficient. Similarly, many of the exceptions to exclusive rights should be seen as necessary inherent limitations rather than exceptions to be interpreted narrowly. Moreover, the exceptions often protect directly – not only through collective goods – freedom of speech, economic, social and cultural rights and privacy. As will be argued in more detail in sub-chapter 5.6.3, such protection interests should not be accorded *prima facie* weaker protection than the interest to protect the rights of the intellectual property owner.

For intellectual property to function as intended there must be workable competition and a threat of competing exclusivities, as already said.¹¹⁷ Hence, also the core informational resources needed for workable competition on the markets should be indiscriminatorily available for all market participants in order for both the markets and the intellectual property institution to fulfil their own functions.¹¹⁸ Such resources may develop into essential inputs needed for workable competition in the course of time through standardisation, network effects or other similar

115 See also e.g. *Eide* (1995b), p. 236 and *Nelson* (2005), *passim*. Article 15(3) of the International Covenant provides the following: “*The States Parties to the present Covenant undertake to respect the freedom indispensable for scientific research and creative activity*”.

116 *Benkler* (2003b), p. 223. See also *Benkler* (1999), *passim* for an analysis of the First Amendments’ relation to the protection of the public domain.

117 See more closely the text around footnote 63 in chapter 1.

118 See also *Karhu* (2007), p. 105-106. See the treatment of the essential facilities doctrine in chapter 7.

developments.¹¹⁹ The (competition law) treatment of such inputs should react to such developments and consider the effects of access to the input for diverse rights, interests and values present in the circumstances. This implies that the public domain and commons are not absolute and static notions, but could be perceived as dynamic and flexible arguments on a sliding scale, functioning as necessary counter-weights to the ideas and trends of absolutist intellectual property ownership. Public domain should be seen as an inherent part of property, as already *Locke* realised.¹²⁰

Intellectual property system is an institutional structure setting, for its part, ground rules for human interaction and economic relations. It must ensure that the interdependent and conflictual rights and collective goods needed for their realisation coexist. In this sense intellectual property, in addition to constituting individual rights, participates in the construction of a *regime* having deep and lasting societal connotations by creating systemic patterns of social and economic interaction. This regime constitutes of not only intellectual property and related laws *per se* but of the interaction between the different modalities introduced in chapter two: social norms, technologies and markets contribute in the construction of this regime together with intellectual property laws, competition laws and contract laws, among others. In the present-day conditions of strong intellectual property rights and rigid doctrines typically favouring the proprietor,¹²¹ also competition law may have to assume the role of realising some of the inherent limitations of intellectual property rights based on the values related to commons or the public domain.

The following two examples reflect the difficulty of integrating in judicial decision-making the effects on the public domain. This is because such effects are typically the result of longer-term aggregate developments, whereas the rights of the proprietors emerge in individual instances. Considered from the perspective of each individual instance separately it may seem that entities having invested in inventions related to biological resources may legitimately base their protection claims and subsequent actions on the rights granted in patent law and ultimately also on the property ownership as a fundamental right. Restricting the patent rights by government in individual instances could thus be seen as a direct transgression of their fundamental rights. Yet, when analysed from the perspective of longer-term cumulative impact of the actions of such inventors and patent owners the situation may seem rather different. The longer-term aggregate effects of realising the individual rights may result in serious inconsistencies and interferences in the fundamental interests of a considerably larger group of individuals in the form of large-scale commodification of various living materials and restrictions in access to existing medical treatment, or insurmountable barriers to market entry, for example. The aggregate longer-term

119 These phenomena will be discussed in more detail in chapters 5 and 7.

120 *Locke* (1690, 1965), p. 329 (“For this Labour being the unquestionable Property of the Labourer, no Man but he can have a right to what that is once joyned to, at last where there is enough, and as good left in common for others”). To be more specific, the quotation seems to refer to the self-limiting nature of property rights.

121 See more closely the analysis in the next main chapter.

effects not only affect the fundamental interests of a larger group of individuals but also affect the structuration of the society in a relatively enduring manner, as also discussed previously in sub-chapter 1.2.2.

Similarly, considered individually, copyright holders may present reasonable claims based on property ownership and contractual freedom that their copyright contracts used for the licensing of copyrighted works in the Internet should be enforced even if they restricted some uses permitted in copyright legislation or led to *de facto* protection of non-copyrightable information. However, seen from the longer-term cumulative impact of such contractual restrictions on the public domain, the overall picture may seem quite different. Enforcing such contracts in conditions where an increasing amount of information is only accessible after accepting standard terms not subject to negotiation could lead to large-scale privatisation of non-copyrightable information and impairment of the values inherent in the exceptions to copyright protection. Deciding the clash between freedom of contract and the values underlying the public domain in one direction or another entails profound implications for the structuration of the information society. Recent Opinion of Advocate General Maduro in *Google v Louis Vuitton Malletier* promisingly demonstrates that European trademark law, or more generally intellectual property law, may be interpreted so that the public domain as a necessary collective good aspect of protection becomes adequately considered.¹²²

One reason for stressing the role of intellectual property and competition law doctrine in internalising concerns related to the public domain is that from the perspective of mainstream fundamental rights doctrine protecting the commons or the public domain directly seems difficult. Although common property rights have been protected under the European Convention, there is no case law protecting the general public right of access to some (tangible or intangible) assets or benefits.¹²³ The public domain could hardly be construed as “possessions” under the European Convention, although the rights of exclusion and disposal, forming the traditional core rights characteristic to property, are not necessarily required for protection under the right to property.¹²⁴ Although the right to (potential) use of the assets is present in such circumstances, it would require a change of approach to protect such

122 Joined Cases C-236/08, C-237/08 and C-238/08, *Google France, Google Inc. v Louis Vuitton Malletier etc.*, opinion of Advocate General delivered on 22 September 2009, not yet reported (at paragraphs 102-111).

123 See more closely the subsequent treatment of right to property under the European Convention. Exclusive hunting and fishing rights of Saami villages have been interpreted to constitute possessions under Article 1, Protocol no. 1 of the European Convention, which protects the right to property. See *Könkämä and 38 other villages v Sweden*, Application No. 27033/95 (the rights could only be exercised by a member of a Saami village. The Commission considered that the applicant villages could claim to be victims of the violations alleged under the Convention and Article 1, Protocol No. 1. However, the case was ultimately inadmissible). See also *Banning* (2002), p. 84 and 296-322.

124 See *Banning* (2002), p. 16-21. See also the more extensive treatment of right to property subsequently.

non-exclusive and non-transferable general use-rights against commodification of the assets to the exclusion of others.

In the current case law, property ownership is thus construed to entail either an individual owner or a well-defined number of individuals as owning an individual, but undivided share in a property.¹²⁵ However, this does not necessarily mean that individuals' use of the public domain would be precluded from fundamental rights protection under the current doctrine in all circumstances. Specific dependency of some individuals on particular public domain resources could be protected against their commodification. This is demonstrated, for example, in the specific arrangements regarding the protection of individuals having invested in the use of public domain materials that have become retroactively protected by copyright.¹²⁶ Yet, this provides very limited protection. The *potential* use of public domain resources is not protected under property ownership, but rather as a collective good related to the protection of social and cultural rights and freedom of expression.

4.4 Private Power and Fundamental Rights

4.4.1 Introduction

The foregoing already implies that fundamental rights law is not only about protecting individual rights against measures taken by states. Typically, the realisation of individual rights presupposes the existence of a collective good that requires positive action on the part of the government and courts. Moreover, the individual right may conflict with the collective good, sometimes connoting that the collective good should be emphasised at the expense of the individual right. This already implies the constant presence of fundamental rights in the private sphere, as another individual may represent the interests related to the collective good in question. Nevertheless, the standard idea of fundamental rights protection is the protection of the individual's individual rights against the intrusive power of the state. The obligation corresponding to a person's right is generally perceived to lie on the government only.¹²⁷ It is thus necessary to discuss the effects of fundamental rights norms in the relations among individuals, firms and other private entities in more detail.

It is difficult to separate the private from the public sphere in the human rights field. When a distinction is made, it appears that an increasing number of threats to fundamental rights originate in the private sphere. The new intensity of private power over rights of others is due to privatisation, globalisation, concentration of

125 See the conclusions of *Banning* (2002), at p. 297-298, which seem to exclude general public right of access from the concept of common property protectable under the European Convention.

126 See *Länsineva* (2002), p. 195-196 (referring to the practice of the Finnish Constitutional Law Committee).

127 See e.g. *Clapham* (1993a), p. 165 (calling this the "standard approach"); *G. Anderson* (2005), p. 33; *Habermas* (1992, 1996), p. 88-89 and 271 and *Günther* (1999), p. 141.

markets, technological developments characteristic to the information society, and functional differentiation and private regulation practices reflecting legal pluralism, among other reasons.¹²⁸ In complex societies that are horizontally differentiated into networks of subsystems, the protection afforded by fundamental rights should extend to social power of large organisations in general, not just to the administrative power of the state.¹²⁹ An increasing number of legal scholars see restricting the effects of fundamental rights to the relationship between the state and the individual as increasingly inadequate.¹³⁰ Globally operating corporations, in particular, should according to many be responsible for fundamental rights violations under international law in some circumstances. They are increasingly powerful actors that some states lack the resources and some states the will to control, thus making the sole reliance on state duties inadequate. Such corporations may exercise major power over individuals and directly control their well-being.¹³¹ In distinction to governments, enterprises also have fundamental rights that must be balanced against the rights of human beings or collective goods affected by the actions or omissions of the enterprise in question.¹³²

Rights should not be conceived as atomistic, but *intersubjective* in their character. As elements of the legal order, they are based on mutual recognition and emerge co-originally with the law positively creating them. The intersubjectivity of rights connotes that it is possible to construct all private relations, and hence all private law relations, from the perspective of fundamental rights.¹³³ Taking one right as far as it can go brings it likely into conflict with other rights and restricts the dialogue between rights, necessary in pluralistic societies.¹³⁴ Hence, individuals must accept that the protection of their own rights requires that they honour the rights of others. They must accept others' rights as limitations of their own rights and interest positions

128 See, from different perspectives *Ratner* (2001), p. 446; *Clapham* (1993a), p. 201-202 and (2006), p. 3-23; *Teubner* (2006), *passim*; *Oliver & Fedtke* (2007), p. 20; *G. Anderson* (2005), p. 7-35 and also *passim*.

129 *Habermas* (1992, 1996), p. 247.

130 See e.g. *G. Anderson* (2005), p. 4 (talking of a paradigmatic crisis affecting traditional approaches to constitutionalism) and *Clapham* (2006), p. 7 ("Clearly, the traditional understanding of the human rights dynamic – as protecting individuals from an overarching state – is inadequate").

131 *Ratner* (2001), *passim*, summing up the central conclusions at p. 524-525: the two cases of duties upon the corporation would result from a) "complicity-based duties that the corporation does not involve itself in illegal conduct by the government" and b) "duties of the corporation not to infringe directly on the human rights of those with whom it enjoys certain ties--". See also *Clapham* (1993a), p. 137; *Teubner* (2006), *passim* and *Dine* (2001), *passim* and *Clapham* (2006), p. 195-270.

132 See *Ratner* (2001), p. 508-515. As *Clapham* (2006), at p. 12, points out, privatisation may shield fundamental rights violations from fundamental rights scrutiny, as the non-state actors may have countervailing human rights claims that the old state actor could not make (for example based on property ownership). Furthermore, privatisation may also decrease the *level* of human rights accountability for the sector concerned, as the proportionality of the private measures is typically evaluated more leniently than equivalent state measures.

133 *Habermas* (1992, 1996), p. 88 understands rights at a conceptual level as presupposing "collaboration among subjects who recognize one another, in their reciprocally related rights and duties, as free and equal citizens". *Pöyhönen* (2000), at p. 69, sees the intersubjectivity of rights as the basis for their horizontality.

134 *Glendon* (1991), p. 44-45.

based on fundamental values. The intersubjectivity of fundamental rights and their complementary function as objective principles or protected interests thus leads to accepting their relevance with regard to the whole legal system, connoting effects in relations between private actors, as the rights and protected interests and values may be harmed by both state and private action.¹³⁵

However, in judicial practices fundamental rights have had significance in such relations between private entities through the government's obligation to protect fundamental rights actively. States cannot argue that the activities of private actors are outside the scope of international human rights treaties or that the states would not have to take positive action in order to restrict breaches by private actors.¹³⁶ An obligation to protect fundamental rights, in addition to an obligation to respect them, requires states to take preventive and institutional measures necessary to prevent other individuals or groups from infringing others' recognised fundamental rights.¹³⁷ In line with these considerations, many of the international human rights treaties have been interpreted so that they contain provisions extending the obligation to respect human rights to individuals.¹³⁸

In addition, fundamental rights have relevance in the relations between private entities in accordance with the constitutional principles of many European states. This may be based on the idea that civil courts, when interpreting private law, are public authorities bound by constitutional rights or simply on the idea that fundamental rights have structural effects over the whole legal system.¹³⁹ Fundamental rights may have limited horizontal effects in European Union law as well, as will be discussed subsequently in more detail. However, all these obligations, intended to realise compliance with fundamental rights of others, have primarily derived from state obligations.¹⁴⁰ Also in instances where asymmetrical power positions exist in the private sphere, the state is typically seen as the ultimate perpetrator of rights violations.¹⁴¹ Hence, the bottom line is: *fundamental rights enter the picture because the state permitted the breach of a right to occur.*¹⁴²

The effects of human rights on non-state actors will be considered below from the perspective of the European Convention and European Union law. After this,

135 See also *Gerstenberg* (2004b), p. 770 and *Kumm* (2006), *passim*.

136 See e.g. *Clapham* (1993b), p. 94, 100, 124-133 and 135-137.

137 See *Banning* (2002), p. 226 and as regards the right to property at p. 227-230.

138 See in more detail *Clapham* (1993b), p. 96-104 and also *passim*.

139 For comparative perspectives see the contributions in *Oliver & Fedtke* (2007a) and *Sajó & Uitz* (2005), both *passim*. In the German legal doctrine, basic rights are generally understood as principles of a total legal order whose normative content structures the system of rules as a whole, thus having a "radiating effect" and a "third-party effect" in addition to being defensive rights against the state. See *Habermas* (1992, 1996), p. 247 and 403 and *Kumm* (2006), p. 355-356 and *Kumm & Comella* (2005b), p. 246-256.

140 See *Banning* (2002), p. 220 and *Kinley* (2002), p. 39-41.

141 As noted by *Oliver & Fedtke* (2007b), at p. 23, many of the fundamental rights issues in the private sphere emerge in relationships where one may identify inequalities or imbalances of power, or market or economic pressures.

142 *G. Anderson* (2005), p. 142.

arguments presented by legal scholars regarding the proper role of fundamental rights protection in the relations between private entities will be discussed for relevant parts, followed by the views endorsed in this research.

4.4.2 Private Power and the European Convention

Although private parties cannot appear as defendants before the European Court of Human Rights, the European Convention does have effects within the private sphere. It is usual to refer to this possibility under the rubric of *Drittwirkung*. The term originates from German legal discourse and refers to the possible applications of basic right norms in cases where both parties are private parties.¹⁴³ It is recognised in the case law of the European Court of Human Rights that private parties may have an obligation to observe the rights of others in order to be able to invoke their own rights. This possibility is recognised in Articles 8, 9, 10 and 11 as well as in Article 2 of Protocol No. 4. However, in its case law the European Court of Human Rights has broadened this obligation and has not restricted such effects to these Articles.¹⁴⁴

Furthermore, a state can be responsible due to a national court sanctioning or failing to compensate a violation committed by a private party. In addition to these instances, if the government could have prevented a private infringement of Convention rights through legislation or active measures, the state may become responsible in some instances.¹⁴⁵ The Convention thus gives rise to positive obligations on the part of the states, these obligations having consequences in the private sphere.¹⁴⁶

In this way, Article 8 of the Convention (right to respect for private and family life) has been held to extend to private parties' actions so that the government in question has become liable for not adopting measures designed to secure respect for private life.¹⁴⁷ Similarly, Article 11 of the Convention (freedom of assembly) may require positive measures to be taken in the sphere of relations between individuals.¹⁴⁸ States may

143 *Kumm* (2006), *passim*. *Clapham* (1993a), p. 165 and (1993b), p. 180-182. Fundamental rights may become applicable in hierarchical horizontal relationships (or diagonal relationships) in Finland as legal principles guiding interpretation, but also as subjective rights. See e.g. *Tuori* (2003b), p. 934 and *Lämsineva* (2002), p. 74-76.

144 See *Clapham* (1993a), p. 169-170; (1993b), p. 184-188 and (2006), p. 349-420 and *Spielmann* (2007), p. 447-464.

145 See in more detail *Clapham* (1993a), p. 166-179 and 197-200 and *Clapham* (1993b), p. 183-184.

146 See also *Clapham* (1993b), p. 89-133 and e.g. *Ovey & White* (2002), p. 38-39 (adopting a more restrictive approach to the *Drittwirkung* of the Convention, however). According to *Clapham* (1993b), p. 181-183 the (*unmittelbare*) *Drittwirkung* doctrine is not useful at international level as all violations of human rights, be it by state or non-state bodies, implicate the state. The states have a kind of "ecological liability" for acts violating human rights in their territories. Clapham's statement does not apply to the EU, however.

147 The leading case is *X and Y v the Netherlands*, (1985) Series A, vol. 91, paragraph 23.

148 See *Plattform "Ärzte Für Das Leben" v Austria*, (Appl. no. 10126/82) 21 June 1988, Series A, vol. 139., at paragraph 32 and *Appleby and Others v the United Kingdom* (Appl. no. 44306/98) 6 May 2003, ECHR 2003-VI, at paragraph 52.

have a positive obligation to require positive action by private persons, for example by imposing a duty on a private data collection company to grant access to individuals to records kept about them.¹⁴⁹ Although the extent and nature of the obligations may not be similar in case of private parties' infringements of other's privacy, legally enforceable rights against private parties may emerge *at national level*.¹⁵⁰ Article 1 of Protocol No. 1 (subsequently "P1-1"), which protects right to property, may also have effects in the private sphere. In the *Gustafsson*-case, the European Court of Human Rights held that "*the State may be responsible under Article 1 for interferences with peaceful enjoyment of possessions resulting from transactions between private individuals--*". However, the contexts where a state may have a positive obligation related to property ownership are not well settled.¹⁵¹

In the following, special emphasis will be on case law addressing private infringements of freedom of expression. While there has been a wider consensus that Article 19(2) of the International Covenant on Civil and Political Rights (subsequently ICCPR) has effects extending to private entities, the phrase "*without governmental interference*" has caused more ambiguity in the interpretations of Article 10 of the European Convention. *Clapham* has argued that a dynamic interpretation of the European Convention should lead to its applicability between private bodies. It would thus entail a duty on individuals to respect the freedom of expression of others. Individuals could also have an obligation to impart information to other individuals. The state would have a corresponding duty to ensure that individuals can exercise these rights.¹⁵²

Article 10 of the Convention *has* been extended to cover restrictions emerging within the private sphere, although the margin of appreciation of governments may widen in these instances, as is generally the case when the European Convention connotes positive obligations on states.¹⁵³ The European Convention could thus also oblige the national courts to apply the principles of the European Convention in private law disputes.¹⁵⁴ Freedom of expression has assumed a dual role in the

149 Clayton & Tomlinson (2001), p. 49-50.

150 *Clapham* (1993b), p. 211-222; *Clapham* (1993a), p. 182-183. See also *Ovey & White* (2002), p. 219-220. The United Nations Human rights Committee has adopted a similar interpretation concerning Article 17 of the International Covenant on Civil and Political Rights. See *Clapham* (1993b), p. 110.

151 The Court did not extend P1-1 to relations of exclusively a contractual nature between private individuals. See *Gustafsson v Sweden* (Appl. no. 15573/89), 25 April 1996, at paragraph 60. See also *Clapham* (1993a), p. 200; *Ovey & White* (2002), p. 302; *Banning* (2002), p. 113-114 and p. 168; *Krause* (1995), p. 156 as well as *H.L.R. v France* (Appl. no. 24573/94), 29.4.1997, Reports 1997-III, at paragraph 40 (the obligation of the state to protect rights against infringements by private persons where it can be "*shown that the risk is real and that the authorities of the -- state are not able to obviate the risk by providing protection*").

152 *Clapham* (1993b), p. 231.

153 *Clapham* (1993b), p. 224; *Banning* (2002), p. 114 and *Spielmann* (2007), p. 435 (in a positive obligations situation the principle of proportionality implies a prohibition of excessive inaction on the part of state).

154 See case *Markt Intern Verlag GmbH and Klaus Beermann v Germany*, (Appl. no. 10572/83), 20 November 1989 and *Clapham* (1993b), p. 240-243.

case law of the European Court of Human Rights: in addition to being an essential foundation of democratic society and its progress, it is also an essential condition for self-development.¹⁵⁵ According to Clapham, the state could be expected to guarantee an effective system to protect the right to free speech from private violation.¹⁵⁶ In *Groppera Radio*, the European Court of Human Rights recognised that the actions of the private parties threatened pluralism of information and thus “the rights of others”. Consequently, the private parties *could not effectively pursue their own claims* based on the European Convention.¹⁵⁷

The European Commission of Human Rights, too, has stated that a state may infringe Article 10 if it fails “*in its duty to protect [newspapers and the public] against excessive press concentrations*”.¹⁵⁸ This seems to demonstrate that an affirmative duty, subject to a necessity test, can be derived from Article 10 of the Convention.¹⁵⁹ In *Markt Intern*, the European Court of Human Rights considered that the applicants had suffered interference by public authority in their exercise of the freedom of expression due to an *injunction* issued against them by a court. The injunction restrained the applicants from repeating the disputed statements in their information bulletin. The case was between private parties at national level. It illustrates that the Convention may oblige national courts to apply the Convention principles in a private-law dispute.¹⁶⁰ Similarly, the European Commission of Human Rights decided in *France 2 v France* that there was no infringement of Article 10 of the Convention as the claimant was relying on its copyright to collect unpaid royalties, not to prevent the defendant television station’s broadcast by asking for an injunction.¹⁶¹ Hence, the case implies that the extent to which intellectual property rights are exercised may affect the conformity of the national court’s judgement with the relevant provisions of the Convention.

The case *Appleby and Others* reflects both the possibilities and limits of Article 10 of the European Convention in the private sphere when freedom of expression is confronted by claims based on right to property.¹⁶² In that case the applicants argued that the state was responsible for the interference with their freedom of expression and assembly rights, as it had not taken care of access to the privatised town centre. It now constituted of a large shopping mall originally built at the town centre by public authorities and on public land, but subsequently transferred into private ownership.

155 See cases *Lingens v Austria*, (Appl. no. 9815/82), 8 July 1986, Series A, vol. 103, paragraph 41 and *Barthold v Germany*, 25 March 1985, Series A, vol. 90, paragraph 58.

156 Clapham (1993a), p. 188-190.

157 See *Groppera Radio AG and Others v Switzerland* (Appl. no. 10890/84), 28 March 1990, Series A, vol. 173, at paragraph 70 and Clapham (1993b), p. 187.

158 *De Geillustreerde Pers N.V. v the Netherlands*, Application no. 5178/71, report of 6 July 1976, DR 8, p. 5, at paragraph 88.

159 Bullinger (1985), p. 112.

160 *Markt Intern Verlag GmbH and Klaus Beermann v Germany*, (Appl. no. 10572/83), 20 November 1989. See also Clapham (1993a), p. 198-200.

161 *France 2 v France* (Appl. no. 30262/96), 15 January 1997.

162 *Appleby and Others v the United Kingdom* (Appl. no. 44306/98) 6 May 2003, ECHR 2003-VI.

The applicants were prevented by the owners of the shopping mall from setting up a stand for distributing critical information regarding city planning. However, the local government, among others, had used the place for equivalent purposes without any restrictions. The European Court of Human Rights ruled that although freedom of expression has key importance as one of the preconditions for a democratic society, the protection of which may also require positive measures even in the sphere of relations between individuals, the property rights of the owner of the shopping centre weighed more in the circumstances of the case. It emphasised that the applicants had alternative points of more restricted access to the shopping mall and alternative means to distribute their information outside the shopping mall, and stated the following (at paragraph 47):

“Where, however, the bar on access to property has the effect of preventing any effective exercise of freedom of expression or it can be said that the essence of the right has been destroyed, the Court would not exclude that a positive obligation could arise for the State to protect the enjoyment of the Convention rights by regulating property rights. A corporate town where the entire municipality is controlled by a private body might be an example.”

The owner of the shopping mall could thus prevent, based on its property ownership, the applicants from utilising the shopping mall for political campaigning. The fact that the shopping mall was constituted of the privatised town centre and the owners had permitted campaigning for the local government did not change this conclusion. In a dissenting opinion, Judge *Maruste* accepted the applicants’ arguments about the central nature of the facilities in question and their “quasi-public” nature. The dissenting opinion emphasised that the public authorities cannot divest themselves through privatisation of all responsibility to protect rights and freedoms other than property rights. Moreover, typically conflicts between freedom of expression and property rights had been decided in favour of freedom of expression.

The majority’s decision is very cautious and protective of private property, despite the specific state involvement and the nature of the property as a “quasi public” forum for the inhabitants of the town. There is no analysis in the majority’s decision of the competing interests to the property, or any indication how the property interests of the owner would be frustrated by abstaining from discrimination between different entities willing to use the shopping mall for political campaigning. Moreover, access to most of the alternative channels identified was also dependent on private entities. The dissenting opinion better captures the particular significance of the property in question as a “quasi-public” central space for expression, as well as the meaning of privatisation of public forums on the continuing interest to protect freedom of expression interests in the private sphere.

As such, the dissenting opinion could also function as an argumentation model capable of being used in intellectual property contexts discussed above under communicative diversity and commons or the public domain. The ownership of physical resources like business premises typically results in lesser restrictions of freedom of expression when compared to copyright, in particular. The latter enables inhibiting certain expressions *generally*, without limitation to a certain site or physical

resource. Such private informational power becomes problematic from the perspective of freedom of expression when the copyright restricts critical, imaginative or creative uses of pre-existing work and not only verbatim reproduction.

4.4.3 Private Power and Fundamental Rights in European Union Law

The capacity of European Union fundamental rights to enter the sphere of legal relations between individuals has been characterised as a significant aspect of European Union law. Some of the European Union fundamental right norms may, depending on the applicable norm and context, grant individuals rights that are enforceable against other private parties.¹⁶³ Nevertheless, an Advocate General of the European Court of Justice has recently stated that fundamental rights do not directly bind private individuals under Community law.¹⁶⁴ Moreover, the general competence of the European Union to impose direct human rights obligations on non-state actors is still limited when compared to states. In practice, fundamental rights have been taken into account as a modality in the exercise of powers enjoyed otherwise by the Community.¹⁶⁵ Thus, on a closer look the European Union context does not seem to represent a particularly extensive approach towards the applicability of fundamental rights norms in the private sphere. Moreover, as indicated earlier, by virtue of Article 52(5) of the EU Charter some of the “principles” under it may be judicially cognisable only indirectly, in the interpretation of their implementations.

Large corporations have also often successfully invoked fundamental rights.¹⁶⁶ Even though they are constituted by large collectivities of stockholders and managers, they operate globally and their resources may exceed those of many states, they are often considered as right holder individuals. However, the scope of protection varies contextually. In practice, smaller entrepreneurs have merited broader protection

163 *Ojanen* (1998), p. 117-118. Fundamental rights included in directives provide a well known problem. As is generally known, directives largely lack so called horizontal direct effect. However, there have been proposals that directives protecting fundamental rights could be granted direct horizontal effect. See *Clapham* (1993b), p. 279. The European Court of Justice has leniated the lack of horizontal direct effect in many ways, e.g. through indirect effect (interpretation), a broad concept of an “emanation of state” against which directives may be relied and effects of directives in certain triangular situations. See e.g. *Hilson & Downes* (1999), *passim* *Lackhoff & Nyssens* (1998), *passim*; *T. Mylly* (2000b), *passim* and *Avbelj* (2005), p. 155-160.

164 See the Opinion of Advocate General Kokott in case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271 (at paragraph 114).

165 See also the discussion in sub-chapter 4.2 and *Bernard* (2003), p. 259-260.

166 See *Ojanen* (1998), p. 120; *de Búrca* (1995), p. 32 and 50 (this has been usual especially in the areas of economic and property rights and rights of defence). Also in the European Court of Human Rights case law profit making companies have been able to invoke e.g. Article 10 (freedom of speech). See *Autronic AG v Switzerland*, (Appl. no. 12726/87), 22 May 1990, Series A, vol. 178, at paragraph 47.

than big corporations. This is mainly due to the presence and interaction of several fundamental rights in the case of smaller entrepreneurs.¹⁶⁷

The case law of the European Court of Human Rights is relevant for contexts where European Union norms are applicable, as well. It would be logical for the European Union member states and the European Union institutions, within the limits of their competencies, to have an obligation to protect fundamental rights threatened by individuals, should the member state have a similar obligation under the European Convention. The *Matthews*-case demonstrates that the European Union membership does not free the member states from their obligations under the European Convention.¹⁶⁸ The European Convention also sets a minimum standard of protection for the European Union institutions through the factual incorporation of the European Convention in the *acquis communautaire*. This is also confirmed in Article 53 of the EU Charter. The federal aspect of the European Union in fact enables a more far going private party effects of (at least some) fundamental rights norms. Both the internal market objective as well as the more intense cohesion of the member states in terms of fundamental values lead to seeing private restrictions of fundamental rights as not only restrictions of democratic values and dignity, but in some instances also as problems for inter-state competition.¹⁶⁹ This interpretation is also strengthened by the EU Charter as well as the changes to the Treaty on European Union as amended by the Lisbon Treaty.

According to Article 51(1) of the EU Charter, its provisions are “*addressed to the institutions and bodies of the Union with due regard for the principle of subsidiarity and to the Member States only when they are implementing Union law. They shall therefore respect the rights, observe the principles and promote the application thereof in accordance with their respective powers*”. Although the Article restricts the field of application of the EU Charter, it should not preclude effects of individual norms of the EU Charter to private power. Quite the contrary, the obligation to observe the principles and especially to promote their application speaks in favour of such effects.¹⁷⁰ The absence of the general competence of the Union to legislate on the basis of fundamental rights protection, also emphasised in Article 51(2) of the Charter and Article 6(1) EU as amended by the Lisbon Treaty, similarly *speaks in favour of integrating fundamental rights principles in the application of European Union law through interpretation and systematisation of existing laws*. In the absence of the Union’s general competence to legislate based on fundamental rights, the duty to promote the application of

167 Such as the interaction between property ownership, freedom to conduct business, and privacy in case of an entrepreneur using his personal house or car also for business purposes. See more closely *Banning* (2002), p. 170 and *Länsineva* (2002), p. 112, 150 and 155.

168 App. no. 24833/94, *Matthews v United Kingdom*, judgment 18 Feb. 1999. See, however, case *Bosphorus v Ireland*, (Appl. no. 45036/98) judgement 30 June 2005 (at paragraphs 148 and 155). As already said, the ECtHR sought to actively avoid conflicts in this case with European Union law.

169 *Clapham* (1993b), p. 251 (in the context of case 43/75, *Defrenne* [1976] ECR, p. 455).

170 Also *Bernard* (2003), at p. 261, notes that an obligation to protect fundamental rights could produce horizontal effects in the European Union context, as well. See also the previous discussion.

fundamental rights in judicial practices becomes emphasised.¹⁷¹ The lack of a general competence to legislate on this basis means that fundamental rights could not easily be extended to private power for example through specific legislative measures subjecting some private entities directly under fundamental rights obligations. Interpretation and systematisation thus assume an even greater role.

Furthermore, Article 52(1) of the EU Charter concerns limitations of fundamental rights. It mentions the “*protection of the rights and freedoms of others*”. A similar reference in the provisions of the European Convention has been interpreted to be capable of affecting rights in private law relations.¹⁷² It should also be remembered that the European Union membership does not absolve the member states from their obligations under the European Convention. To an extent the European Convention obligates to address fundamental rights in the private sphere, it would be logical to interpret the EU Charter similarly, to the extent possible. Finally, the fact that fundamental rights now clearly constitute the core aims of the Union speaks in favour of interpreting and applying both the horizontal clauses of the EU Charter (Article 51-54) and European Union legislation in general against this background and teleology. The values of the Union as recognised in Article 2 EU and treated as the Union’s aims in Article 3 EU should affect the interpretation of all European Union legislation and primary law.

The applicability of some European Union norms having a fundamental right character to private power has been recognised in the case law of the Community Courts. In *Walrave*-case, the prohibition of discrimination based on nationality was applied, together with freedom of movement for workers and services, to a non-public entity, namely a private association, *whose rules aimed at regulating, in a collective manner, gainful employment and provision of services*.¹⁷³ The case had an extraterritorial dimension as well, as the only link with the Community was the *effects* produced by the contracts at issue.¹⁷⁴ The same rationale was later applied in the *Bosman*-case.¹⁷⁵ In that case, the Court also held that when a private association is bound by the Community norms protecting the basic freedoms which usually obligate the member states only, that private entity may try to justify its conduct by relying on the grounds of justification normally available for member states only.

However, the arguments given by the Court in both cases reveal that the rationale for the horizontal effect of the constitutional norms in question was rather the

171 *Helander* (2001b), at p. 110-113, states it to be self-evident that the reference to promotion in Article 51(1) of the EU Charter intends to regulate application and interpretation of law. However, due to the lack of general competence in the area of fundamental rights it is more uncertain whether and how it could oblige the EU-legislator.

172 See the previous discussion concerning the European Court of Human Rights case law.

173 Case 36/74, *Walrave and Koch v Association Union Cycliste Internationale* [1974] ECR 1405.

174 See also *Torremans* (1995), p. 291-293 (suggesting that the combined effect of *Walrave*-case and the status of fundamental rights within the core objectives of the EU makes such extraterritorial application of all fundamental rights incorporated in EU legislation possible).

175 Case C-415/93, *Union royale belge des sociétés de football association ASBL v Jean Marc Bosman* [1995] ECR I-4921.

integration objective as reflected in the free movement and antidiscrimination norms than the objective value of fundamental rights. The cases may thus be criticised for neglecting the fundamental rights values present in them.¹⁷⁶ Nevertheless, they imply that some European Union norms of constitutional character may be relied upon against an entity regulating individuals' rights and markets in a collective manner. The decisive consideration may not have been the asymmetry of power or the *diagonality* of the relationship, but simply *the fact that a private entity effectively regulated a collective good*, namely the work- and services-related markets. The party invoking fundamental rights against such an entity thus does not have to be substantially smaller or weaker than the other entity. Rather, the regulating effects of the behaviour should be decisive.

Interpreting the above cases in the latter sense opens up new perspectives for extending the reach of fundamental rights provisions to private entities as such private ordering is an increasingly common phenomenon.¹⁷⁷ Extending the above case law beyond contexts involving the collective regulation of the basic freedoms (such as the free movement of services) into contexts involving fundamental rights *per se* would be a welcomed development. A private entity could then be responsible for regulation of a collective good, should it negatively affect the realisation of others' rights. There is no reason to restrict this approach to regulation through rules or internal norms of an organisation. The collective regulation could equally well take place through technological regulation, such as *de facto* standardisation of technological environments. As said before, such regulation is typically more binding and takes place on a larger scale than legal rules or internal norms due to the absence of the possibility of non-compliance with the former kind of regulation, among other reasons.¹⁷⁸ Thus, *Walrave* and *Bosman* could be interpreted as precedents capable of being utilised in the development of horizontal fundamental rights principles to European Union law. Such fundamental rights responsibility of private entities could sometimes be channelled through the application of competition law, in particular. Applying the fundamental rights norms directly in the absence of any more specific norms would thus not be necessary in most cases.

The European Court of Justice has also referred to the combined effects of the principle of loyalty and the prohibition of import restrictions,¹⁷⁹ when mandating obligations on member states to take active measures to prevent restrictions on free movement of goods arising from the private sphere. Such active state measures may include efficacious police investigations and even public prosecution of suspects, when necessary to restrict serious restrictions on fundamental Community objective,

176 See also *Avbelj* (2005), p. 151-152 and *Clapham* (2006), p. 190-191.

177 See generally the articles in *Cutler, Haufler & Porter* (1999a), *passim* and *Hall & Biersteker* (2002), *passim*.

178 See the discussion under heading 2.4.

179 Now Article 4(3) EU, ex. 10 EC (loyalty) and Article 34 FEU, ex. 28 EC (free movement of goods).

such as the free movement of goods.¹⁸⁰ Trying to transfer this case law to apply to fundamental rights protection is not without problems. Although fundamental rights protection has been elevated into the essential values and objectives of the Union, the Union still lacks the general competence to legislate or impose obligations on member states related to fundamental rights. The European Court of Justice could still be seen to be moving beyond the prohibition on infringing measures towards setting up a positive duty to take measures to ensure that certain rights should not be violated. Such competence to mandate positive measures could be inherent to all fields of legislative competence of the Community.¹⁸¹

The referred case law related to the principle of loyalty demonstrates that collective objectives of fundamental nature, normally giving rights to individuals *vis-à-vis* the member states, may also *de facto* obligate the individuals through a loyalty-based obligation on the part of member states to take active measures to protect the realisation of the collective Community objective of fundamental character. It is suggested that the existence of such an obligation may also entail duties for European Union institutions to react to the frustration of the objectives of the European Union by entities in particular when such objectives relate to fundamental rights protection, as according to the basic EU Treaties they form the fundamental objectives of the Union.¹⁸² Such a situation may occur in the application of European Union competition law or in other areas, where the Union institutions directly apply European Union norms to private firms or other entities.

4.4.4 Limits on the Horizontalisation of Fundamental Rights

Although fundamental rights have effects in the relations between private entities, their application to private power is still exceptional. The relevant cases are rare. They represent more the potential to develop the doctrine than existing reality. Furthermore, the state is the ultimate perpetrator by failing to protect fundamental rights in the private sphere. In the European Union, norms having a constitutional character have been applied to private entities mostly for the sake of market integration objectives, not for their qualities relating to fundamental rights protection. The lack of general competence on the part of the Union to legislate based on fundamental rights could preclude the extension of fundamental rights obligations on private entities through

180 See case C-265/95, *Commission v France* [1997] ECR I-6959 and case case C-112/00, *Schmidberger v Austria* [2003] ECR I-5659. This could be characterised as an instance of “ecological responsibility” of the member state for private measures interfering with the basic freedoms.

181 See *Weiler & Fries* (1999), p. 155.

182 See also joined cases 60 and 61/84, *Cinéthèque SA v Fédération Nationale des Cinémas Français* [1985] ECR 2605, at paragraph 26 (“it is the duty of this Court to ensure the observance of fundamental rights in the field of Community law”) and *Weiler & Fries* (1999), p. 156-161 (arguing that this duty rests on all institutions of the Community exercising their competences within the field materially controlled by Community law).

specific legislative measures. Similarly, the exclusion in Article 52(5) of the EU Charter of fundamental rights “principles” from being directly judicially cognisable could even make comprehensive evaluation of fundamental rights in the application discourse problematic.

The discrepancy between the fundamental rights doctrine and the unprecedented private power to affect fundamental rights and collective goods has become untenable. As G. Anderson insists, fundamental rights doctrine should recognise the presence and effects on fundamental values of several norm-producing centres, many of which are constituted of private entities.¹⁸³ The question is *how* (far) should fundamental rights be extended to control private power than *whether* they should be extended. Although the internal regulation of private corporations (through codes of conduct among others) has increased, such voluntary and sporadic self-regulation is clearly not an adequate response to the fundamental rights threats arising from the private sphere.¹⁸⁴ Moreover, many legal spheres, including intellectual property and competition law, are already being constitutionalised through their internal developments in neoliberal spirit, as will be argued in the next main chapters in more detail. Constitutionalising these fields of law through fundamental rights law and rights constitutionalism should thus be seen as bringing in counter-weights and counter-hegemonic alternatives to these already on-going constitutionalisation processes.

Developments in the communications characterised by privatisation and globalisation on one hand have eroded the ability of states to censor and control information flows. On the other hand, the same developments have enabled increasing private control over the markets and conditioning of the permitted services, information flows and expressions. Technological developments and rapid changes in the related business environments cause a continuous need to update the governmental policies fostering freedom of expression and freedom to impart and receive information. Private power over communications infrastructures and essential information resources should be at the central focus of societally relevant fundamental rights jurisprudence.¹⁸⁵ For example, it can be asked *why* should private information infrastructure monopolies be treated radically differently in fundamental rights doctrine from the treatment of public broadcasting monopolies in *Informationsverein*,¹⁸⁶ where the public broadcasting monopoly in Austria was not in conformity with the principle of media pluralism which states should guarantee. Although the power to regulate through technological design differs from its origin and contents of the power exercised by states, the outcomes of the production and

183 G. Anderson (2005), p. 145-151 and also *passim*.

184 See also Alston & Weiler (1999), p. 63.

185 Lessig (1999a), at p. 6 and also *passim*. See also Steeves (2000), p. 190 (recognising in such a context the shifting of collective power from governments to corporations).

186 *Informationsverein Lentia v Austria* (Appl. no. 13914/88; 15041/89; 15717/89; 15779/89; 17207/90) 24 November 1993, Series A, vol. 276.

knowledge structures are part of the politics in world economy and the ones exercising this power are thus political actors.¹⁸⁷

Non-state actors have increasingly become the *de facto* regulators of markets in the global economy.¹⁸⁸ States' reliance on markets and private transactions in neoliberal spirit connotes that laws regulating private transactions become instruments of politics and realisation of collective goals. As a corollary, it is increasingly misleading to try to divide sharply the public sphere of constitutional rights and the private sphere of market transactions.¹⁸⁹ Intellectual property and competition laws, in particular, participate in defining the limits of power based on global technologies. Intellectual property rights can be construed as instruments enabling private technological and informational power. Patents enable powers to regulate privately behaviour within markets. Through the expansion of patentable subject matter such control increasingly extends to non-industrial contexts with broader societal repercussions.¹⁹⁰ Similar considerations now apply to copyright, as will be discussed in more detail in the next main chapter. Intellectual property laws also limit such power through the limitations and exceptions to exclusive rights, among others. Competition law enables the control of societally harmful economic power. It could thus function as a limit on the power enabled by intellectual property rights. Considering their roles and effects, intellectual property and competition laws could thus appear as branches of law where fundamental rights could play an important role in affecting private law.

Quite certainly, the extension of fundamental rights to the relations between private actors is not without dangers, as will be further elaborated below. *Gerstenberg* seeks to summarise the main concerns raised in discussions:¹⁹¹

- The threat to private law's libertarian core of private autonomy by placing private actors under the same duties as public bodies acting in the common interest;
- the threat of displacing or overriding the policy choices of the legislator “in a sweeping judicial usurpation of legislative prerogatives in determining the boundaries of spheres of private autonomy”; and
- the threat of shifting authority to interpret private law's core concepts from ordinary and specialised courts to constitutional and generalist courts, thereby rendering private law redundant and superfluous.

187 See also *Strange* (1996), p. 53-54.

188 See in more detail articles in *Cutler, Haufler & Porter* (1999a) and *Hall & Biersteker* (2002), *passim* and discussion in chapter 2 previously.

189 *Study Group on Social Justice in European Private Law* (2004), p.655-668. See also *Fitzgerald* (2000a), p. 52 (in relation to information society and regulation by computer code).

190 See more closely *Thomas* (1999) and (2002), both *passim*, for an analysis of post-industrial patent law.

191 See *Gerstenberg* (2004b), p. 769-770.

Gerstenberg also addresses the danger of extending fundamental rights argumentation too far. He realises the value of protecting the autonomous self-regulation of comprehensive social spheres carrying their own internal logic and integrity. The role of fundamental rights would thus not be to rewrite the background rules of private law, but to enable a dialogue between private law and fundamental rights. Based on such a dialogue, adjudication must harmonise or construct transitory orders between highly abstract and open-ended principles in a process requiring constant reviewing. The protective function of the state to design rules of private law so that they guarantee the realisation of fundamental rights would often be an adequate construction.¹⁹² Kumm notes similarly that flexible and contextual fundamental rights application may and should take into account the principle of private autonomy and the autonomous self-regulation of social spheres based on it. Fundamental rights law would redefine the balance between the respective spheres of private autonomies only where the private law discipline has failed to be responsive to legitimate concerns or relevant societal shifts.¹⁹³ Kumm and Comella argue that the explanation for the mainstream constitutional doctrine's cautiousness to extend fundamental rights analysis to the area of private law more directly may also be explained in terms of legal sociology, the desire to preserve the (image of) discursive hegemony of the private law establishment in their "own" arena.¹⁹⁴

Clapham argues that dignity and democracy as analytical tools would enable the assessment of the limits of the right at issue.¹⁹⁵ Should the actions (or inactions) of individuals prevent the participation and expression of opinions of other individuals in a way threatening democracy, courts and authorities would be under an obligation to protect the rights of participation and expression. In other words, when the fundamental right at stake relates to democracy, there has to exist a public element in order to justify protection of the right against another individual. A private restriction on protesting in the only forum in town would fall under this category, whereas a private restriction leaving other equivalent possibilities open would not.¹⁹⁶ On the other hand, when the actions (or inactions) of individuals threaten the dignity of other individuals or groups formed by them, there does not have to exist such public element. Protection of human dignity relates to the intersubjective character of

192 See *Gerstenberg* (2004b), *passim*.

193 *Kumm* (2006), p. 362-363.

194 *Kumm & Comella* (2005b), p. 244, 251 and 285 (also maintaining that the shift in Germany from indirect effect to direct horizontal effect of basic rights within private law would have no substantive effect on the outcomes).

195 See in more detail *Clapham* (1993b), p. 145-149, 352 and 356 and (2006), p. 533-559.

196 See also case *Appleby and Others v the United Kingdom* (Appl. no. 44306/98) 6 May 2003, ECHR 2003-VI, treated above. See also the treatment of the *essential facilities* doctrine in chapter 7. Similar considerations are present in contexts characterised by this doctrine. Private control over an important infrastructure enabling the production of private, public and non-market goods, in particular, should be accompanied by a duty to permit the use of the infrastructure indiscriminatorily. Depending on the context, such a duty may be connected not only to economic rights, but also to freedom of expression values.

rights and the respect for humanity as an end.¹⁹⁷ States must thus protect the positive liberties of participation and expression and not just the negative liberties of freedom from state interference. They have an “*ecological liability*” for abuses within their jurisdictions. However, Clapham reminds that the margin of discretion left for courts and authorities is larger when dealing with human rights in the private sphere.¹⁹⁸

Graber and Teubner emphasise that constitutional rights are not always connected to power relations, but should restrain any means of communication that tend to colonise other sectors of social life. Freedom (be it individual or social) may be threatened not only by the state but also by private organisations and institutions.¹⁹⁹ Constitutional rights should then be applicable against intrusions of expansive social systems other than state, as well. Constitutional rights protection against private infringements would not only extend to indirect effect in the interpretation of private law concepts like *good faith*, *public policy* or *unfair terms*, nor to state action-doctrine. Even the doctrine concentrating on economic and social power in the form of organised power-centres threatening individual autonomy is too narrow an orientation for them, as this approach looks for structural analogies to the power of the state in the institutions of “private government” and refuses to recognise other media of communication as threats to individual and social autonomy.²⁰⁰

Graber and Teubner argue that individual and social autonomy *need to be protected against the specific communicative medium of an expansive social system at hand*, in analogy with the power medium of the government. Accordingly, *economy*, *technology* and *science*, among others, could constitute threats against whose colonisation individual or social autonomy needs protection.²⁰¹ These may present totalising tendencies of partial rationalities and become concretised through actions of *institutions*, bundles of norms capable of being personified, like private formal

197 For different dimensions of dignity as the basis of human rights obligations see Clapham (2006), p. 545-546.

198 Clapham (1993b), p. 178-184, 345 and 353-354. See also Ratner (2001), p. 472.

199 Graber & Teubner (1998), *passim*. See also Teubner (2006), *passim* and Lessig (1999a), p. 84-85 and 217-218, arguing that we should be worried of all sources of threats to liberty – not only of threat to liberty from government, as threats to liberty are time- and place -specific and threats to liberty have never come solely from government. Lessig points out that the absence of traditional command and control rules with regard to the Internet does not automatically connote increased freedom as the other modalities of regulation, in particular a combination of economic interests and technology (or code) may impose far-going restrictions on individuals.

200 Also Gerstenberg is willing to go beyond the concepts of *Drittwirkung*, indirect application, horizontal effect and incorporation. See more closely Gerstenberg (2004a) and (2004b), *passim*. He considers this vocabulary as both inadequate and misleading as the relations between competing fundamental right claims are substantive moral claims to be decided on the merits. The judges should, in the spirit of interpretive holism, work out conceptions of values in play, each value interpreted in the light of others. Without such an approach privatisation, in particular, could ultimately marginalise the constitution and transform our sense of societal interdependence and the collective discourse about what we owe each others as a matter of justice and fairness. See Gerstenberg (2004b), p. 776.

201 Lessig (1999a), p. 86, argues that whereas earlier it has been state power and the market that threatened liberty, now code (or technologies of built environments in more general) should be our main concern.

organisations, universities and general terms of trade, private standardisation and similar rule-setting mechanisms as private regulatory systems.²⁰²

Instead of conceptualising the horizontal conflicts of fundamental rights as interpersonal conflicts between individual bearers of fundamental rights, they could be seen as *anonymous and autonomous matrices of communicative mediums* doing injury or injustice to their social and human ecologies, so that they ultimately threaten the minds and bodies of human individuals. Fundamental rights would thus require an ecological sensitivity of communication: internal and external limitation of social institutions' expansive tendencies and sensitive balancing between their intrinsic rationality and the intrinsic rights of their ecologies.²⁰³ Constitutional rights designed to protect economic freedom against the intrusions of the state could thus be used to protect political freedom against economic and technical influences.²⁰⁴ Hence, not only state action or social power is a threat to individuals' integrity, but also subtler endangerments by other communicative matrices, such as commodification.²⁰⁵ Similarly, not only individuals directly are the objects of protection, but also the autonomy of social discourses – the autonomy of art or of science against their suppression by the expansive and totalising tendencies of the communicative matrix.²⁰⁶ Teubner recognises the difficulty of bringing in – through fundamental rights application – the competing logic of one social discourse into another. Abstract and general rules on incompatibilities should be developed as a response, implying that the potential of fundamental rights law as a resource of legal policy capable of producing just outcomes in individual instances of adjudication is limited.²⁰⁷ Structural violence, the effects of expansive social domains – to the extent it is not the result of state action or disparities in social power – largely escapes fundamental rights adjudication.

The preceding discussion indicates that acts or omissions of private entities may increasingly threaten the ultimate objective of realising fundamental rights to the fullest extent possible. It also seeks to stress that collective goods reflecting fundamental values should be protected against threats emanating from the public and private spheres alike. Moreover, rights and collective goods may be jeopardised by anonymous, uncoordinated processes causing structural violence: fundamental values may be infringed without there being a single identifiable perpetrator. As

202 Teubner (2006), p. 344.

203 See Teubner (2006), p. 340-345.

204 Graber & Teubner (1998), p. 70.

205 Teubner (2006), p. 339.

206 Teubner (2006), p. 342. Teubner calls this form of protection *institutional rights*. They seem to correspond with collective goods discussed previously.

207 Teubner (2006), p. 344-346. The evident problem in extending the practical application of fundamental rights to expansive tendencies of a social sector is that the limits on the application of fundamental rights law could not be defined by reference to the specific communicative medium of an expansive social system only. Even though the problem of expansive social domains is real, just expanding the reach of fundamental rights law is not a feasible answer. However, as social power exists in various forms also in the spheres of economy and technology, among others, disparities in power positions in the private sphere may be often detected and used as a criterion in fundamental rights application.

the preceding discussion also implies, mainstream fundamental rights doctrine merely captures a fraction of these threats to fundamental values. It concentrates on individual rights and sometimes state responsibility over breaches emanating in the private sphere. Collective goods, which reflect fundamental values and are necessary for the realisation of rights, typically function as mere counter-weights to individual right claims. Anonymous, autonomous processes like globalisation in neoliberal spirit and excessive commodification or propertisation, caused by uncoordinated acts or omissions on the part of multiple private and public entities and expansive social systems, seem to escape all fundamental rights scrutiny. The broader the effects on the realisation of fundamental rights, the more likely that it escapes scrutiny under mainstream fundamental rights doctrine.

However, there are no single solutions capable of addressing these problems and tensions without ending up in additional problems. Placing a direct, abstract-level legal obligation on all individuals to respect, protect and fulfil fundamental rights could appear as problematic and unnecessary for several reasons. It could not secure the realisation of collective goods and could not inhibit the broader anonymous processes causing structural violence on other sub-systems. It would not be necessary whenever the relations between private entities could be constructed as legal relations based on other public regulation. As this almost always is the case, fundamental rights could be read into the interpretations of the applicable laws already regulating their relations. In any instance, the state becomes involved and other laws applicable when the private parties subject their dispute to be decided by courts.

Furthermore, beyond the most precisely and unconditionally worded fundamental rights norms (like the prohibition of torture), there exists considerable uncertainty what is required by the system of fundamental rights in individual instances. On which democratic and fundamental rights theory should the individual base her behaviour and expectations of others' behaviour?²⁰⁸ Discourse or liberal democracy, or perhaps republican or even radical democracy? In case of intersystemic conflicts, should the individual's primary loyalty be based on the contents of rights as defined by the domestic courts, the European Court of Human Rights, or perhaps the European Court of Justice? How should she decide conflicting obligations caused by fundamental rights norms (however interpreted) and secondary legislation? Placing an unqualified, abstract-level legal obligation on all individuals to respect, protect and fulfil all fundamental rights would be hard to pursue without jeopardising individual and collective autonomy and societal and legal (value) pluralism as reflected in different interpretations of both individual rights and the whole system of rights. In the Union, additional problems are generated by the Union's lack of general competence to legislate based on fundamental rights only, as discussed above.

208 It should be recalled that democracy is an *essentially contested concept*, also implying that there could never exist a final resolution of the contents of fundamental rights related to it, nor of the extent to which courts should be able to interfere on the basis of fundamental rights with the measures taken by the legislators. See footnote 158 of chapter 1 for a reference to the relevant discussion.

Provided the individual *prima facie* violates fundamental rights of others, how could she be able to judge the effects of her or the other party's behaviour on the realisation of collective goods? In case of private individuals, such effects typically constitute of longer-term, aggregated effects of uncoordinated behaviour by multiple individuals.²⁰⁹ The uncertainty concerns both the actions of others and competing theories used for the evaluation of their impact on the realisation of collective goods. However, such effects could justify a limitation of an individual right.

Finally, placing an abstract obligation on all individuals could effectively be used to inhibit progressive reforms on the part of the state: extensive horizontalisation of fundamental rights obligations could be seen to reduce the need for active state measures intended to protect fundamental rights in the private sphere. Far-going horizontalisation of fundamental rights on an abstract level is thus no panacea capable of being pursued without such serious problems. Traditional rights constitutionalism and fundamental rights jurisprudence simply have their limits on how far the abstract fundamental rights obligations could be directly extended in the private sphere without ending up in even greater problems implicit in the solutions adopted.

This connotes that we need other strategies to address the threats identified. The existing strategies based on positive obligations of states to protect actively fundamental rights in the private sphere,²¹⁰ interpreting the notion of state flexibly,²¹¹ and giving significance to socio-economic power and asymmetrical positions between parties could be further developed.²¹² The regulation of individual rights or collective goods collectively or on a large scale through internal rules of associations and technologies, in particular, should also be placed under fundamental rights supervision.

However, in addition to developing such doctrines *there should be further constitutionalisation of legal spheres* in the following two senses, first implicating the role of courts, second legal scholarship. The *courts* should develop and build-on, as part of their obligation to protect fundamental rights, principles and doctrines capable of internalising fundamental rights argumentation and considerations in the development of the specific branches of law. As part of this, they should also more actively address the effects of alternative interpretations and alternative reconstructions of the functions and objectives of whole legal institutions on the realisation of collective goods reflecting fundamental values. For example, the problem in intellectual property contexts is more often the neglect of collective goods related to fundamental values

209 The situation may be different with regard to private entities controlling essential infrastructural or other resources enabling collective regulation of individual rights or collective goods. As argued before, there are thus grounds to extend fundamental rights obligations to such entities, now typically private corporations.

210 Implying both the obligation to take active legislative measures and an obligation to interpret and apply existing laws so that fundamental rights may be realised to the extent possible.

211 This is the standard approach in US constitutional law based on *state action doctrine*.

212 See *Länsineva* (2002), p. 105. As *Länsineva* points out, it makes sense to give significance to the existence of asymmetrical positions and the presence of socio-economic power simply because concentrations of power may threaten the rights of individuals interacting with them to an extent typically not possible among private individuals.

than the lack of horizontal effect of individual rights. Such an approach, primarily based on the function of fundamental rights as objective values having effects in the design, interpretation and implementation of law and legal doctrine, could enable the development of specific branches of law so that fundamental rights may produce counter-weights and modifications to single-sided doctrines. They could enable some coherence throughout the legal order, but without imposing on individuals the legal obligation to anticipate that design in their relations with other individuals.

Importantly, due among other reasons to the practical limits of courts and the judicial process to channel all the relevant interests into the relevant discourses, and due to the typical conservatism of courts, *legal scholars* could initiate and expand such endeavours and develop alternative reconstructions and systematisations competing with, stimulating and complementing the endeavours of courts. They could seek to advance the internalisation of fundamental rights considerations in law applying in the private sphere – make it sensitive to fundamental rights – through general principles of private law,²¹³ as well as through branch of law -specific principles, doctrines and argumentation patterns. As Karhu says, systematisation of private law based on fundamental rights would enable considering more fully, systematically and in advance the effects of alternative interpretations, principles and doctrines on fundamental rights and collective goods. Courts could consider the fundamental rights dimensions of the cases at hand *ex officio* also when the parties do not formally invoke fundamental rights norms, or do so selectively.²¹⁴ Such reconstructions could also enable appropriate reactions of private law norms to threats to fundamental values posed by anonymous processes like economic globalisation, excessive commodification and propertisation. They would also make it easier for specialised authorities or courts to consider the effects of a broader set of norms on the interpretations of the specific laws they apply. Thus, specialised intellectual property or competition law authorities or courts would more likely pursue interpretations acceptable from the perspective of the whole legal system.

The plurality of such court decisions emanating from multiple levels, and the inherently pluralistic academic discourse, would necessarily reflect some of the societal value pluralism, and legal pluralism also enabled by overlapping legal orders and multiple and sometimes conflicting loyalty obligations of courts and individuals. For many of the legal spheres, like intellectual property and competition law, are already being constitutionalised through specific norms, like the three-step test designed to censor exceptions and limitations within intellectual property law,²¹⁵ forms of efficiency

213 See Pöyhönen (2000), p. 86-109.

214 Pöyhönen (2000), p. 139 and also *passim*. As part of the systematisation, courts should know the contents of law: *iura novit curia*. Also the European Court of Justice may give an interpretation of Community law based on fundamental rights considerations even when the domestic court in the preliminary ruling procedure has not recognised such systemic connections. See e.g. case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271, at paragraph 42.

215 See more closely sub-chapters 5.5.3 and 5.7.4.

argumentation seeking to exclude any non-economic values within competition law,²¹⁶ and intellectual property norms purporting to restrict the application of competition law.²¹⁷ Such inherent constitutionalisation often has the (intent and) effect to lock-in and shelter neoliberal values from what are considered as outside threats. To allege that integrating fundamental rights more extensively in such contexts would frustrate societal value pluralism, individual autonomy or the autonomy of private law is either a politically motivated statement or positively naïve.

However, instead of extensive horizontalisation of fundamental rights obligations in the abstract, what is needed is the *extension of constitutionalism* in the form of critical discourses challenging the democratic or constitutional legitimacy and inherent ethics of such branch of law -specific developments. Traditional constitutional law may successfully communicate some of the necessary inputs to these new discourses. They include ideas of intersubjective rights being both ends in themselves and necessary ingredients of a democratic society, but simultaneously being dependent on multiple collective goods and other legal institutions. Rights constitutionalism should also communicate – based on critical self-reflexive analysis – limitations on its own capacity to resolve many of the underlying problems, hence indicating the need for the specialists and doctrines of other branches of law to get involved in the furtherance of fundamental values in law. But as will be argued in more detail in the next main chapter, reconstructions of intellectual property and competition laws based on fundamental rights discourse is not enough. We need multiple, overlapping systematisations challenging, modifying and sometimes strengthening the interpretations and outcomes based on the other systematisations.²¹⁸ The relative weight given to a particular interpretive premise could be seen to depend on the context at hand, the effects of deciding the case on several scales simultaneously. When the case at hand has *insignificant* effects on the constitutional scale, alternative systematisations based for example on economic analysis could assume a greater role and *vice versa*.

4.5 Concretisation: Intellectual Property and Fundamental Rights in European Union Law

4.5.1 Introduction

The foregoing discussion represent more the *potential* of fundamental rights law as a discourse to improve and enrich argumentation patterns and systematisations in the frameworks of intellectual property and competition law institutions. The purpose of this sub-chapter is, on a more concrete level, to analyse the existing reality of the

216 See the related discussion in chapter 6.

217 See the discussion of the competition norms in the TRIPS Agreement in chapter 7.

218 See more closely the discussion in the beginning of the next main chapter.

effects of fundamental rights arguments and considerations on the European-level case law. For this purpose, the meaning given to specific provisions of international and European fundamental rights law on the boundaries of intellectual property protection will be first addressed, hence also being relevant for the application of competition law. Depending on the context and particular situation at hand, nearly all fundamental rights may become relevant within this area of law.²¹⁹ However, the discussion below will focus on fundamental rights provisions having their immediate connection to intellectual property protection either by referring to them directly or through their frequent application by courts in contexts involving fundamental rights analysis of intellectual property law. In more concrete terms, the first part of this sub-chapter will concentrate on the surprisingly usual idea that (some) intellectual property rights are fundamental rights as such, as well as on the impact of the right to property in the European Convention on intellectual property protection, and the specific intellectual property provision as written in the EU Charter.

After this, the case law of the Community Courts will be reviewed in order to enable the evaluation of the practical effects of fundamental rights on intellectual property law and informational power. The question asked is whether there exists a structural proprietary bias in international and European fundamental rights law. This could imply that non-proprietary values as reflected in fundamental rights law, if considered equally important to protecting the right to property interest in exclusive rights, must be integrated otherwise. One option for doing so is to develop the inherent doctrines and principles of intellectual property law or other laws, such as competition laws.

4.5.2 Structural Proprietary Bias of Fundamental Rights Norms?

As indicated above and will be substantiated below, some treat intellectual property as a fundamental right as such. This approach largely stems from Article 27(2) of the Universal Declaration. According to this Article: “*Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author*”. A similarly worded obligation is to be found in Article 15(1) (c) of the International Covenant. The states parties to the Covenant namely “*recognize the right of everyone -- (c) To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author*”.

Both Articles are concerned with the protection of productions which are the result of the application of human creativity. This implies that there has to be some human creativity involved. On the other hand, the term “author” in the Articles should not

219 See also e.g. *Committee on Economic, Social and Cultural Rights* (2001), p. 3 at paragraph 5.

be formalistically restricted to copyright.²²⁰ The requirement of personal involvement indicates that persons other than the initial creator of the subject matter in question could be outside the scope of protection guaranteed by these Articles.²²¹ Reading the wording of the Articles with care makes it evident that one should not consider intellectual property rights human rights.²²² As very generally and vaguely worded, both Articles leave a broad margin of discretion for states to design alternative ways of protecting the moral and material interests of authors and inventors. Establishing an embrasive exclusive property right regime is certainly not the only possible way to accomplish this task.²²³

For example, moral and material interests could be protected through a regime based on a liability rule or direct reward for the author or innovator.²²⁴ Although exclusive property rights in the form of intellectual property have become the standard way of protecting these interests, this does not transform the chosen instrument into a human right. In other words, neither the Universal Declaration nor the International Covenant creates an obligation on the part of the states to establish exclusive rights, as the latter is only one alternative way of safeguarding the individuals' interests protected under Articles 27(2) of the Universal Declaration and 15(1)(c) of the International Covenant.²²⁵ Therefore, it is erroneous to consider intellectual property rights as fundamental rights in themselves, as the Articles only require there to be some form of protection for the interests mentioned.²²⁶ As said by *Drahos*, the fact that intellectual

220 It has been suggested that in addition to copyrights, inventions, designs, and probably also the rights of performers may become under Article 27(2) of the Universal Declaration. *Ricketson* (2002), p. 190-191. There is no need to depart from this interpretation in the case of Article 15 of the ICESCR.

221 *Ricketson* (2002), p. 192.

222 See also *Committee on Economic, Social and Cultural Rights* (2001), p. 3 at paragraph 6 (recognising the instrumental nature of intellectual property in comparison to human rights).

223 See also *T. Mylly* (2005), p. 197 and *Geiger* (2006a), p. 382.

224 *Kingstone* (1987), *passim* examines the possibility of direct reward as an alternative scheme. One could hardly argue that such a regime of direct reward could be considered a fundamental right in itself.

225 As pointed out by *Eide* (1995b), p. 233, there existed intellectual property conventions already at the time the Universal Declaration was negotiated. In spite of this, the Articles do not mention patents or copyrights expressly. In the negotiations the desirability of including the right to benefit from the moral and material interests of the author was debated. Some members of the Commission on Human Rights argued that such interests are not rights applicable to everyone. It was also pointed out in the course of the negotiations that patents and copyrights could become obstacles to the possibility of others to enjoy the benefits of scientific progress and its applications.

226 Cf. *Jehoram* (2004), p. 276 (stating that “copyright itself is recognised as a human right” in the said Articles); *Ricketson* (2002), p. 189-194 (considers intellectual property as a human right in itself due to Article 27(2) of the Universal Declaration, but to a limited extent both as regards the types of intellectual property rights coming under Article 27(2) and as regards the practical effects of the protection). Cf. also the position of the *Max Planck Institute* in response to resolution 2000/7 of UN Commission on Human Rights, Sub-Commission on the Promotion and Protection of human rights, Document E/CN.4/Sub.2/2001/12, 14 June 2001: “*Intellectual Property Rights and Human Rights*”, Report of the Secretary-General, at p. 17. The *Max Planck Institute* argues that “at least the main kinds of intellectual property rights are human rights” and talks of “*intellectual property rights and other human rights*”). *Drahos* (1999a), p. 367-371 considers that intellectual property rights are not fundamental rights in themselves, but instrumental rights which should serve the citizens' fundamental rights.

property rights are widespread in international law does not make them human rights any more than a widespread norm to queue in many contexts.²²⁷ The Articles place a positive obligation on states, but leave the exact ways of doing this to the discretion of states. Evidently, this does not exclude the fact that intellectual property rights may protect individual interests of fundamental rights nature.²²⁸

Furthermore, it should be questioned how far the fundamental material or moral interests of an individual author or inventor extend.²²⁹ There is nothing in Article 27(2) of the Universal Declaration or Article 15(1) (c) of the International Covenant indicating a minimum level of protection. The Universal Declaration and the International Covenant are more informative in defining the maximum level through a comprehensive interpretation of the relevant Articles with other provisions, which require limiting the scope of intellectual property protection against other rights and the related collective goods. For example, Article 27(1) of the Universal Declaration protects everyone's right to participate freely in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits. Similarly, in case of the International Covenant, Article 15 starts by recognising the right of everyone to take part in cultural life and to enjoy the benefits of scientific progress and its applications. The Article also requires that the steps taken by states shall include those necessary for the conservation, the development and the diffusion of science and culture. The states are furthermore required to respect the freedom indispensable for scientific research and creative activity.

Already these references to the other parts of the same Articles indicate that the protection "*of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author*" becomes easily conflictual with personal freedom and access to cultural and scientific knowledge.²³⁰ This is why the provisions have an in-built obligation to balance protection of the said interests with other rights and societal interests. In addition to this, both human rights instruments should be interpreted as a whole, taking into consideration the other relevant articles as well. For example, Article 22 of the Universal Declaration protects the economic, social and cultural rights indispensable for individuals' dignity and the free development of their

227 See *Drahos* (1999a), p. 365-366.

228 The fact that criminal law protects many fundamental rights does not convert criminal law into a fundamental right in itself. This simple idea applies in the context of intellectual property right laws as well.

229 One cannot necessarily argue that the original author should be able to control derivative works or the use of the original work for purposes of criticism, for example.

230 See also *Drahos* (1999a), p. 358 and *Committee on Economic, Social and Cultural Rights* (2001), p. 2-3 and 6 at paragraphs 4 and 17 (emphasising the need to balance the protection of public and private interests in knowledge).

personality. Such rights justifiably affect the scope of the protected moral and material interests of an author.²³¹

As the Universal Declaration and the International Covenant neither require the establishment of exclusive rights nor define any minimum level for the protection of the interests mentioned, the notion of intellectual property as a human right in itself is not operational in fundamental rights analysis. The level of protection established in multilateral intellectual property instruments, such as the Paris and Berne Conventions and the TRIPS Agreement, easily satisfies and exceeds the requirement for the protection of the moral and material interests explicated in the said human rights instruments. The problem of the TRIPS Agreement is rather the lack of balance regarding other rights and related collective goods.²³² Moreover, the focus of intellectual property protection has shifted from the protection of individual authors and creators to the protection of business and corporate interests and investments. Most recent reforms of intellectual property law have little to do with the interests protected in Article 27(2) of the Universal Declaration and Article 15(1) (c) of the International Covenant.²³³ The latter provisions have thus potential use in the rare instances where there is *no* protection of the individuals' moral and material interests related to scientific, literary or artistic creation. As a corollary, in the present conditions of global intellectual property protection Articles 27(2) of the Universal Declaration and 15(1) (c) of the International Covenant should be of marginal practical relevance.²³⁴

However, Article 27(2) of the Universal Declaration has been given independent relevance in case law. In its *Priorities of India* -decision the Enlarged Board of Appeal of the EPO took the view that Article 27(2) of the Universal Declaration provides a guarantee that states should provide their citizens with patent and copyright laws to protect their interests mentioned in Article 27(2) of the Universal Declaration.²³⁵ The

231 See in more detail *Andreassen* (1999), p. 479-485 (As regards Art. 22 the state has also “*an obligation to protect individual or collective freedom of action and use of recourses -- access to necessary recourses such as -- property rights*”) and *Adalsteisson & Thórhallson* (1999), p. 591-593 (as regards Art. 27, paragraphs 1 and 2 the states should also provide concrete opportunities for everyone to freely obtain information and knowledge, and for enjoying cultural values and cultural property; enhance the democratization of access and participation in all forms of culture and to guarantee access to the benefits of scientific progress and its applications for everyone).

232 *Geiger* (2006a), p. 388-389, has suggested that the TRIPS Agreement should be modified to include a reference to the Universal Declaration of Human Rights to prevent a systematic interpretation in favour of the right owners.

233 See generally *Sub-Commission on Human Rights* (2000); *Committee on Economic, Social and Cultural Rights* (2001) and *Weissbrodt & Scholl* (2003), *passim*.

234 See also *Eide* (1995b), p. 233 who concludes that these paragraphs of the Articles have limited relevance due to existing intellectual property conventions. He says that the Articles may be of relevance when a state is not a party to the specialised intellectual conventions regarding the rights of authors and copyright proprietors, but is a party to the relevant human rights instruments.

235 G 0002/02 and G 0003/02, decision of 26 April 2004, *AstraZeneca AB*. The Enlarged Board of Appeals endorsed the opinion of the Legal Board of Appeal that the obligation to recognise priority rights laid down in the TRIPS Agreement cannot be considered to impinge on the fundamental rights of the persons involved.

decision seems to presume that the only implementing option for a state would be the establishment of copyright or patent laws. Although this obligation may stem from other international obligations, it makes an important difference that it does not stem from international instruments protecting human rights.

In addition, an Advocate General of the European Court of Justice has concluded that Article 27(2) of the Universal Declaration attributes copyright, but no other intellectual property right, the status of a fundamental right.²³⁶ Thus, rights related to copyright, such as the rights of phonogram producers, would be outside any comparable protection. The Advocate General stated that in that case the classification of copyright as a human right in Article 27(2) of the Universal Declaration of Human Rights was not taken into account since the intellectual property right at issue was a related right which does not come within the scope of Article 27(2) of the Universal Declaration. The Opinion thus gave strong operational relevance for Article 27(2) of the Universal Declaration, but restricted its scope strictly to copyright. It interestingly made the question of compulsory licensing based on competition law dependent on this classification. The Opinion is problematic from the perspective that it considers copyright as a human right in itself, restricts the scope of the protection interests in Article 27(2) formalistically to copyright, operationalises the Article in a questionable manner, neglects the indivisibility and interaction between various rights, and does not discuss the protection of intellectual property rights under the protection of right to property.

The idea of intellectual property as a human right may be seen as an extreme attempt to shield intellectual property rights from other institutional alternatives, the effects of fundamental rights and other norms, such as competition law. The aura of human rights attached to intellectual property rights transforms the relevant question of which fundamental rights are potentially inherent in an intellectual property dispute and how they should be weighed into a banal question of how to balance intellectual property rights with *other* human rights, thus giving intellectual property rights a deeper justification exceeding instrumental reasons. Such a premise also problematically implies that intellectual property is a fundamental right to be maximally protected as far as it does not interfere with other rights, like freedom of speech or privacy, and to be balanced against these and other fundamental rights proportionally on the same level of analysis.

This also converts, somewhat ironically, international measures maximising intellectual property protection on a global level, such as the TRIPS Agreement, into human rights instruments allegedly affecting the interpretation of other human rights instruments, such as the Universal Declaration, the International Covenant, the European Convention and the EU Charter. Thus, what the phraseology of intellectual property as a human right does, is to transform intellectual property protection from the object of fundamental rights analysis (legislative policy) into its

236 Opinion of Advocate General in case C-200/96, *Metronome Music v Music Point Hokamp* [1998] ECR I-1953.

core instrument, namely a fundamental right in itself not to be interfered with even by the legislator, less to the extent required by other fundamental rights or sufficiently serious policy reasons necessary and proportionate in a democratic society.²³⁷ As a corollary, institutional alternatives for the protection of the interests mentioned in the human rights instruments, such as liability rules, public funding or direct protection of creativity and innovation, are precluded as being in irreconcilable conflict with the intellectual property fundamental right.²³⁸ The treatment of intellectual property as a fundamental right in itself is thus a strong reflection of structural proprietarian bias in the related discourses.

The above discussion does not deny that intellectual property legislation may protect interests of fundamental nature. However, once modern intellectual property protection (*à la* TRIPS) is in place, Articles 27(2) of the Universal Declaration and 15(1)(c) of the International Covenant largely lose their *operational* relevance, less in an improbable situation where a country would abolish all protection without adequate institutional alternatives for the interests protected in the said Articles.²³⁹ On the other hand, the individual rights emanating from intellectual property may obtain protection under *property ownership* as a fundamental right.²⁴⁰ In practice, intellectual property protection usually leads to some protection of individual and transferable rights that become under property ownership as a fundamental right. However, what is protected under property ownership, how and to what extent, is a complex question generally, and in the context of intellectual property rights, in particular. Some of the problems will be addressed in the following.

The starting point for the discussion is the protection of property ownership under the European Convention. According to Article 1 of Protocol 1 (subsequently “P1-1”):

“Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties”.

237 For the requirements see *J. Viljanen* (2003), p. 266-271.

238 However, it should be noted that these institutional alternatives to intellectual property rights are largely precluded by the international intellectual property instruments, in particular the TRIPS Agreement.

239 Needless to say, this would lead to serious infringement of the TRIPS Agreement and other international intellectual property instruments binding the state in question. As these are more elaborate on the scope and nature of the required protection and have a system for dispute resolution and effective sanctions (the TRIPS Agreement), the abolition of intellectual property laws would be handled as a TRIPS infringement and not as a human rights infringement case.

240 This aspect of fundamental rights protection afforded to intellectual property rights is missed e.g. by *Ricketson* (2002), *passim* (stating at p. 201 e.g. that “*there is no specific human right basis in the claims of database producers*”). See also *Drahos* (1999a), *passim*.

It should be noted at the outset that the Article mentions both natural and legal persons as subjects enjoying the right of property ownership.²⁴¹ Furthermore, the second paragraph enables a wide margin for states to regulate property ownership: the starting point is the right of a state to regulate the use of property based on general interest, among other interests.²⁴² On the other hand, the European Court of Human Rights has interpreted the notion of “possessions” widely in its case law. According to this case law the term possessions has “*an autonomous meaning which is certainly not limited to ownership of physical goods: certain other rights and interests constituting assets can also be regarded as ‘property rights’ and thus as ‘possessions’*” for the purposes of P1-1.²⁴³

The wide definition of possessions indicates that intellectual property is protected under P1-1. This has been accepted in scholarly work and in case law related to P1-1.²⁴⁴ In *Smith Kline*, the Human Rights Commission found that a patent, as personal property being transferable and assignable, fell within the scope of the term “possessions” in P1-1.²⁴⁵ In addition, the goodwill created when doing business has been likened to the right of property.²⁴⁶ In *British-American Tobacco*, the Human Rights Commission considered a patent application *not* to fall within the term “possessions”. The European Court of Human Rights did not have to decide on this issue.²⁴⁷ In *Aral* the Human

241 However, as *Banning* (2002), at p. 170 says, the European Court of Human Rights has focused more on relationships between humans rather than on the abstract notion of property in defining the extent and nature of protection, thus leading to more protection to those being dependent on the property in the realisation of their other rights.

242 Generally on the scope and nature of Article P1-1 see *Banning* (2002), *passim*; *Länsineva* (2002), p. 170-198 and *Coban* (2004), *passim*. See also *James and others*, 21 February 1986, Series A, vol. 98, paragraph 41, according to which “*The taking of property in pursuance of a policy calculated to enhance social justice within the community can properly be described as being ‘in the public interest’*”. In particular, the fairness of a system of law governing the contractual or property rights of private parties is a matter of public concern and therefore legislative measures intended to bring about such fairness are capable of being ‘in the public interest’, even if they involve the compulsory transfer of property from one individual to another”.

243 *Gasus Dosier -und Fördertechnik GmbH v Netherlands*, (Appl. no. 15375/89), 23 February 1995, Series A 306-B, 1995, at paragraph 53.

244 See e.g. *Coban* (2004), p. 149; *Länsineva* (2002), p. 183 and *Krause* (1995), p. 150.

245 *Smith Kline and French Laboratories Ltd v Netherlands*, (Appl. no. 12633/87), 4 October 1990, 66 DR 78. See also the admissibility decision of the Human Rights Commission in *Lenzing AG v United Kingdom* (Appl. no. 39025/97), at paragraph 2 (“*A patent is a possession for the purposes of Article 1 of Protocol No. 1*”) and indicating that the applicant company’s right to pursue a legal claim in the domestic courts, based on a European Patent, constitutes a possession for the purposes of P1-1). Generally on the wide scope of possessions under Article 1 of Protocol 1 see e.g. *Ovey & White* (2002), p. 303-309.

246 *van Marle and others v Netherlands*, 26 June 1986, Series A, vol. 101, at paragraph 41.

247 *British-American Tobacco Company Ltd v the Netherlands*, (Appl. no. 19589/92), 22 October 1995, Series A, vol. 331, at paragraph 71 of the Human Right Commission’s Opinion and at paragraph 91 of the ECtHR’s Judgment. The position of the Human Rights Commission can be criticised for making a formalistic differentiation not capable of taking into account different situations, the value and transferability of a patent application and e.g. the different state measures capable of frustrating the application in an arbitrary manner. A patent application may have less property value than a granted patent, but it could still be considered as a “possession” for the purposes of P1-1. The extent and nature of protection does not have to be the same, however.

Rights Commission stated in general terms that “*intellectual property is covered*” by P1-1.²⁴⁸ Finally, in *Anheuser-Busch* the Grand Chamber of the Court confirmed this and also stated that an intellectual property application may be protected.²⁴⁹ In spite of these references to intellectual property rights in case law, there are no judgements discussing the property nature of intellectual property rights in detail. Most of the relevant cases have been admissibility decisions. In others, the analysis has been very brief, as well. The general principles applied with regard to protection of property ownership and analysis of particular features of intellectual property rights provide more insights on the topic than the case law referred to above. National cases may provide additional viewpoints.

The protection of the property interest in intellectual property is further complicated by the explicit inclusion of intellectual property in the EU Charter. The EU Charter protects intellectual property under Article 17(2) and heading “Right to property”. It simply reads: “*Intellectual property shall be protected*”.²⁵⁰ Intellectual property was not explicitly included in Article 17(1), which protects the right to property in general.²⁵¹ Yet intellectual property rights have been covered under the protection of property ownership within the framework of the European Convention, as already explained. Article 27(2) of the Universal Declaration and Article 15(1) (c) of the International Covenant already protect the interests of authors and inventors, as discussed. The explanations to the EU Charter say the following about the purpose of Article 17(2):²⁵²

“*Protection of intellectual property, one aspect of the right of property, is explicitly mentioned in paragraph 2 because of its growing importance and Community secondary legislation. Intellectual property covers not only literary and artistic property but also patent and trademark rights and associated rights. The guarantees laid down in paragraph 1 shall apply as appropriate to intellectual property.*”

It is possible to interpret Article 17(2) as establishing an obligation on the institutions and bodies of the Union to establish protection, or rather, to secure the continuation of intellectual property protection. The Article could thus establish an obligation to create and maintain in force enabling legislation for the acquisition of property rights in intellectual creations. This would be an addition to Article 27(2) of the Universal Declaration and Article 15(1) (c) the International Covenant, as the EU Charter would explicitly require intellectual *property* protection, whereas the former

248 *Oguz Aral, Galip Tekin and Inci Aral v Turkey* (Appl. no. 24563/94), 14 January 1998, at paragraph 4.

249 *Anheuser-Busch Inc. v Portugal* (Appl. no. 73049/01), 11 January 2007, at paragraph 72-78.

250 Cf. with other language versions in “*la propriété est protégée*” and “*Geistiges Eigentum ist geschützt*”, see also *Geiger* (2009a), p. 19 and (2009b), p. 115.

251 The first paragraph reads: “*Everyone has the right to own, use, dispose of and bequeath his or her lawfully acquired possessions. No one may be deprived of his or her possessions, except in the public interest and in the cases and under the conditions provided for by law, subject to fair compensation being paid in good time for their loss. The use of property may be regulated by law in so far as is necessary for the general interest.*”

252 The text of the explanations relating to the complete text of the Charter (CHARTE 4487/00 CONVENT 50), p. 20. See also *EU Network of Independent Experts on Fundamental Rights* (2006), p. 168.

instruments leave more discretion for states to design alternative means to protect the moral and material interests of authors and inventors. Yet in distinction to Article 27(2) of the Universal Declaration, Article 15(1) (c) the International Covenant and most Articles of the EU Charter, Article 17(2) of the Charter does not seem to give judicially cognisable rights to individuals.

After intellectual property protection exists, individual intellectual property possessions would be protected under Article 17(1) and P1-1 of the European Convention, as also stated in the explanations and suggested by the systemic position of Article 17(2) under Right to Property.²⁵³ These rights are judicially cognisable rights of individuals. Mentioning intellectual property separately in the second paragraph, without the limitations written in the first paragraph, should not lead to more absolute nature of intellectual property possessions. Yet it would have been preferable to include limitations in Article 17(2) as well.²⁵⁴ The final sentence of the explanations quoted above recommends contextual interpretation of Article 17(1) in cases involving intellectual property possessions. Including the limitations in the interpretation is hence not problematic.

The European Union legislator has already referred to Article 17(2) in intellectual property legislation. In addition to recognising the commitment to fundamental rights protection in general as recognised in the EU Charter, the legislation in question intended particularly “to ensure full respect for intellectual property, in accordance with Article 17(2) of that Charter”.²⁵⁵

This is significant, as the reference to intellectual property in Article 17(2) should be classified as a “principle” in terms of Article 52(5) of the EU Charter, thus being judicially cognisable only when interpreting its implementations.²⁵⁶ By stating that the particular purpose of the legislation in question is to give effect to Article 17(2) of the EU Charter, the Union legislator thus renders Article 17(2) judicially cognisable. This would enable both judicial review of the legislation in question from the perspective of Article 17(2) and the interpretation and application of that legislation in its light. This practice of the Union legislator, if continued, gives Article 17(2) potentially important constitutional dimensions.

However, the meaning of Article 17(2) remains in many respects open. It should not create an obligation to establish new or expanded forms of intellectual property protection. Ensuring “full respect for intellectual property” should not be read into

253 See also Advocate General Kokott’s interpretation in case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271 (at paragraph 55), where the Advocate General stated that Article 17(2) emphasises that “intellectual property also falls within the protective scope of the fundamental right to property”. See also *EU Network of Independent Experts on Fundamental Rights* (2006), p. 168.

254 See also *T. Mylly* (2005), p. 206 and *Geiger* (2006a), p. 376.

255 See Recital 32 of Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L 157/16. See also Recital 12 of Amended Proposal for a European Parliament and Council Directive on criminal measures aimed at ensuring the enforcement of intellectual property rights of 26 April 2006, COM(2006) 168 final.

256 See also *Menéndez* (2003), p. 9-11.

Article 17(2) as a commitment to *strong rights* or a *high level of protection*, although such levels of protection may have been endorsed in the secondary legislation of the Union, to which the explanations also refer. Such an interpretation would convert European Union fundamental rights law into an instrument locking-in neoliberal standards as reflected in secondary law: fundamental rights would be restricted and interpreted in the light of secondary law and not *vice versa*. In any case, the potential of Article 17(2) of the EU Charter to shelter intellectual property from outside restrictions and institutional alternatives to exclusive rights is noteworthy. As such, it reflects the structural proprietarian bias inherent to current intellectual property law and policy in Europe and internationally.

However, recognising that intellectual property is protected under property ownership is a starting point for fundamental rights analysis, not its conclusion. First, although ownership of all property and mechanisms for its enforcement are granted in legislation, intellectual property should not be equated with other property. Infringements of intellectual property rights usually only reduce the opportunities of the owners to make profits from royalty payments. A compulsory patent license does not restrict the owner's own utilisation of the patented technology in its production due to the non-rivalrous nature of intellectual property rights. This is a significant difference to interferences with other property rights.²⁵⁷ Intellectual property is also inherently more uncertain as a form of property than for example real estate. Intellectual property may be invalidated and its existence and limits are often certain after court or administrative proceedings only.²⁵⁸

Second, the interaction with other rights in individual application situations affects the extent and nature of protection. The rights and interests of the holder of the property thus affect the scope and nature of protection.²⁵⁹ The same applies to the effects the exercise of the right has on others. A conceptual framework based on the underlying interests and interaction with other fundamental rights is in its flexibility a fruitful premise for the analysis. Property should thus be seen in a broader context of fundamental rights: it is in constant interaction with other rights.²⁶⁰ The practical outcomes of this interaction are determined on a contextual basis, often involving complex weighing of a multitude of rights, collective goods and societal interests. We should thus first identify the conflicting interests to rights in the property in question and the effects the exercise of rights would have on other rights and collective goods.²⁶¹ Other rights, like the right to privacy, may strengthen the property right. But

257 See also *Barendt* (2005), p. 253-254.

258 See more closely *T. Mylly* (2005), p. 204. *Lemley & Shapiro* (2005), *passim*, use the term "probabilistic patent". However, even if the exclusive right is uncertain, it usually has some property value and deserves protection under right to property. Although a lottery ticket is a highly uncertain investment, its owner deserves protection from misappropriation etc. However, the protected right of the owner to participate in the lottery does not lead to a guaranteed right to win.

259 See e.g. *Banning* (2002), p. 192-210 and *Länsineva* (2002), p. 170 and 193.

260 See e.g. *Banning* (2002), p. 109-112 and 173-174 and *Länsineva* (2002), p. 125.

261 See *Singer* (2000), p. 84 and 116-117 and *Länsineva* (2002), p. 170, 195 and 235.

rights of others, for example cultural rights, may limit the rights to property in some circumstances.²⁶²

Protecting the collective good aspect of property rights could also require limitation of individual property rights: *Banning* suggests that governments' active prevention of monopolistic practices could be interpreted as compliance with the obligation to protect the equal opportunity of everyone to enjoy their property rights.²⁶³ The right to property could thus create positive obligations to prevent interference in property resulting from private action. Although competition law is foremost reactive regulation, it also has a preventive function. The prevention of monopolistic practices also relates to the protection of freedom to conduct business and pursue a profession.²⁶⁴ An individual firm's freedom of contracting and property rights can be in conflict with the workable market as a collective good and social duties accompanying property. This is so especially if the company controls an essential facility without which competition would be precluded or severely restricted.²⁶⁵ Similarly, recognising that copyright is protected as property does not insulate it from freedom of speech claims, as such an approach would wrongly give property rights a privileged position in the system of fundamental rights.²⁶⁶ The indivisible and contextual nature of rights, and collective goods typically forming a *sine qua non* for the realisation of individual rights are thus core ideas related to the interdependent but often conflictual nature of rights and collective goods.

Third, in the hands of a small entrepreneur a patented invention has more relative value than in the hands of a multinational corporation. Even though Article P1-1 of the European Convention and Article 17 of the EU Charter also protect legal persons, the protection is stronger in the case of private individuals or small businesses being dependent on the piece of property for their core activities or even for their existence. In these instances, the protection of property ownership is regularly connected and strengthened by other rights, such as freedom to conduct a business or freedom to engage in work.²⁶⁷ Furthermore, intellectual property should not be treated as a homogenous block in fundamental rights analysis. Each intellectual property sub-category is different and has its own particular functions and justifications.

In conclusion, the occasional tendency by legal scholars and decision-makers to treat intellectual property as a fundamental right in itself, as well as the strengthening of property protection of intellectual property rights in the case law of the European Court of Human Rights and the EU Charter alike, reflect structural proprietarian

262 *Banning* (2002), p. 192-193 and 199-210; *Länsineva* (2002), p. 125.

263 *Banning* (2002), p. 230. *Länsineva* (2002), at p. 248, also notes that the protection of competition may legitimately function as a limitation of property rights.

264 See also *Singer* (2000), p. 147 (with regard to antitrust law).

265 The notion of social duties related to property are increasingly common due to the materialisation of private law. Such duties may relate to universal service obligations, for example. *Habermas* (1992, 1996), p. 403-404.

266 See *Barendt* (2005), p. 253.

267 See on a general level *Banning* (2002), e.g. at p. 209 and *Länsineva* (2002), p. 150 and 235-236.

bias one-sidedly emphasising the fundamental right interests of owners of intellectual property. Such underlying trends inhibit the control of the informational power inherent in intellectual property. The latter may adversely affect collective goods and the rights of others. Thus, if continued and strengthened, these trends solidify and further immunise private power based on intellectual property from outside control.

However, the fundamental rights analysis of intellectual property could also recognise the interdependence and indivisibility of rights and be based on contextual analysis seeking to address the interests underlying the intellectual property in question. Rather than on formal distinctions, such an analysis could reflect the position and strength of the intellectual property owner, the meaning of the intellectual property right in question for its owner and others, and the impact of any other fundamental right interests present in the situation on the interest to protect the right to property. Yet, currently there are no such cases available on the European level, capable of functioning as precedents for others to follow. Rather, it seems that the patterns of argumentation in intellectual property cases have typically been more formalistic and protective of property rights than in cases dealing with other objects of property ownership, as also the subsequent discussion of the case law of the Community Courts demonstrates. The selected cases will be discussed in detail to enable the elaboration of some of the perspectives developed previously.

4.5.3 Community Courts: Strengthening Structural Bias?

The European Court of Justice has discussed the fundamental rights dimensions of intellectual property in four major judgments. In *Netherlands v Council and Parliament* the Court analysed the Biotechnology Directive.²⁶⁸ It did not acknowledge any limitation of the right to human dignity or the right to self-determination and consequently did not consider the limitation requirements, such as proportionality.²⁶⁹ It stated that the grant of a patent does not preclude legal limitations or prohibitions applying to research into patentable products or the exploitation of patented products and that “[the] purpose of the Directive is not to replace the restrictive provisions which guarantee, outside the scope of the Directive, compliance with certain ethical rules --” (paragraph 80). Hence, the Court adopted a narrow interpretation of Article 6(1) of the Directive, and followed its Advocate General in arguing that the said provision does not require the informed consent of the donor of human biological material to patenting of inventions developed from or using this material.

The approach of the Court could insulate ethical and fundamental rights considerations from any grant of a patent, as it is always possible to have legislative restrictions outside the intellectual property instrument in question. The same

268 Directive 98/44/EC on the legal protection of biotechnological inventions.

269 Case C-377/98, *Netherlands v Council and Parliament* [2001] ECR I-7079. For a critique of the judgment see *Craig & de Búrca* (2003), p. 332 and *Beyleveld & Brownsword* (2002), *passim*.

approach could be extended to competitive concerns within intellectual property law. Yet, neither the judgment nor the Advocate General identified such restrictive provisions outside the Directive. The judgment also fails to recognise that it would have been appropriate to interpret Article 6(1) of the Directive in conformity with fundamental rights protection. This would have connoted broad interpretation of Article 6(1), leading to unpatentability of an invention where there is no informed consent for patenting an invention based on or containing human biological material.²⁷⁰ The potential existence of restrictive provisions outside patent law does not exclude the need to consider fundamental rights also within patent law, including the patentability requirements. When the exclusion from patentability is related to the protection of a fundamental right, the patent law principle of narrow interpretation of exclusions from patentability becomes very problematic.²⁷¹ The same holds true with regard to other intellectual property rights limitations as well: as far as they protect fundamental right -related interests, the idea of narrow interpretation of exceptions and limitations cannot be supported.²⁷²

In *Metronome Music v Music Point Hokamp*²⁷³ the European Court of Justice evaluated the conformity of the Directive on rental and lending right²⁷⁴ with freedom to pursue a trade or profession, and the right to property. According to the defendant in the main proceedings (Music Point Hokamp) the obligation to establish, for the producers of phonograms and all other holders of rights in respect of phonograms, an exclusive right to authorise or prohibit the commercial rental of those products would infringe freedom to pursue a trade or profession (Music Point Hokamp's rental of compact discs). The Court noted that the rental right is, due to an increasing threat of piracy, of increasing importance to the economic and cultural development of the Community because of its function to guarantee that “*authors and performers can receive appropriate income and amortise the especially high and risky investments required particularly for the production of phonograms and films*”. Based on these considerations, it said that these objectives conform to the objectives of general interest pursued by the Community.

270 Article 27 of the Universal Declaration has been interpreted to connote that states should take measures to prevent the use of scientific and technical progress for purposes which are contrary to the enjoyment of all human rights. See *Adalsteisson & Thórhallson* (1999), p. 593.

271 Similarly *Beyleveld & Brownsword* (2002), p. 101-102. As they argue, this interpretation would have been in line with the text of Article 6(1), Recital 26 and the principle of fundamental right -compliant interpretation. Furthermore, it would have been consistent with the legislative history of the Directive, as the European Parliament placed special emphasis on ethical and moral considerations and managed to reject the first proposal on these grounds.

272 See also *T. Mylly* (2005), p. 208 and *Geiger* (2006a), p. 398. See also the discussion in sub-chapters 5.5.3 and 5.6.3 where the norms and principles regulating the interpretation of limitations and exceptions will be discussed.

273 Case C-200/96, *Metronome Music v Music Point Hokamp* [1998] ECR I-1953.

274 Directive 92/100/EEC on rental right and lending right and on certain rights related to copyright in the field of intellectual property.

The Court referred to Article 36 EC [now 36 FEU] and said that the protection of literary and artistic property constitutes a ground of general interest capable of justifying restrictions on the free movement of goods. The inclusion of phonogram producers among the beneficiaries of the exclusive rental right was held to be justified by the protection of the extremely high and risky investments that are required for the production of phonograms and are essential if authors are to go on creating new works. It continued that the grant of an exclusive right to producers “*certainly constitutes the most effective form of protection, having regard in particular to the development of new technologies and the increasing threat of piracy, which is favoured by the extreme ease with which recordings can be copied*”. The Court considered it likely that without such a right “*the remuneration of those who invest in the creation of those products would cease to be properly guaranteed, with inevitable repercussions for the creation of new works*”. Advocate General *Tesauro*, too, referred to the right of every person to enjoy access to culture, recognised not only in Article 151 EC [now 167 FEU] but also in international instruments concerning human rights to which the member states contributed or became parties. These included the International Covenant and the Universal Declaration. As already implied, according to the Advocate General Article 27(2) of the Universal Declaration expressly recognises *copyright as a human right*.

Finally, the Court also held that the Directive is in conformity with the combined provisions of Articles 11 and 14 of the TRIPS Agreement. The general principle of freedom to pursue a trade or profession cannot be interpreted in isolation from the general principles relating to protection of intellectual property rights and international obligations entered into in that sphere by the Community and by the member states, the Court argued. It considered it unlikely that the objectives pursued could have been achieved by measures that preserved more the entrepreneurial freedom of individuals or undertakings specialising in the commercial rental of phonograms. Accordingly, the Court did not regard the consequences of introducing an exclusive rental right as disproportionate and intolerable.

The argumentation of the Court is inadequate. The Directive could have established a liability rule -based regime instead of a property rule -based regime regarding the rental right. The need to guarantee authors and performers “an appropriate income” could have been protected by a liability rule, requiring only the payment of a fixed fee for rental and making the prior authorisation from the right owner unnecessary. Establishing an exclusive right to the right owner (property rule) could lead to a refusal to license or excessive fees, thus threatening the freedom to pursue trade or profession in the rental business.²⁷⁵ A liability rule would also have prevented transaction costs, which tend to be high in proportion to the potential royalties involved. A liability rule -based regime could thus have been less restrictive of the fundamental rights involved, and more effective in securing authors and performers “an appropriate income”. The European Court of Justice was thus not right in holding that the selected regime was

²⁷⁵ See also *Travers* (1999), p. 176.

the least restrictive and potentially not in holding that it was the most effective regime in securing “an appropriate income”.²⁷⁶

The Advocate General referred to the *Magill*-case²⁷⁷ and considered it possible to apply the Community competition rules if it was shown that the *only* purpose of refusing rental licences was to remove those engaged in the rental business from the market in order to enable the occupation of the same market by undertakings controlled by producers.²⁷⁸ He argued that the *exercise* of the rental rights could infringe the prohibition of abusing a dominant position. He interpreted the *Magill*-case so that it does not entail a general justification for controlling decisions by *authors* through competition provisions due to the status of fundamental right attributed to copyright by international instruments, namely Article 27(2) of the Universal Declaration. Yet he said that the same does not apply to rights related to copyright, such as the rights of phonogram producers, to which the international provisions do not accord equivalent protection. The last-mentioned considerations are formalistic and not based on an appropriate interpretation of Article 27(2) of the Universal Declaration and case law regarding right to property. The Opinion failed to interpret Article 27(2) in conjunction with Article 27(1) or Article 22 of the Universal Declaration. The latter require weighing the protection interest with other societal interests, such as access to culture.

The Court’s reference to the TRIPS Agreement and other international measures seems on surface to be consistent with the case law of the European Court of Human Rights, where the need to interpret the European Convention in harmony with other rules of international law has been stressed.²⁷⁹ Yet, the European Court of Human Rights has used this method mostly in relation to other human rights instruments, as well as in cases where the issues touch upon interpretive continuums developed over several decades, such as the question of state immunity in civil claims or the development of *jus cogens*.²⁸⁰ The European Court of Justice, too, has referred to the need to interpret fundamental rights with reference to other international treaties for the protection of human rights, as explained previously. However, the

276 At paragraph 28.

277 Joined Cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* [1995] ECR I-743.

278 At paragraphs 12 and 33 and footnotes 7 and 19.

279 See ECHR cases *Al-Adsani v United Kingdom* (Appl. no. 35763/97), 21 November 2001, at paragraph 55 and *Fogarty v United Kingdom* (Appl. no. 37112/97), 21 November 2001, at paragraph 35 (“*The Convention, including Article 6, cannot be interpreted in a vacuum. The Court must be mindful of the Convention’s special character as a human rights treaty, and it must also take the relevant rules of international law into account --. The Convention should so far as possible be interpreted in harmony with other rules of international law of which it forms part, including those relating to the grant of State immunity*”). See also case *Öcalan v Turkey* (Appl. no. 46221/99), 12 March 2003, where the European Court of Human Rights reiterated that “*it must be mindful of the Convention’s special character as a human-rights treaty and that the Convention cannot be interpreted in a vacuum. It should so far as possible be interpreted in harmony with other rules of public international law of which it forms part--. It must, however, confine its primary attention to the issues of interpretation and application of the provisions of the Convention which arise in the present case*”.

280 In addition to the cases cited above see *J. Viljanen* (2003), p. 107-109.

interpretive situation is different when the referred international instruments are of special character. International law increasingly fragments into diversified fields, as already discussed.²⁸¹ Many international instruments represent narrow interests and specialised fields of application. There may be a conflict between two legitimate aims of interpretation of the European Convention: the pursuance of coherence between the European Convention and other international instruments, and the development of the protection of human rights based on a common European law. The interpretation of the European Convention may differ from interpretive standards applicable to other international instruments.²⁸² To an extent the Community Courts are willing to protect effectively fundamental rights, they should not use specialised international instruments as a shield against human rights arguments.

In such circumstances, the single-sided reference to just one set of international measures seems inadequate and purposeful. By referring to the TRIPS Agreement and the WIPO Conventions only the European Court of Justice avoided recognising the increasingly open conflict between access to culture and scientific advancements as stressed in some international instruments (such as the International Covenant and more lately also the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions) and exclusive right to control the results of investments in the creation of new knowledge and expression (as demonstrated in the TRIPS Agreement, in particular).²⁸³ By referring to the TRIPS Agreement and WIPO Conventions only (and selectively to actual human rights instruments) the Court did not form a comprehensive interpretation seeking harmony between the broadest relevant set of international instruments.

The reference to TRIPS Agreement as an evidence of the recognised fundamental rights nature of intellectual property rights is somewhat ironic in that the WTO system enables for one Member the denial of intellectual property rights protection to the products originating from a Member having breached some other part of the WTO rules as an authorised sanction.²⁸⁴ Treating intellectual property rights protection as a bargaining chip and trade sanction in the dispute settlement system of the WTO is, if anything, proof of the instrumental character of intellectual property rights and their subordination under general trade rules in the WTO *acquis*.

281 See e.g. *International Law Commission* (2003), p. 267-275 and the previous discussion under sub-chapter 3.3.2.

282 *Ovey & White* (2002), p. 37.

283 See Sub-Commission on Human Rights Res. 2000/7, Intellectual property rights and human rights, ESCOR, Commission on Human Rights, Sub-Commission on the Promotion and Protection of Human Rights, 52nd Sess., 25th mtg., U.N. Doc. E/CN.4/Sub.2/Res/2000/7 (2000) and *Weissbrodt & Schoff* (2003), *passim*.

284 See more closely *Ethier* (2005), at p. 858, about an instance where the WTO dispute resolution organs authorised Ecuador to suspend some of its TRIPS obligations in favour of the EU as a cross-agreement retaliatory measure based on the EU's GATT-infringing regime for the importation, sale and distribution of bananas.

The single-sided approach to the interaction between fundamental rights and intellectual property continued in *Laserdisken*.²⁸⁵ The case concerned the introduction in the Information Society Copyright Directive (henceforth the Information Society Directive) of obligatory regional exhaustion in the area of copyright law.²⁸⁶ Laserdisken ApS had imported and sold cinematographic works not available in Europe to individual purchasers through its sales outlets in Denmark, among its other activities. The exclusion of the international exhaustion doctrine in Article 4(2) of the Information Society Directive connoted that it could no longer import without acquiring prior consent from the owners of copyright.²⁸⁷ Laserdisken ApS, among other claims, challenged the validity of Article 4(2) based on freedom of speech argumentation: the exclusion of international exhaustion restricted the individuals' freedom to receive information.

The European Court of Justice, after repeating the contents of Article 10 of the European Convention, simply stated in one sentence that “*the alleged restriction on the freedom to receive information is justified in the light of the need to protect intellectual property rights, including copyright, which form part of the right to property*” (at paragraph 65). There is no substantive argumentation between the applicable norm and the conclusion reached. It should be noted that under both the European Convention and the EU Charter freedom of speech includes the right to impart information *regardless of frontiers*.²⁸⁸ It has been noted that the logic followed seems to have been the absolute, taken for granted primacy of the right to property over freedom of speech, the latter being generally subject to limitations. The signal given by the European Court of Justice was thus the immunity of copyright protection against freedom of speech arguments.²⁸⁹

It should be obvious that the protection of the right to property cannot always justify the establishment of *new* property rights at the expense of freedom of expression or other fundamental rights. Otherwise, any restriction of fundamental rights would be tolerated, provided it establishes new property right categories or somehow strengthens or expands the existing rights of intellectual property owners. Properly analysing the seriousness of the interference, the legitimacy of the aim, as well as the necessity and the proportionality of the measure, would indeed have led to an opposite conclusion. The proprietor has already received a reward for the creative efforts after the first sale outside the European Economic Area. Furthermore, the exclusion of international

285 Case C-479/04, *Laserdisken ApS v Kulturministeriet* [2006] ECR I-8089.

286 Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (OJ 2001 L 167, p. 10).

287 Laserdisken ApS also argued that the Information Society Directive could leave the member states an option to apply international exhaustion. The European Court of Justice concluded that the Directive precludes such rules.

288 See Article 11 of the European Charter of Human Rights and Article 10 of the European Convention. See also Article 15(2) of the International Covenant, which establishes an obligation on states to secure the diffusion of science and culture.

289 See *Hoikka* (2009), p. 227-229.

exhaustion also restricts the further distribution of copyrighted objects imported for private use by natural persons.²⁹⁰ Hence, the owners of the underlying copyrights can prohibit the distribution of even privately imported copyrighted items, such as books, within the European Union.

On the other hand, it is likely that the restriction of the freedom of speech could not adequately further the protected interests of copyright owners. The costs for negotiating importation licenses would in most cases be excessive and effectively prevent the importation of copyrighted items not already marketed within the European Economic Area. This is definitively so in case of copyrighted items imported by a natural person for private use. Thus, the exclusion of international exhaustion does not necessarily advance the ends of individual authors and copyright owners. The right of the copyright owner to partition the markets internationally price-discriminate the European Union market at the expense of European Union consumers, in turn, seems to be relatively far from the essential function of copyright as traditionally perceived. It is also artificial to connect this right to the protection of property as an individual's right, as the ones benefiting from international price discrimination are typically multinational content and publishing industries. In addition to affecting freedom of expression as individual rights, the exhaustion doctrine established in the Directive jeopardises communicative diversity in that the distribution of cultural items imported from outside the European Economic Area is now subjected to private, copyright-based control. The impact of such a regime is likely the lessening of both the diversity of cultural and informational artefacts in Europe and the channels of their distribution. Only the major players have a realistic possibility to negotiate the licenses needed for their distribution in Europe. Thus, a fuller analysis of the situation should have led to a contrary conclusion.

It is possible that *Laserdisken* represents the apex of the protective trend of the European Court of Justice in intellectual property matters. There are namely some indications of a potential change of approach in *Promusicae*,²⁹¹ decided in January 2008. In that case, the Court emphasised that when the member states transpose copyright directives, they must take care to rely on an interpretation of the directives that allows a fair balance to be struck between the various fundamental rights protected by the Community legal order. This obligation also extends to the authorities and courts when interpreting the national rules deriving from the directives. It also extends to other

290 See also *T. Mylly* (2002), *passim*. It should be noted that the permitted exception in Article 5(2) (b) of Directive 2001/29/EC only seems to concern the reproductions – not other exclusive rights – made by a natural person for private use. There is no permitted exception regarding exhaustion, as the European Court of Justice concluded at paragraph 25 of its *Laserdisken*-decision.

291 Case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271.

general principles of Community law, including the principle of proportionality.²⁹² It is yet uncertain, whether the case, decided by Grand Chamber, will remain an exception or will set the future direction for interpretations. In September 2009, Advocate General Maduro also emphasised in *Google v Louis Vuitton Malletier* that whatever the protection afforded to innovation and investment, it is never absolute. It must always be balanced against other interests, including freedom of expression.²⁹³

A comparison of cases where the Community legislative measures are claimed to restrict intellectual property rights²⁹⁴ or property rights in general,²⁹⁵ with the cases where the Community intellectual property legislative measures have been challenged suggests that the Community Courts are not always overly protective of intellectual property as such. The European Court of Justice has even in one context emphasised that the Community legislative measure may justifiably restrict (intellectual) property for example due to the need to reconcile the need to provide the final consumer with clear and accurate information on the products concerned, with the need to protect producers on their territory against distortions of competition.²⁹⁶ It is also possible to refer to the well-known case law limiting – often considerably – intellectual property rights based on free movement of goods.²⁹⁷ Rather, *the totality of the cases suggests that the European Court of Justice is likely to reject any challenge of Community legislation even when the balance of fundamental rights in the legislative measure is distorted*, like in the circumstances of the *Laserdisken*-case. Even the *Promusicae*-case is in line with this interpretation, as it involved no challenge of Community legislation, but only concerned its interpretation. The Community Courts have hence given strong protection for the choices of the Community legislator in the area of intellectual property, like in other areas of secondary Community law.²⁹⁸

292 See also case C-456/06, *Peek & Cloppenburg KG v Cassina SpA* [2008] ECR I-2731, where the right of distribution to the public was interpreted in the light of the free movement of goods, leading to a restrictive interpretation of the distribution right. Compare with case case C-306/05, *Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA* [2006] ECR I-11519, where the European Court of Justice emphasised the objective of the Information Society Directive related to high level of protection (at paragraph 36) as a guideline when defining the right of communication to the public.

293 Joined Cases C-236/08, C-237/08 and C-238/08, *Google France, Google Inc. v Louis Vuitton Malletier etc.*, opinion of Advocate General delivered on 22 September 2009, not yet reported (at paragraph 102).

294 Case C-347/03, *Regione autonoma Friuli-Venezia Giulia and ERSA* [2005] ECR I-3785 (concerning geographical indications) and T-195/00, *Travellex Global and Financial Services Ltd. v Commission* [2003] ECR II-1677 (concerning trademarks).

295 See joined cases C-20 and 64/00, *Booker Aquacultur Ltd. and Hydro Seafoof GSP v The Scottish Ministers* [2003] I-7411; joined cases C-37 and 38/02, *Di Lenardo Adriano Srl v Ministero del Commercio con l-Estero* [2004] ECR I-6911; joined cases C-453/03, 11, 12 and 194/04, *The Queen, ex parte ABNA Ltd. v Secretary of State for Health and Food Standards Agency* [2005] ECR I-10423; Case C-295/03 P *Alessandrini v Commission* [2005] ECR I-5673.

296 Case C-347/03, *Regione autonoma Friuli-Venezia Giulia and ERSA* [2005] ECR I-3785, at paragraph 128.

297 See e.g. *Keeling* (2003), chapters 1-10 for an analysis of this case law.

298 See also *Craig & de Búrca* (2008), p. 390-391 (on a general level without discussing intellectual property law).

The practical effect of this approach is to neutralise almost any conceivable challenge of Community intellectual property measures. This is particularly significant in the area of intellectual property, as the Community measures now typically reflect proprietary bias and pre-empt the comparable national competence to legislate, resulting in persistent but single-sided intellectual property legislation throughout the Union. Hence, taken as a whole, it is not a grave over-exaggeration to state that in the case law of the Community Courts fundamental rights have had the function of legitimating a strong form of intellectual property ownership and the intellectual property institution in general. The overprotective trend as reflected in the TRIPS Agreement on the international level has been taken as a factor further strengthening the proprietary bias in European Union fundamental rights law, thus sheltering a strong form of protection from comprehensive fundamental rights scrutiny. In the judicial review of Community secondary intellectual property law fundamental rights norms have been interpreted in conformity with the secondary legislation and the strictures of international intellectual property protection and not *vice versa*. Although promising when compared to the formulations of the pre-existing case law, the *Promusicae*-judgement is still very cautious in its formulations. It could hardly be interpreted as a precedent likely leading to the fundamental rights control of problematic provisions of law or informational power adversely affecting collective goods and the rights of others.

It has been argued that fundamental rights have started to have a balancing impact on domestic level, also in the context of private intellectual property litigation.²⁹⁹ Privacy rights and freedom of expression, among others, have occasionally started to affect interpretations of intellectual property laws also in horizontal relations.³⁰⁰ *Geiger* has optimistically proposed that these developments could lead to the recovery of the “true function” of intellectual property rights.³⁰¹ Should such occasional domestic judicial controls on the excesses of the proprietary trend continue and strengthen, such a development could ultimately also affect the interpretations of the Community Courts in the European framework characterised by constitutional pluralism. There may thus be weak signs of such a potential turn in the foreseeable future.

4.6 Concluding Perspectives and Transitional Thoughts

On European Union level, the concrete handling of fundamental rights arguments in the context of intellectual property rights reflects the inadequacy of the mainstream doctrine. The cases fail to consider the collective good side of intellectual property

299 See e.g. *Geiger* (2004), *passim*, who analyses national case law of EU member states and concludes that the reluctance to apply fundamental rights in the private law has gradually been overcome (at p. 277).

300 See e.g. the English case *The Right Honourable Paddy Ashdown, MP PC v Telegraph Group Ltd.*, 2001 EWCA Civ. 1142 (Eng. C.A.). The decision interprets copyright in the light of freedom of speech. See also *Barendt* (2005), p. 250 and 257.

301 *Geiger* (2004), p. 280.

protection and the intersubjectivity of rights. The mere notion of intellectual *property* may insulate the choices made by the Union legislator from any constitutional review, like in the *Laserdisken*-case treated above. Ovey's and White's conclusion that it is not clear under the European Convention to what extent (if at all) states may restrict freedom of expression to protect private commercial interests,³⁰² does not seem to apply to intellectual property under European Union law. This may reflect a more generic trend in freedom of expression doctrine: also in Europe, courts tend to be much less sensitive to freedom of expression arguments when the context is characterised as private rather than public, or involves property rather than censorship.³⁰³ The fact that intellectual property by definition restricts others' utilisation of information is interpreted to legitimate almost *any* restriction of others' freedom without the need for proportionality analysis. Intellectual property may even be problematically elevated into a human right as such, like in the Advocate General's Opinion discussed above.

Cases like *Schmidberger* imply that the situation may be somewhat different with regard to the relevance of fundamental rights as a counterweight to the basic Union freedoms. However, in such contexts the basic rights as guaranteed under the domestic laws of a member state sensitise the European Court of Justice's treatment; it is unlikely to challenge openly more extensive protection provided on the domestic level, especially after the gradual relaxation of the Community's integration objective. The basic freedoms-based control of member state laws implementing or securing basic rights is thus qualitatively different from the judicial review of European Union secondary norms or their interpretation and systematisation in the light of fundamental rights. The fundamental rights-based norm control or conforming interpretation is also qualitatively distinct from instances such as the *Cresson*-case,³⁰⁴ concerning individual acts or omissions of European Union administration. Deciding such cases in favour of fundamental rights arguments does not jeopardise the choices of the Union legislator, and hence not the strong economic interests perceived to underlie Union's intellectual property laws. Even the *Promusicae*-case, albeit containing some promising formulations by requiring the interpretation and implementation of intellectual property directives in member states so that the balance of fundamental rights is secured, operates on a safely abstract level. It does not frustrate the final verdict. Where fundamental rights protection could have its greatest significance – the judicial review of European Union intellectual property legislation, the interpretation and systematisation of all Union norms and direct control of private informational power – their effects are insufficient, or worse, merely legitimate the choices of the Union legislator and further strengthen the proprietary bias underlying the relevant laws.

The relevant case law from the Community Courts is scarce, as the Courts do not actively interpret or systematise intellectual property rights in the light of fundamental rights. Interests of individual intellectual property owners generally prevail in the

302 Ovey & White (2002), p. 287.

303 See Boyle (1997), p. 98; Rubinfeld (2002), p. 11 and also *passim* and Benkler (2003b), p. 223 (all in the context of US law).

304 Case C-432/04, *Commission v Édith Cresson* [2006] ECR I-10653.

Community Courts' interpretations, albeit less so in the area of trademark law, as will be discussed in more detail in the subsequent main chapter. Similarly, the Community Courts have largely missed the connection between competition law and the advancement of collective goods related to fundamental values.³⁰⁵ The *Microsoft*-case,³⁰⁶ in particular, constituted a paradigmatic opportunity for connecting the competition law evaluation of the measures to the realisation of collective goods relevant for economic rights and freedom of expression, as well as to individual rights (including those of Microsoft's). It is submitted that such analysis would not have changed the outcome of the case, but could have improved its competition law argumentation. Finally, perhaps for happenstance, the relevant case law from the European Court of Human Rights recognises and discusses intellectual property law almost exclusively from the perspective of the right to property and thus manages to send a one-sided signal to other European courts. The same applies for the EU Charter, which singles out intellectual property of all possible categories of possessions with a specific provision, and thus further strengthens the proprietary signal prevalent in the relevant European-level case law.

The review of the case law thus illuminates the fact that even if fundamental rights would be extended to the private sphere more extensively than currently, no direct conclusions could be made of the increased role of fundamental rights law in controlling private informational power or putting any limits to the single-sided proprietary bias prevalent in intellectual property legislation during the recent years. Even bodies like the Boards of Appeal of the European Patent Organisation have accepted that fundamental rights, and the European Convention *acquis*, in particular, affect the interpretation of the European Patent Convention.³⁰⁷ Yet, also in this case fundamental rights appear to assume a legitimating role rather than a

305 The impact of fundamental rights law in the area of competition law has rather reflected the liberal approach restricting the scope of fundamental rights analysis to the power relation between the state and the individual in the form of a competition authority applying competition law and an economic actor owning (intellectual) property rights and being subject to competition law application. See e.g. case case C-94/00, *Roquette Frères SA v Directeur Général de la Concurrence, de la Consommation et de la Répression des Fraudes* [2002] ECR, p. I-9011 (concerning on-the-spot investigations and privacy). From this perspective, the role of constitutional rights has been limited to protecting the economic actor's freedom and property rights from the coercive power of the state in the application of competition law. Constitutional law has thus presented itself only as a limit and restraint on certain interpretations of competition law to the benefit of an individual actor. Even though a relevant consideration, it presents only one of the many functions the constitutional rights could and should have within competition law.

306 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, Commission's Decision Case COMP/C-3/37, 792 *Microsoft*. The case will be discussed in chapter 7, in particular.

307 The EPO Boards of Appeal has accepted in its Interlocutory Decision, dated 5 August 1998, T 0377/95 - 3.3.4 that "[t]he overall acceptance of the ECHR as guidance is shown by the fact that all member states to the EPC adhere to the ECHR" (at paragraph 36). See also EPO Boards of Appeal Decision of 12 July 2000T 0377/95 - 3.3.4 (concerning the same matter) and EPO Boards of Appeal Decision D 0011/91, dated 14 September 1994, at paragraph 3.3 (recognising the role of the European Convention rules expressing general principles as forming part of the legal system of the EPO and which must therefore be observed).

function as a force or discourse questioning, and if necessary interfering with, the already existing systematisations and interpretations of intellectual property law. From this perspective, economic sectors and entities preferring strong intellectual property protection should not be overly worried about the general calls to place intellectual property rights under increasing fundamental rights review on the European level. It could, perhaps counter-intuitively, be in their interest.

However, the existing record of European-level courts does not frustrate the potential of fundamental rights discourse to improve interpretations of intellectual property and competition law alike, in individual instances or on a more lasting basis by affecting the doctrines and principles of the relevant laws. It is still considered fruitful to pursue on the track of interconnecting these laws to the system of fundamental rights and rights constitutionalism. What the discussion of the problems inherent to existing fundamental rights case law does is to avoid naïve expectations of any such increased interaction. At best, such interaction could manage to open up the branch of law -specific doctrines and interpretations, broaden and improve the consideration of various values, interests and effects present in each context of application, and hence provide an opportunity for the doctrines and principles inherent to these branches of law to develop further based on this interaction. At worst, fundamental rights would be either used to legitimate the already existing legislative choices and doctrines of the branches of law in question or – in the other end – would seek to single-sidedly determine the material contents of doctrines and outcomes without dialogical interaction. The last-mentioned strategy would likely lead to increased confrontation of fundamental rights law and the branches of private law it seeks to modify to conform to its own premises.

For example, it is possible to analyse compulsory licensing based on competition law from the perspective of fundamental rights protection, thus enriching legal argumentation typical in such instances and subjecting the standard competition law doctrines to a test. Compulsory licensing could be considered to constitute interference through control, as it may even imply a positive obligation for the individual in question as part of the social function of property, or deprivation of certain exclusivity related to the property in question. Such interference may be justifiable, as the state may have to interfere with the rights of an individual in order to protect the interests or rights of others. Ownership thus entails social aspects connoting the possibility of positive obligations.³⁰⁸ From the perspective of right to property, the position of the proprietor is significant: an individual inventor or a multinational corporation makes a difference. The same applies to the property interest of the owner in the intellectual property in question: a patent constituting the core of its owner's business or one out of thousands of patents protected for defensive (or offensive) purposes makes a

308 *Banning* (2002), p. 106 and 112-113. See also the background related to the social aspects related to property in German constitutional law (Article 14.2 of the German Constitution reads: "*Eigentum verpflichtet. Sein Gebrauch soll zugleich dem Wohle der Allgemeinheit dienen.*"), *ibid.* at p. 146-147. On a more theoretical level see *Singer* (2000), p. 84-86 (noting also at p. 18 that "*there is no core of property we can define that leaves owners free to ignore entirely the interests of others*").

difference. Furthermore, in case of copyright the jeopardising of the moral rights of the author could be interpreted as an interference with the integrity or freedom of expression of the author. Such considerations are typically absent in case of computer programs developed in the framework of commercial production of software. From another perspective, the dependency of others on the intellectual property in question and its impact on the realisation of other individual rights and collective goods, such as communicative diversity, should be weighed against the property interest(s) in the situation at hand. The analysis could be pursued even further to extend to questions like compensation payable for the compulsory license. Interference through control (not only through deprivation) may lead to an obligation to pay damages.³⁰⁹ This could imply that when an obligation to license intellectual property is imposed, the competition authority or court cannot normally mandate royalty-free licensing. Yet, there could be instances where the actions of the intellectual property owner amount to abuse of rights, frustrating the right to royalties in analogy with Article 17 of the European Convention and 54 of the EU Charter.

Conducting such an exercise and critically reflecting the relevant competition law doctrines on that basis could question the idea of presumptive predominance of the property right over other fundamental right -related values present in the situation at hand, thus, among others, directing the interpretation of the concept of *exceptional circumstances* now required for compulsory licensing on the basis of competition law. It could also challenge the notion of *objective justification* in that the idea that a significant negative impact on the intellectual property owner's incentive to innovate could justify any restriction of others' rights or collective goods needed for the realisation of rights would become suspect, as will be discussed in chapter 7 in more detail. Furthermore, it could provide a means to contextualise different ownership situations by emphasising the concrete rights and interests of the owner and others in the situation at hand, thus reducing rule-of-thumb -type formal competition law analysis based on rigid classifications and court-created inflexible tests. Finally, such analysis could even lead to recognising the need to complement the economic welfare standard prevalent in current competition law with a social or societal welfare standard, especially when the case deals with communications, information, media or cultural life.

Yet, as has been pointed out, pursuing such discourses as part of traditional rights constitutionalism has its limitations not only related to the proprietary bias of the relevant fundamental rights case law on the European level, but also related to the general capacity of rights constitutionalism to address the problem of private power, effects on collective goods and the general longer-term colonisation of societal subsystems and jeopardising of collective goods by anonymous, autonomous processes like economic globalisation or excessive commodification. "*Bold constitutional adjudication*" is an unlikely and inappropriate response to such developments. In addition to pushing the fundamental rights doctrine to better integrate private

309 Banning (2002), p. 107.

regulative practices and asymmetrical power under fundamental rights control and to facilitate fuller consideration of effects on collective goods, we need new kind of constitutionalism in the form of principled, critical discourse. Such constitutionalism should question the democratic legitimacy and ethics of the branch of law -specific developments from within, but utilising the ideas, inputs and limitations provided by traditional rights constitutionalism. Intellectual property and competition law already exemplify inherent constitutionalisation in a neoliberal spirit, for example in the form of the three-step test intended to censor limitations and exceptions acceptable for exclusive rights, be they based on fundamental rights or any other interests. The purification of competition law doctrine from any non-economic considerations, as taught by the Chicago School, may be seen as another branch of law -specific constitutionalisation project pursued in neoliberal spirit.

The fundamental rights developments in the European Union emphasise the importance of such constitutionalism. These developments place pressure on other legal institutions – and the inherent doctrines of intellectual property law – to react to the expansionary tendencies of intellectual property laws: the existing fundamental rights doctrine largely fails to function as an adequate control of informational power enabled by the intellectual property institution and as an adequate check on the strong rights -ethos characterising intellectual property policy in Europe. In some instances, competition law may be able to accommodate the concerns related to collective goods, such as the freedom of the markets, communicative diversity or even freedom necessary for scientific and creative activity. However, competition law cannot easily address the general expansion of intellectual property rights, nor can it typically assist in individual instances related to effects on private individuals. The potential of competition law as a generic solution is thus limited. Creating balancing instruments within intellectual property laws, intended to enable the integration of fundamental right -related values in interpretations, seems indeed grounded.

It appears necessary to address the underlying discourses, developments, the basic doctrines and operation of the intellectual property institution in more detail. These define, more concretely and pervasively than the incidental application of the fundamental rights norms, the respective weights of rights and the realisation of collective goods related to information and knowledge. By regulating the rights to knowledge on a day-to-day basis, they structure the economic constitutional law of intellectual property. Furthermore, it is necessary to consider the availability of instruments and the sensitivity of doctrines within intellectual property law to market power and competitive concerns. The inherent functioning of the intellectual property institution may either alleviate or exacerbate the pressure to adjust intellectual property rights by having recourse to fundamental rights or competition law, or other legal institutions. Finally, it is time to substantiate the argument about the expansion of intellectual property and its structural proprietarian bias. Hence, the evolution and functioning of the intellectual property institution will be analysed in the next main chapter. The notion of economic constitutional law will also be further developed, now also enabled by the preceding discussion of rights constitutionalism.

5 Intellectual Property and Economic Constitutional Law

5.1 Chapter's Contents and Central Arguments

In this chapter, European intellectual property protection will be addressed from the perspective of economic constitutional law. The notion of European economic constitutional law will first be opened and further developed. It constitutes of not only fundamental rights or other constitutional norms in the European Union context, but could also comprise elements having their origin in intellectual property norms and discourses. Furthermore, although neither the historical nor the only current motive for protection, the economic reasons behind intellectual property protection provide the modern *prima facie* justification for the existence of intellectual property laws. Hence, excluding economic discourses related to intellectual property would constitute an oversight comparable to legal dogmatics approaches disregarding any value- and policy-level discussion, or law and economics approaches ignoring non-market values in decision-making. Overlapping and competing reconstructions or systematisations of intellectual property law considered simultaneously enable fuller contextual analysis and could avoid any single reconstruction or systematisation becoming an exclusionary strategy or dogma.

Although the *prima facie* legitimation of intellectual property law is here seen to rest on instrumental or utilitarian theories, the *effect* of intellectual property protection is to participate in the construction of an institutional structure setting ground rules for human interaction and economic relations. Intellectual property pervades lifeworld directly by restricting the possibilities of individuals to use protected subject-matter in their interactions, thus applying to situations embedded in informal lifeworld contexts. It also affects lifeworld indirectly, for example by affecting the communication system and the markets by making the exclusion of some technologies possible, hence affecting the plurality of market actors and the extent and nature of communication within that system. From a systems theoretical perspective it must accommodate the competing rationalities of economy, science, art and technology, among others. As intellectual property is not restricted in its effects to the subsystem(s) of the economy, it requires more than procedural or utilitarian justification. The analysis of substantive intellectual property protection in Europe will be conducted against this horizon.

After discussing the notion of European economic constitutional law, the research will address the theoretical premises of intellectual property protection in mainstream

economics. The picture thus formed will be complemented and problematised with an analysis of various real-life market phenomena related to intellectual property rights. The theoretical case for intellectual property protection may namely fail or produce a distorted picture for several reasons. The information markets may be oligopolistic or monopolistic, intellectual property may not be needed as an incentive on some markets or the power and social harms generated through intellectual property protection may be excessive in relation to the benefits achieved. However, such failures or inadequacies of intellectual property protection could also be addressed and remedied through legislative instruments other than intellectual property law, such as competition law.

European intellectual property law is part of the broader specialised framework of international intellectual property law. It should be seen in this context. The *globalisation of capitalism* in the sense of global rivalry on the production level and innovation assuming a central function in global competition necessitated an effective mechanism enabling the recapture of cross-border spillovers of innovation. That system was also necessitated by the shifting of production to developing countries and the inhibition of imitation and thus learning-by-doing and potential innovation-competition on the part of the developing countries. The answer to this need has been the *intensified globalisation of intellectual property protection*. The development has so far culminated in the TRIPS Agreement.

The globalisation of intellectual property protection enables the formation of economic and informational power exercisable on a world scale and contributes to the global oligopolisation and concentration of the related industries. This is due to the fact that the globally harmonised intellectual property protection enables and fosters the global distribution of protected goods and provision of such services on a world scale and thus the amortisation of the sunk costs devoted for creating the intellectual property in the first place. The European Union contributes in the formation of the international system of protection and must act under its constraints: it both regulates through the international system and is regulated by it. As such, the international system of protection importantly participates in the construction of the economic constitutional law of intellectual property in Europe. Hence, it would be a mistake to exclude the international system of protection from the analysis of the European developments.

Like the system of international intellectual property, also European intellectual property protection has gone through an important function change. The current stage represents proprietarian ideology. The concretisation of the argumentation involves patent and copyright protection in Europe, with an emphasis on information technology, communications and the means available under intellectual property law to control the economic and informational power created. The analysis must be at the same time relatively comprehensive and substantive to enable reliably the identification of generic trends and (structural) problems of protection. Achieving these objectives comes with the expense of the length of this chapter.

The critical analysis of European patent and copyright law brings forth the inadequacy of the current doctrines, persistent argumentation patterns and *allgemeine Lehren*. They typically serve neither the economic functions now often seen to underlie protection, nor

cater for the fundamental right -related values and objectives. Moreover, intellectual property norms create economic and informational power they are unable and unwilling to handle with. Instead, the function of many doctrines and argumentation patterns seems to be the *neutralisation* of the underlying policy and moral questions, the normative fencing of intellectual property exclusivity against limitations and outside threats (*inherent constitutionalisation in neoliberal spirit*) and the systematic prioritisation of the interests of the right owner (*structural proprietarian bias*).

Alternative ways to construct intellectual property laws based on the underlying theoretical premises of this research will be made throughout the discussion. In the end of this chapter, some horizontal solutions, capable of being adopted throughout the intellectual property institution, will be considered. Such proposals relate to the interpretation of exceptions and limitations to protection, the extension of abuse of rights doctrine to intellectual property law and the relativisation of the three-step test used to censor exceptions and limitations to exclusive rights.

5.2 European Economic Constitutional Law and Intellectual Property

5.2.1 Politicisation of European Intellectual Property Law

The immediate effect of intellectual property is to enable the exclusion of others from the use of informational resources of various kinds. Hence, the ideas or wishes of technological, artistic, communicative or competitive neutrality often attached to intellectual property do not hold even the simplest critical evaluation.¹ Concerns related to what can be owned, what are the limits of ownership and what should be the right balance between incentivising or rewarding creation and causing harms through exclusion of others from the utilisation of ideas and expressions have always been implicit in intellectual property law and policy.² Furthermore, like private property, intellectual property accumulates and enables concentration of power in ways that keep others from participating in the market system on fair and equal terms. This is why it should be reassessed over time to prevent illegitimate and unjustified forms of this concentration.³

Property right logic in general is indeterminable and may produce several plausible conclusions. The conclusions reached depend on other intervening values, interests and principles which structure and affect argumentation. These may be based on various premises, such as the image of competitive markets, regulation of communication, information and innovation, or the protection of health, the environment or freedom of science.⁴ This applies to intellectual property, too. Intellectual property laws are

1 See also *Drahos* (1999b), p. 441.

2 *Waldron* (1993), *passim*.

3 See *Singer* (2000), p. 174 (with regard to property in general).

4 See generally with regard to property *Singer* (2000), *passim* and *Peritz* (2000), p. 256.

flexible and indeterminable in a significant way. They enable competing constructions of the underlying values and interests and thus competing *allgemeine Lehren*. The underlying values and interests considered relevant affect not only the interpretations reached, but also the questions asked and problems seen.

The intensification and globalisation of technology competition and the development of the global information networks into the daily environments of human interaction and commerce connote that intellectual property laws now constitute part of the basic global laws of the information society. More actively, concretely and far going than fundamental rights laws they determine the substantive boundaries of property rights, entrepreneurial and individual freedom, competition and freedom of expression. The core doctrines and concepts of intellectual property, however, originate from eras when the effects of intellectual property rights were restricted to some professions and industries only, with limited impact on the systemic environment. The responsibility for their reassessment rests not only on the shoulders of the legislators, but extends to the judicature and the members of the academia (re)interpreting the laws, developing the concepts and doctrines of law and constructing *allgemeine Lehren* of intellectual property law and related fields. This implicates intensive politicisation of intellectual property law.

The most obvious political struggles take place around “boundary objects” like gene, genome and standard operating system software, being objects having different meanings for different interests.⁵ A proposal for new intellectual property legislation, even though predominantly codifying existing practices, may politicise, ultimately producing unexpected outcomes in the process. The Proposal for a Directive on the Patentability of Computer-Implemented Inventions from the year 2002 is an example of such developments.⁶ It attracted considerable media attention and criticism on the part of the open source community, individual programmers and several firms, culminating in several modifications proposed by the European Parliament and in the later rejection of the whole Proposal by the Council.⁷ The more oblivious political struggles are those between competing patterns of interpretation, competing definitions of legal concepts and doctrines, as well as proposals to construct broader constellations of laws that necessitate the accommodation of several branch of law -specific *allgemeine Lehren*.

Intellectual property law cannot avoid being constitutional in terms of matters decided under its rules. It cannot avoid being political even and especially when giving the impression that nothing has changed or that the rules and doctrines of intellectual property laws flexibly and unproblematically adapt to the new situations. Making the current state of law appear as a natural culmination of step-by-step doctrinal developments or neutral and thus unproblematic reactions of the intellectual property institution to the changes in the systemic environment is either a bold attempt to

5 See e.g. *Lash* (2002), p. 194-197 and 200-201.

6 COM(2002) 92 final (20 February 2002). See also Opinion of the Economic and Social Committee on the Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions, COM(2002) 92 final – 2002/0047(COD), 19 September 2002.

7 See also e.g. *Hilty & Geiger* (2005), p. 615-616 and *Grosche* (2006), *passim*.

depoliticise perhaps the most political legal institution of the information society – or total blindness of social and economic contexts. The same applies for the naïve conception of intellectual property developments as progressive enhancements of protection through international, regional and domestic legislative measures alike.

It is possible to constitutionalise intellectual property with an inward- or outward-looking strategy, or a combination thereof. *Inward-looking or internal constitutionalisation* of intellectual property constitutes of the inherent working of the intellectual property-specific doctrines, concepts and principles. It is the work of the intellectual property experts and specialised courts and authorities and may crystallise, legitimate, emphasise and seek to safeguard the most essential rules, principles and interests of intellectual property laws from experienced threats. It is thus often reactive to the demands originating in other spheres and expert systems. It may also comprise selective references to spheres and regulations outside intellectual property laws, such as isolated arguments based on economics or fundamental rights provisions. The incentive argument isolated from any consideration of real-life contexts and imposition of social costs is an example of the former. Invocation of the right to property ownership as a fundamental right, detached from the broader system of fundamental rights protection and the social responsibility of property ownership, is an example of the latter.

Outward-looking or external constitutionalisation, on the other hand, may be an attempt to reconstruct intellectual property law by experts other than traditional intellectual property specialists. Fundamental rights jurisprudence and economic analysis of law provide competing approaches through which intellectual property may become constitutionalised in the sense of creating a persistent hierarchy of norms, principles, interests and techniques, through which intellectual property norms become interpreted, legitimated and (in)validated, and through which proposals for reform become formulated. Both external approaches are typically depicted as neutral, apolitical projects following given, undisputed premises. In this sense, the difference to internal constitutionalisation of intellectual property may be marginal.

External constitutionalisation may also comprise elements of inherent constitutionalisation of intellectual property law and accommodate more than one external approach. This implies the *possibility of dialogical constitutionalisation* not restricted to the perspective of any single expert system. Accommodating several systems having partially incompatible basic assumptions places the politics of intellectual property law and its constitutionalisation attempts into the limelight. There are no more undisputed premises to which one could resort. The constitutional projects constantly challenge each other's premises and attempt to maximise their own logic and perspectives at the expense of the others. It is this pluralistic, multi-perspective constitutionalisation, which will be further developed in the following. It is built on the perceived need for multiple, overlapping reconstructions or systematisations considered simultaneously in the decision-making practices. Such an approach enables fuller contextuality of decision-making in the sense of considering cases at hand from multiple competing premises. It also enables constant critique and challenge of the proposed systematisations and proposals based on other systematisations.

5.2.2 The Notion of European Economic Constitutional Law

It is possible to discern alternative explanatory and justificatory models of what one could call European economic constitutional law.⁸ Although neo- and ordoliberal thinking have dominated in the emergence of the European economic constitution, the profound changes in the basic Treaties and the whole structure of the European Union have significantly affected the normative environment, the theoretical discussion and ultimately also the interpretations of the Community Courts. The European Union's current goals do not only include economic or market integration ends, but also other objectives related to social and cultural values, environment and the protection of fundamental rights. The ordoliberal conception of economic constitution as a legal materialisation and justification of one economic order, based on freedom of trade and competition as construed by the classical economists, has outlived its life. It harnesses both politics and the civil society to advance a certain ideology of markets. It does not correspond with the plural objectives and values inherent to modern societies and reflected in their constitutions, be it on the level of individual countries or the Union.

The strengthening of European regulatory policies and the broadening of their scope within these and other areas can be seen as incompatible with the ordoliberal legacy: the vision of European Economic Community representing *economic constitution* at supranational level. Economic rationality and a system of undistorted competition were accordingly seen to prevail within the framework of the European Economic Community. Social, redistributive policies were pursued and developed at national level.⁹ The Maastricht Treaty with its social emphasis can be seen as an important demarcation line marking the end of the ordoliberal economic constitution in the European Union context. Joerges argues that it made ordoliberals turn from a self-assured identification with the integration project to a critique of its course.¹⁰ The unity of the competitive order was further broken down by the strengthening of Community's industrial policy related to research and development, elevated to constitutional status as an objective of the Community in the Treaty on European

8 See *Maduro* (1998), at p. 108-149 and also *passim*, treating the free movement of goods provisions of the Treaty from the perspectives of alternative explanatory and justificatory models. See also *Joerges* (1994), *passim*. *Nörr* (1995), *passim*, addresses the origins of the concept *economic constitution*. *Baquero Cruz* (2002), at p. 42, preferred the term "*EC economic constitutional law*", based on the pillar-structure of the Union and the differences between the pillars. However, the differences became increasingly relative even before the Lisbon Treaty, which ultimately abolished the whole structure. The term *European economic constitutional law* is broader than *European Union economic constitutional law* as it better captures the idea that also the constitutions and legal traditions of the member states, other regional measures, as well as international law are included in an interactive relationship.

9 As *Lemke* (2001), p. 197 says, the ordoliberal concept of social market economy was based on a difference between the economic and social domains: the consequences caused by the former on the latter domain had to be mediated through state action to produce the necessary legitimation both for the economic domain and the state structured to maintain it. See also *Joerges* (1994), p. 37-43.

10 *Joerges* (2005), p. 461-475.

Union.¹¹ Finally, the fundamental rights development in Union law can be seen to shatter finally the ordoliberal dream of an economic constitution operating on top of the European legal order. The gradual recognition of fundamental rights among the core values and aims of the Union, and their development into operational legal norms conditioning, at least in theory, the legality of all Union action, has profound implications for the attempts to construct broader constellations of European law.

However, what is the course of the integration project and which ideology will replace ordoliberalism, if any, is far from settled. *Maduro* argues that no particular model of economic constitutional law has been adopted, but that the future of European economic constitutional law lies in an ongoing discourse between multiple institutions and different alternative models. The European economic constitution can thus be seen as an open constitution accommodating different competing values between free competition and economic and social cohesion. Its open character includes the neo- and ordoliberal genesis, the new goals of the European Union as explicated in the basic Treaties, as well as the constitutional traditions of the member states.¹² This open-ended and discursive nature of European economic constitutional law enables competing interpretations and alternative paths of development. The inherently indeterminable and contestable character of European economic constitutional law, as advanced by *Maduro*, can be seen as its most central feature, opening the field for alternative constructions.

The question of the division of competencies between the member states and the Union formed the core analytical schema for *Maduro*.¹³ Intellectual property laws in Europe may still be constructed on the basis of the division of competencies, and could continuously present problems related to the respective competencies of the Union and the member states, jurisdictions of courts, language regimes and alike.¹⁴ Even though the question of competencies and thus one constitutional dimension of the Union and the member states will not lose its relevance, its practical significance in relation to the substantive issues determined on Union level is marginalising within the core sectors of information society law analysed in this research.¹⁵ The centralised model has dominated within these areas for some time and continues to produce rules of paramount importance from the

11 See Articles 179-190 FEU, ex. 163-173 EC. See also *Joerges* (1994), p. 43.

12 *Maduro* (1998), p. 159-169 and 175.

13 *Ibid.*, *passim*, divides the alternative explanatory and justificatory models behind the free movement of goods provisions of the Treaty largely on the basis of the division of competencies between the Union and the member states (the centralised model, the competitive model and the decentralised model).

14 For example, the external competence of the Communities to enter into intellectual property agreements has been a contentious issue, as reflected by Opinion 1/94 (WTO) [1994] ECR I-5267. The Proposal for a Council Regulation on the Community patent, COM/2000/412 final (OJ C 337 E, 28/11/2000, p. 278-290), on the other hand, has been pending for a long time due to the language regime questions and problems related to jurisdictions of courts.

15 Also *Joerges* (1994), p. 48, notes that European economic law is not in any way shielded from politicisation, but it faces the same type of choices as does any national legal system. *Joerges* sees as a distinguishing feature and simultaneously as a problem of European economic law the discrepancy between its political substance and its immature political infrastructure.

perspective of substantive constitutional law. A broadening of discussion concerning European economic constitutional law is hence needed. The question of competencies must increasingly be complemented with a discussion about the structuring effects of Union law on societal and economic phenomena, as well as the more direct effects of Union law on individual and collective autonomy.

Hence, the European economic constitutional law discourse should increasingly broaden its focus to substantive issues of democratic theory and constitutionalism, as fundamental economic choices having profound repercussions within political and social spheres are determined at Union and global levels. On the latter level the Union – not its member states in isolation – is the significant operator. European economic constitutional law thus constitutes of the central norm complexes and principles regulating the economy's interrelationships with politics and the civil society. Instead of broad, top-down characterisation of the overall nature of European economic constitutional law, it is fruitful to concentrate on existing European legislative and judicial developments shaping the economic and social life in various ways.¹⁶ Such developments may be used as examples of the European economic constitutional law in the making.

As the Union is an international actor capable of initiating and affecting the contents of international measures, also international treaties and other international instruments binding the Union form a significant part of this regulation. The same applies to private regulation. This applies in particular to regulation of behaviour through technological architectures, standards and computer code: in information society economic and lifeworld interactions are increasingly mediated by artificial, man-made environments embedded with and affecting the realisation of values, rights and democratic ideals. The multitude of such bottom-up analysis could demonstrate something more telling about the character of integration and the aspects economic constitutional law than a top-down approach based on the division of competencies or the general position of fundamental rights instruments, such as the European Convention or the EU Charter, in the reasoning of the Community Courts.

For example, instead of asking to which extent and how European Union's basic freedoms law affects nationally determined intellectual property rights, it is considered more relevant from the perspective preferred here to ask how intellectual property norms determined at European Union level, together with other normative instruments like competition law and fundamental rights norms as applied and interpreted in courts and authorities, regulate the economic activities in question. It is furthermore important to ask what are the ramifications of this regulation within civil society and politics, what kind of democratic ideals does this regulation reflect, *and how would regulation based on alternative democratic ideals look like*. Concentrating solely on the formally defined questions of federalism or the position of fundamental rights in European Union legal system in the abstract cuts the thus created critical edge of discussions related to the material aspects of European economic constitutional law.

16 See also Joerges (2005), p. 487.

In the framework suggested here the question of competencies becomes articulated as a discourse or dialogue among the various European Union and member state institutions and other actors on the substantive course to be adopted and the democratic ideals to be pursued. Similarly, instead of concentrating on the status of fundamental rights in the argumentation of the Community Courts in the abstract, it is at least equally important to analyse the substantive fundamental rights effects of intellectual property laws, international measures binding the European Union, as well as the ideals underlying them and the argumentative patterns and doctrines deployed and developed by courts when giving substance to their provisions. European economic constitutional law thus comprises elements emanating from the European Union-organs, but also from the member states and international and other than European Union regional instruments, such as the European human rights and intellectual property regimes. For example, interpretations of European patent law have developed in the practices of the European Patent Office, on one hand, and the practices of the domestic courts, on the other hand. The latter interpret their validity, scope and the extent of exceptions.

For example, a Community directive enumerating the permitted exceptions to copyright exhaustively and subjecting their national implementation to an additional test reflects the European Union legislator's choice of balance between different fundamental rights and thus also illuminates the background democratic ideals. Likewise, a doctrine of interpretation, like the idea of narrow interpretation of exceptions and limitations to copyright, reflects a choice on the part of the judiciary of how to *prima facie* balance different fundamental rights in application discourse, thus also illuminating the background democratic ideals.

Furthermore, an interpretation given by a Boards of Appeal of the European Patent Office of a TRIPS provision requiring patentability in "*all fields of technology*" is significant, as it on one hand underlines the capacity of the Union to affect the substantive contents of European patent law through international measures and without recourse to the doctrine of direct effect of the international treaty in question. It could also reveal the power of specialised administrative agencies to define the course to be adopted within patent law: it may be neither grandiose judgements of the highest courts nor legislative acts that define the scope of patentability, but relatively mundane and purportedly apolitical work of administrative agencies. The judgements and legislative acts often merely confirm what has already taken place in the practices of the administrative agencies.

These typical and routinely applied doctrines, argumentation patterns and legislative choices are revealing of the underlying balance of fundamental rights and collective goods, preferences between competing values and policies, and thus also of European economic constitutional law's democratic ideals. They are more revealing than the more exceptional and contingent cases where on the European level the correct fundamental rights are invoked in a correct way in a correct case, or where the provisions of two branches of law representing competing values or policies are successfully brought in a direct conflict before a European court.

European-level intellectual property protection thus determines in an important way underlying aspects of European economic constitutional law. In information society, intellectual property laws define the strategically the most important, ethically the most delicate and democratically the most significant ownership rights. They enable the exercise and accumulation of informational power, regulate access to and use of information, and determine essential features of freedom of expression and the most important forms of competition. Intellectual property laws thus participate in the definition of the relations between the economy, politics and civil society and in a fundamental sense the (economic) culture of the information society. It is against this background that the developments and selected aspects of European intellectual property law will be analysed (and should be comprehended) in the following.

5.3 Evolutionary Perspectives

5.3.1 Economic Discourses and Market Phenomena

Introduction

The following will discuss economic underpinnings of intellectual property protection. This is necessary to understand many of the current discourses, developments and specific phenomena of intellectual property protection. Yet, as the theoretical framework elaborated in this research mainly relies on other than economic theories, the discussion of the economic arguments underlying intellectual property will be relatively concise. It will concentrate here on what could be characterised as mainstream economics of intellectual property protection.¹⁷ It is namely the mainstream understandings that explain many of the current developments and positions taken in intellectual property policies, argumentation patterns of case law and scholarly discourses. It is these understanding that centrally participate in constituting the meaning of intellectual property norms. Using mainstream economic analysis of intellectual property protection to reveal inadequacies in argumentation patterns of case law and legislative developments alike is often more effective than resorting to less well-known premises in economic theory.

All property rights interfere with the ability of people to use resources. Hence, from an economic viewpoint the benefits from creating any property right should over-compensate the economic harms it produces.¹⁸ What intellectual property rights prohibit people from doing is important for the moral justification of intellectual property, as well. Merely being an incentive or reward for inventive or creative activities is not enough from this perspective either.¹⁹ Hence, when evaluating the

17 It could thus be described as a combination of microeconomic and institutional approaches. Also mainstream international economics and endogenous growth theory will be utilised, among others.

18 Coase (1959), p. 27. This applies equally to intellectual property rights.

19 Waldron (1993), *passim* and at p. 842, 852 and 862, explicitly.

economic case for establishing new forms of protection or extending the old ones to cover new subject-matter, the benefits of doing so should outweigh the constraints and harms imposed on others. Similarly, when interpreting existing intellectual property laws, the benefits of an interpretation or doctrine for the protection interests of intellectual property should outweigh the limitations on the freedom of others. Both individual rights and collective goods must be involved in this weighing. In other words, the evaluations should comprise case-specific and systemic considerations to be legitimate. Despite the simplicity and intuitive appeal of these propositions, they have proven hard to follow in the development of intellectual property policies and court-created patterns of interpretation alike.

Mainstream Economic Rationale for Intellectual Property

There is a general tendency to treat intellectual property in competition law analysis just like any other form of property. This is an over-simplification of a complex issue.²⁰ Intellectual property is not like any other property in several important respects. For example, whereas people may need private property for the development and exercise of their liberty,²¹ this does not apply in the case of intellectual property.²² Furthermore, whereas property rights in real or personal property include the right to use with the subordinate right to exclude, intellectual property centrally only enables exclusion of others.²³ Moreover, whereas property rights in real or personal property are necessarily limited by the tangibility of the object of protection, intellectual property has no such inherent constraints: *it is limited by legal design only*. Thus, the legal regime itself creates scarcity, allocation of entitlements, the need for permissions and licensing, and intangible bottlenecks for access to and utilisation of existing knowledge and cultural resources.²⁴ Many of these crucial differences may be explained through the economics of information. But more importantly, the economics of information also provides the now mainstream utilitarian justification for intellectual property protection.

The presumption that free markets will lead to an efficient allocation of resources does not hold in the case of information. Information involves high fixed costs and low marginal costs.²⁵ As information is different from every other piece of information, it cannot satisfy the essential property of *homogeneity* that characterises competitive markets.²⁶ It is *non-rivalrous* in the sense that it can be used simultaneously by multiple agents in the

20 See e.g. Reichman (1993a), p. 116 and from the perspective of an economist Stiglitz (1999a), *passim* and Katz (2007), *passim*. For a historical perspective on the discussion see Machlup & Penrose (1950), *passim*, treating the patent controversy of the 19th century. See also the subsequent discussion in chapter 7.

21 See Waldron (1988/1990), p. 329.

22 However, intellectual property of others may effectively restrict one's exercise of liberty. Rifkin (2000), at p. 239-240, argues that in the information society the right *not* to be excluded – the right of access – becomes decisive.

23 See e.g. Chisum *et al* (2004), p. 5.

24 See also e.g. Frischmann & Lemley (2007), p. 273 and Karhu (2007), p. 106.

25 See e.g. Shapiro & Varian (1999), p. 3-8.

26 David (2005), p. 87.

production of goods or services. From another perspective, an individual having it cannot lose it by transmitting the information to another individual. It is non-appropriable, as access to it can be restricted by costly protective measures only. These characteristics of information distinguish it from physical objects and connote that information cannot be fully identified with commodities presented in abstract models of general equilibrium.²⁷ The non-rivalrous nature of information also means that it cannot be overused like land or other objects of physical property.²⁸ Hence, the possibility of a so-called tragedy of the commons, deterioration of physical property due to overuse caused by the absence of the right to exclude no one does not exist with regard to information.²⁹

The mainstream economic rationale for protecting intellectual property rather resides in the proposition that in the absence of legislative, contractual or technological obstacles codified information acquired by costly research may be sold cheaply by its first buyer. These general public good properties of information have led to the classic position that a competitive world will under-invest in research and development, as the information will become general knowledge and cannot be appropriated by the firm financing the research. The technical inability to exclude causes the appropriability problem speaking in favour of intellectual property protection.³⁰ The growth of dynamic efficiency ideally balances out the losses from static inefficiency caused by the underutilisation of the knowledge or from the underproduction of the goods protected by intellectual property rights.³¹ Intellectual property protection is needed especially when an invention is incorporated in products on the open product market, since the technology can often be easily reverse-engineered and copied.³² Intellectual property protection enables partial appropriation of information otherwise having public good characteristics.

This function of exclusive rights is complemented by unfair competition laws: when exclusive rights are not available, unfair competition laws protecting trade secrets and confidential information may provide natural lead-time. Trade secrets laws lead to the need for the rivals to reverse-engineer the undisclosed innovations. As a corollary, unfair competition laws affect the conditions of technological competition on level below patent or other exclusive protection.³³ Thus, the delays in entry, which function as rewards for successful innovative activities, need not entail an exclusive right. Inventing a cheaper method of production, for example, gives for its inventor

27 Arrow (1984), p. 142, also pointing out that high transmission costs can lead to inappropriability, as the seller cannot realise the social value of information. See also Romer (1990), p. 73-78; Grossman & Helpman (1991), p. 15 and 112 and Dasgupta & Stiglitz (1988), *passim*.

28 Merges, Menell & Lemley (2000), p. 2 and Frischmann & Lemley (2007), p. 281.

29 See about the tragedy of commons the classic article by Hardin (1968), *passim*.

30 Arrow (1984), p. 142; Audretsch (1995), p. 38-40; Foray (1995), p. 80-81 and David (2005), p. 86.

31 Stiglitz (1999b), p. 311.

32 Reichman (1994), 2443.

33 See Reichman (1993a), 83. On the other hand, unfair competition laws should not generally lead to the expansion of intellectual property exclusivity. See e.g. Ghidini (2006), p. 114-115, and for a more comprehensive treatment of unfair competition laws in Europe, Kamperman Sanders (1997), p. 11-77 and also *passim*.

supranormal profits until competitors catch up. The disequilibrium created through the invention of the cheaper method of production functions as the reward to innovation in such an instance, rather than any exclusive rights.³⁴

In other words, sometimes competition can reduce the incentive to minimise costs through invention if competitors could reap the benefits of the inventing enterprises by easily copying the invention. This “free-riding” problem leads to a situation whereby no enterprise is willing to invest in easily innovation easily copied, although reciprocal innovation and copying would be the most desirable end-result. Intellectual property laws aim to counteract this occasional tendency of competition to retard beneficial innovation.³⁵ However, free riding as such is not negative. Free riders provide an important function in diffusing information. The diffusion of information, in its part, is essential for the functioning of competitive markets. Free riding is negative only if it exists to an extent to deter original investments in innovation.³⁶ This depends on the particular industry in question, as will be discussed later in the context of patent law.

No amount of intellectual property protection could convert information into a thoroughly appropriable commodity.³⁷ In addition to the fact that potential infringements of intellectual property are harder to ascertain and detect, intellectual property protection does not cover all technical information resulting from innovation. This spill-over information accumulates the pool of public knowledge and has the effect of lowering the cost of subsequent innovation.³⁸ The technical information functions thus as both an output and input in the research and development process. Investments in research and development cause a positive externality (or “free-riding”) by adding to the economy’s knowledge base. These non-appropriable benefits from research and development forward the public knowledge capital and keep the private incentives for further research maintained.³⁹ For example, patents have an important function in disseminating technological information, as innovative processes require systematic access to the state of the art.⁴⁰ New products and services building on top of inputs protected by intellectual property typically produce additional spill-over effects. Similarly, copyrighted cultural resources benefit not only commercial activities directly deriving from them, but also private users *and non-users* in the users’ community by

34 See *Olson* (1982), p. 61. See also *Reichman* (1993b), p.176, who points out that innovators who fail to qualify for protection under intellectual property laws granting exclusive rights can rely on such factors as lead time, reputation for quality, and continuing technical improvements to maintain their foothold on the markets.

35 *Gordon* (1992), *passim*.

36 *Drahos* (2002a), p. 4.

37 *Arrow* (1962), p. 615 and *Stiglitz* (1999b), p. 309-310.

38 See *Romer* (1990) p. 89 and *Grossman & Helpman* (1991) at p. 18, 38, 57 and 72 and also *passim*.

39 See e.g. *Grossman & Helpman* (1991), p. 38, 57-74 and 84-99.

40 *Foray* (1995), p. 91. However, at least in some rapidly developing areas of technology the delay between application and publication of patents is generally too long, thus partially diluting the information-disseminating function of patents. See *Macdonald* (2002), p. 16-22, referring to empirical data and also pointing out that the information obtainable from patent claims and specifications may not often be sufficiently clear in itself to enable *de facto* dissemination of the information.

contributing to reading, learning, and so forth. *Due to the abundance of such spillovers, it becomes impossible to internalise all the benefits accruing from invention or creation.* Efficient transactions may thus be precluded as the social return could often exceed the licensees' willingness to pay for the input protected by intellectual property, based on the appropriable benefits only (and hence to the exclusion of spillovers).⁴¹

It is important to note that what is needed to overcome a market failure caused by the appropriability problem may not be an exclusive right. A right to exclude others may cause excessive harms without being necessary for incentivising creation. Intellectual property rights grant upon their owners some market power, and may thus cause deadweight loss akin to monopolies.⁴² Overcompensating a particular innovator does not lead to more innovation, but more restrictions on the productive and innovative activities of others.⁴³ A liability-rule based regime may thus be preferable in some circumstances. As already discussed, all property rights interfere with the freedom to use resources. The benefits from establishing any property rights regime should more than compensate the economic harms it produces. To an extent exclusivity is not needed, excess protection is deadweight loss. Thus, the first question is whether there should be any property rights regime in place – be it based on property rule or liability rule.⁴⁴

Building on *Coase's* seminal article,⁴⁵ *Calabresi* and *Melamed* have advanced the view that when transaction costs are high enough, a liability rule should be preferred over a property rule.⁴⁶ A property rule provides for an injunction, whereas a liability rule provides for non-consensual access in return for a payment of monetary damages. A property rule thus enables fixing the price for the infringement of property *ex ante*.⁴⁷ The transaction costs may relate to the costs of having to identify the property owners and negotiating with them as well as to the costs related to opportunistic behaviour of some property owners (for example a holdout strategy).⁴⁸

On the other hand, it has been argued that a liability rule -based regime could imply error costs. It may be overly complicated for the judges to identify a holdout strategy or to define the damages payable without distorting the objectives of intellectual property protection. These risks have led many commentators to argue in favour of property rules.⁴⁹ Moreover, high transaction costs related to a strong property rule

41 See more closely *Frischmann & Lemley* (2007), p. 273-274, 288-289 and also *passim*.

42 *Katz* (2007), p. 840.

43 *Frischmann & Lemley* (2007), at p. 276-279, say that a firm will make an investment in research and development if it expects a positive return on it: unexpected extra return will not affect the investment decision.

44 *Lessig* (2004a), at p. 38 and also *passim*. See also *Lemley & Weiser* (2007), p. 786.

45 *Coase* (1960), at p. 15-19 and also *passim*.

46 *Calabresi and Melamed* (1972), *passim*.

47 See also *Merges* (1994), p. 2655.

48 *Calabresi and Melamed* (1972), p. 1106-1107 and *Lemley & Weiser* (2007), p. 787.

49 *Epstein* (1997), *passim* and *Merges* (1994), p. 2664-2665.

may lead the interested parties to devise an institution, the administrative structure of which serves a similar function to a statutory liability rule.⁵⁰

Although these negative scenarios attached to liability rules and the positive scenario attached to property rules in the presence of high transaction costs are realistic, bargaining in the shadow of a liability rule may on the other hand prevent inefficient opportunistic behaviour and lessen the possibilities for abuse of economic power based on (intellectual) property ownership.⁵¹ Furthermore, as intellectual property can be shared without degrading it, the case for the superiority of a property rule is not compelling.⁵² Finally, the myriad spillovers discussed above for the innovative and productive activities of others imply that licensees' demand for access and use of a technology may understate societal demand, demonstrating that even if transaction costs are overcome, a property rule may not be optimal.⁵³

Ultimately, the trade-off between the level of innovation and social harms caused is not only a matter of economic optimisation, but involves a decisional moment: how much social harms are we ready to tolerate to achieve a certain degree of new inventions and creations. Likewise, as bargaining in the shadow of both property and liability rules is feasible and the appropriability problem may be overcome by both systems, the choice between property rules and liability rules is also a matter of decision between two regimes empowering distinct groups at the expense of distinct others, with distinct effects on the freedom to utilise existing knowledge. Human interaction and economic relations follow different rules as a consequence of this choice. Patterns of social and economic interaction are affected differently. When broadening the perspective from economic theory, that choice cannot be reduced to transaction costs alone.

It should be emphasised that establishing a property rights regime is only one of the instruments available for governments to secure the production of public goods. Moreover, what becomes identified as a public good *in need of governmental regulation* in the first place is not a straightforward matter. Providing the necessary incentive for *any* knowledge production not pursued without governmental intervention, or at any cost, is clearly not desirable.

Finally, we value clean air and education as public goods in need of governmental regulation predominantly because they relate to fundamental, existential values everyone *should* enjoy of. If markets want them, but are unable to provide them for themselves through collective effort, is a secondary concern. Excluding some one from clean air or education through the establishment and allocation of exclusive rights in them would pervert their public good character and the reasons for regulating them in the first place. From this perspective, subjecting knowledge to exclusive rights could privatise a public good without adequate guarantees that the thus generated new knowledge outweighs the restrictions on the usage of knowledge or benefits all.

50 See *Merges* (1994), *passim* and at p. 2655 and 2673, explicitly. See also *Merges* (1996), *passim* (treating collective rights organisations from this perspective).

51 *Lemley & Weiser* (2007), p. 795 and 832-836. See also *Lemley* (1996), p. 1071-1072.

52 See e.g. *Lemley & Weiser* (2007), p. 813.

53 See *Frischmann & Lemley* (2007), p. 277-279 and also *passim*.

Real-Life Market phenomena Challenging the Mainstream Economic Rationale

Operationalising the economic incentive function of intellectual property protection is problematic. Optimising it against the multiple social costs caused is enigmatic. Even if it were possible to define the optimal incentive to a particular intellectual property owner, the courts and authorities involved should be aware and analyse the effects of all decisions affecting the aggregate incentive of the right owner, as well as the social costs involved.⁵⁴ The other side of this on the systemic level is that even if we knew the optimal level of intellectual commons in a society – the stock of freely usable ideas, expressions and technologies – individual firms would have no incentive to abstain from appropriating more and more intellectual property rights. There would thus likely be too many and too broad intellectual property rights with the comparable undervaluation of the public domain or intellectual commons.⁵⁵

Courts, authorities and legislators should thus be aware of the totality of protected subject-matter, decisions, judgements and new laws to enable achieving and maintaining the optimal level of intellectual commons. They should be able to foresee the externalities of intellectual property protection not only in terms of restrictions on the direct utilisation of ideas and expression, but also in terms of the systemic effects. In particular, the end-to-end principle underlying the Internet is seen by *Lemley* and *Lessig* as a central *innovation commons*, enabling decentralised innovation and creativity at the ends of the Internet, uncensored by no central rule or authority. As they point out, extensive intellectual property protection and various practices of enterprises may jeopardise this innovation commons.⁵⁶ More generally, as decentralisation tends to favour experimentation and learning, extensive intellectual property protection or concentrated intellectual property ownership may prevent or exhibit pluralism in innovation and the ensuing competition among the decentralised units.⁵⁷

Moreover, as will be discussed in more detail subsequently, the whole optimisation exercise should take place on the global scale, where the incentive function and the social harms increasingly operate. The optimisation of the incentive function should be sector- or even case-specific and take into account the diverse logics of creation and innovation within various areas of economic activity, the degrees of subsequent and complementary invention and creation, the different degrees of market concentration and the specific social harms caused by subjecting a particular sector to particular intellectual property regulation. It should take into account the public subsidies for research and development and their complementary role as an incentive to invent. Needless to say that such a calculation is impossible as a practical matter and entails several problems and political choices as a conceptual matter.

Despite the complexity of the real life, and the constant mismatches between economic theory and empirical market phenomena, it is useful to address the market

54 *Kaplow* (1984), p. 1817-1823.

55 See also *Boyle* (1996), p. 179 and the previous discussion under heading 4.3.3.

56 *Lemley & Lessig* (2001), *passim* and *Lessig* (2004), *passim*.

57 See e.g. *Stiglitz* (1999a), p. 16.

phenomena and thus contextualise the need for intellectual protection. The basic economic rationale for intellectual property may namely fail for several reasons, or it must be subjected to modifications. Thus, there may be economic reasons to adjust the scope and extent of protection generally or within particular sectors. These phenomena may also affect the way courts should interpret and apply intellectual property laws and evaluate the application of competition law to intellectual property rights. Even though not enabling mathematical optimisation, the discussion of these phenomena may point to certain *directions* affecting the way courts, authorities, legislators and members of the academia should approach intellectual property and related laws. Three phenomena considered particularly relevant will be discussed.

First, the economic case for intellectual property protection rests on the premise that new inventions and creations will benefit the society in the form of new products and processes becoming available for firms and humans alike. This ideal is also reflected in intellectual property laws, for example in the provisions concerning compulsory licensing of patents due to non-usage of the patented invention, as will be discussed subsequently in more detail. In line with this ideal, the protected intellectual assets may have value in the *manufacturing of material property* by constituting a patented production method or patented components granting a competitive advantage over the competitors. This traditional role of intellectual property is best described as competition *with* intellectual property rights.

However, the firms' motivations for acquiring intellectual property protection are now fundamentally broader.⁵⁸ Technological and informational assets as such have become major objects of trade and competition. There is thus a discernible shift from protecting manufacturing processes or the design of machines towards protecting direct exploitation of disembodied technologies as such. For example, inventions within biotechnology do not often need to be transferred into goods, but may be exploited as research tools or directly applicable technologies. Similarly, databases, digital content of various kinds and computer programs may be licensed as such, without their transformation into physical products. Such intellectual property can be regulated privately through licensing terms and largely without the consequences attached to the first sale of tangible products in the form of exhaustion of rights.⁵⁹ In some sectors, the value of intellectual assets may outweigh the value of material assets. An enterprise's primary or even the only source of income may come from the licensing of intellectual property rights. Firms may specialise and compete in the production of and trade with technology without there being a need to manufacture goods or provide services. Intellectual property thus also enables new forms of competition, namely competition *for* intellectual assets.

Moreover, the traditional connection between intellectual property and production of goods is further confused by wide-spread practices like patenting for defensive, offensive and other strategic purposes. The true function of a patent family, for

58 See e.g. *Chisum et al* (2004), p. 1-2, for an overview.

59 See more closely *Ullrich* (2005b), p. 742-743.

example, may be to enable counter-measures or cross-licensing in case of alleged breach of patents of others. Its function may be to provide access to the patents of others, patent pools or to enable influence on the standardisation of a particular technology. Quite often, intellectual property enables the control of potential, future markets: it may enable the control of the research and development of others, erection of entry barriers for certain operations, services and businesses, or the threatening of the users of competing (for example open source -based) technologies with financial and operative risks. In many cases, the proprietor does not know whether the patented invention will finally be used in the manufacturing of products or not.

Intellectual property protection and patents, in particular, thus enable the orchestration and direction of current and future markets and the private regulation of the extent and nature of competition within them. It is doubtful whether the economic functions of intellectual property protection are in conformity with such market phenomena. To the extent the function of intellectual property is to incentivise innovation that benefits not only the proprietor but also the society at large, this hardly is the case.

Second, the networked model of production and innovation connotes that especially within the production of informational services and information goods, aspects of property ownership may have to be adapted. The basic economic unit of economic organisation is no more a subject, but *network* organised in a flexible manner enabling continuous change.⁶⁰ The intellectual resources needed in the production of intellectual goods and services are rarely the property of only one firm and cannot be augmented or exploited without cooperation with others, as it needs to be combined with several other kinds of information.⁶¹

Many important sectors are based on a cumulative model of innovation. Within such sectors, inventions are incremental improvements of existing technologies.⁶² The whole science and technology paradigms are said to have shifted towards a greater collaborative use of the existing knowledge stocks. Knowledge production increasingly becomes a cumulative and continuous process, a collective effort.⁶³ User-generated innovation is enabled by the global information networks and technologies enabling modifications and the giving of new meaning and purpose for what already exists.⁶⁴ The foundation of the classic modern conception of private property based on labour is dissolved at least to a certain extent in this context, as it is the community that produces and producing increasingly means constructing cooperation and communicative commonalities.⁶⁵

60 *Castells* (2000), p. 214. See also the preceding discussion under heading 2.5.4.

61 *Dunning* (2002), p. 9-10.

62 *Merges & Nelson* (1990), p. 884-897 and 908-911 and (1994), p. 13-16 and *Reichman* (2001), p. 26.

63 *Foray* (1995), p. 87. See also e.g. *Ullrich* (2005b), p. 740.

64 See *Tuomi* (2002), *passim* and *von Hippel* (2005), *passim*.

65 *Hardt & Negri* (2001), p. 302 and 410-411.

In addition to user-generated innovation and the network enterprise as partly de-territorialised forms of communal creation, *regions* represent a territorial form of cooperative innovation. Recent economic theory places substantial value on spillovers of knowledge and information externalities within local specialised clusters for innovative economic activity. Certain regions, consisting of high density networks and concentrations of multinational corporations, universities, industry-specific organisations and related and supporting services, take on a leading innovative role within certain business segments.⁶⁶ Innovation in these environments is highly communal and interactive in nature as it is based on informal exchange of tacit knowledge between various actors, such as the basic science infrastructure, specialised research institutions, suppliers, users and service sector, in addition to firms producing within the economic sector in question.⁶⁷ The knowledge exchanged may refer to practices, technological problems and their potential solutions as well as spillover information related to existing innovations. Consequently, ideas behind an innovation often originate outside the company that finally performs the actual development or manufacturing based on it.⁶⁸ If presence within a strong cluster in the same industry is necessary for successful innovative activity, and is to a significant degree dependent on informal exchange of information and spillover knowledge, then within these sectors innovation has to a large extent communal nature.

Importantly, many technologies are extensively science-based in that the efforts of inventors can often be characterised as first bringing to practice of new understandings published in the scientific literature or known in the scientific community. The inventive activities leading to patenting thus strongly correlate with the evolution of the underlying science.⁶⁹

Open source -development is now the paradigmatic example of community-based, cooperative creation.⁷⁰ It could be thought of as a de-territorialised, sociodigitised form of community-created innovation within regions, and is based on the free exchange of knowledge, discussion of problems and their potential solutions. Open source code reveals the problems and the solutions suggested to them globally across the networks of participating programmers. Even though the openness of the development is partially secured by contractual provisions utilising copyright protection, intellectual property protection does not incentivise this creation. It rather seems that in open source, the foundational notion of copyright becomes inverted from the right to

66 See Sölvell & Birkinshaw (2002), p. 82-83, in addition to other articles in the same book. See also Beaudry, Breschi & Swann (2002), p. 191.

67 See e.g. Sölvell & Birkinshaw (2002), p. 86-87.

68 See Sölvell & Birkinshaw (2002), p. 86 and the studies referred there. As Rugman (2002), at p. 10-11, points out, smaller firms have often a comparative advantage in innovation and multinational corporations in application.

69 See Merges & Nelson (1990), p. 904-908 and (1994), p. 9 and 18-20 and Nelson (2005), *passim* ("Virtually all modern technologies are supported by a strong body of science --", *ibid.*, at p. 126).

70 See generally about open source development Weber (2004) and (2005), both *passim*; Benkler (2006), p. 63-67 and Välimäki (2005), *passim*.

exclude to the right to distribute.⁷¹ Intellectual property as a right to exclude and patents, in particular, may pose significant threats for this form of innovation. The success of the open source -model questions some of the core assumptions behind the basic economic rationale for intellectual property protection. At the minimum, it begs for recognising the distinct logics of creation and innovation in intellectual property law and policy.

It should be realised that the phenomena treated above – the users being an important source of new innovation, the network enterprise model of production and research and development, innovation by and within geographical clusters and de-territorialised networks of open source developers – are no marginal incidents, but have emerged as the paradigmatic trends of innovation and creation in the globally networked information society.⁷² Therefore, new features of intellectual property protection may surface as the most significant ones. Instead of a clearly defined (absolute) right to exclude allocated to a single entity, the following could become the paradigmatic areas of the current laws: enabling disclosure, co-author- and inventorship, derivative use and compulsory or collective licensing regimes of various kinds (dependency patents, complementary products, licensing by the copyright collecting societies etc.), experimental use and exceptions and limitations to the exclusive rights related to research, education and freedom of expression. Most, if not all of these areas can be seen to be in a conflictual situation with respect to the clearly defined right to exclude, as they emphasise proliferation and sharing of knowledge, require weighing between competing logics of creation and thus make the intellectual property institution more complex by challenging the mainstream unitary logic of creation based on incentivisation only.

Third, it is not only the original production and creation within the sphere of informational services that has features of a new kind of commonality, but also the formation of value with respect to intellectual property rights within a systems technology through network effects or because of technical standardisation. These paradigmatic phenomena of the current economic model further erode the original arguments for intellectual property protection based on the idea of unrestricted competition on technical merits between different technologies and the formation of value to intellectual property in this competitive “natural” selection process taking place on the markets. This erosion should lead to questioning the idea that it is natural in all contexts for an intellectual property proprietor to reap what the market will bear. It is namely questionable whether the added value generated independently by third parties in the standardisation or network effects contexts should be fully protected as the legitimate property of the intellectual property owner, comparable to

71 See Weber (2005), p. 178 and 204. See also the previous discussion under heading 2.4.

72 The idea of patent law being incompatible with communal creation is an old one. It was one of the arguments used against patents in the patent controversy of the 19th century. See *Machlup & Penrose* (1950), p. 17.

more traditional cases where the full value of the intellectual property is based on the competitive selection process within the markets.

The value of blocking intellectual property within network effects -technologies increases *whenever a third party independently* designs and implements a compatible product or service. The value of the entire system and thus the value of the intellectual property rights enabling access to that system increase due to research and development and production efforts of *others* as the appeal of the system towards consumers and thus also towards independent producers and service providers within that system technology increases whenever the entire system expands. The decision of a third party to design its products or services based on a system may be based on the position of the firm controlling the system in the markets and the relative market position of the system technology in question. These factors affecting the analysis of the viability of the technology in question to become a *de facto* standard and thus the willingness of the third party to invest in that technology are thus at least partly based on factors other than technological superiority of the technology constituting the system.

Technical standardisation may have similar effects. Which technology finally ends up in the standard may have relatively little to do with the superiority of the technology in question. Power and bargaining positions of the participating firms and technology camps are often more important factors in determining which technologies and consequently which intellectual property rights become included within standards. Technological superiority is only one argument in the standardization game leading to the final outcome. In this setting, the value of the intellectual property within the standard is largely determined on the basis of collaboration, bargaining and power positions of the participants rather than based on the superiority of the technology. It is thus to a large extent the firm's market share within the *existing* technology standard and its *past technical and non-technical efforts* not necessarily related to the becoming standard that may lead to the inclusion of its technology within the next technology standard.⁷³ The foundation of the economic conception of private property is largely illusory with respect to this added value relating to the intellectual property included within the standard.

Furthermore, products incorporate increasingly not a single invention, but a combination of several different components, each being potentially subject to one or more patents.⁷⁴ This is typical in particular within the information technology sector, where invention is typically sequential, incremental and complementary in nature.⁷⁵ In case of complex or standardised products, it is possible that one patent covers only a small piece of the product. However, enforcing this patent may enable an injunction, which prevents the sale of the whole product – covering all the non-infringing components, as well. This may enable the extraction of “hold-up money”

73 See, for example *Shapiro & Varian* (1999), p. 15, about the leverage strategies of Sony and Philips during the DVD standard negotiations based on their control over the original CD technology (due to the requirement of backwards compatibility).

74 See e.g. *Lemley & Weiser* (2007), p. 797.

75 See e.g. *Foray* (1995), p. 87-93 and *Bessen & Maskin* (2000), *passim*.

from the producers. The possibility to overprice is due to reasons other than the patent owner's actual innovative efforts. Allowing the extraction of hold-up money on the basis of one patent is not an efficient way to reward innovation, as most of the value captured by the patent owner is derived from the inability of the producer to separate the infringing component from the whole product – not from the intrinsic value of the patent infringed.⁷⁶

The fragmentation of intellectual property underlying complex or standardised products has been addressed in terms of *anticommons*.⁷⁷ However, no viable solutions resolving the anticommons situations have been adopted in the intellectual property policies. Private contractual measures in the context of standardisation may provide some relief for example by requiring licensing of essential intellectual property rights on favourable terms. However, as will be discussed in chapter 7 in more detail, they do not offer a general solution to the problems identified.

In conclusion, the market phenomena introduced above point to the direction that the social costs of introducing or extending intellectual property to new areas may often be larger than the gains achievable in the form of incentivising new creation and invention. Moreover, a liability-rule based regime could produce in many instances better results than a property-rule based exclusive right. In addition to the market phenomena addressed above, the globalisation of the markets and the intensification of the internationalisation of the intellectual property system produce additional effects speaking in favour of conceptualising and modifying intellectual property law accordingly. These effects will be addressed in the following.

5.3.2 Evolution of the International System of Protection

Introduction

The European Union must function under the constraints of the international protection of intellectual property. It also uses international measures to achieve its own goals on the international level. Thus, the international system of protection forms part of European intellectual property protection and cannot be excluded from its analysis based on the perspective of European economic constitutional law.

In addition to the traditional international intellectual property measures agreed upon by governments, various forms of private and public-private ordering *de facto* leading to global intellectual property norms have been enabled by certain institutional solutions. Examples of such privatised regulative practices comprise the Uniform Domain-Name Dispute-Resolution Policy (UDPR) adopted by the Internet Corporation for Assigned Names and Numbers (ICANN), internet service provider practices in response to notices from copyright owners, regulation through

⁷⁶ Lemley & Shapiro (2007), p. 2009-2010. See also Lemley & Weiser (2007), p. 797.

⁷⁷ See e.g. Shapiro (2001), *passim*; Rahnasto (2003), p. 175-199 and Goodman & Myers (2005), p. 1. For the concept of anticommons generally, see Heller & Eisenberg (1998), *passim*.

technological protection measures and digital rights management (DRMs) not tied to national copyright rules,⁷⁸ and private regulation of intellectual property liability in the context of standardisation.⁷⁹ Although such practices may often be acceptable from the perspective of the global reach of the Internet and many technologies, as well as inefficiencies based on transactions costs, they may lack democratic legitimacy and regulate intellectual property from the right owners' perspective only.

The purpose of the following is to analyse the international context for the European intellectual property protection. Rather than discussing particular norms of international protection instruments, the analysis concentrates on the changes in the underlying functions of protection, structural problems in achieving appropriate protection, as well as on elements of protection affecting competition on the global level. Individual provisions of the international measures affecting copyright and patent law in Europe will be addressed later under the substantive discussion of these types of intellectual property rights on the European level.

Global Dynamics of Invention and Political Economy of Global Intellectual Property Expansion

Trade intensifies competition.⁸⁰ Because of trade liberalisation on a global scale, producers must compete against a larger range of varieties. On the other hand, the size of potential markets available for them expands.⁸¹ Consequently, free trade provides entrepreneurs with an incentive to seek new ways to export and compete with imports. This may increase costs allocated to research and development and ultimately the degree of innovation.⁸² Trade liberalisation thus intensifies competition between innovators in different countries. Such competition gives firms incentives to invent products that are new in the world economy, thus reducing duplicative research.⁸³

As knowledge has *global* public good characteristics by being non-rivalrous and non-excludable throughout the whole world,⁸⁴ the developed countries' insistence for globally harmonised intellectual property protection becomes understandable after the markets for goods have become global and information-based technologies an essential part of their competitiveness.⁸⁵ The developed countries' *comparative advantage* in the production of high-tech products and technological knowledge is

78 See more closely *Dinwoodie* (2007), at p. 100-113, for an analysis of such practices.

79 See more closely about standardisation sub-chapter 7.7.

80 See e.g. *Kenen* (2000), p. 146.

81 *Grossman & Helpman* (1991), p. 243.

82 *Krugman & Obstfeld* (1997), p. 221 and *Grossman & Helpman* (1991), p. 257.

83 *Grossman & Helpman* (1991), p. 243, 245 and 256-257.

84 See *Stiglitz* (1999b), *passim*.

85 See generally *Reichman* (1993b), 176.

largely dependent on international standards of protection.⁸⁶ As intellectual property is a tool enabling the recapture of cross-border spillovers by the innovating country, global protection of intellectual property based on reciprocal national treatment and a high level of substantive harmonisation has become the norm.⁸⁷ This norm has been achieved through the TRIPS Agreement, in particular.

In more concrete terms, the developed countries' products incorporating intellectual assets could often be easily copied in markets having no protection. The technology involved would then have only minimal value, and lower wages and other cost-related benefits of developing countries could soon render the superiority in innovation a marginal asset.⁸⁸

Moreover, global intellectual property protection facilitates the shifting of production to labour-rich countries which have lower production costs. This may take place through multinational corporations producing themselves in the labour-rich countries or by licensing the technology to local industries.⁸⁹ The latter alternative is in practice entirely dependent on the existence of intellectual property protection. Also the former is greatly facilitated by intellectual property protection, as it enables restrictions on the utilisation of knowledge over production processes, leaked from the local workforce. Accordingly, lower standards of protection or broad exceptions abroad decrease the value of comparative advantage in technology production and restrict benefiting from cheaper production costs in the developing countries. Thus, the special form of competition pursued by the developed countries – global technology competition with production shifted to the low cost countries – could effectively be extended to the global level only in the presence of globally harmonised intellectual property protection.

One possible characterisation of this development is that worldwide competition on innovative level could not exist in the absence of global intellectual property protection: to enable technological competition on a world level it became necessary to harmonise intellectual property protection globally.⁹⁰ Another perspective to the same development is that by harmonising intellectual property protection globally

86 On comparative advantage generally see e.g. *Kenen* (2000); *Krugman & Obstfeld* (1997) and *Grossman & Helpman* (1991). See *Sykes* (1998), *passim*, for an international trade law perspective on comparative advantage. *Krugman & Obstfeld* (1997), p. 139-141, note that trade between developed countries cannot be adequately explained by traditional theory of comparative advantage, as industrial countries are quite similar in their factors of production. Trade between them is better explained by factors related to economies of scale. The importance of economies of scale and product differentiation has led to intraindustry trade becoming an important form of international trade between the industrialised countries. *Kenen* (2000), p. 142-143, says that when product differentiation and economies of scale are important, firms have an incentive to invest in research and development: they must search for better ways to manufacture the existing products, modify the old products, or create entirely new products, because economies of scale can function as an entry barrier.

87 See *Scotchmer* (2004), p. 416.

88 *Krugman & Obstfeld* (1997), p. 85.

89 See more closely *Grossman & Helpman* (1991), p. 197-205.

90 *Ullrich* (1996), p. 374.

to the level of the developed countries, *worldwide competition in innovation and technological development was prevented from emerging* in the sense that the developing countries could no more resort to imitation and learning-by-doing.⁹¹ The developed countries' position had been threatened by the developing countries' increasing ability to penetrate foreign markets for traditional industrial products and the hardship of developed countries to charge what the market will bear for innovation-based products in the developing countries.⁹²

By making it more difficult for the developing countries to imitate and thus learn-by-doing in the area of high technology, the developed countries extended and secured their lead in high technology production. This extended lead enables external economies, dynamic increasing returns through accumulation of technological knowledge and benefits from economies of scale.⁹³ The outcome may be that because of external economies, economies of scale and accumulation of knowledge, the potentially lower costs of developing countries may not allow them to enter the markets for the protected technologies even after the expiration of intellectual property protection.⁹⁴

Additional dynamics affect the political economy of global intellectual property protection. A country with intellectual property protection in place always has an interest in reciprocal protection abroad to enable the recapture of the cross-border spillovers and to share the deadweight loss of the monopoly thus created with foreign countries. Where local markets are large enough to support invention, the geographical expansion of protection leads to deadweight loss. Yet, under the international system of protection based on national treatment and extensive harmonisation, modifying the intellectual property protection accordingly, case-by-case or sector-by-sector is impossible. As a corollary, the international system of protection relies more heavily on intellectual property than is efficient: international intellectual property policies may become overprotective even if the countries involved are equally concerned about all national interests, those of various producers and consumers. Although the end-result is excessive protection and deadweight loss in terms of the level of the incentives provided globally, alternative models for financing inventive activities, such as public subsidies, do not enable the recapture of the cross-border spillovers, thus leading to under-investments.⁹⁵

Globally harmonised, extensive intellectual property protection may thus be necessary to support some invention under the conditions of globalised competition and very high research and development costs characteristic to some sectors. However,

91 See also Kingston (2005), p. 658 ("*The thrust of the TRIPS Agreement is to ensure that this process of growth by copying and learning by doing will never happen again*").

92 See also Reichman (1993b), 176.

93 See e.g. Krugman & Obstfeld (1997), 150-52.

94 On the potential effects of lead time on competitiveness, see the diagrams in Krugman & Obstfeld (1997), 150-152. However, because of the extension of the lead time through the TRIPS Agreement, external economies, accumulation of knowledge and economies of scale in high technology industries protected by intellectual property may lead to a situation where the aging of the product does not lead to new entrants even after the expiration of the intellectual property protection.

95 See Scotchmer (2004), p. 422-423 and 435-436, and also *passim*.

many inventions could be supported locally or with less extensive international protection: many products and services do not compete on a global scale and may not involve high research and development costs. There may also be additional factors at stake lessening the need for extensive intellectual property-generated incentives, such as the communality of creation or the formation of value through network effects, as discussed above. It is thus uncertain whether the resulting deadweight loss is compensated by the invention needing global protection. Should this not be the case, the international intellectual property protection appears unnecessarily over-protective.

In the absence of proof either way, there are no reasons why the international system of protection should be designed so as to correspond to the needs of the entities with the most far going desire for globally harmonised, extensive intellectual property protection. This is, however, what took place through the TRIPS Agreement, as will be discussed below. The resulting excesses of protection caused by the global harmonisation could be taken into consideration, among other factors, in the interpretation of intellectual property law and application of competition law within the area of intellectual property rights.

Function Change of International Intellectual Property Protection

The changes in the global dynamics of invention have resulted in an important transformation of the function of international intellectual property protection. To understand this transformation, it is necessary to briefly characterise the historical phases of intellectual property protection. It is possible to divide the history of international intellectual property protection roughly into three phases: national, international and global phases.⁹⁶ During *the national phase*, intellectual property was largely a national issue.⁹⁷ This period lasted until the late nineteenth century and was influenced by mercantilist thinking: the mere importation of inventions and ideas could constitute a sufficient ground for protection.⁹⁸ It was also possible and usual to reserve protection for the country's own nationals. Intellectual property protection thus related to the production of concrete products manufactured domestically, sold both domestically and abroad. As importation of already existing inventions could obtain protection, the system facilitated the spread of technical knowledge, imitation and countries' learning-by-doing. It also corresponded with and supported the geographically fragmented production within small economic units.

During the second period, *the international phase*, states concluded first bilateral agreements, and then multilateral Conventions: the Paris Convention of 1883 (covering industrial property) and the Berne Convention of 1886 (covering copyright) being the most important ones. This period maintained the territorial basis of intellectual

96 See also *Drahoš* (1997), *passim* and *Dinwoodie* (2007), *passim* for characterisations of the different stages of international intellectual property protection.

97 For example *Godienhielm* (1994), at p. 6, describes the original patent theories as national economic.

98 See e.g. *Bernitz* (1969), p. 119 and *Petrusson* (1999), p. 108-111 (concerning patent law).

property rights and did not create new substantive law or impose new laws on member states: the Conventions corresponded to a consensus among member states that was largely based on laws already in existence at national level.⁹⁹ The international intellectual property regime thus recognised the different levels of development and allowed considerable autonomy for the national legislation and practices.¹⁰⁰ One country – one vote mechanism applicable in the context of these WIPO-administrated Conventions led to several concessions for the developing countries.¹⁰¹ In addition, there was no effective dispute settlement mechanism, nor a central body giving binding interpretations of the WIPO-administrated Conventions.

The main principles of the Conventions were national treatment, territoriality and first priority. These corresponded to the needs of internationalising business and the markets for intellectual goods and technologies. The principle of territoriality also corresponded to the sovereignty of nation states over their territories.¹⁰² Whereas the national treatment principle enabled the repatriation of cross-border spillovers for the internationalising enterprises, the principle of territoriality maintained the countries' exclusive jurisdiction over infringements taking place within their territories. Application, grant, existence, validity, scope and expiry of protection were determined by the legislation of a country where the protection was applied. The territoriality principle also functioned as a choice of law rule: the place of infringement determined the applicable law. The relatively broad differences in international protection and non-protection in some countries argued in favour of still conceptualising each national market as a separate entity yielding profits for and incentivising the owners of intellectual property rights for the full extent in each country.

During the international phase, intellectual property rights were mostly seen as *locally defined restraints* of trade.¹⁰³ Accordingly, intellectual property protection required a justification as a potential restraint of trade in the international trade law system. However, between 1980's and 1990's, a rapid change took place, resulting in an opposite conception of the role of intellectual property protection in international trade. Because of this transformation, the *lack of or inadequate intellectual property protection became to be seen as a trade-related problem*.¹⁰⁴ Hence, US-style protection for semiconductor chips and computer programs, for example, was required from other countries. Their spread represents what Sousa Santos calls globalised localism.¹⁰⁵

99 See Ullrich (1995), p. 166-167 and Gana (1995), p. 138.

100 Sell (2003), p. 12.

101 See e.g. Ullrich (1995), p. 172.

102 Austin (2002), p. 1157. As noted by Ullrich (1996), at p. 366, the orientation towards the domestic market through the territoriality principle was rather confirmed than weakened by the classical convention law.

103 This was also explicated in Article XX(d) of GATT. The Article provides an exception to Article XI(1) on the basis of intellectual property protection and has provided a model for Article 36 FEU, ex. 36 EC. On Article XX(d) of GATT 1994 in intellectual property context see e.g. T. Mylly (2000a), p. 76-77 and the sources referred to.

104 See e.g. Ullrich (1995), p. 194.

105 Sousa Santos (2002), p. 179.

The TRIPS Agreement brought this approach to its outer limits by practically transplanting the intellectual property protection of the industrialised countries to all WTO Members, including the developing countries.

Sell explains this rapid transformation with structural changes resulting in increased importance of international intellectual property protection for private interests of some powerful US-based enterprises and the successful lobbying of the ideas first nationally,¹⁰⁶ and then globally, culminating in the TRIPS Agreement.¹⁰⁷ *Sell* identifies the main structural changes as: 1) developments of new technologies making a) copying cheap and easy; b) creating a global marketplace through communications technologies and the Internet and also c) resulting in new forms of intellectual property rights, such as semiconductor chips and software and; 2) the simultaneous increase in the costs of innovation.¹⁰⁸ The deep level changes were the globalisation of capitalism and the ideological turn toward a radical free market agenda.¹⁰⁹ These structural changes created and delineated new agents, such as the Intellectual Property Committee, and led to the powerful re-emergence of natural law and incentive-rhetoric.¹¹⁰

The TRIPS Agreement became part of the WTO-package to overcome the difficulty of reaching consensus within a single-focus organisation WIPO. As part of the more comprehensive WTO-package, the TRIPS articles benefiting the northern industrialised countries could be bartered to benefits for the developing countries in the areas of textiles and agriculture. The TRIPS Agreement was linked to concessions in tariffs on clothes and agriculture. These functioned as a carrot to the developing countries and made them finally agree to the TRIPS Agreement.¹¹¹ The success of the linkage-bargain strategy depended on abandoning the *à la carte* approach applied during the former Tokyo round.¹¹² It became obligatory for all contracting parties to adopt all multilateral agreements, including the TRIPS Agreement. The package thus secured the developing countries cheaper access to the developed countries' markets in their areas of comparative advantage. These benefits were thought to compensate

106 *Sell* (2003), p. 75-95.

107 *Ibid.*, p. 96-120 and 186.

108 *Ibid.*, p. 37-38.

109 *Ibid.*, p. 185-186.

110 Regarding the Intellectual Property Committee see *Sell* (2003), p. 55 and 115. For the re-emergence of natural law argumentation see *Oddi* (1996), *passim*.

111 See *Reichman* (1993b), p. 176; *Ryan* (1998), p. 12-13, 92-93 and 106. See also *Picciotto* (2002), p. 226. Beside carrot, the US used Section 301 procedure against South Korea and Brazil as a stick, signaling to the developing countries opposing the inclusion of intellectual property on the negotiation agenda that the negotiations would in any case continue – bilaterally under the threat of US trade sanctions. See *Ryan* (1998), p. 108. In the course of the negotiations also a GATT Secretariat official had pointed out to the developing countries that the choice of forum was not between GATT or WIPO, but between GATT or unilateral US trade sanctions (*ibid.*, 110-111).

112 *Ryan* (1998), p. 106.

for the premature introduction of industrialised countries' intellectual property standards on a global level.¹¹³

The TRIPS Agreement connotes the *global phase* of intellectual property protection.¹¹⁴ In contrast to the Conventions of the international era, the TRIPS Agreement promotes universality in intellectual property protection. It does not mirror the consensus of the members of the WTO regarding intellectual property protection already in place in the member states, but harmonises protection to a very high level and thus requires considerable modifications to most members' laws.¹¹⁵ The Agreement connotes harmonisation generally at the level of the industrialised countries, or even above it.¹¹⁶ The industrialised countries, including the US and the European Union, have also experienced that the developing countries can successfully use the TRIPS Agreement against them.

It thus seems that within such globalisation of the local intellectual property norms not only the functional level of the norms becomes transformed. Local legal transplants may function differently in a global context. They could ultimately affect the interpretation and even the validity of the local intellectual property norms having acted as a model or standard for the international norms.¹¹⁷ Legal systems often react to external references in a manner which best reconciles the existing links with social and political processes within the territory.¹¹⁸ A norm introduced to the system from outside will thus often be shaped and modified by the system to correspond to the existing links. The results of this interaction may be unpredictable, especially when rules are transferred in an area where law has tight ties to some fragments of the society. In such instances the transferred rule can irritate the co-evolution of law's binding arrangements with other social discourses.¹¹⁹

The level of protection required by the TRIPS Agreement partially exceeding that of the industrialised countries has resulted in a relatively widespread judgement among political scientists, sociologists, economists, and legal scholars that it has extended intellectual property rights too far, at the expense of public interest in securing access

113 See also *Dinwoodie* (2007), p. 79. Imitation has played a major role in the transfer of technology to the newly industrialising countries. Their exports often consisted of goods once produced in the North. Imitation is the vehicle for technological progress in the South, because it allows the South to introduce new varieties at lesser resource cost than if it had to develop the varieties from scratch. This leads to more rapid innovation and growth. See *Grossman & Helpman* (1991), p. 282 and 295.

114 *Drahoš* (1997), *passim*.

115 *Sell* (2003), p. 12. See also *Eeckhout* (1997), p. 32.

116 For example, the US had to extend the term of patent protection from 17 to 20 years. Some changes have taken place in the EU area as well. There is a general assumption that the aim of the TRIPS Agreement is to set a "high level of protection", in practice connoting strong exclusive rights. See *Picciotto* (2002), p. 237 and Article 71(2) of the TRIPS Agreement.

117 For treatments of legal transplants especially within the intellectual property field see *D'Amato and Long* (1997), p. 70-71 and *Geller* (1994a), *passim*. *Koopmans* (1994), p. 198 discusses the possibility of re-entry of originally nationally developed principles in a modified (by the European Court of Justice) form.

118 *Maher* (1998), p. 245.

119 *Teubner* (1998), p. 27-28.

and distribution of knowledge.¹²⁰ The previous autonomy of the members to decide the proper weights of various interests and values in the intellectual property system has thus been sharply reduced in the transition from the international to the global phase of intellectual property protection.¹²¹

The TRIPS Agreement refers to the major intellectual property conventions in the form they were at the time the WTO Agreements became effective.¹²² It also incorporates relatively detailed procedural norms in addition to the substantive intellectual property provisions, and introduces the principle of most-favoured-nation (MFN) to the area of intellectual property protection.¹²³ Importantly, the WTO context provides recourse to dispute settlement procedure. The possibility of cross-retaliation is an important incentive for the members to comply with their TRIPS-obligations. In the US and the European Union, the institution of complaints against the members of the WTO is partially in the hands of private parties.¹²⁴ Provided certain conditions are fulfilled, the relevant norms in some cases leave no discretion for the public authorities.¹²⁵ Hence, individual enterprises may utilise the regimes in place and have their government launch a complaint against an infringing Member of the WTO.

Moreover, the dispute settlement procedure enables centralised interpretation of the TRIPS Agreement and its development as part of the broader WTO *acquis*. The WTO obligations are cumulative and all members must comply with all of them at all times. The WTO panels and Appellate Body have accordingly emphasised the presumption against conflicts and the principle of effective interpretation to safeguard unity.¹²⁶ The framework of interpretation for this core international intellectual property measure thus essentially consists of the international trade law context.

The TRIPS Agreement can be seen as an adjustment of international intellectual property protection to the globalisation of the current forms of capitalism. The developed and the developing countries had different reasons for adopting the TRIPS Agreement. For the developed countries, it connoted the extension of the regime of competition based on technology and innovation to the global level. The harmonisation of intellectual property protection to a high level secured the extension of developed countries' comparative advantage on innovation to the level where

120 *Sell* (2003), p. 13 and 28.

121 *Aoki* (1996), p. 1343.

122 These include the Paris Convention (1967); the Berne Convention (1971); the Rome Convention; and the Treaty on Intellectual Property in Respect of Integrated Circuits. See also the text of footnote 2 to the TRIPS Agreement and *Palmer & Mavroidis* (1999), p. 52-54. The WTO panels and the Appellate Body interpret these referred provisions for WTO purposes. See *Palmer & Mavroidis* (1999), p. 58-59.

123 The MFN-principle reduces bilateral agreements between Members. See e.g. *Ullrich* (1995), p. 183.

124 In the US through the application of Section 301 of the Trade Act 1974 as amended. See more closely *Sell* (2003), p. 91-95. In the EU through the Trade Barriers Regulation 3286/94.

125 See e.g. *Picciotto* (2002), p. 229-230 and *Sell* (2003), p. 88 and 120 (noting that the intertwining of private actors illustrates the porous boundaries between public and private authority), as well as *T. Nieminen* (2004), *passim*, concerning the trade barriers regulation.

126 See generally about the interpretation of the WTO obligations *Lindroos* (2005), p. 57-58.

competition now takes place: the TRIPS Agreement is based on a certain form of competition, namely competition for innovation.¹²⁷ By securing both blocks access to the global markets in their areas of comparative advantage the WTO package led to the fixation of specialisation between the developed and developing countries rather than to the enhancement of technology production in the developing countries and elevation of technology competition to the world level. As *Gervais* has said, creativity and innovation are interwoven into the social and cultural fabric of societies to an extent that it is highly questionable whether they could be regulated beneficially in the developing countries by a set of universal norms developed among the Western nations based on their current forms and levels of protection.¹²⁸

The TRIPS Agreement aims at the similarity of technology competition among the WTO members and has transposed the whole economic and political notion of intellectual property to the global level, where competition now takes place.¹²⁹ Despite the fact that the TRIPS Agreement continues to rely on national laws and the principles of national treatment and territoriality, the significance of these classic convention principles has experienced changes. The national treatment principle has lost some of its importance after the elevation of the global intellectual property norms to the level of the industrialised countries. The national treatment principle is important when the differences between the national intellectual property regimes are large. As argued by *Ullrich*, now the WTO Members apply *de facto* reciprocity based on the TRIPS Agreement.¹³⁰ In addition, the transnationalisation of corporations and the emergence of the network enterprise have relativised the importance of the national treatment principle.¹³¹

It has been argued that the absorption of classical intellectual property law into international economic and trade law could eventually lead to universal standards governing the relations between innovators and their competitors in an integrated world market, thus effectively extinguishing territoriality.¹³² Even though doubtful due to the sustaining cultural and developmental differences across the world, the TRIPS Agreement has already led to a situation where the investment promotion and incentives created by intellectual property protection comprise the potential revenue of the aggregated markets of all WTO Members.¹³³ The new forms of private ordering leading to *de facto* global intellectual property norms, discussed above, strengthen this conclusion. To an extent private entities are capable of regulating intellectual property

127 See also *Ullrich* (1995), p. 194.

128 *Gervais* (2007), p. 19.

129 *Ullrich* (1996), p. 377-378. The similar conditions of technology competition make transnational alliances between competitors more likely. Concerning the latter aspect, see *Reichman* (1993b), p. 181.

130 *Ullrich* (1995), p. 180 and (1996), p. 377.

131 See *Strange* (1996), p. 67 and 56-57 and *Drache* (1996), p. 36 and 51 for a description of the difficulties to define what is a "national" or "European firm". I have pointed to similar difficulties with regard to the intention to protect "European" enterprises with the exhaustion of trademark rights regime. See *T. Mylly* (2000a), p. 71.

132 *Reichman* (1993a), p. 98.

133 See e.g. *Ullrich* (1995), p. 191.

globally by resorting privatised dispute resolution, regulation through technological design, as well as intellectual property policies and patent pools in the context of standardisation, the territoriality of intellectual property protection has lost much of its relevance.

This *globalisation of the incentive-function of intellectual property* connotes that the incentive or reward expected from protection constitutes of the expanded markets of harmonised intellectual property protection. In contrast to physical property, which locates in a given country and cannot be reproduced in other countries without incurring most of the costs incurred already with the first exemplar, intellectual property protection can be extended geographically by simply filing new applications or *ipso iure* in case of copyright. Not only the incentive-function, but also the social costs of intellectual property protection spread across the expanded markets of harmonised intellectual property protection. Thus, on a global scale both the potential rewards and the social costs generated by protection increase. To an extent the increased rewards were not needed as incentives, the end-result is overprotection and deadweight loss on the global scale.

The incentive function of intellectual property should thus increasingly be evaluated on the global level. If the enterprises operate globally, their incentive to innovate consists of the global aggregate of profits potentially available for them. Under an internationally harmonised intellectual property regime, the rewards that a national market can produce become relative and depend on the size of the market, among other factors. The possibilities of individual countries to restructure the incentives of enterprises in order to correct market failures have thus been curtailed by the globalisation of markets and competition. A decision of a country with a small market to increase or decrease intellectual property protection unilaterally may not have a considerable impact on the innovation incentives of globally oriented enterprises.

The principle of territoriality supported the small-scale local units responsible for manufacturing and supplying the markets locally. When intellectual property protection reflected mercantilist thought and production and intellectual property ownership largely corresponded with the territorial division of the world, the idea of rewarding or incentivising the patent and copyright owners territory-by-territory to full extent was comprehensible. However, now that the intellectual property protection is harmonised globally to the level of the industrialised countries and intellectual property owners exercise their rights and supply the markets globally, the situation has changed considerably. Territory is not the central organising premise for economic actions in the era of globalisation. Thus, there are no more compelling grounds to maintain the idea that each territorially defined sub-market of the global economy should fully reward and incentivise the owners of intellectual property rights for their research and development and creative efforts that are now typically aimed at global utilisation of harmonised intellectual property protection, global production and global protection of the markets.

Even though it is unlikely that the intellectual property doctrines could flexibly and rapidly adapt to the changes underlying the principle of territoriality,¹³⁴ competition analysis could and should take due account of the adequate levels of protection achieved globally. As Ullrich argues, territoriality can be seen as a remnant of the national phase when intellectual property policy could be defined nationally. Competition law does not have to take intellectual property -based territorial divisions as sacrosanct, but may legitimately address the internationally harmonised globalised economic context where the knowledge-based competition now takes place.¹³⁵

Structural Problems of International Harmonisation

After the coming into force of the TRIPS Agreement, increasing resistance to strong protection has emerged on the international level, opening up possibilities for a less single-sided international governance of intellectual property.¹³⁶ These post-TRIPS developments include the increasing interest of international non-governmental organisations in the TRIPS-matters and the leadership of African countries on health and biodiversity issues, among others.¹³⁷ Likewise, the final stages of the negotiation process and the end-result of the WIPO 1996 Copyright Treaties have been described to be relatively balanced by reflecting many-sided public interests, comprising values related to access to information, in particular.¹³⁸ The underlying reason for these changes may have been the critical response created by the TRIPS Agreement, resulting in better-organised representation of public interests outside major intellectual property owners.¹³⁹ However, the impact of these developments should not be overestimated. The basic structural problems underlying the international system of protection remain there and affect the potential direction and leeway of intellectual property policies on international, regional and national levels. Some of the underlying problems will be discussed in the following.

The major structural problem with the TRIPS Agreement is that it functions as an isolated island of intellectual property in the context of international trade law, but has the capacity to restructure aspects of intellectual property protection going beyond any trade-related issues. The WTO *acquis*, where the TRIPS Agreement is embedded, lacks a broader context where to locate intellectual property rights. The WTO has

134 There are no signs of this as for example the European doctrine regarding the exhaustion of intellectual property rights demonstrates. The opposite trend, that is, the rejection of international exhaustion of rights is prevailing. See e.g. *T. Mylly* (2000a) and (2002), both *passim*.

135 See also *Ullrich* (1995), p. 195-196 and 209.

136 See *Sell* (2003), p. 58 and *Drahoš* (2002b), *passim*.

137 *Sell* (2003), p. 57 and 187; *Gervais* (2007), p. 19-27 and *Dinwoodie* (2007), p. 71-92.

138 *Sell* (2003), p. 26-27 and 180-181. However, the same cannot be said of the measures implementing the WIPO Copyright Treaties in Europe and the US, as will be discussed subsequently.

139 *Ibid.*, p. 27.

no traditional constitution.¹⁴⁰ It has no adequate consumer protection elements. The competition norms of the TRIPS Agreement are minimalist.¹⁴¹ Moreover, there is no trans-cultural, universal notion of intellectual property the WTO-practice could be based on.¹⁴² Yet, from the perspective of the WTO dispute settlement organs the WTO Agreements form the sole source of law, overriding any public interest considerations underlying the domestic intellectual property laws or other laws interfering with them. For example, when evaluating the TRIPS-conformity of the exceptions and limitations to exclusive rights, the dispute settlement organs decline to consider the public interest behind the disputed national intellectual property policies. Instead, they restrict the analysis to the *extent and quality* of restrictions only, to the exclusion of their reasons.¹⁴³

These problems have led some commentators to urge the dispute settlement organs of the WTO to engage in rigorous scrutiny of the policy reasons behind the domestic exceptions investigated,¹⁴⁴ while others have recommended that the role of the dispute settlement organs should be limited to reviewing whether the national provisions fall within a range of possibilities that can be considered “normal” or “reasonable”. According to the latter views, the dispute settlement process should leave a margin of appreciation for the WTO Members and resist becoming a *de facto* appeal procedure for national measures that try to strike a balance between intellectual property protection and other public policy objectives.¹⁴⁵ Pending such interpretive reform, the TRIPS Agreement constitutes a straightjacket for the intellectual property policies nationally and regionally. Similarly, on the international level only legislative measures and harmonisation upwards are feasible outside the TRIPS Agreement. The TRIPS norms are minimum requirements reflecting the regime in place in the western industrialised countries at the time of the Uruguay Round negotiations, called in the preamble to the TRIPS Agreement “*adequate protection*”. Moreover, the TRIPS Agreement does not impose restrictions or limitations, but only censors their availability for the members.

In theory, the international treaty-making process in the area of intellectual property is characterised by compromise-formation, as is the case with any other subject-

140 Nor should it have as this would only lead to reductions in value- and constitutional plurality and would most probably ultimately place constitutional rights under the free trade objectives. See, however, *Petersmann* (2000), *passim* (arguing a case for the WTO constitutionalisation). See also the previous discussion under sub-chapter 3.3.2.

141 See more closely the treatment of TRIPS competition norms in chapter 7 subsequently.

142 See on a general level *Burkitt* (2001), p. 186 (not connected to the TRIPS Agreement).

143 See WTO panel report, Section 110(5) of the US Copyright Act, June 15, 2000, NT/DS160/R. See also *Austin* (2002), p. 1203-1204. See also the subsequent treatments of the three-step test.

144 See *Austin* (2002), p. 1203.

145 See *Helter* (1998), p. 440, arguing that there are strong structural and functional similarities between the European Convention on Human Rights and the TRIPS Agreement. Helter recommends adopting the interpretive methodologies developed by the European Court of Human Rights in dispute settlement procedures concerning the TRIPS Agreement. Similarly *Picciotto* (2002), p. 236-237.

areas.¹⁴⁶ If all relevant interests are represented, all involved have full information about the various possible outcomes and no one coerces the others, there is a possibility for fair bargaining at international level.¹⁴⁷ However, in practice compromise-formation is based on the specific interests as represented through the government negotiators. Most intellectual property lawyers, including the specialised government negotiators, have a natural tendency to socialise to promoting the protection of intellectual property and uphold the ideology of private rights. There is thus typically no neutral or objective group of civil servants in a position to counterbalance private demands.¹⁴⁸

Concerning private demands, the reality has proven the basic proposition of the economics of collective action to be correct in that a relatively small number of major intellectual property producers are more likely to organise than the larger number of people affected by intellectual property rights.¹⁴⁹ Relatedly, the former are likely to have considerably more resources available, when organised.¹⁵⁰ The private demands affecting the government negotiators thus tend to represent a small percentage of the ones affected. They may present a fraction of the private sector intellectual property owners, as demonstrated by the triumph of the Intellectual Property Committee in achieving its goals in the negotiation process leading to the TRIPS Agreement.¹⁵¹ Defence of the competitive ethos once underlying the intellectual property system has largely fallen to the responsibility of the developing countries.¹⁵²

This basic logic of international intellectual property bargaining has not changed post TRIPS. Consequently, the private interests of large intellectual property owners have prevailed and are likely to prevail over public interests of access to and dissemination of information. Moreover, what *Litman* has demonstrated in her survey of the US copyright development,¹⁵³ seems to apply equally to intellectual property policy on the international level: the standard treaty-making process of negotiated

146 For a short historical survey of international intellectual property instrument negotiations and the negotiations regarding the TRIPS Agreement in particular, see *Draho* (2002b), p. 164-180, pointing out that the conditions for fair bargaining were not present in the TRIPS negotiations; *Gervais* (1988), p. 10-28, explaining the negotiation process in a more positive light and *Sell* (2003), p. 96-120 and also *passim*, providing a profound critical analysis of the structural changes, agents, institutions and their interaction in the processes leading to the TRIPS Agreement.

147 *Draho* (2002b), p. 163 (calling harmonisation under these conditions “*democratic bargaining*”).

148 *Sell* (2003), p. 99.

149 See generally *Olson* (1971), p. 11-12 and *Olson* (1982), p. 31 and 41. As *Benkler* (2003b), at p. 197, notes, when compared to media and communications regulation, the stakeholders in intellectual property legislation are not so comprehensively in the negotiation table, thus implicating a greater role for courts to balance the organised proprietary interests with other values not present in the negotiations preceding intellectual property laws.

150 *Draho* (2002b), p. 163 (mentioning as an example that both healthcare consumers and pharmaceutical companies lobby, but it is only the Pharmaceutical Research and Manufacturers Association that has one for every two Congressional representatives available).

151 *Sell* (2003), p. 55 and 115 (except for the lengthy transition period, *Sell* reports Intellectual Property Committee to have achieved 95% of what it wanted from the TRIPS Agreement).

152 See also *Maskus & Reichman* (2005), p. 35.

153 *Litman* (1989), p. 333-342.

bargains among industry representatives serves badly the interests of yet-to-develop technologies. The typical fact-specific solutions to industry-specific disputes do not offer the flexibility and generality necessary for the adaptation of intellectual property to technological change. Although the conditions for protection and the exclusive rights are now formulated more broadly and flexibly, there has been no similar development in drafting the limitations to the exclusive rights. Creating such inherent limitations necessary for balancing the expanding exclusivity has thus been the task of the courts and later codifications of these court-created doctrines. On the international level, agreement on the exceptions and limitations is typically difficult to achieve, as there is no coherent interest group comparable to the industries benefiting from strong protection only.

When connected to the already detailed level of regulation based on proprietarian ideology, this structural and ideological bias in the international treaty-making process implies that it is increasingly difficult to base the scope of international intellectual property protection on public welfare criteria or values other than rewarding the right owners.¹⁵⁴ Thus, intellectual property seems to globalise without any shared understanding about the role it should have in employment, health, education, research and culture, among other values. These crucial interests have been either irrelevant or nuisance for the negotiators of the TRIPS Agreement.¹⁵⁵

However, they are shared transnationally and affect a larger group of citizens than the protection interests. Hence, although it is objectionable for the states to allow domestic oligopolies to control future negotiations on intellectual property rights to the extent they did in the negotiations leading to the TRIPS Agreement,¹⁵⁶ there are no reasons to presume such practices would not continue. Finally, a combination of technological and ethical complexity characterising intellectual property impedes, for its part, the democratisation of the regulatory policies beyond the narrow expert and interest group discussions. A third complexity follows, the complexity of intellectual property laws, functioning as a further entry ticket to the expert discussions defining the agendas and forming the basis for compromises in the international regulatory policies.

5.3.3 Phases of Intellectual Property Protection in the European Union

Introduction

Like with international protection, the case law of the Community Courts and the legislative developments in the area of intellectual property in the European Union can be divided into historical phases, each representing different ideological background thinking and connection to distinguishable periods in the development

154 See also e.g. *Picciotto* (2002), p. 224. See also Articles 7 and 8 of the TRIPS Agreement, which would enable a balanced approach to international protection in the interpretations of the TRIPS Agreement.

155 See *Drahos* (1999a), p. 368.

156 See also *Reichman* (1993a), p. 110.

of European integration. In the following, the development of the intellectual property dimension in the Union will be divided into three phases: *the common market phase*, *the reconciliation phase* and the *proprietary phase*.¹⁵⁷ However, rather than replacing the former period completely, the ideological expressions of each phase continue to co-exist in legislation, case law and jurisprudence alike. The European intellectual property landscape is thus populated with norms and norm fragments of different times, embedded with values and objectives particular to each epoch. Thus, although the ideological centre moves in the course of time, the ideologies remain alive in norms and norm fragments that complement and sometimes conflict each other.

From Common Market towards Proprietary Ideology

The common market phase is characterised by negative integration and the perception of intellectual property rights as nationally defined restraints of internal trade and competition. The territorial nature of intellectual property rights was thus considered as antagonistic to the integration objectives of the European Economic Community (the EEC). This phase, lasting from the late 1950s to late 1980s, is characterised by the active application of the EEC Treaty provisions on the free movement of goods and competition to intellectual property rights. The European Court of Justice, in addition to the Commission, was the central actor in shaping the economic constitutional law status of intellectual property rights. This is understandable, as the period is characterised by the active overall role of the European Court of Justice in the furtherance of the Community's integration objectives.¹⁵⁸ Legislative initiatives outside intellectual property's competition law interface failed. The Community Patent Convention¹⁵⁹ represents an unsuccessful attempt of this phase to introduce a European system of protection.

During this period, the European Court of Justice created several doctrines designed to limit the undesirable effects of intellectual property on the European integration objectives. After the expiry of the transitional period (after 31 December 1969) concerning the free movement provisions, the European Court of Justice's judgments relating to conflicts between intellectual property rights and Community law mostly dealt with the core free movement of goods - norms, now Articles 34 and 36 FEU (ex. 28 and 30 EC). Before this, some basic principles, such as the distinction between the

157 For an alternative periodisation, see *Phillips* (1998), p. 108-110. Phillips considers the current era to demonstrate "a more sensitive and sympathetic understanding of the needs of intellectual property owners and users--" (*ibid.*, at p. 112). See also *Bently & Sherman* (2009), p. 19-21 and *Rosas* (2002), *passim* for alternative characterisations and periodisations of the Community's intellectual property dimension.

158 See *Weiler* (1991), *passim*.

159 The Convention for the European Patent for the Common Market, OJ 30.12. 1989 L401. First agreed in 1975, but due to lack of political will, among other things, the Convention has not been ratified by all signatories.

existence and exercise of rights, were established in the area of competition law.¹⁶⁰ Article 36 FEU was formed after the model of Article XX GATT and was interpreted narrowly as an exception to freedom of trade within the Community.¹⁶¹ The first case involving the free movement provisions and an intellectual property right (a right related to copyright) was the *Deutsche Grammophon* case.¹⁶² In this landmark ruling, the Court laid down important principles that have been developed in later case law. These principles are the *existence-exercise* distinction, the specific object of the property (later the *specific subject-matter*) and the doctrine of *exhaustion* of rights at the Community level. Many of these doctrines had their origin in national laws and in German intellectual property law, in particular.¹⁶³

The reconciliation phase lasted from the late 1980s until mid 1990s. This period essentially relaxed the traditional common market and competition objectives and accommodated them with the emerging positive integration: legislative measures harmonising domestic intellectual property protection. Community-level protection regimes, functioning parallel to harmonised national laws and establishing rights with unitary character throughout the Community, were also created during this period.¹⁶⁴ The phase coincides with the ambitious internal market -programme and the general relaxation of the European Court of Justice's case law in the area of free movement of goods and state-based restrictions of competition.¹⁶⁵ It also coincides with the Uruguay Round negotiations leading to the creation of the TRIPS Agreement, which strengthened the view of adequate intellectual property protection being in conformity with objectives related to freedom of trade and innovation-based growth. The paradigm change within the Community can thus be seen in the light of and connected to the changes taking place on the international level and other areas of Community law.

The phase culminated in the area of trademarks. Trademark law represents the first area of successful harmonisation at Community level. The First Trademark

160 Starting with cases 56,58/64, *Consten and Grundig v Commission* [1966] ECR I- 299 and case 24/67, *Parke Davis v Centrafarm* [1968] ECR I- 55. The exercise of intellectual property rights by private undertakings was seen to have the potential of erecting harmful and thus illegitimate barriers on the common market.

161 See, e.g. case 229/83, *Leclerc v Au Blé Vert* [1985] ECR I-1 (depicting current Article 36 FEU as an exception to integration objectives and the main rule of free movement of goods, thus to be interpreted narrowly).

162 Case 78/70, *Deutsche Grammophon Gesellschaft GmbH v Metro -SB Grossmärkte* [1971] ECR I-487.

163 For example, the exhaustion doctrine is originally a national limitation of intellectual property rights. See *Beier* (1990), p. 151. See also the discussion in chapter 7.

164 Notably within the areas of trademarks, plant breeder's rights and later designs. See Regulation 40/94 on the Community Trade Mark [1994] OJ L 11/1, Regulation 2100/94 on Community plant variety rights [1994] OJ L 227/1 and Regulation 6/2002 on Community Designs [2002] OJ L 3/1.

165 See case C-267 and 268/91, *Bernard Keck and Daniel Mithouard* [1993] ECR I-6097 (free movement of goods) and case C-2/91, *Criminal proceedings against Meng* [1993] ECR I-5751 (state-based restrictions of competition). See generally about this development e.g. *Craig & de Búrca* (2008), p. 604-635.

Directive¹⁶⁶ represented a relatively successful attempt to balance competition-related concerns with the objectives of protection. It also codified the regional exhaustion of trademarks developed in the case law of the European Court of Justice. Moreover, during this period, trademarks gradually became perceived in a new manner in the case law of the European Court of Justice, connoting the first concrete steps in the transformation from the conception of intellectual property rights as restraints of trade and competition into perceiving them as essential instruments of European market economy, the furtherance of which is in the interest of the Community.

The European Court of Justice's case law from the common market period exposes the Court's original preferences. In *Sirena*, the Court placed the common market objectives above any other values and did not see trademarks worth much protection. It held that a trademark right "is distinguishable -- from other rights of industrial and commercial property, in as much as the interests protected by the latter are usually more important and merit a higher degree of protection than the interests protected by an ordinary trademark."¹⁶⁷ This position was also adopted in *Hag I*,¹⁶⁸ where the *doctrine of common origin* was established. This doctrine connoted that the owners of the same trademark in different member states could not invoke their rights against each other if the trademarks had the same (historical) origin. The principle applied despite the fact that the trademark in the other member state had been sequestered as enemy property after the Second World War. The ruling was much criticised at the time and was a cause of serious concern to intellectual property rights owners.¹⁶⁹ The *Nancy Kean* case¹⁷⁰ extended the principle to protected design rights. From this, it could be concluded that the doctrine of common origin potentially applied to all intellectual property rights.¹⁷¹

However, by its judgment in *Hag II*,¹⁷² the Court overruled its *Hag I*-ruling. *Hag II* was a reversal of the situation in the first *Hag* case. It also constitutes a reversal of the Court's approach towards trademarks. After *Hag I*, the Court had given its ruling in *Pharmon v Hoechst*,¹⁷³ holding that the rights of a patent holder are not exhausted by the sales of a holder of a compulsory license. Already this indicated a more permissive approach towards intellectual property – caused impediments to free movement of goods; the Court refused to extend the common origin principle to compulsory patent licenses. However, *Hag II* can be considered as the real turning point in the perception of the role of trademarks. The Court held in *Hag II*-case that trademarks constitute "an essential element of the system of undistorted competition which the Treaty aims

166 First Council Directive 89/104/EEC to approximate the laws of the Member States relating to trade marks [1989] OJ L 40/1.

167 Case 40/70, *Sirena S.r.l. v Eda GmbH* [1971] ECR I-69, at paragraph 7.

168 Case 192/73, *Van Zuylen Frères v Hag AG* [1974] ECR I-731.

169 See e.g. *Pehrson* (1995), p. 13.

170 Case 144/81, *Keurkoop v Nancy Keen Gifts* [1982] ECR I-4005.

171 See e.g. *Pehrson* (1995), p. 14.

172 Case C-10/89, *SA CNL -Sucal NV v HAG GF AG* [1990] ECR I -3711.

173 Case 19/84, *Pharmon BV v Hoechst AG* [1985] ECR I-2281.

to establish and maintain” and that the trademark “must constitute a guarantee that all the products bearing it have been manufactured under the supervision of a single enterprise to which responsibility for their quality may be attributed.” The change in the perception of the function of trademarks is remarkable. This approach was later taken to its logical conclusion in *Ideal Standard*,¹⁷⁴ which concerned voluntary assignment.

In addition, the *Software Copyright Directive*,¹⁷⁵ treated subsequently in more detail, represented an endeavour to accommodate competition-related interests with the objectives of protection. With the Software Copyright Directive, the Community recognised that the European software sector was equally in need of harmonised protection and competitive safeguards on the increasingly global software markets. Similar developments took place in the relationship of competition law to licensing of patents and know how,¹⁷⁶ as well as in the relationship between patents and free movement of goods, although the transformations were more gradual in these areas. Thus, different interpretations and ideologies seemed to compete during the second phase. Whereas *HAG II* and *Ideal Standard* seemed to represent a more favourable approach towards intellectual property, the ruling in *Magill*,¹⁷⁷ based on the application of the prohibition on the abuses of a dominant position to copyright, was generally interpreted as an attack on the very essence of intellectual property right protection. Likewise, it can be argued that the European Court of Justice did not pay due attention to the functions of patents in *Merck v Primecrown*,¹⁷⁸ which rather emphasised the common market ideology.

The current era, *the proprietary phase*, is characterised by legislative activities emphasising the protection of investments in the form of strong protection, easily obtainable rights (designs in particular) and protectionism insulating the Union market from outside price competition. The protection of other interests, be it competition, fundamental rights or cultural interests, is left for other legislation. The beginning of the proprietary era coincides with the coming into force of the TRIPS Agreement in 1996 and the Commission’s Green Papers on Innovation, Copyright in the Information Society and the Protection of Utility Models, all dated 1995.¹⁷⁹ The Green Papers elevated innovation and information creation to one of the central policy objectives of the Community. Several other policy papers prepared by the

174 Case C-9/93, *IHT Internationale Heiztechnik GmbH v Ideal-Standard GmbH* [1994] ECR I-2789.

175 Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, OJ L 122, 17 May 1991, p. 42-46.

176 See Commission Regulation 240/96 on the application of Article 85(3) [now 81(3)] of the Treaty to categories of technology transfer agreements. For example, *Govaere* (1996), at p. 2, reported that a conceptual change has recently occurred, indicating that intellectual property is no more seen as an indispensable trade barrier, but that both intellectual property rights and competition policy are now considered as indispensable assets in furthering trade.

177 Cases C-241/91 P and C-242/91 P, *RTE and ITP v Commission* [1995] ECR I-416.

178 Case C-267-268/95, *Merck & Co Inc and Others v Primecrown Ltd and Others* [1996] ECR I-6285.

179 *European Commission Green Paper on Innovation* (1995); *Green Paper - Copyright and Related Rights in the Information Society* (1995) and *Green Paper - The Protection of Utility Models in the Single Market* (1995).

Commission and other organs of the Community have strengthened this trend subsequently.¹⁸⁰ The approach was also visible in the Lisbon Spring Council in 2000, where the member states agreed on the objective of making the Community “*the most dynamic and competitive knowledge-based economy in the world*” by the year 2010.¹⁸¹ It remains to be seen whether such objectives signify a transformation of the single market objectives towards the internal market becoming construed as a platform of innovation, as indicated in some policy documents.¹⁸²

The European Court of Justice’s interpretations provided the Community with the broad *formal competence* to legislate intellectual property both through international and internal legislative measures.¹⁸³ Its rulings also provided the European Union legislator with a very broad *substantive discretion* to enact intellectual property legislation with a proprietary bias. On the basis of its judgements it seems unlikely that the European Court of Justice would strike down any legislative measure strengthening intellectual property even if this would result in obvious conflicts with fundamental rights protection, as such conflicts can always be explained as conflicts between intellectual property right-related property ownership and other fundamental rights, to be balanced by the legislator and not the courts.¹⁸⁴ The reference to the protection of intellectual property in Article 17(2) of the EU Charter can also be seen as an expression of proprietary ideology or intellectual property fetishism.

The *Database Directive*¹⁸⁵ and the *Information Society Directive*,¹⁸⁶ both treated in more detail subsequently, represent proprietary ideology and one-sided intellectual property logic.¹⁸⁷ With these Directives, the protection of economic investments and marketing efforts has become the *prevailing* logic of protection.¹⁸⁸ In line with this logic are the enumerated exceptions in both Directives as well as the adoption of the three-step test, treated in more detail subsequently, as an additional European

180 See e.g. *Promoting Innovation Through Patents - Green Paper on the Community patent and the patent system in Europe* (1997) and *Communication from the Commission* (1999).

181 See more closely *Facing the challenge: The Lisbon strategy for growth and employment* (2004).

182 See footnote 33 of chapter 1 and the text accompanying it.

183 See *Opinion 1/94* [1994] ECR I-5267 and case C-350/92, *Spain v Council* [1995] I-1985. See more about these cases e.g. *Rosas* (2002), p. 798-799.

184 See e.g. case C-377/98, *v Council and Parliament* [2001] ECR I-7079 and case C-479/04, *Laserdisken ApS v Kulturministeriet* [2006] ECR I-8089. See more closely the previous main chapter.

185 Directive 96/9/EC of the European Parliament and of the Council on the Legal Protection of Databases.

186 Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (OJ 2001 L 167, p. 10).

187 *Cornish & Llewelyn* (2007), p. 854, use the term “*protective frenzy*” when characterising the Information Society Directive (29/2001/EC) as it came out from the European Parliament.

188 There may be exceptions to the prevailing logic of protection. For example, Community design law, with its *must-match* and *must-fit* rules, as well as the proposed repairs clause concerning spare parts (Proposal of 14 September 2004), are based on competitive consideration. See about the spare parts debate and the proposal *Kur* (2008), *passim*. However, the future of the proposal is highly uncertain as it has attracted strong opposition due to active lobbying on the part of the car industry.

Union level limitation on the nationally implemented exceptions. By not including compulsory or permitted exceptions based on competition-related grounds and by censoring the development of corresponding exceptions and limitations through case law, *the protection of competition-related concerns has been left to legislative instruments outside intellectual property law*, mainly general competition law. Moreover, by protecting technological protection measures the Information Society Directive *extends de facto protection and remedies to subject matter formally outside protection*, as the technological protection measures do not distinguish between protected and unprotected in works.

Also the *First Enforcement Directive*¹⁸⁹ reflects one-sided proprietarian logic by failing to realise that intellectual property owners are typically also users and potential infringers of others' intellectual property rights. This applies generally and with regard to patents related to information technology and complex or standardised products, in particular. The Directive's ideological ethos is based on the fight against intellectual property "piracy",¹⁹⁰ but its scope of application extends considerably broader by including all infringements of all industrial property rights. On top of already extensive remedies and enforcement rights of the right owners, the Directive is according to its Article 2(1) *minimum harmonisation in favour of right holders*.

In the area of patent protection the *European Patent Convention* (EPC) has been modified through EPC 2000¹⁹¹ to the effect that the EPC's formal exclusions from patentability (computer programs and business methods, among others), are made finally redundant, although the formal exclusions in theory remain applicable.¹⁹² The case law of the Boards of Appeal of the EPC had already enabled the patentability of computer programs, to some extent business methods and potentially other subject matter formally treated in Article 52(2) of the EPC from patent eligible subject-matter. The EPC 2000 also likely leads to broader construction of patents in some countries through the endorsement of the doctrine of equivalents. This could result in the need

189 Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights [2004] OJ L 157/16.

190 See e.g. Article 15 of the Directive, which concerns publication of judicial decisions. According to the Article, "*Member States shall ensure that, in legal proceedings instituted for infringement of an intellectual property right, the judicial authorities may order, at the request of the applicant and at the expense of the infringer, appropriate measures for the dissemination of the information concerning the decision, including displaying the decision and publishing it in full or in part. Member States may provide for other additional publicity measures which are appropriate to the particular circumstances, including prominent advertising*". Why is not the interest of an innocent defendant worth equal protection? The publication of judicial decisions may be grounded in high-profile cases of intellectual property "piracy" where the consumers may have been misled. However, Article 15 applies generally to all intellectual property infringements, covering cases like too extensive use of copyrighted materials in teaching, private circumvention of technological protection measures and mutual infringement of each other's patents by both parties to the legal dispute.

191 Act Revising the Convention on the Grant of European Patents, Munich, 29 November 2000.

192 See the revised Article 52 EPC and its interpretation by the EPO Boards of Appeal in its Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, treated subsequently.

for competitors to differentiate more from the patented technology, thus leading to greater market power conferred upon the patent holder.¹⁹³ These aspects of patent protection will be treated in more detail subsequently.

The *Community Design regulation*¹⁹⁴ enables the registration of designs without the Office examining the formal requirements of protection, except for the design's conformity with public policy or accepted principles of morality.¹⁹⁵ It is questionable that public authorities grant rights applicable *erga omnes* without duly investigating the conditions for protection pre-grant.¹⁹⁶ The Regulation also provides limited protection without any registration for designs made available to the public.¹⁹⁷ The outcome of these rules is that there exist multiple invalid registered designs and even more unregistered designs, yet invoked by their makers as existing rights. The registration creates a presumption of validity.¹⁹⁸ *The responsibility to inspect and invoke the formal requirements of protection is thus transferred to the defendants, post-grant.* Taking into account that infringement proceedings are costly and involve considerable uncertainty, many or even most of the invalid design rights are likely to survive uncontested and thus likely to restrict unduly competition and new creation.¹⁹⁹ Smaller enterprises, in particular, are unlikely to take the risk of using a registered (or unregistered) Community design even if they are convinced that the design does not fulfil the conditions for protection.

More generally, due to the insufficiency of lead-time offered by the protection of trade secret and confidential information in the context of modern innovation, legislators in industrialised countries have increasingly resorted to various *sui generis* forms of protection, such as the protection of utility models, designs and databases. These regimes are intended to overcome the market failure caused by the inadequacy of traditional intellectual property system to protect important modes of modern innovation and the resulting lack of incentive to invest in these technologies. However, this development has been said to compromise the competitive ethos and free-market premises of the intellectual property system from within by protecting practically every product sold on the products market.²⁰⁰ The negative effects of these specific *sui generis* regimes on competition have not been adequately considered.²⁰¹ Once in place, such regimes reduce the shared knowledge and know-how by producing a

193 See also *Katz* (2007), p. 858.

194 Council Regulation (EC) No 6/2002 of 12 December 2001 on Community designs.

195 See Article 47 of the Regulation. The "Office" refers to the Office for Harmonisation in the Internal Market, located in Alicante, Spain. It grants both Community trademark and design rights.

196 See also *Llewelyn* (2005), p. 36, with regard to the amended proposal for a European Parliament and Council Directive approximating the legal arrangements for the protection of inventions by utility model, COM/99/0309 final Official Journal C 248/56 E.

197 See Articles 1, 5, 6, 11, 15 and 19 of the Regulation, in particular.

198 See in more detail Article 85 of the Regulation.

199 See relatedly *Barton* (1997), p. 445, noting that also invalid (patent) rights may function as an entry barrier.

200 See *Reichman* (1993a), p. 96-97.

201 See *ibid.*, p. 81 and (2001), *passim*.

web of property and quasi-property rights, thus constituting an entry barrier and a disincentive to advance small-scale innovation.²⁰²

The European Union has been the global leader in introducing such regimes, including the Database Directive, the now dropped Proposal for the protection of inventions by utility model,²⁰³ and the Community Design Regulation which protects not only shapes, but also extends protection to lines, contours, colours, texture and materials of the product itself, or its ornamentation.²⁰⁴ The extension of the term of phonogram producers' and musicians' rights from 50 to 95 years demonstrates the continuation of the proprietarian ideology with the Commission.²⁰⁵ In its industrial property rights strategy from year 2008 the Commission explicitly states, "*Europe requires strong industrial property rights to protect its innovations and remain competitive in the global knowledge-based economy*".²⁰⁶ The Commission considers that the social costs caused by strong protection can be adequately addressed with the application of competition law: "[s]trong protection of industrial property rights should be accompanied by rigorous application of competition rules".²⁰⁷

The case law of the Community Courts from this period is not consistent. With regard to *trademarks*, the Courts have internalised competition-related concerns in their interpretations by favouring parallel importers in situations internal to the European Union and by favouring competition on the derivative or related markets to the trademark owner, such as repairing the trademarked products and production and marketing of compatible parts.²⁰⁸ Trademark rights are seen to constitute "*an essential element in the system of undistorted competition which the EC Treaty is intended to establish and maintain*".²⁰⁹ This basic premise is further reflected in the perceived

202 Reichman (2001), p. 38.

203 See Amended proposal for a European Parliament and Council Directive approximating the legal arrangements for the protection of inventions by utility model, COM/99/0309 final Official Journal C 248/56 E. See, however *An Industrial Property Rights Strategy for Europe* (2008), at p.6-7, where the Commission now asks the member states with utility models to assess their contribution to innovation.

204 See Article 3(a) of Council Regulation (EC) No 6/2002 of 12 December 2001 on Community designs.

205 The Commission Proposal for a Directive amending Directive 2006/116/EC on the term of protection of copyright and certain related rights (2008). The Commission argued that the proposal is based on improving "*the social situation of performers*" (at p. 2 of the Proposal). Yet, not only the rights of performers, but also those of producers were extended. For a critical reaction to this proposal, see *Bently et al.* (2008), *passim*. See also *Ghidini* (2006), p. 58-59, for a critique on the producers' rights in general.

206 *An Industrial Property Rights Strategy for Europe* (2008), p. 2. Taking into account the desire for strong industrial property rights, the Commission still ironically calls the free movement of knowledge "*the fifth freedom*" (*ibid.*, at p. 3). See also the *Green Paper, Copyright in the Knowledge Economy* (2008), at p. 4, where the Commission states that "*A high level of copyright protection is crucial for intellectual creation*".

207 *An Industrial Property Rights Strategy for Europe* (2008), p. 2 and 9.

208 See case C-228/03, *Gillette Company and Gillette Group Finland v LA-Laboratories Ltd Oy* [2005] ECR I-2337 and case C-63/97, *Bayerische Motorenwerke AG (BMW) and BMW Nederland BV v Ronald Karel Deenik* [1999] ECR I-905. See about these cases *Hilli* (2006), *passim* and *Monteagudo & Porxas* (2006), *passim*.

209 See e.g. case C-104/01, *Libertel Groep BV and Benelux-Merkenbureau* [2003] ECR I-3793, at paragraph 48 and the previous cases referred to there where similar terminology has been used.

functions of trademarks and the interpretations of trademark law. It is reflected in what could be registered as a trademark in the first place. For example, in its *Libertel*-judgement the Court evaluated the registration of colours in the following terms:²¹⁰

“As regards the registration as trade marks of colours per se, not spatially delimited, the fact that the number of colours actually available is limited means that a small number of trade mark registrations for certain services or goods could exhaust the entire range of the colours available. Such an extensive monopoly would be incompatible with a system of undistorted competition, in particular because it could have the effect of creating an unjustified competitive advantage for a single trader. Nor would it be conducive to economic development or the fostering of the spirit of enterprise for established traders to be able to register the entire range of colours that is in fact available for their own benefit, to the detriment of new traders.”

This general approach to trademarks is also reflected in the interpretation of the rights of the trademark owner and the exceptions to protection. Instead of defining the rights of the trademark owner expansively and in the abstract, they are typically defined restrictively and in relation to the function of trademarks. The exercise of trademark rights is in principle reserved to cases where a third party's use of the sign affects or is liable to affect the functions of the trademark, in particular its essential function of guaranteeing to consumers the origin of the goods or services.²¹¹ This has enabled the use of another's trademark in the advertising of compatible products and specialised services (subject to further conditions).²¹²

Importantly, *the exceptions from trademark protection are not to be interpreted narrowly, but with regard to their function and the functions of trademarks.*²¹³ Certainly, the interpretations of the Community Courts are not wholly consistent in their approach to trademarks, their relation to competition and the need to keep free for other public policy reasons.²¹⁴ The general thrust of the relevant case law and one of the core premises for interpretations is, however, the function of trademarks in the system of competition. A notable exception to this approach is intra-brand competition from

210 Case C-104/01, *Libertel Groep BV and Benelux-Merkenbureau* [2003] ECR I-3793, at paragraph 54. See also case C-136/02 P, *Mag Instrument Inc., v Office for Harmonisation in the Internal Market* [2004] ECR I-9165 (concerning shape as an object of trademark registration).

211 See e.g. case C-228/03, *Gillette Company and Gillette Group Finland v LA-Laboratories Ltd Oy* [2005] ECR I-2337, at paragraph 25 and case C-206/01, *Arsenal Football Club plc v Matthew Reed* [2002] ECR I-10273, at paragraphs 47-51. For an introduction to EU trademark law see *Tritton* (2008), p. 252-264. For an insightful review of the relationship between European Union trademark law and competition, see *Davis* (2004), *passim*.

212 Case C-228/03, *Gillette Company and Gillette Group Finland v LA-Laboratories Ltd Oy* [2005] ECR I-2337 and case C-63/97, *Bayerische Motorenwerke AG (BMW) and BMW Nederland BV v Ronald Karel Deenik* [1999] ECR I-905. See about these cases *Hilli* (2006), *passim* and *Monteagudo & Porxas* (2006), *passim*.

213 See also *Roughton* (2005), p. 197 (regarding the exceptions in Article 6(1)(b) of the First Trade Mark Directive 89/104/EEC. See however, Case C-102/07, *adidas AG, adidas Benelux BV, v Marca Mode CV, C&A Nederland CV, H&M Hennes & Mauritz Netherlands BV, Vendex KBB Nederland BV* [2008] ECR I-2439, where the Court did not allow the availability-criterion to affect the interpretation of the exceptions to protection once established.

214 See e.g. *Davis* (2004), p. 1019 and also *passim*.

outside the European Union in the form of parallel importation. The protectionist outcome of the *Silhouette-case*²¹⁵ represents an important demarcation from the otherwise relatively competitive ethos characterising the European trademark law.²¹⁶ Its effects have been extended by the European Union legislator, with the Court's approval, to other harmonised intellectual property rights.²¹⁷

The European Court of Justice's interpretations of the Database Directive have also partially balanced the proprietary ideology of the Directive with anti-monopoly and freedom of speech interests, although the argumentation of the decisions has proceeded on the basis of more formal textual and teleological grounds. However, the Court's case law on database protection is inconsistent in its underlying policy orientation. A fairly recent case, regarding the definition of the database owner's exclusive right of extraction, shows no traces of taking competition-related or freedom of speech concerns seriously.²¹⁸ Despite some case law developments constituting an exception to the proprietary ethos of the period, the majority of the Community Courts' intellectual property case law has reinforced the proprietary intellectual property trend, leading to further polarisation of conflicts between intellectual property rights and competition, fundamental rights as well as cultural and communal interests. In the area of copyright, in particular, the basic premise has been the establishment of a "high level of protection".²¹⁹

Yet, it should be realised that the European Court of Justice could no more represent a unitary ideology throughout its numerous judgements concerning intellectual property law. As stated before, the Court is composed of 27 judges representing different legal cultures, areas of specialisation and political views. It typically sits in chambers of three or five judges and sees no more intellectual property from the unifying perspective of the common market and freedom of competition only, previously dominating its case law. Hence, the underlying thinking of the judgements is likely to differ depending on the composition of the Court, among other reasons. Ultimately, longer-term generation of case law and the inevitable judicial path-dependency likely solidifies certain ideological premises. So far, however, the relatively recent harmonisation of intellectual property laws on the European level and the partially scarce existing case law interpreting it still leave scope for alternative developments and underlying ideologies.

215 Case C-355/96, *Silhouette International Schmied GmbH & Co. KG v Hartlauer Handelsgesellschaft mbH* [1998] ECR I-676.

216 See more closely *T. Mylly* (2000a), *passim*.

217 With regard to copyright, see the European Court of Justice's ruling in case C-479/04, *Laserdisken ApS v Kulturministeriet* [2006] ECR I-8089, treated earlier in chapter 5.

218 See more closely the subsequent treatment of database-protection under heading 5.5.5.

219 See case C-200/96, *Metronome Music v Music Point Hokamp* [1998] ECR I-1953; case C-479/04, *Laserdisken ApS v Kulturministeriet* [2006] ECR I-8089 and case C-306/05, *Sociedad General de Autores y Editores de España (SGAE) v Rafael Hoteles SA* [2006] ECR I-11519, at paragraph 36 and case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported.

There are multiple reasons underlying the proprietarian ethos.²²⁰ First, the European Union is not insulated from the intensification of international trade and global competition, but is both subject to its pressures and an active constructor of this new global regime. Innovation-based comparative advantage and growth have emerged as the new fundamental policy objectives of the Community, as expressions of techno-nationalistic spirit on Union -level.²²¹ Such emphasis on technological competitiveness is not only an economic theory among others, but has developed into something of an official ideology guiding governmental policies. Enabling and enhancing the control of technological knowledge is the core policy objective within this ideology.²²² Clearly defined (strong and absolute) intellectual property rights are seen to be the primary legislative instruments in the pursuance of these objectives.

In its official statements, the Commission seems to deploy instrumental phraseology and connects strong intellectual property rights to innovation-based growth.²²³ In this phraseology, the social costs imposed by exclusive rights do not exist, but a simple logic of “strengthened protection – more innovation” prevails. Under this logic, intellectual property protection does not restrict freedom of expression, competition or anything else. As *Sideri* says, patterns of words connecting the importance of innovation and intellectual property protection, like rituals, become reproduced in ever-new policy reports, green papers and recitals to directives. Their accuracy is never questioned. Ultimately, they become symbols of authority and continuity.²²⁴

The United States also provides a constant point of reference for the demands of more extensive protection. However, also in the US the commitment to strong intellectual property protection is a recent phenomenon. It has been said that this new faith has reversed there about 75 years worth of scepticism over the merits of strict intellectual property protection.²²⁵ It should also be noted that the US courts have instruments that are more flexible at their disposal to balance the rights of the intellectual property owners with public interests. These instruments include the *misuse* and *fair use* doctrines, in particular.²²⁶ Even though these doctrines may be rarely applied successfully in courts, they provide a framework for contextual interpretation in courts capable of accommodating

220 See also the discussion in chapter 8.

221 *Nelson & Rosenberg* (1993), p. 3. define “*techno-nationalism*” to be a combination of a strong belief that the technological capabilities of a nation’s firms are a key source of their competitive prowess, with a belief that these capabilities are in a sense national, and can be built by national action.

222 See also *Petrusson* (1999), p. 89-90.

223 See e.g. *Bolkestein* (2000), first and last paragraphs (“*We need to encourage as much innovation as possible and thereby make it attractive for industry to invest in Europe. In this context, it is particularly important to put more emphasises on the protection of intellectual property rights*” and “*The need for protection of industrial property rights for innovation and employment and its impact on competition is crucial.*”).

224 *Sideri* (2007), p. 91-94.

225 *Sell* (2003), p. 60.

226 See about the “procompetitive doctrines” in US intellectual property law *Cotter* (2006), *passim*. About copyright misuse, see *Cross & Yu* (2008), *passim*.

diverse public interest grounds, and could lead to voluntary licensing in the shadow of a right to use the resources freely.

This implies that similar statutory texts in the US and the European Union tend to lead to broader exclusivity in the Union, as the European courts do not usually create new exceptions to the exclusive rights or apply flexible and general norms relating to the limitations of the exclusive rights. In Europe, the equivalent flexible balancing is more supposed to be the task of other legal instruments, such as competition law. Moreover, the US seems to reconsider its intellectual property policies by now taking competition-related concerns more seriously.²²⁷ Finally, as already mentioned, by introducing the Database Directive, Community Design Regulation and the Proposal for the protection of inventions by utility models, the European Union has become the global leader in competitively problematic *sui generis* regimes of protection, extending intellectual property protection below patent and copyright thresholds of protection. Much of the proprietary trend is thus the internal production of the European Union itself.

However, it must also be realised that the intensive and extensive international regulation of intellectual property *does* reduce the scope of available policy options for the European Union. At Union-level, the preceding international measure forms a starting point for further compromises. Yet at this time, the legislation can only develop in one direction, as the international measure is regularly minimum harmonisation in favour of intellectual property owners. All interest groups must thus normally accept the preceding international measure as a *minimum* level for the purposes of regional implementation actions. The legislative process of the European Union reminds the international negotiation process in that it is also primarily based on compromise formation. Likewise, as already indicated, the economics of collective action affect the negotiation process in that the relatively small number of major intellectual property owners are well organised and funded when compared to the larger and more heterogeneous group of users. In practice, the same intellectual property lobby operates effectively on both levels. This tends to shift further the balance towards proprietary interests at the expense of users' rights and collective goods of various kinds.

A third shift in the same direction may typically occur on the member state -level. This is so in particular if the legislative instrument used on Union-level is a directive. The directive in question may be minimum harmonisation in favour of the right owner. In any case, compulsory limitations or exceptions are rarely used and directives set obligations that the member states must fulfil. The transnationally operating intellectual property lobby affects the outcomes on national level alike. Moreover, it seems that it is usually at domestic level where objections, based on not only special interest groups but also general public interest and fundamental rights, emerge. One obvious reason for this is that it is at this level where the legislation becomes concrete

227 See *Federal Trade Commission: To Promote Innovation: The Proper Balance of Competition Law and Policy*, A Report by the Federal Trade Commission, October 2003. The report is an in-depth investigation of the competitive problems of the US patent system.

and its likely effects visible. Furthermore, there are no systematic fundamental rights checks at either international or European Union legislative processes comparable to national ones.²²⁸

It is only at the national level where the norms emanating from the international and European levels become embedded in a comprehensive legal context. Yet, quite often due to the specificity and detailed manner of regulation, it may be impossible to implement the international and European Union measure in a manner satisfying the requirements of public interest and fundamental rights. To avoid international conflicts, the problems typically remain in the national implementations. A tacit consensus typically emerges about the conformity of the international and European Union measures and their domestic implementations with both fundamental rights protection and public interest. Such tacit, European-wide consensus is almost never challenged before courts, domestic or European.

When connected to these structural problems, the prevailing proprietary ethos increases the tensions in the relations between intellectual property rights protection and fundamental rights on one hand, and between intellectual property and competition law, on the other hand. Competition law seems to become the entrusted counterweight to the desired strong protection.

However, each ideological phase contains the seeds of its decline. There are now some signs of a possibility of a re-evaluation of the current trend. These are visible on international level in the Doha Declaration,²²⁹ on European Union level in the politicisation of intellectual property and the *de facto* rejection by the European Parliament of the Directive Proposal concerning the Patentability of Computer-Implemented Inventions.²³⁰ Moreover, some cases from the European Court of Justice demonstrate an increased willingness to accommodate many-sided fundamental rights values in the interpretations of intellectual property law. The *Promusicae*-case, discussed in more detail in the previous chapter, can be mentioned as an example of such an approach.²³¹ The same applies to Advocate General Maduro's Opinion in *Google v Louis Vuitton Malletier*.²³² At the least, some cases decided by the Community Courts may demonstrate the continuing existence of competing ideologies and perceptions of intellectual property rights on European Union level. Yet the time is

228 The EU Fundamental Rights Agency (established in 2007) has very limited powers. See *Craig & de Búrca* (2008), p. 404.

229 *Doha Declaration* (2001). See also *WTO Doha Implementation* (2003). For the implementation within the EU, see Regulation (EC) No. 816/2006 on compulsory licensing of patents relating to the manufacture of pharmaceutical products for export to countries with public health problems.

230 COM(2002) 92 final (20 February 2002). Thus, despite the complexities involved (see the previous discussion), intellectual property law has strongly politicised lately.

231 Case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271.

232 Joined Cases C-236/08, C-237/08 and C-238/08, *Google France, Google Inc. v Louis Vuitton Malletier etc.*, opinion of Advocate General delivered on 22 September 2009, not yet reported (at paragraphs 102-111).

not ripe yet to pronounce the emergence of a fourth phase in European intellectual property protection.

In the following concretisation, European protection of intellectual property will be analysed in more detail from the perspective of economic constitutional law. The emphasis will be on patent and copyright laws and the information society aspects of protection – protection of information, communication technologies and computer programs. Means enabling the control of economic and informational power within the chosen right-types as well as aspects of protection affecting communications will be addressed in more detail. As said previously, the treatment will be both relatively comprehensive and substantive. It is the concrete doctrines, argumentation patterns and *allgemeine Lehren* applied by courts and authorities that define the substantive outcomes and participate in constituting European economic constitutional law of the information society. Moreover, only such treatment enables the substantiation of generic trends and structural underlying problems requiring response on the level of theory-formation of this research.

5.4 Concretisation I: Patent Law

5.4.1 Introduction

Should patents be seen as exceptions to a general prohibition on monopoly, inviolable property naturally belonging to inventors, or something else? This fundamental question affecting the conceptions of the patent law institution has been answered differently depending on the epoch and country in question. Although nothing formally follows from answering such a question, it is necessary to have a look at the historical roots of the patent law institution to enable the understanding of its underlying ideologies, tensions and trajectories of development. The patent law institution has essentially a mercantilist origin. It emerged from the system of privileges and was tailored to control and stimulate domestic production of goods. This was seen to enhance the competitive position of the country in question *vis-à-vis* other countries.²³³

Historical depictions of patent law often start with the Venetian patent statute of 1474, followed by the Statute of Monopolies of 1624 in England.²³⁴ The former has been said to include all the essential features of modern patent law.²³⁵ The latter has been characterised as a statutory reaction to royal abuses and an affirmation of the common law view that patents should be tolerated only if they serve the public

233 See e.g. *Petrusson* (1999), p. 109, *Koktvedgaard* (1965), p. 46 and *Bernitz* (1969), p. 116-118.

234 However, *Sherman & Bently* (1999), at p. 209, argue that the foundation or basis for patent law in England lay in the Royal Charters and Royal Letters Patent of the Crown – and not in the Statute of Monopolies. See also *Fisher* (2007), p. 41-42, for a discussion of patent history in England preceding the Statute of Monopolies.

235 See *Nard & Morriss* (2006), p. 234; *Brand* (2007), p. 233 and *Fisher* (2007), p. 26.

good.²³⁶ The Statute of Monopolies reflected the premise that all monopolies except those based on patents are abhorrent and are thus to be prohibited. Patents were seen to incentivise domestic invention and introduction of inventions invented elsewhere to England.²³⁷ This dual approach to patents – patents seen as both monopolies and necessary incentives – resulted in tolerating the patent monopoly, but limiting it strictly to the minimum required for obtaining the benefits achievable through the patent institution.

This approach has persisted during the later periods. The first modern British patent law, the 1883 Patents, Designs and Trade Marks Act, compelled the patent owner either to exploit the invention properly or to grant licenses for others to do so, thus mirroring the underlying anti-monopoly and utilitarian ideology.²³⁸ The incentive-argument has more recently transformed from the incentivisation of domestic production and importation of inventions from abroad towards Schumpeterian incentivisation of corporate investments in costly research and development. However, the basic tension between the general dislike of monopolies and the perceived utilitarian need to incentivise still reflects the British patent law, as will be discussed in more detail subsequently with regard to the scope of patent protection, in particular.

Alternative perceptions of patents developed especially in France and Germany. France's first Patent Act of 1791 was based on natural law ideology, according to which "*it would be a violation of the rights of man in their very essence if an industrial invention were not regarded as the property of its creator*".²³⁹ Yet the actual functioning of the French patent law could not be characterised as an orthodox implementation of natural law ideology. The patent law, among other things, enabled the patenting of inventions known outside France.²⁴⁰ Germany's first Patent Act was introduced as late as 1877.²⁴¹ This was preceded by the great *patent controversy*, anti-patent movement in Europe between 1850 and 1873. The anti-patent movement was largely based on free trade and anti-monopoly arguments and related economic theories. It led, among other things, to the abolishment of the Patent Act in the Netherlands between 1869 and 1912.²⁴² The economic arguments widely presented against patents during that period led in Germany to the defence of patents on the basis of natural law. Reflecting Hegelian ideas, the patent was argued to protect not the economic interests of the inventor, but above all his *personality*. Accordingly, the remunerations the patent owner obtained for the exploitation of his patented ideas were conceptualised as *acts of*

236 See *Chisum et al* (2004), p. 13-15. See also *Fisher* (2007), p. 42 and *Nard & Morriss* (2006), p. 258-290 and *Brand* (2007), *passim* (with emphasis on compulsory licensing).

237 See *Bernitz* (1969), p. 118-119 and *D. Cohen* (1998), p. 1092-1093.

238 See *D. Cohen* (1998), p. 1097.

239 *Machlup & Penrose* (1950), p. 3 and 11 (quotation of the translation from the preamble to the French patent law *ibid.* at p. 11); *Bernitz* (1969), p. 121.

240 *Oddi* (1996), p. 421; *Petrusson* (1999), p. 147-148.

241 See e.g. *Heinemann* (2002), p. 124-126.

242 See more closely *Machlup & Penrose* (1950); *Bernitz* (1969), p. 125-129 and *Petrusson* (1999), p. 113-117. The societal justification of patent law has been debated ever since. See more closely e.g. *Chisum et al* (2004), p. 38-71 and *Petrusson* (1999), p. 106-108.

recognition rather than economic incentives. Mirroring similar background ideology, the invention was seen as a reflection of the idea behind it. As a corollary, it was this inventive idea that merited protection through the patent law institution.²⁴³

In England, in contrast, the patent controversy helped to transform the legal image of the invention from that of the unique creation of an individual to *discovery*, having also important consequences for the societal justification of the patent law institution. The anti-patent movement had to face in England the argument that if patents must be abolished, why the same does not apply to copyright. Abolishing copyright would have been impossible in practice. This resulted in making a distinction between patents and copyright, whereby the patentable inventions became conceptualised as being *discovered* as opposed to being products of mental labour or the inventor's personality. This distinction also explained the shorter period of protection for patents. More importantly, the distinction changed the social justification of patents from rewarding mental labour to constructing a "contract" between the inventor and the state, whereby the inventor first communicates the invention to the general knowledge and is in return given a temporary monopoly in return by the state.²⁴⁴

Like with British patent ideology, the patent laws of other European countries continue to carry in their doctrines and patterns of interpretation their ideological past. This is perhaps most clearly visible in the determination of patent scope, as will be discussed subsequently in more detail. In the following, patentability, scope, exceptions and compulsory licensing will be discussed as the core aspects of European patent laws. The discussion purports to be neither an exhaustive legal dogmatic treatment of these topics, nor comparative in a strict sense. Instead, the main emphasis will be on the ideological premises and evolutionary perspectives, doctrines and principles considered central to the notion of economic constitutional law and competition, as well as on the federal, European-level aspects of protection.

However, as the example of patents demonstrates, the economic constitutional law of intellectual property protection is still partially a work of joint authorship, comprising not only the federal level, but also national doctrinal developments. The latter are in a dialogical relationship not only with the federal level, but with each other as well. Without any systematic ambitions, the analysis of the national doctrines and developments merely has the purpose of demonstrating the plurality of the ideological premises and thus the potential in European patent law for competing interpretations and perspectives.

243 See *D. Cohen* (1998), p. 1103-1105.

244 See more closely *Sherman & Bently* (1999), p. 149-156.

5.4.2 Patentability of Computer Programs and Business Methods

Introduction

In Europe, the European Patent Convention (EPC) largely determines the conditions and scope of patentability. Although individual states in Europe have their own patent laws and patentability requirements, they largely reflect the standards developed by the European Patent Office (EPO) in its application and interpretation of the EPC.

What comes protected in the first place matters. Commodifying certain knowledge, such as the human genome or human life, may be considered simply unethical and against the public morality. There must also be an adequate public domain of scientific knowledge wholly beyond the reach of patent law. Furthermore, the possibility to rely subsequently on exceptions to protection should not be a ground for enabling the patentability of subject-matter creating serious ethical, competitive or social problems, as among other reasons, testing the interpretation of the exception in courts may not be a viable option for smaller competitors, in particular. The doctrine of narrow interpretation of exceptions to exclusive patent rights also contributes to the same conclusion, as do the rules concerning the burden of proof.

Furthermore, even if many of the patents are found later invalid, they may function as an entry barrier.²⁴⁵ The cost of litigating a patent thicket may become insurmountable for any firms being unable to navigate it for example by resorting to cross-licensing arrangements. Thus, not only the patentability requirements as applied by courts in invalidation proceedings, but also the patentability criteria as adopted by the patent authorities, is important for competition and the control of economic and informational power, among other concerns related to patentability.

In Europe, as also in the US, the clearly discernible trend has been the expansion of patent-eligible subject-matter. The European Patent Office has promoted the view that the widest possible conception of patentability was a predominant conception when the European Patent Convention was negotiated, thus leading to the principle of narrow construction of exceptions to patentability. This approach has made the restrictions on patentability weak.²⁴⁶ For example, the important distinction made in patent law between invention and discovery is already being gradually whittled away in the area of biotechnology.²⁴⁷

The following analysis will concentrate on the patentability of computer programs and business methods in European patent law. Both are contested objects of patenting and present particular competition-related problems. Moreover, as essential techno-economic elements underlying modern communications built on computer networks, they are also potential sources of socio-economic power over communication.

Patentability under the EPC framework requires four conditions to be fulfilled: 1) there must be an invention, implicating *technical character* of claimed subject-

245 See e.g. *Barton* (1997), p. 445.

246 See also *Drahos* (1999b), p. 442.

247 *Drahos* (1999b), p. 443 and *Llewelyn* (2005), p. 45-49.

matter and it must be 2) *new* (novelty), 3) *inventive* (inventive step) and 4) *industrially applicable*.²⁴⁸ Whereas novelty and inventive step are relative requirements, technical character of the claimed subject-matter and industrial application are absolute requirements.²⁴⁹ Technical character is an implicit requirement based on the notion of *invention* in Article 52(1) of the EPC, as will be discussed in more detail subsequently. For the satisfaction of the fourth requirement, there must be at least one field of industrial application for the direct use of the claimed invention. The claimed invention must be concretely industrially applicable. Mere speculation with exceptional or theoretical industrial uses or possible future developments is not enough.²⁵⁰ However, in practice this requirement is the easiest to satisfy.

The TRIPS Agreement, in its Article 27(1), takes as its starting point that patents should be available for inventions in all fields of technology.²⁵¹ Similarly, the European Patent Convention (EPC) now requires in its Article 52(1) that patents must be granted “*for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application*”. The EPO Boards of Appeal has interpreted this as *a fundamental maxim of the general entitlement to patent protection for any inventions in all technical fields*. Accordingly, any limitation to this general entitlement *is not a matter of judicial discretion*, but must have a clear legal basis in the EPC.²⁵² Thus, achieving sector-specific flexibility in the application of the patentability requirements seems difficult in the current regulatory environment, as the international and European patent regulation has taken as its premise technological neutrality, demonstrating an idea that patents are no more considered as instruments in achieving the desired objectives, but *natural rights* belonging to inventors regardless of the field of technology.²⁵³

248 For a critical commentary on the application of these requirements, see *Llewelyn* (2005), p. 23-32.

249 See Article 52(1) of the EPC. See also e.g. EPO Technical Board of Appeal Decision T 258/03 – 3.5.1, dated 21 April 2004, *Auction Method/Hitachi* and EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*. Cf. with *The Right Honourable Lord Justice Chadwick* and *The Right Honourable Lord Justice Jacob* and *The Right Honourable Lord Justice Neuberger*, *Aerotel Ltd and Telco Holdings Ltd and others* [2006] EWCA 1007, Civ. 1371, 27th October 2006.

250 See EPO Boards of Appeal Decision T 74/93 - 3.3.1, dated 9 November 1994, *Contraceptive method/British Technology Group*, where the Boards of Appeal connected the requirement of industrial applicability in Article 57 EPC to the protection of privacy. The secondary (contributory) infringement cannot establish industrial applicability if there are no direct uses implicating industrial applicability.

251 See *Gervais* (1998), p. 144-151 for an analysis of drafting history. Gervais says (*ibid.* at p. 147) that the Article establishes “*a general principle of eligibility to be patented*”. See, however the permitted exclusions in Article 27(2)-(3). See also *Dinwoodie & Dreyfuss* (2005), at p. 866-867, about the interpretation of Article 27 of the TRIPS Agreement (saying that the Article appears to exclude not only *de iure*, but also *de facto* discrimination).

252 EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 20.

253 As mentioned before, intellectual property rights were reframed as natural rights in the lobbying of the TRIPS Agreement. See *Sell* (2003), p. 51 and *Oddi* (1996), *passim*.

Nevertheless, Article 52(2) EPC still excludes from patentability a) discoveries, scientific theories and mathematical methods, b) aesthetic creations, c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers as well as d) presentations of information.²⁵⁴ However, their patentability, according to Article 52(3) EPC, is excluded only to the extent to which a European patent application or European patent relates to such subject-matter or activities *as such*.²⁵⁵

Importantly for the subsequent European developments, the US patent law does not have a similar statutory exclusion. However, the US Supreme Court has identified three categories beyond patent protection: laws of nature, natural phenomena and abstract ideas.²⁵⁶ Computer programs were considered excluded from patent protection until court decisions in the late 80s.²⁵⁷ After the *State Street Bank* –decision of 1998 the patenting of mathematical algorithms and business methods has expanded in the US.²⁵⁸ As the following analysis demonstrates, patentability of computer programs and business methods has also expanded in Europe despite the express statutory exclusion.

Computer Programs and Business Methods as Patent Eligible Subject-Matter

Protection of computer programs is particular for several reasons. Compared to most other sectors where there are usually considerable capital costs to entry, in the software sector intellectual property protection may become the principle barrier for entry.²⁵⁹ Intellectual property may thus directly regulate the structure of the software markets and the possibilities of entry of smaller firms into these markets. Originally, copyright became the primary form of protection for computer programs. However, more recently patent protection has been increasingly extended to this area.

254 See generally about the excluded subject-matter *Muir et al* (2002), p. 138-143.

255 As pointed out by *Pila* (2005), p. 182-183, Article 52(3) EPC was originally designed to apply to scientific discoveries only. However, it was extended to other excluded subject-matter during the final stages of the negotiations, intended to avoid broad interpretation of the other exclusions. The excluded subject-matter under Article 52(2) EPC was taken from the Patent Cooperation Treaty, demonstrating a commitment to facilitating worldwide harmonisation by ensuring the EPC's harmony with international patent law instruments. For these reasons, *Pila* considers the whole contents approach to be an interpretation of Articles 52(2) and (3) EPC in conformity with the framers' original objectives. See also *Hilty & Geiger* (2005), p. 619 and EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 20-22, about the original motivation of the exclusion concerning computer programs.

256 See *Chisum et al* (2004), p. 772-773, for a more detailed discussion.

257 See e.g. *Bessen & Maskin* (2000), p. 2.

258 *State Street Bank v Signature Financial*, 149 F.3d 1368 (Fed. Cir. 1998), *cert denied*, 119 S. Ct. 851 (1999). See also *Chisum et al* (2004), p. 829-838 and *Lee* (2005), p. 342-348. *Koo* (2002), p. 187, explains the differences between the US and European approach: In Europe, the key to patentability of inventions is “*technical contribution*”, which is narrower than “*useful, concrete and tangible result*” required in the US.

259 See also e.g. *Barton* (1997), p. 445 and *Grosche* (2006), p. 288-301, noting that typical software development occurs in small teams and that more than 70% of IT firms in Europe are small and medium-sized enterprises.

As a consequence, not only the original expressions (copyright), but also inventive technical ideas may obtain intellectual property protection.

As stated above, computer programs *as such* have been excluded from protection under the EPC-framework. However, the EPO's interpretations of what constitutes a computer program as such have diverged and evolved in the course of time. Despite the exclusion, computer programs are now widely patentable under the EPC framework,²⁶⁰ provided the four basic conditions for patentability under the EPC are otherwise fulfilled.

The European Patent Office (EPO) and its Boards of Appeal have interpreted Article 52(2) EPC as a definitional provision that resolves to a single requirement of *technical character*. The requirement of technical character is seen to be inherent to the notion of *invention* as stated in Article 52(1) EPC.²⁶¹ The categories excluded from patentability in Article 52(2) relate to abstract subject matter as opposed to technical apparatus having practical application. A distinction between practical scientific applications and intellectual achievements in general is thus maintained in patent law.²⁶² Should the claimed invention have technical character, it is not excluded from patentability due to any of the grounds mentioned in Article 52(2) EPC, even if the claimed invention formally relates to any of the excluded subject-matter.²⁶³

Even though the earlier practice of the EPO has been inconsistent in its approach to what in practice constitutes technical character, the more recent practice, based on the *whole contents approach* and rejecting the *contribution approach*, has confirmed that patents are available not only in cases of an invention where a piece of software manages, by means of a computer, an industrial process or the working of a piece of machinery. They are available *in every case where a program for a computer is the only means, or one of the necessary means, of obtaining a technical effect*.²⁶⁴

260 See also *Hilty & Geiger* (2005), p. 624, stating, only slightly exaggerating, that "the letter of the law is nothing but hollow words".

261 See, in particular, EPO Boards of Appeal Decision T 641/00 - 3.5.1, dated 26 September 2002, *Two identities/Comvik*, p. 5-6, and EPO Boards of Appeal Decision T 931/95 - 3.5.1, dated 8 September 2000, *Controlling pension benefits system/PBS PARTNERSHIP*, p. 15. See also *Pila* (2005), p. 175 and *Koo* (2002), p. 188.

262 See e.g. EPO Boards of Appeal Decision T 1002/92, dated 6 July 1994, *Petterson/Queuing System*, at p. 12; EPO Boards of Appeal Decision T 935/97, dated 4 February 1999, *Computer program product II/IBM*, p. 15 and EPO Boards of Appeal Decision T 0154/04 - 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 23.

263 See, in particular, EPO Boards of Appeal Decision T 0154/04 - 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 22.

264 See, in particular, EPO Boards of Appeal Decision T 935/97, dated 4 February 1999, *Computer program product II/IBM*, p. 16-17 and EPO Boards of Appeal Decision T 0154/04 - 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 31-32. The *whole contents approach* connotes that when the subject-matter, taken as a whole, deploys technical means to solve a technical problem, the subject-matter is patentable. The *contribution approach* requires a non-conventional result in a field of activity not excluded by Article 52(2) EPC. See also *Pila* (2005), p. 176.

The Proposal for a Directive on the patentability of computer-implemented inventions²⁶⁵ would have connoted the codification of the whole contents approach in the Union.²⁶⁶ Although being a proposed Union legislative measure only, it would have affected the EPO practice as well: the EPO could hardly have disagreed with binding European Union legislation where a two-thirds majority of its members are European Union member states. Thus, would the proposed Directive have been accepted, it could have frozen the line of interpretation existing at that time.²⁶⁷

The EPO-practice demonstrates that normal physical modifications of the computer hardware, deriving from the execution of the instructions given by a program for the computer, cannot constitute the technical character required for avoiding the exclusion of those programs. Such effects are a common feature of all programs for computers, which have been made suitable for being run on a computer, and thus lack distinctive potential. Instead, *further effects* deriving from the execution (by hardware) of the instructions given by the computer program are required. Where such further effects have a technical character or where they cause the software to solve a technical problem, an invention which brings about such an effect may be considered as patentable subject-matter.²⁶⁸

The EPC case law allows an invention to be patentable when the basic idea underlying the invention resides in the computer program itself.²⁶⁹ A computer program product may therefore possess a technical character because it has the *potential to cause a predetermined further technical effect*. This means that computer program products are, in principle, not excluded from patentability under Article 52(2) and (3) EPC. Provided the claim is worded to contain functional features and its scope is defined in terms of the function performed by the computer program as described in that claim, the computer program product is in principle patentable.²⁷⁰ Hence, a program as sold on the markets could constitute a direct infringement of the patented computer program product.²⁷¹ As product patents connote absolute protection regardless of the indicated purpose or function of the patented invention as claimed in the patent, protection may be very wide.²⁷² What constitutes an unpatentable “computer program

265 COM(2002) 92 final (20 February 2002). See also Opinion of the Economic and Social Committee on the Proposal for a Directive of the European Parliament and of the Council on the patentability of computer-implemented inventions, COM(2002) 92 final – 2002/0047(COD), 19 September 2002.

266 Even though using the vocabulary of the contribution approach. See *Pila* (2005), p. 180. The changes proposed by the European Parliament reflected more the contribution approach and thus a more restricted approach to the patenting of computer programs.

267 See also *Grosche* (2006), p. 269.

268 EPO Boards of Appeal Decision T 935/97, dated 4 February 1999, *Computer program product II/IBM*, p. 16-17. See also *Pila* (2005), p. 176-179.

269 EPO Boards of Appeal Decision T 935/97, dated 4 February 1999, *Computer program product II/IBM*, p. 20.

270 *Ibid*, p. 23-24 and EPO Boards of Appeal Decision T 931/95 – 3.5.1, dated 8 September 2000, *Controlling pension benefits system/PBS PARTNERSHIP*, p. 13-14.

271 *Cornish & Llewelyn* (2007), p. 824-825.

272 See more closely about the principle of absolute protection of product patents subsequently under heading 5.4.3.

as such” is a claim merely to an abstract method of programming. Thus, counter-intuitively and contrary to the ordinary understanding of the word computer program as used in Article 52(2) EPC, it refers neither to a computer program product nor to a concrete set of instructions given to a computer.

The Boards of Appeal have taken Article 27(1) of the TRIPS Agreement (requiring patentability *in all fields of technology*) into consideration as giving “a clear indication of current trends”, as well as the practice in the US and Japanese patent offices, again as “a useful indication of modern trends”, capable of providing a model to be followed in the “highly desirable (worldwide) harmonization of patent law”. Moreover, inspired by the Vienna Convention on the Law of Treaties, it considered the patentability of computer programs also in the light of the object and purpose of the EPC which was seen as “the grant of patents for inventions and thus to promote technical progress by giving proper protection to these inventions”. The fact that information technology “tends to penetrate most branches of society” and “leads to very valuable inventions”, was seen as further evidence of the need to expand the patentability of computer programs under the EPC.²⁷³

Thus, rather than relying on the existing evidence of the fruition of the computer programs sector in the absence of patent protection or discussing the multiple effects of expanding patent protection on innovation within the computer programs sector, the Boards of Appeal took for granted that valuable inventions are by definition in need of patent protection. Moreover, the reasons for the formation of value in the information technology sector were of no relevance. As explained previously, the value of a computer-implemented invention may reside on the efforts of others to develop compatible products (system technologies), on standardisation, being often based on considerations other than technical merit, or on the fact that the invention is part of a complex product including several inventions. Finally, to an extent the value and societal penetration of a computer-implemented invention is the result of network effects and tipping, it is unclear why this should lead to the need to secure the patentability of computer-implemented inventions. Rather, the obvious potential of the patented invention to develop into a bottleneck or essential facility -type entry barrier could equally well lead to contrary conclusions.

On the other hand, it is somewhat artificial to argue that computer programs even *as such*, would lack technical character. They have been characterised, without much exaggeration, as representing “the purest form of technology: technical ideas embedded in a binary code”.²⁷⁴ The reason for computer programs’ exclusion from patentability should accordingly not be sought from the lack of technical character, but elsewhere, as argued subsequently. Thus, technical character is not an adequate criterion for

273 EPO Boards of Appeal Decision T 1173/97, dated 1 July 1998, *Computer program product/IBM* and EPO Boards of Appeal Decision T 935/97, dated 4 February 1999, *Computer program product II/IBM*, at p. 11-13 and 25-26.

274 Ghidini & Arezzo (2005), p. 165. See also Pila (2005), p. 183 and Hilty & Geiger (2005), p. 623.

demarcating the patent eligible subject-matter from subject-matter which should not be patentable.

In addition, the *patentability of business methods* is a controversial issue. Their patentability raises serious competition-related questions. An exclusive right on a business method invention may establish a strong monopolistic position on the markets by in practice reserving for the patent holder not only the technological solution invented, but in some circumstances also the business for which the invention is used. To avoid such serious competition-related problems from developing and to ensure freedom of economic action and entrepreneurship, business methods *as such*, like computer programs, have been excluded from patentability under the EPC-framework. However, the EPO has enabled in its case law also the patentability of business methods to some extent. The main features of their patentability will be explained in the following.

The EPO Boards of Appeal has enabled patenting of business methods, when having a technical character or when implemented by a computer or other hardware apparatus, and described in the patent documentation in terms of that implementation.²⁷⁵ The mere implementation of individual steps of a business method through technical means, for example by using a processor, may in principle render the claimed subject-matter an invention and thus patent eligible subject-matter in terms of Article 52(1) EPC.²⁷⁶ In these instances, the invention is either not considered as a business method *as such* or in case of a computer system suitably programmed for use in a particular field (including business and economy), not a *method* at all, as excluded in Article 52(2)(c) EPC. Thus, although a method designed for business or economic purposes may not be patentable even if some of its individual steps involve the deployment of technology, an apparatus suited to perform such a method may be patentable. The business method is not patentable only if the steps taken in its implementation do not contribute to the technical solution of a technical problem that may be defined in terms of aims residing at non-technical fields.²⁷⁷ For example, the EPO Boards of Appeal in *Petterson/Queuing System* used the following argumentation for a finding of patentability:

The program-determined output signal of the hardware was used for an automatic control of the operation of another system component (information unit) and thus solved a problem, which was considered “*completely of a technical nature*”. The functions of the claimed invention did not correspond technically to the steps of a method. Thus, the true nature of the subject-matter *when*

275 EPO Boards of Appeal Decision T 1002/92, dated 6 July 1994, *Petterson/Queuing System*, at p. 12-16 and EPO Boards of Appeal Decision T 931/95 – 3.5.1, dated 8 September 2000, *Controlling pension benefits system/PBS PARTNERSHIP*. See also *Pila* (2005), p. 179; *Koo* (2002), p. 181-185 and *Lee* (2005), *passim* (comparing the US, Japan and Europe).

276 EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 38. See also *Tritton* (2008), p. 112.

277 EPO Boards of Appeal Decision T 931/95 – 3.5.1, dated 8 September 2000, *Controlling pension benefits system/PBS PARTNERSHIP*, at p. 9-14 and EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 36-37.

considered as a whole was not interpreted as a method for doing business as such, as excluded from patentability in Article 52(2) (c) EPC.

Only one of the functional terms inspected was of an amphibious nature in that it was “as well a step of a method for doing business which may be performed by a mental act as a hardware capacity of the computing means, which allows to achieve the intended technical result by the claimed subject-matter without human intervention”. However, the functional term was not an independent constituent underlying the entire claim, but part of the remaining technical features of the claim in an inseparable way, in that it was seen as indispensable for achieving the intended technical result disclosed in the description. Accordingly, the functional term was not examined on its own merits as an intellectual concept. As it was a logical and inseparable part of claimed subject-matter considered as a whole to be technical in nature, the mix of technical and non-technical elements did not exclude it from patentability under Article 52(2) and (3) EPC.

The patentability of both business methods and computer programs depends also on the other conditions of patentability. In practice, inventive step has proved to be the most important criterion demarcating patentable inventions from the non-patentable. It will be discussed briefly in the following.

Inventive Step

Novelty and inventive step are seen as separate questions of technical character and thus the definition of an *invention* under Article 52(1) EPC: what constitutes the technical character of the claimed invention does not have to be new or inventive.²⁷⁸ Thus, counter-intuitively and against the ordinary connotation of the word invention, it does not have to be new or inventive with regard to the known art.

However, novelty and inventive step can only be based on technical features which have to be clearly defined in the claim. In accordance with the problem-and-solution approach used in the analysis of inventive step, the invention must solve a problem defined in technical terms.²⁷⁹ Non-technical features, to the extent that they do not interact with the technical subject-matter of the claim for solving a technical problem (non-technical features “as such”), do not provide a *technical contribution to the prior art* and are thus to be ignored when assessing novelty and inventive step. For example, the mere use of a processor for executing an invention residing in a non-technical field, for example a mathematical algorithm or a business method does not satisfy this

278 See EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 30-31. Cf., with *The Right Honourable Lord Justice Chadwick* and *The Right Honourable Lord Justice Jacob* and *The Right Honourable Lord Justice Neuberger*, *Aerotel Ltd and Telco Holdings Ltd and others* [2006] EWCA 1007, Civ. 1371, 27th October 2006. According to that case, what is considered under Article 52 EPC is whether the contribution to the prior art as identified in the patent application is technical in nature. As pointed out by *Tritton* (2008), at p. 112-113, the UK considers whether the contribution is technical under Article 52 EPC and the EPO under Article 56 EPC. The end result is most probably the same, but the UK court must consider the technicality of the contribution twice: under Article 52 and 56 EPC, provided the invention fulfils the criteria of an invention under Article 52 EPC.

279 See e.g. EPO Boards of Appeal Decision T 641/00 - 3.5.1, dated 26 September 2002, *Two identities/Comvik*, p. 6-7. See also EPO Boards of Appeal Decision T 424/03 - 3.5.01, dated 23 February 2006, *Clipboard formats I/Microsoft*.

criterion.²⁸⁰ Likewise, application of normal programming practice does not render an invention residing in a non-technical field patentable.²⁸¹

Yet, the aim to be achieved by the invention can also relate to non-technical subject-matter.²⁸² Moreover, the technical and non-technical aspects may also typically intermingle to the required extent in case of computer-implemented inventions, in particular.²⁸³ Technical contribution can lie in the *problem* solved by the invention, in the *means* constituting the solution of the underlying problem or in the *effects* achieved in the solution of the problem. The technical contribution may also constitute an *alternative solution* for an already solved technical problem or for an already known technical effect.²⁸⁴

The technical contribution to the prior art must naturally be non-obvious to a person skilled in the art in order to fulfil the inventive step. Should the differences between the prior art and the claimed invention be obvious for a person skilled in the art, the invention is not patentable. It is possible to see a correlation between the patentability threshold (and inventive step in particular) and scope of protection. Although not in total symmetry,²⁸⁵ the level of non-obviousness required for inventive step can be seen to correspond with what qualifies as obvious equals when determining patent scope in a potential infringement situation.²⁸⁶ The higher the inventive step, and thus the threshold of non-obviousness required for patentability, the broader the scope of obvious equivalents to the patented invention, and thus the scope of patent protection.²⁸⁷

Hence, simply insisting on increasing the threshold of non-obviousness as a counter-measure to competition-related problems or general expansion of patenting may produce unintended consequences elsewhere within the patent institution, potentially exacerbating the problems targeted in the first place. Moreover, it is

280 EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 40; EPO Boards of Appeal Decision T 641/00 – 3.5.1, dated 26 September 2002, *Two identities/Comvik*; EPO Boards of Appeal Decision T 368/05 – 3.5.01, dated 15 May 2007, *Integrated Account/Citibank* and EPO Boards of Appeal Decision T 388/04 – 3.5.02, dated 22 March 2006, *Undeliverable mail/Pitney Bowes*.

281 See e.g. EPO Boards of Appeal Decision T 368/05 – 3.5.01, dated 15 May 2007, *Integrated Account/Citibank*, at p. 11-12.

282 EPO Boards of Appeal Decision T 1002/92, dated 6 July 1994, *Petterson/Queuing System*; EPO Boards of Appeal Decision T 935/97, dated 4 February 1999, *Computer program product II/IBM*, p. 21. EPO Boards of Appeal Decision T 931/95 – 3.5.1, dated 8 September 2000, *Controlling pension benefits system/PBS PARTNERSHIP*, at p. 16 and EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 18-19.

283 EPO Boards of Appeal Decision T 0154/04 – 3.5.01, dated 15 November 2006, *Estimating Sales Activity/Duns Licensing Associates*, at p. 34.

284 See *Koo* (2002), p. 181.

285 See more closely *Durham* (2007), *passim*. Although *Durham*'s analysis concerns US patent law, it partially applies to European patent law, as well. For example, the baseline for comparison in judging the inventive step is the prior art in its entirety, whereas when judging equivalents and infringement, the baseline for comparison is the patented invention. This applies both in the US and Europe.

286 See more closely about patent scope subsequently under heading 5.4.3.

287 See also *Ghidini* (2006), p. 32-33.

possible to argue, like *Ghidini* does, that keeping the inventive step low rather than high better meets the needs of the dominating research paradigm based on small-step, incremental progress and continuous successive experiments needing complex teams and advanced technological resources and thus continuous investments.²⁸⁸

Discussion

Ultimately, technical character does seem to qualify the patentable from the non-patentable. However, this qualification process does not typically take place at the stage of answering whether there is an invention within the meaning of Articles 52(1) and (2), but at a later stage of defining inventive step under Article 56 EPC which must reside at a technical field.²⁸⁹ Thus, the actual exclusion of computer programs' and business methods' patentability has been diluted by the narrowing of the concept of computer program and business method "*as such*", respectively. The concept of technical character has been redefined in the course of technological evolution, in this case the data-technical revolution. The intensive pressure from the software industries has made the patent authorities gradually change their position, ultimately leading to a *de facto* nullification of an express exclusion from patentability.

The reliance on the notion of technical character defining all excluded subject-matter under Article 52(2) EPC may open the way for the increasing patenting of other similarly excluded subject-matter as well, such as mathematical methods. Taken together, this on-going expansion of patentable subject-matter is problematic especially from the perspective of competition, subsequent invention and freedom of research. To the extent a business method or algorithm can (competitively) only be implemented by using a computer, patent protection may confer a *de facto* monopoly on the underlying business method or algorithm as well.²⁹⁰ This is the case where there are competitively no non-infringing substitutes for the method of implementing the business method, algorithm or other excluded subject-matter.

However, technical character is a substantively inadequate operative concept, not taking into account the various ratios behind the exclusions. Although being in line with Article 27(1) of the TRIPS Agreement in that it treats the exclusions from patentability formally indiscriminatorily, the exclusions relate to different interests and societal values and thus merit individual analysis.²⁹¹ They can be related to diverse fundamental rights, collective goods and public policy objectives related to the realisation of collective goods, such as the maintenance of workable competition. It would be possible to interpret Article 27(1) of the TRIPS Agreement and the relevant

288 *Ghidini* (2006), p. 32-33. Ghidini goes as far as to suggest merging the inventive step to novelty, whereby novelty would conclusively determine the patentability (*ibid.*, at p. 33). However, it should be noted that already the resulting great number of patents would cause competitive and other problems. Although the resulting rights would be more narrow in their scope, the great number of patents would likely mean that contrary to Ghidini believes, the cost of legal defence of patents would not be reduced.

289 See also *Cornish & Llewelyn* (2007), p. 829 and *Tritton* (2008), p. 116.

290 See also *Grosche* (2006), p. 275.

291 See also relatedly *Pila* (2005), p. 185-186.

Articles of the EPC less formalistically by treating different categories of subject-matter in accordance with the relevant differences in underlying reasons for their exclusion from patentability, thus allowing the flexibility needed in how far (if at all) different categories of subject-matter should become patentable.²⁹²

Thus, each exclusion should be interpreted against the framework of its relevant background norms and policy reasons, including fundamental rights norms, particular features of innovation and competition within the excluded sector, protection provided by other laws (for example copyright law), and thus ultimately the specific interests, values and rationalities protected with the exclusion in question. Such an approach would enable the integration of the values related to fundamental rights and collective goods in the decision-making. For example, the interests related to freedom of science and arts as well as ethical considerations related to specific subject-matter could form part of the analysis.

The expansion of computer programs' patentability has negative effects on science and open source development. These greatly affect commercial development and technical progress, the latter being the primary objective of patent protection.²⁹³ Patent law should recognise the *rationality conflicts* between science and open source development on one hand and commercial research and development in need of patent protection, on the other hand. Both science and open source development need protection against extending the economic logic of patent protection into these spheres of action. The autonomy of science is a fundamental right -related collective good in need of constitutional protection.²⁹⁴ Likewise, open source development can be seen as not only specialised communication and expression, but perhaps more importantly as a collective effort by a technologically oriented fragment of the civil society to participate in the making of technological environments central in the networked information society. The potential positive effects on commercial research and development of harmonising the European patent protection with the TRIPS Agreement and the US and Japanese practices should thus be weighed against these effects as well as values and norms underlying them.

The extension of patent protection to other excluded subject-matter should balance the need for protection against the other interests, values, rationalities and norms relevant to the exclusion in question. For instance, discoveries, scientific theories and mathematical methods belong to the domain of science. Science follows logic different from patent protection. It is based on immediate sharing of codified results, building on the work done by others without restrictions, attribution of credit and scientific fame forming the principal incentives of action. These premises of science are in stark contrast with the incentive rhetoric deployed when extending protection to new

292 See also UNCTAD-ICTSD (2005), p. 481 (concerning the interpretation of Article 27(1) of the TRIPS Agreement).

293 See also Nelson (2005), *passim* (regarding science).

294 With regard to science, see also Hall (2003), *passim*. See also Article 13 of the EU Charter of Fundamental Rights.

subject-matter, the required secrecy until the publication of the patent application, and the idea of excluding others from the professional utilisation of the results.

However, the exclusion also relates to other interests, such as the need to exclude monopolies on basic discoveries, scientific theories and mathematical methods for competition-related, antimonopoly reasons. A patent monopoly on such basic resources would evidently be problematic more generally, without restricting the perspective to competition-related concerns. Such knowledge should form part of the public domain, freely usable by everyone. Furthermore, the exclusion of discoveries may relate to genetic discoveries where in some circumstances the fundamental rights of dignity and integrity of persons may require exclusion.²⁹⁵ Similarly, the exclusion of aesthetic creations from patentability can be seen to relate to the freedom of the art as a fundamental right -related collective good, other freedom of expression as well as to the existence of copyright protection. Moreover, a patent right in an aesthetic creation would connote a monopoly far extending the consequences of copyright law, as also independent creation could infringe.²⁹⁶

Furthermore, the sequential and complementary, small-step model of invention within the computer programs sector should be taken into account,²⁹⁷ as well as the fact that the computer programs sector has flourished also in the absence of patent protection. More lately, as the open source development model demonstrates, invention within the computer program sector may take place in the absence of any intellectual property -based incentive or reward. It must yet be recognised that patents may play a role in attracting research partners or investment.²⁹⁸ However, especially for smaller software firms, which are said to be responsible for most computer program -related invention in Europe,²⁹⁹ patents function primarily as an impediment and risk due to the sequential and complementary nature of computer programming.

The whole discussion of technical character demarcating the patentable invention from the more abstract subject-matter *as such* is reminiscent of the practical and conceptual problems related to the idea/expression dichotomy in copyright law, discussed subsequently. In addition to the practical problems with the demarcation, the discussion reflects much of the millennia old philosophical problems about universals and particulars.³⁰⁰ Understandably, courts and patent offices have avoided articulating the issue on a philosophical or political level. The end-result, however, has been continuous changes in approach and confusion resulting from a policy resting

295 See recital 16 to the Biotechnology Directive (Directive 98/44/EC on the legal protection of biotechnological inventions). See also *Pila* (2005), p. 186-187, for a discussion of genetic discoveries and their relation to the exclusions in Article 52(2) EPC.

296 In copyright law, independently created work does not infringe. See e.g. *Sherman & Bently* (1999), p. 155 for a historical context of this distinction. See also the subsequent treatment of copyright.

297 See about the nature of invention within these sectors e.g. *Foray* (1995), p. 87-93 and *Bessen & Maskin* (2000), *passim*.

298 See e.g. *Chisum et al* (2004), p. 68-71.

299 See *Koo* (2002), p. 197.

300 See more closely *Powers* (2004), *passim*, treating the copyright dichotomy between ideas and expression from this perspective. See also *Koktvedgaard* (1965), p. 105-113.

on a metaphysical basis. Why the obviously different grounds for exclusions from patentability, some of which relate to fundamental rights, collective goods and ethical consideration, have not constituted an integral part of the patentability analysis?

It appears that Article 27(1) of the TRIPS Agreement and the notion of technical character under the EPC are formalistic instruments concealing the politics of the patentability question. Technical character defines an invention and thus patent eligible subject-matter under the EPC. Article 27(1) of the TRIPS Agreement insists that patents should be available equally in all fields of technology. The problem of which ideas and subject-matter should become monopolised and tradable as private property rights becomes a seemingly neutral engineering question of determining whether the claimed subject-matter falls under the category of technological. Most policy and fundamental right-related reasons implying the need to keep free or avoid broad monopolies are excluded save where there is a clear legal authority for doing so in the EPC or the TRIPS Agreement.³⁰¹ Thus, economic analysis, empirical evidence about the nature of innovation or structure of competition within a given sector, preservation of entrepreneurial freedom, communicative diversity or values related to the public domain are largely excluded from the analysis. *Patentability has become a peculiar mix of technological determinism and circular logic. From the definition of technological follows patentability. The definition of technological follows from the practice of patentability.*

However, it is obvious that the ongoing development is in line with computer programs and business methods emerging from the peripheries of the economy into the core areas of economic growth and business activities in the informational and networked service economy. Like with the historical example of copyright protection emerging in the area of photography,³⁰² the interpretations of patent laws tend to adapt to the changes in the forms of production and perceptions of economic value. Once a critical mass of powerful enterprises with an interest in expanding patent protection to computer programs and business methods emerges, the courts, administrative offices and policymakers ultimately tend to lean in their favour.

Typically, this does not take place by a conscious change of policy identifiable at a given point of time, but rather by gradual adaptation, weighing, re-evaluation and compromising taking place on multiple levels simultaneously. These continuing processes also accumulate legal argumentation seeking coherence and legitimation from new grounds, such as the perceived need for international harmonisation, invocation of selected international norms, as well as the elevation of issues like non-discrimination between different technologies or the promotion of economic incentives into supreme principles directing interpretations.

Once this judicial legitimation process and reconfiguration of the relevant legal fields is far enough, the law starts to function increasingly self-referentially in favour of the interests previously attached to the enterprises with a concern in expanded

301 See about the permitted exceptions to patentability Article 27(2)-(3) of the TRIPS Agreement.

302 See *Edelman* (1973, 1979), *passim*.

protection. After such maturation of the increasingly international field of patent law, any political or interpretive reform intended to shake and break the newly found consensus from alternative premises seems impossible. This rapid normalisation of interpretations favouring hegemonic economic interests is the result of the relative homogeneity of the patent community and judicial path-dependency.³⁰³ Such a development could be seen to reflect structural proprietary bias.

5.4.3 Scope of Patent Power I: Basic Scope of Protection

Introduction

Scope of patent protection refers here to the interpretation of the basic coverage of the exclusive patent rights in a potential infringement situation. The scope of patent protection is in practice the most important aspect of patent law for the subsequent need to apply competition law. The scope of patent protection largely defines the temporal duration of the patent monopoly, as the effective life of a patent is often circumscribed not by the formal duration of twenty years from the filing date, but by the emergence of substitutes and improvements.³⁰⁴ Thus, the principles upon which the scope of patent protection in Europe is based are critically important also from the perspective of competition law. More generally, determining the scope of patent protection is the most significant factor affecting the overlaps and conflicts between protection interests and the countervailing interests as explicated in exceptions and limitations to exclusivity both within patent laws and in other laws.

Scope of patent protection is an area where different underlying theories of intellectual property protection clash and clearly produce different practical propositions.³⁰⁵ This diversity of approaches is permitted by the modest international and European regulation of the scope of protection. It is advanced by the two-stage conversion between technology and its literal description. First, the novel and non-obvious technology must be literally described in the patent application. Later, the allegedly infringing device must be depicted in words and compared to the language used in the patent. These conversions are by no means automatic, but necessarily indeterminate and problematic. As a corollary, they *necessitate* the deployment of a background theory and the intervention of diverse values and principles.

Natural law -based perceptions of patents treat them comparable to any other property as someone has devoted his/her mental labour in the object of protection.³⁰⁶ This perception easily leads to embrative protection. German *Josef Kohler's* influential

303 The patent community functions as an interpretive community and consists of patent offices, industries dependent on patent protection, specialised patent courts, patent attorneys and lawyers. See also *Drahoš* (1999b), p. 445-446 about the notion of patent community generally.

304 See also *Fisher* (2007), p. 145.

305 See also *Fisher* (2007), *passim* and at p. 7-8, explicitly.

306 See e.g. *Fisher* (2007), p. 223-257, for an introduction to the German natural rights -affected interpretation of patent scope.

theory also considered protected inventions as property comparable to material objects of property ownership. This is based on the view that it is possible to identify objectively a specific inventive idea behind protection. This objectively discoverable idea behind protection forms the object of protection analogous to tangible property.³⁰⁷ As pointed out by the Scandinavian legal realists, this view also tends to expand the scope of protection, as the monopoly granted is not often restricted to the wording of the claims.³⁰⁸ Both Ross and Koktvedgaard opined that such an object of protection is a metaphysical construction, to be abandoned and replaced by the analysis of the competitive relations present in the emerging economic contexts.³⁰⁹ Practical propositions based on the latter views tend to differ accordingly from those adhering to Kohler's ideas.³¹⁰

Moreover, it is obvious that diverse branches of economic thought generate diverse suggestions for determining the scope of patent protection. For example, the *prospect theory* developed by Kitch recommends broad, well-defined rights in the hands of the patent owner. The underlying idea is that the patent owner orchestrates through licensing the search for technological and commercial improvement of the patent's value so that wasteful duplicative investments are not made and so that information is exchanged among researchers. The patent is seen to incentivise its owner to investments to maximise the value of the patent without fear that the fruits of the investment will produce information appropriable by rivals.³¹¹ The presumption is thus that the patent owner knows best how to benefit from the invention within various sectors, that it is generally willing to license third parties and that it is willing to develop its invention in the absence of direct competitive threat. From this perspective, even scope of protection enabling the control of future innovation seems relatively unproblematic.³¹²

307 See Kohler (1888), p. 41-43. See also Heinemann (2002), p. 126-127 and Koktvedgaard (1965), p. 105-109 (also discussing the influence of Kohler in the Nordic countries).

308 See Koktvedgaard (1965), p. 148.

309 See Ross (1953), p. 263-264 and Koktvedgaard (1965), p. 17, 21 and 148.

310 See Koktvedgaard (1965), p. 147, 154-158 and 234; (1967), *passim* (arguing that equivalence is merely a label attached to the conclusions reached through other way and emphasising overall assessment based on description, claims, technical knowledge and intuition); Bruun (1990), p. 177 (speaking in favour of an open argumentation model where third parties' (competitors') need of protection is taken into account, in addition to the comparison between the patent document and the putatively infringing device) and Petrusson (1999), p. 336-337 (treating equivalence as a façade legitimisation and speaking in favour of strict interpretation of patents which takes into account the interests of competitors). For Kohler, equivalence was an important part of his general theory. See Kohler (1888), p. 55-64. For example, Swedish patent law experts Westlander & Törnroth (1995), at p. 284, seem to share Kohler's views by writing that the inventive idea (*uppfinningsidén*) must be used for there to be an infringement through an equivalent.

311 See Kitch (1977), p. 276.

312 See *ibid.*, *passim* (by prospect Kitch means "a particular opportunity to develop a known technological possibility", *ibid.* at p. 266). See also Kitch (1986), *passim*.

On the other hand, evolutionary and post-Chicago scholars tend to argue in favour of more restricted scope of protection.³¹³ Narrowing the scope of patents produces independent follow-on efforts and may produce not only slightly different, but also considerably improved technologies. Such a decentralised model of innovation is argued to have several advantages over a centralised one. The main argument in favour of a decentralised model is that due to bounded rationality the single patent owner cannot have the cognitive capacity to develop the prospect comparable to several independent developers that tend to see the development opportunities differently. The benefits of decentralised development would more than offset the duplication of some efforts necessarily present in such a model. Moreover, empirical studies indicate that large-scale tailored licensing does not take place in practice. Finally, it seems that the patent owner is unlikely to develop the invention as enthusiastically as when engaged in competition with others.³¹⁴

The relevance of patents differs substantially across different industry sectors. Industries characterised by high cost of research, development and innovation but relatively low costs of imitation benefit the most from patent protection.³¹⁵ In some sectors, such as information technology, patents are important because the enterprises must adapt to the fact that also other enterprises within the sector have patents.³¹⁶ Hence, the level of optimal free riding varies from market to market. For example, the patent system is the most relevant in the pharmaceuticals sector where approximately 60% of inventions would not have been produced in the absence of patent protection. In some other sectors, such as instruments, office equipment, or motor vehicles, the figure may be zero or near it.³¹⁷ In some areas, the chilling effect of patents may thus be greater than the incentive function they provide.³¹⁸

These findings would support differentiating the patent system (and similarly other instruments of intellectual property protection) so that patent protection would be stronger in areas where the patent institution actually functions as an incentive for innovation and weaker (or non-existent) in areas where it provides no such incentive, but has instead chilling effects. It has been discussed before that achieving sector-specific flexibility in the application of the patentability requirements seems now difficult to achieve. However, this does not have to mean that the relevance of patent protection for a certain field or mode of innovation within a particular sector could not be taken into account in substantive patent law. It is possible to achieve some flexibility or “policy levers” within patent law through the interpretation of patent

313 See *Merges & Nelson* (1990) and (1994), both *passim*. See also *Scotchmer* (1991), *passim* (addressing sequential innovation) and *Farrell & Weiser* (2003), *passim* (the authors discuss several scenarios where the right owner likely refuses to license even to efficient third parties).

314 See *Merges & Nelson* (1990), p. 870-877 and 908-910 and (1994), p. 1-6.

315 See e.g. *Ryan* (1998), p. 27.

316 *Petrusson* (1999), p. 98-99.

317 See e.g. *Macdonald* (2002), p. 22.

318 *Ibid.*, p. 27 (referring to statistical data regarding semiconductors industry and the chilling effect of patents in the area of software).

scope, application of exceptions and limitations, as well as industry-specific rules (for example with regard to biotechnology) and general doctrines.³¹⁹

Moreover, industry-specific features and differences in innovation patterns may be considered in the application of competition law, as will be discussed subsequently. The application of competition law to patents could thus bring in sector-specific flexibility to an extent not possible by applying the patent laws. The same applies to other intellectual property rights, as well.

The economics of patent scope is indeed complex. In addition to the fact that different sectors of the economy may exhibit diverse logics of innovation and thus dissimilar needs of patent protection,³²⁰ the patent doctrine has to assure that there are sufficient incentives for pioneering and incremental inventions alike, but no unnecessary social costs. The patent doctrine also has to enable sequential and complementary invention, secure the freedom of science and its inherent rationality, and make sure that what was once freely available will not be recaptured later within the scope of patents through constructive interpretation or the doctrine of equivalents.

Moreover, it has to adapt increasingly to important new phenomena like open source development of software, where patent incentive is not needed, but may prove harmful. Thus, concerning optimal patent scope one size does not fit all. From the perspective of adapting patent scope and doctrines to the multiplicity of innovation and creation models, the *allgemeine Lehren* of patent law should either start from contextuality and flexibility or create parallel doctrines to be applied selectively in diverse environments and contexts of operation.

Scope of Protection in European Patent Law

In Europe, the factual scope of patent rights rests predominantly with the national patent courts and the EPO. The EPO defines the scope of protection in the first place by setting the level of concreteness required from claims. National patent offices in Europe typically follow the practices of the EPO. National courts interpret the scope of the patent as well as most exceptions to patent law in infringement actions. Patent infringement does not require knowledge of the patent or the patented invention. In contrast to the situation under copyright law, an infringing device does not have to derive from the original patent or invention.³²¹

In other words, whereas copyright law imposes a general obligation to restrain from copying and deriving from the protected expressions of others, patent law enables imitation to the extent the technologies developed by others are not patented, but at the same time does not save from infringement even in the absence of any imitation

319 See *Burk & Lemley* (2003), *passim* (discussing US patent law from this perspective).

320 See generally *Merges & Nelson* (1990) and (1994), both *passim* and *Burk & Lemley* (2003), *passim* (also pointing out the need to interpret and apply patent law flexibly by taking into account the diverse logics of invention and evolution of technology within various sectors of the economy).

321 See e.g. *Koktvedgaard* (1965), p. 136 (noting that copyright protection is essentially protection against copying and imitation or derivation from the original). For a historical account of this distinction (in English law), see *Sherman & Bently* (1999), p. 155-156.

or knowledge of the patented invention. Liability within patent law is based on the comparison, on an abstracted level, of the putatively infringing products, methods etc. with the claims as written in the patent instrument and constructed in each case of alleged infringement. Infringement normally requires that the putatively infringing object has all the technical properties of the claims, or their equivalents.³²² However, also the use of sub-combinations or even individual elements of patented inventions could constitute an infringement in some European countries. This significant aspect of patent scope will be treated subsequently in more detail. Moreover, the *doctrine of equivalents*, also treated more fully below, may extend protection from the literal wording of the claims.

The protection of *product patents* extends to each product having the same essential elements, without regard to the manner or means of production. Product patents generally confer *absolute protection* in that the protection encompasses all of the functions, effects, purposes and uses of the product, whether indicated in the patent claims or not. Typically, the patentee does not have to contemplate any possible use or purpose that might arise in the future.³²³ Product patents may thus be described as the strongest and competitively the most restrictive form of patents.³²⁴

This has led some scholars to argue that the doctrine of equivalents should not assume a critical role where product patents are typical, such as in the pharmaceutical sector,³²⁵ or even that absolute protection should be replaced with the rule adopted in the Biotechnology Directive where disclosure of an industrial application is required for the patentability of a gene sequence.³²⁶ The combination of absolute protection for product patents and the doctrine of equivalents could lead to very extensive patent monopolies. The uncertainty concerning the technological development works in favour of the patentee at two stages: both when including the equivalent elements

322 See about the all elements -rule e.g. *Domeij* (2000), p. 311.

323 See EPO Boards of Appeal, Decision G 2/88, dated 11 December 1989, *Mobil Oil III*. See also the German *Interferon-gamma* -case, Decision of 5 December 1995, X ZR 26/92 (Bundesgerichtshof), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 28, issue 2/1997, pp. 242-250 (stating that “*the extension of the product patent to the application not disclosed -- is the result of the absolute protection for a substance invention intended by the legislature*”). See also *Singer & Stauder* (2003), p. 242 and *Muir et al* (2002), p. 282-283 (also the exceptions to this principle) and *Benyamini* (1993), p. 81-82. The most important exceptions to absolute protection concern the protection of substances for a specific purpose in the pharmaceutical field, direct process products and potentially gene sequences. See about the last-mentioned question Article 5(3) of Directive 98/44/EC on the legal protection of biotechnological inventions and e.g. *Muir et al* (2004), p. 284 and 166-167.

324 See also *M. Levin* (2007), p. 261. *Drexel* (2007), at p. 652, notes that product patents for a DNA sequence that do not limit the claims to its functions could similarly foreclose access of competitors to biotechnology markets.

325 See more closely *Straus* (1999), p. 473 (concerning Germany and referring to different views expressed there) and *Domeij* (2000), p. 320, and the sources referred there.

326 *Ghidini* (2006), p. 19, 21 and 29. *Drexel* (2007), at p. 652, says that the German legislature ensured that product patents for DNA sequences would only be given for specific functions. However, Article 9 of Directive 98/44/EC on the legal protection of biotechnological inventions is worded ambiguously as concerns the freedom of the member states to limit patentability to such functions.

within the claims and when including the unforeseen uses or purposes within the exclusive patent rights.

The scope of protection conferred by an EPC-patent is, according to Article 69 EPC, to be determined by the claims.³²⁷ The patent description and drawings are to be used when interpreting the claims. National patent laws in Europe generally follow this model. Article 1 of the Protocol on the Interpretation of Article 69 EPC endeavours to define further the scope of patent rights.³²⁸ The interpretation endorsed is said to be between two extremes referred to and should be able to combine a *fair protection for the patent proprietor* with a *reasonable degree of legal certainty for third parties*. The extremes to be avoided are 1) strict, literal meaning of the wording used in the claims, the description and drawings being employed only for the purpose of resolving an ambiguity found in the claims and 2) the claims only serving as a guideline and the actual protection conferred potentially extending to what, from a consideration of the description and drawings by a person skilled in the art, the patent proprietor has contemplated.

The text of the Protocol was intended to strike a balance between the German practice, according to which the *general inventive idea* (*allgemeiner Erfindungsgedanke*) underlying the invention enjoys protection, and the narrow British approach of literal interpretation.³²⁹ Put shortly, the German approach concentrates on comparing the

327 Originally “*terms of the claims*”. The original German word *Inhalt* (contents) differed from the English word “terms” and enabled the continuation of different traditions of interpretation. These differences resulted, for their part, on the adoption of a Protocol on the Interpretation of Article 69 EPC. See more closely *Fisher* (2007), p. 224-225. With the EPC 2000, both words were dropped from Article 69 EPC. The words “*the subject-matter of the patent*” in Article 7(a) of the proposed Community Patent Regulation (Proposal for a Council Regulation on the Community patent, COM/2000/412 final (OJ C 337 E, 28/11/2000, p. 278-290.) connects the infringing activity to Article 69 EPC. See also *Benyamini* (1993), p. 65, with respect to the similarly worded Community Patent Convention.

328 According to Article 164(1) of the EPC, the Protocol is an integral part of the Convention and as a corollary has the same effects as the provisions of the Convention itself.

329 See *Domeij* (2000), p. 313 and *Singer & Stauder* (2003), p. 240. See about the German practice in historical perspective *Straus* (1999), *passim* and about the English approach *Jacob* (1999), *passim* (also noting that the English approach does not correspond with the first alternative to be avoided). See similarly also *Fisher* (2007), p. 226, noting that the Protocol parodies both the traditional British approach to claim interpretation and the traditional German approach. The best-known statement of the status of the claims in former UK law is by *Lord Russell of Killowen* in *Electric and Musical Industries Ltd v Lissen Ltd* (1938) 56 RPC 23, at p. 39 (cited in the House of Lords judgement in *Kirin-Amgen v Transkaryotic Therapies Inc* [2005] 1 All ER 667, at paragraph 20): “*The function of the claims is to define clearly and with precision the monopoly claimed, so that others may know the exact boundary of the area within which they will be trespassers. Their primary object is to limit and not to extend the monopoly. What is not claimed is disclaimed. The claims must undoubtedly be read as part of the entire document and not as a separate document; but the forbidden field must be found in the language of the claims and not elsewhere.*” According to *Straus* (1999), p. 463, in the 1930s the German infringement courts based their decisions on the notion of general inventive idea and “*granted the scope of protection as if they were the patent granting authority and entirely detached from the wording as well as the content of the claims*”. *Pagenberg* (1993), p. 323, argues that the era of very generous interpretation of patent claims is definitively over in Germany. *D. Cohen* (1998), *passim*, argues that the particular approach to patents in Germany is still visible in the relevant case law.

whole inventive idea or *solution principle* behind the patent to the whole inventive idea or solution principle behind the allegedly infringing device. The British approach concentrates on comparing a subset of words used in the claims (in the context provided by the specification and the drawings) to a subset of words when describing a particular solution underlying the allegedly infringing device.³³⁰ Both trends were exacerbated by the reactions of the applicants and domestic patent offices: in Germany, the claiming practice became more narrow and specific to satisfy the patentability requirements, as the courts would later extend the protection beyond claims. In Britain, the contrary development took place.³³¹ Although these patent prosecution practices somewhat balanced and equalised the scope of domestic patent protection in Britain and Germany respectively, they at the same time connoted that the national courts were still farther away from each others' positions when interpreting the scope of patents in infringement suits.³³² There were no harmonised interpretations among other EPC states either. The Protocol thus seemed necessary for achieving any convergence in the interpretation of patents.

However, despite some convergence there has not developed a consistent approach towards claim interpretation or the doctrine of equivalents in Europe.³³³ Achieving such convergence rapidly seems unlikely, as the different perceptions of patents, and more generally of intellectual property protection, reflect different grounds of justification and underlying perceptions of the merits of intellectual property. Even the idea of a middle ground between the German and English patent interpretation doctrines has been described as nonsensical, as the positions are not on a singular continuum, but mirror diverse underlying perceptions of the nature and justification

330 See *D. Cohen* (1998), p. 1110-1111 and 1120-1121. See also *Fisher* (2007), p. 223-257 (Germany) and 291-380 (England).

331 See *Weston* (1998), p. 51 and 57.

332 However, as said by *D. Cohen* (1998), p. 1098-1103, there were two competing traditions of legal thinking about patent scope in England. The first was based on the idea that "*Everything which is not claimed is disclaimed*". The second was based on the *pith and marrow* of the invention, thus implicating that even if one does not copy the entire invention, infringement may still be possible. The latter tradition comes closer to the German and French patterns of interpretation, but differs from them in the basic orientation (see *ibid.*, at p. 1120-1121). See also *Fisher* (2007), p. 7-21.

333 See e.g. *Brinkhof* (2002), p. 919-920 and *Singer & Stauder* (2003), p. 246. For a comparison of Dutch and UK rules, see *Hoyng* (2003), *passim*. In both countries the doctrine of equivalents has been of very limited use. Concerning the UK, see also *Fisher* (2007), *passim* and *Cornish & Llewelyn* (2007), p. 244-251 ("*British courts continue to insist that the issue is one of interpretation and they thereby avoid over-extended arguments for infringement by equivalence*", *ibid.*, at p. 251). For a comparison between US, UK and Germany, see *Pechhold* (2005), *passim*. For a summary of the Scandinavian positions see *Bruun* (1990), *passim* and *Domeij* (2000), p. 311-339 (also discussing other European countries). For the US law, see *Chisum et al* (2004), p. 905-936 and *Weston* (1998), p. 37-47. The leading US case is *Warner-Jenkinson Co. v Hilton Davis Chem. Co.*, 520 U.S. 17 (1997). For a concise summary of the main features in several European and non-European countries, see *Beton* (1994), *passim*.

of patents.³³⁴ If patents are seen as privately held property rights and justified through natural law -influenced personality argumentation (Germany), the interpretation of patent scope tends to become broader from that of a legal culture where patents are predominantly seen as state-granted monopolies constituting exceptions to the freedom of competition for the furtherance of a public policy related to innovation (Britain). Such competing views are rooted in legal culture and deep level justification of the patent law institution and are thus subject to slow change. Contrary to what has been argued, such deep level differences underlying the perception of patents cannot simply be harmonised or even worse, dictated from above.³³⁵

Now Article 2 of the Protocol on the Interpretation of Article 69 EPC, following the entry into force of the EPC 2000 in December 2007, specifically addresses the issue of equivalents and aims at convergence on the European level. Yet, the Article simply adds that for determining the extent of protection conferred by a European patent, “*due account shall be taken of any element which is equivalent to an element specified in the claims*”. The original text proposed was more detailed and ambitious, but due to the differences in the domestic practices and, above all, underlying background ideologies, the time was not ripe for a more far-going substantive harmonisation on the European level.³³⁶ Although Article 2 of the Protocol is conceptually thin, red together with Article 1 of the Protocol there is scope for the doctrine of equivalents to expand in Europe both geographically and substantially. Article 1 namely indicates that the scope of protection can go beyond the meaning of the letter of the claim.³³⁷

However, the more precise contents of such a doctrine will continue to be in the hands of national courts interpreting Article 69 EPC. The addition to the Protocol will probably place pressure on some European countries to expand or explicitly recognise

334 See *D. Cohen* (1998), p. 1086 and 1126-1127. See also a relatively recent case from Germany, *Sprocket Assembly*, Decision of 13 February 2007, X ZR 75/05 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 38, issue 6/2007, pp. 726-734. The decision emphasises the construction of the patent in its entirety, and insists on figuring out the *solution idea* of the patented invention (see paragraphs 34-36 of the Decision). See also case *Plastic Pipe*, Decision of 12 March 2002, X ZR 43/01 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 33, issue 3/2003, pp. 302-309. The cases affirm the consistency of the basic underlying approach to patents in Germany.

335 See *Fisher* (2007), p. 380-386, arguing that for increasing predictability, “*the underlying rationale of protection must be harmonised*” in Europe or “*there must be conformity mandated from above*” (at p. 380). More generally, Fisher’s contribution suffers from the misconception that the patent law institution could simply be justified through adopting one of the traditional grounds for granting patent protection in the first place, i.e. natural law, utilitarian incentive-theory etc. However, this could be possible only were the patent law institution to have its effects in a vacuum of patent law and invention in a narrow sense. As this clearly is not the case, attempts such as Fisher’s are bound to fail.

336 See e.g. *Tritton* (2008), p. 184 and *Fisher* (2007), p. 355-357.

337 See *Singer & Stauder* (2003), p. 245 and *Hoyng* (2003), p. 150-151.

the notion of equivalence in their case law.³³⁸ It also seems likely that case-law from other European countries will increasingly be taken into account, thus contributing in the longer time-scale to the formation of what could be called a European doctrine of equivalents, or at least to increasing convergence of doctrine through case law.³³⁹ Yet, the competing perceptions of patents continue to affect the interpretations. The vague addition to the Protocol will not automatically signify major changes, as there is still room for diverse national interpretations anchored in the different background ideologies and justification grounds.³⁴⁰

The potential entry into force of the Community Patent Regulation,³⁴¹ with its centralised Community Patent Court (attached to the General Court) and centralised court for appeals (the European Court of Justice), could connote deeper convergence of patent doctrine in Europe. The rulings of the Community Patent Court and the European Court of Justice are likely to have more authority as precedents throughout Europe than the rulings of any individual domestic highest courts in Europe. However, also the Community Patent Regulation would continue to function parallel to the national patent laws. The latter are not extensively harmonised by the European Union.³⁴² Moreover, the Community Patent Court and the European Court of Justice, as the final arbiters of some patent disputes in Europe, continue to be influenced by the diverse perceptions and legal cultural backgrounds of their judges. Doctrinal competition is thus likely to continue in Europe even in the longer-term perspective, however eventually transforming into competition for the determination of the Community Courts' federal-level interpretations. Ultimately, the latter are bound to have deeper harmonising effects throughout Europe.

338 For example, *Hoyng* (2003), at p. 159-160, argues that the German notion of *Auffindbarkeit* (a condition according to which the equivalent features should have been findable by a person skilled in the art in the light of the patent and considering the state of the art) could no longer be maintained. However, this is doubtful. On the other hand, the English courts may be under pressure to recognise the notion of equivalents explicitly in their case law, not only by extending the notions of *purposive construction* and *pith and marrow*. See more closely about these doctrines *D. Cohen* (1998), p. 1092-1103 1123-1125; *Weston* (1998), p. 47-51 and 62-68 and *Fisher* (2007), p. 12-21.

339 See also *Singer & Stauder* (2003), p. 240-241 and *Hölder* (2006), *passim*, concluding that the difference between the UK and German approach, once far from each others, is now marginal. Cf., however, with *Pechhold* (2005), p. 434, concluding that the UK has its own doctrine of equivalents, functioning under another mode of operation. See also *Kirin-Amgen v Transkaryotic Therapies Inc* [2005] 1 All ER 667 (at paragraphs 42-44), where the House of Lords argues that the English courts are merely using constructive interpretation, which is distinct from the doctrine of equivalents.

340 See also *Brinkhof* (2002), p. 921 and *Fisher* (2007), p. 356.

341 Proposal for a Council Regulation on the Community patent, COM/2000/412 final (OJ C 337 E, 28/11/2000, p. 278-290. See also the revised text: Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent, dated 8 March 2004.

342 The situation thus differs from the area of trademark law, where the judgements of the European Court of Justice and the Court of First Instance (now the General Court) have greatly affected the interpretations of national laws throughout the European Union, as the domestic laws are extensively harmonised through First Council Directive 89/104/EEC to approximate the laws of the Member States relating to trade marks [1989] OJ L 40/1. There is considerably less embrasive and less ambitious harmonisation of national patent laws.

The main grounds for the doctrine of equivalents are the risk of competitors unfairly circumventing the literal scope of patents through unimportant and insubstantial changes and substitutions, the difficulty of distinguishing between copying and designing around and the risk of punishing the patentee for shortcomings of language or later technological developments.³⁴³ An overly strict literal interpretation of patent claims could enable “free-riding” at the expense of the patent owner and jeopardise the reward belonging to the inventor, and thus the incentive function of patents. From the perspective of economic efficiency, the doctrine of equivalents could induce early disclosure and patenting instead of secrecy, as the patent owner would benefit from later development of the invention.³⁴⁴ For these reasons, the approach towards the doctrine of equivalents has been relatively permissive in case of pioneering invention, in particular.³⁴⁵

On the other hand, extending the interpretation beyond the literal meaning of the claims would threaten legal certainty of third parties, the incentive of others to develop the patented state of the art further and competition in the production of substitutes coming close to the patented invention. The obvious tension between legal certainty and the need for open and contextual interpretation, which generally characterises legal decision-making, will always characterise the interpretation of patent scope, too. Every decision involving claim interpretation can be criticised for betraying the promises of the patent institution either for the patent owner (“*fair protection for the patent proprietor*”) or the competitors (“*a reasonable degree of legal certainty for third parties*”).³⁴⁶ However, any interpretation can be seen to jeopardise legal certainty irrespective of whether it is favourable to the patent owner or the competitors. Also strict, literal interpretation may threaten legal certainty and the legitimate expectations of the patent owner in case of pioneering invention, for instance. Legal certainty may also be satisfied by a regime of broad protection, as long as the scope of protection is predictable.

Likewise “*fair protection for the patent proprietor*” may not only be invoked by the applicant in an infringement suit, but also by the defendant, whose possibility to utilise a subsequent patent may depend on the interpretation of the scope of a pre-existing patent.³⁴⁷ Moreover, “*fair protection*” is not a legal standard to be applied, but a label to be attached to the desired outcome. What is considered fair is dependent on the background ideology and justification basis for patents and their practical effects. Thus, framing the issue in terms of fair protection for the patent proprietor

343 See e.g. Pechhold (2005), p. 412-414.

344 See Kitch (1977), *passim* (not specifically discussing the doctrine of equivalents, however).

345 See *Merges & Nelson* (1990), p. 848 and 853-854 (referring to US case law, where this position is visible). See also *Straus* (1999), p. 462 and 467 (referring to German case law where the same principle has been adopted). Cf. however with *Fisher* (2007), p. 390, in particular, arguing that English law fails to compensate pioneering inventions adequately and fostering a standard of interpretation closer to German patent law.

346 From another perspective, patent law can never fully satisfy the dual demands of identification and abstraction, characterising intellectual property generally. See *Sherman & Bently* (1999), p. 55-59.

347 See more closely about dependency patent situations the text under heading 5.4.4.

and legal security for the third parties, or more generally as the conflict between open, contextual interpretation and legal certainty may not provide, in themselves, any substantive yardsticks for the decision-maker. In this sense, the Protocol on the Interpretation of Article 69 EPC could be characterised as a substantively empty reminder that there is more than one interest or *topos* to be taken into account when determining patent scope.³⁴⁸

It is thus understandable that different underlying ideologies have continued to co-exist in Europe. Moreover, the substantive emptiness of the Protocol connotes that any honest proposals for deepening convergence or construction of European-level doctrines of patent interpretation are bound to proceed on the level of the underlying justification grounds and basic perceptions of patents, effects on different types of inventions and inventors, effects on competition and informational power, and finally on systemic societal effects and constitutional values. In the following, the scope of patent protection will first be connected to systemic effects and constitutional values and subsequently to effects on invention and economic efficiency.

Discussion

Like the definition of what constitutes technological in the determination of patentability, the abstract language of *fair protection for the patent proprietor and a reasonable degree of legal certainty for third parties* neutralise the issues underlying the determination of the scope of patents. Economic and informational power based on patents should have as clear limits as possible: uncertainty about its limits tends to broaden the economic and informational power in question. Moreover, the underlying values and interests should directly affect the interpretation of patent scope, as will be discussed in more detail below.

From the *perspective of constitutional values and democracy*, narrowly constructed patents would connote that the basic technological principles are not likely monopolised, as designing around is possible. There would be no central authorities or planners, but the freedom of invention and the responsibility for the development and operation of technologies would be shared by multiple entities. Furthermore, many important products, services and technologies of communication are based on a combination of some core technological principles. If these basic principles of operation were subject to broad patents, individual enterprises would be able to control the evolution and operation of these technologies and regulate other entities' access to and operation within the related markets and hence communicative diversity.

Thus, in addition to freedom of entrepreneurship, invention, and economic action in general, the question relates to the democratic nature of technological evolution: should individual entities be allowed to control technological trajectories in general and the technologies of communication necessary for the freedom of expression, in

³⁴⁸ See also *Jacob* (1999), p. 483, noting in somewhat more straightforward way that the intermediate position – fair protection/reasonable degree of legal certainty – represents no more than a fudge.

particular? Or should there be shared responsibility in the absence of concentrated control, based on the diversity of entities participating?

In other words, constructing the scope of patents has systemic effects on the structure and operative principles of the markets and even on society in general and its democratic features. The principles regulating the outer boundaries of patents greatly affect the constellations of power over markets and technological environments, including the infrastructures of communication. These principles also influence the innovation commons and the freedom of the science, as the broader the patents are, the more they circumscribe the availability and use of platforms of innovation and the results of science.³⁴⁹

Hence, whether the innovation model is decentralised or centralised is not only a question of maximising invention. *A decentralised model empowers a plurality of market and non-market actors and enables entrepreneurial, inventive and scientific freedom not present in a centralised model*, where a broad patent monopoly confers on one entity the power to control and censor the activities of others. Patent scope relates to constitutional values and can be seen to constitute an important element of economic culture. In the context of communication technologies, in particular, determining the patent scope may affect the opportunities of others to offer alternative technologies functioning as mediums for discourse and information processing, thus importantly affecting communicative diversity.

As argued in the previous chapter on a more general level, governments' positive obligation to protect communicative diversity speaks in favour of limiting the reach of patent scope when the case involves important communication technologies. The construction of patent scope has thus societal and constitutional implications beyond the economics of innovation, and can therefore be discussed in terms of economic constitutional law. Relating the determination of patent scope to such considerations in legal scholarship could enable the broadening of the argumentative premises of patent law now dominated by technical and economic discourses.

In addition to the foregoing, patent scope can be related to the traditional *Rechtsstaat*-principles. Patents are publicly granted exclusive rights for the intended public good of promoting innovation. They enable regulating the behaviour of others by recourse to injunctions, compensation and sanctions.³⁵⁰ Patent is not a contract applying *inter partes* only, but a limited monopoly having *erga omnes* effects.³⁵¹ Although the applicants formulate the patent claims, the accepted claims reflect

349 Regarding freedom of science, see also *Merges & Nelson* (1990), p. 915.

350 See e.g. *Thomas* (2005), *passim*.

351 See also *Lord Upjohn in case Rodi & Wienberger v Showell* [1969] RPC 367, at p. 391-392, where a patent is seen as "a grant of a monopoly forbidding others to enter a part of the general commercial territory open to all of Her Majesty's subjects and so in the interests of those subjects that territory must be marked out with reasonable clarity by the claim, construing it fairly in the light of the relevant art". Also cited in *Fisher* (2007), p. 19.

the patent authorities' interpretation and application of patent law.³⁵² The patent instrument is the critical point of departure for the determination of infringement.

Infringement requires neither imitation, nor knowledge of or access to the patented product or process. Based on this instrument, courts award injunctions bringing also innocently acting enterprise's activities to an end, order compensation for the infringement of the patent claims and may even impose criminal penalties. Abstracting from the wording of the claims to discover the *general inventive idea*³⁵³ beyond the expressions used or giving weight to the *intention of the patentee*³⁵⁴ fits uncomfortably with these public and regulative features of patents. Hence, when interpreting patents, courts should also consider such traditional *Rechtsstaat*-questions.

From the *perspective of effects on invention and economic efficiency*, the decentralised model is seen here to be generally superior over a centralised one in the production of invention. In line with evolutionary theories, inventive rivalry and multiple sources of invention are seen to guarantee not only that the various development opportunities will be better seen and utilised by a multiplicity of diversified actors, but also that the incentive of the original patent owner to further develop its technology will be higher under competitive pressure.

Moreover, as the basic justification of patent law is seen to be utilitarian or instrumental, a decentralised model seems to be in conformity with the traditional objectives and functions of patent law: such provision of incentives for inventive activities and codification and diffusion of technological knowledge advances such aims. This is not to deny that different economic sectors present different patterns of invention and technical advance, and thus different needs for patent protection.³⁵⁵ From the point of view of economic optimisation, patent scope should react accordingly.

352 See also *Godenhielm* (1994), p. 150. It is usual that patent authorities affect the formulation of claims during the patent prosecution. In any event, the patent as issued reflects the patent authority's view of the acceptability of the claims in terms of patent law.

353 Discovering the inventive idea behind protection can be traced to natural law and Josef Kohler's theory, treated above. See *Kohler* (1878), *passim*. See *Straus* (1999), *passim* and *D. Cohen* (1998), p. 1103-1115 about the evolution of the notion of "*general inventive idea*" in German case law. According to *Hoyng* (2003), at p. 155-156, there is infringement under the Protocol "if the person skilled in the art at the start of the infringement, confronted with the infringing device and comparing this with the claim as understood in the light of the description and the drawings, would come to the conclusion that the accused device achieves essentially the same result in essentially the same way with essentially the same means. In order to be able to determine this, the person skilled in the art will often have to establish the inventive idea which underlies the claim. If, after having studied the description, drawings and if necessary the file wrapper, reasonable doubts remain, there would in principle be no infringement." Hoyng seems to combine US and German case law in his proposal, without substantive argumentation why.

354 See e.g. *Hölder* (2006), p. 669, for a proposition concentrating on the intention of the patentee. Also the *purposive construction* of patents as applied in Britain concentrates on the intention of the patentee when formulating the claims. See *Stenvik* (2001), p. 15; *D. Cohen* (1998), p. 1102-1103 and 1120-1121 and *Fisher* (2007), p. 291-380.

355 See more closely about the industry-specific differences and the related need to tailor patent law accordingly *Merges & Nelson* (1990), p. 880-908 (concentrating on patent scope) and *Burk & Lemley* (2003), *passim* (concentrating on other patent law doctrines).

The possibility to include equivalents in the scope of protection also undermines the value of proper notice to competitors.³⁵⁶ The probabilistic nature of patents³⁵⁷ is exacerbated by the idea that the textual interpretation of the claims should be complemented by *ex post* discovering the inventive idea underlying the patent or the intention of the patentee. The thus created uncertainty always works in favour of the patentee, as it enables invoking the patents against actors outside the literal scope of the claims. Broad claim interpretation thus expands the potential scope of the economic and informational power based on patents. The considerable costs of court proceedings, connected with the possibility to initiate similar proceedings against the plaintiff as a counter-measure within several sectors with a high density of patents (so-called *patent thickets*) easily leads to settlements and explicit or implicit cross licensing. Because of the uncertainty involved, the costs of litigation and the threat of counter-measures, the ones having the knowledge and resources to test the outer boundaries of others' patents are not likely to initiate infringement proceedings in the first place. Who suffers from this state of continuing uncertainty, the threat of legal proceedings and increased entry barriers the most are the potential entrants, smaller firms having no patents capable of being cross-licensed or used as counter-measures.

Broad scope of protection also easily leads to the need to acquire several patent licenses for enabling production and other economic activities within certain branches of business characterised by the complexity and systemic nature of products or infrastructures. This is typical in the information technology and modern communications sectors. This may cause inertia due to non-availability of essential patent licenses, and increases barriers to entry. In some circumstances (but not all) broad patents may lead to cross licensing, patent-pooling or consolidation. These may provide a partial solution to broad patents, but have their own competition-related problems and may coarse additional entry barriers.³⁵⁸

Patent scope thus affects the structure of the markets and entrepreneurial diversity. Moreover, constructing the scope of patents broadly tends to produce dependency patent -situations, whereby the junior patent cannot be practiced without infringing the senior patent. This may unduly restrict entrepreneurial freedom. The senior patent holder may practice a holdout strategy and refuse to license.³⁵⁹ It could also extract, through the licensing terms, the value of the junior invention, which may constitute a major improvement over the senior invention.³⁶⁰ This could lessen the incentive of competitors to develop sequential inventions. The thus reduced competitive pressure could also diminish the incentive of the senior patent owner to develop further its

356 See also *Pechhold* (2005), p. 413.

357 See *Lemley & Shapiro* (2005), *passim*. See also *Frischmann & Lemley* (2007), p. 274-275.

358 See also *Merges & Nelson* (1990), p. 891-896. See more closely the treatment of patent pools in chapter 8.

359 See *Merges & Nelson* (1990), p. 866-867.

360 However, in European countries there may exist a possibility for compulsory licensing in case of a dependency patent situation. Compulsory licensing is treated in more detail subsequently. Yet, compulsory licenses are in practice very rare: in many countries, no compulsory licenses are in practice granted.

own technology.³⁶¹ This could ultimately result in oligo- or monopolistic markets where the owners of the basic patents, together or individually, control access not only to their respective technologies, but also to all the related product and service markets alike.

The potential consequence of the market power and dependency situations produced with broadly constructed patents is an increasing recourse to competition law. To an extent the same problematic results could be avoided by narrower claim interpretation, the costly and burdensome competition law processes can be considered as economic waste.

For all the reasons discussed above, the doctrine of equivalents should not become a substitute for claim interpretation: it should be applied exceptionally and with caution. More generally, the construction of patent scope should be narrow rather than broad. Yet, defining the semantic content of the claim and comparing it to the putatively infringing object is always a matter of interpretation and construction. The claims by themselves cannot demarcate infringing activities from the non-infringing ones.³⁶² As a claim is not a literal description of one thing, but of a *class of things*, all of which are intended to be covered by the exclusive rights, the patent is bound to be interpreted in all potential infringement situations.³⁶³

That there are no incontestable boundaries of classes of things is even more certain than that there are no fixed boundaries of things. Our imperfect knowledge of the world and the uncertainty of future technological developments transform even the least vague, the most precise term vague and imprecise. This open texture of language, caused by unanticipated contingency, makes any norms expressed in language, including patent claims, somewhat indeterminate.³⁶⁴ Thus, the problems related to the doctrine of equivalents do not disappear even if the doctrine is not expressly invoked, but are to varying degrees present in all instances where the scope of a patent is determined.

Proposing detailed and exactly worded tests for equivalency or claim interpretation is of no use, as it seems that all tests developed in case law become quickly abandoned or modified in later case law. Moreover, defining the appropriate scope of patents depends on the threshold of patentability (inventive step) and the availability and interpretation of exceptions and limitations. Yet, as a rule, the claims should define the basic scope of the patent monopoly. This is required already by the wording of Article 69 EPC,³⁶⁵ and is in line with the idea of exactly limiting the scope of state-granted monopolies applying *erga omnes*.

361 See *Merges & Nelson* (1990), p. 877.

362 See also *Koktvedgaard* (1965), p. 154-155 and *Stenvik* (2001), p. 15 (referring to American practice where controversies about the meaning of the claim language are reported to be nearly as common and unpredictable as disputes involving the doctrine of equivalents).

363 See also *Durham* (2007), p. 994.

364 See generally about the open texture of language e.g. *Schauer* (2002), p. 36-37 and the sources referred there.

365 See also *Jacob* (1999), p. 483.

Hence, what is not sufficiently clearly claimed, but only included in the specification, should fall outside the patent scope.³⁶⁶ The specification provides clarification and a context for the claims. Interpretation of the claims and thus the scope of the patent monopoly should not extend beyond the patent's disclosure and teaching. The claims may thus not be constructed broader than what the patent disclosed to a person skilled in the art to be new and inventive *at the time of the priority date*.³⁶⁷ Basing the evaluation on the date of infringement could expand the scope of the patent in the course of time and generation of new knowledge.³⁶⁸ It may occasionally be unavoidable that subsequent technological progress exposes new, at the time of patenting unforeseen ways of substituting individual elements of the invention. In such cases, the effective term of exclusivity granted by a patent may admittedly be reduced when the priority date is decisive, as such subsequent developments could not have been anticipated in the formulation of the claims.³⁶⁹

However, the alternative of accepting subsequently developed substitutes within the claims could unexpectedly inflate the patent monopoly and jeopardise the values and objectives attached to the absence of concentrated control over the evolution of markets and technologies, discussed above. Furthermore, basing the evaluation on the priority date also lessens unjustified hold-up situations, whereby the patent owners extract royalties for something they did not invent.³⁷⁰

366 In addition to the English case law (see in particular *Kirin-Amgen v Transkaryotic Therapies Inc* [2005] 1 All ER 667, which is largely based on this approach, see also the German case *Radio Broadcasting System*, Decision of 24 March 1987, X ZR 20/86 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 19, issue 6/1988, pp. 811-815. See also the German case *Sprocket Assembly*, Decision of 13 February 2007, X ZR 75/05 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 38, issue 6/2007, pp. 726-734.

367 Many courts and scholars have preferred evaluation on basis of the date of priority or filing. See e.g. *Singer & Stauder* (2003), p. 244; *Hölder* (2006), p. 667 (noting, however, that the English courts usually base the evaluation on the publication date). Cf., however with *Domeij* (2000), p. 318 (arguing that "If the true value of the invention has still been used it appears reasonable to use the time of infringement when deciding what the man skilled in the art was aware of") and *Fisher* (2007), p. 369-370 and 388-391 (preferring the date of infringement instead). The claims should thus only cover such equals which were obvious with regard to the claimed combination for a person skilled in the art *at the time of the priority date*. Cf. with the US patent law, where a product infringes by equivalence not because it is an obvious equal, but because the differences are "insubstantial". See more closely *Durham* (2007), *passim*.

368 Yet, the patent's disclosure and teaching do not expand in the course of time. See also *Lemley* (2005a), p. 119-121. In the US, the relevant date is the date of infringement. In addition to Lemley's article, see *Weston* (1998), p. 46-47 and 77-78 and *Durham* (2007) p. 987-989.

369 See also *Fisher* (2007), p. 345.

370 For the last mentioned aspect, see *Lemley* (2005a), p. 120.

Rather than constructing an imaginary “contract” between the inventor and society,³⁷¹ restricting the doctrine of equivalents as proposed is also premised on disclosure requirement and the idea that patent law’s function related to dissemination of technological knowledge is as important as its function to incentivise invention. The disclosure should open the technology to competitors and thus enable the development of alternative approaches and further progress of technology.³⁷²

Finally, the obviousness test should relate to replacing individual features with equivalents, not to the obviousness of the whole idea of the protected invention with regard to the allegedly infringing device.³⁷³ The latter resembles the test for inventive step, and is not an adequate meter for equivalence.³⁷⁴ Comparing the whole ideas behind the patented invention and the accused device tends to abstract considerably from the claim language and thus produces considerable uncertainty. Finally, to qualify as an obvious equivalent, the substitute should perform the same function and produce the same result *in the same way* as the patented element.³⁷⁵

Yet, instead of proposals concerning doctrinal nuances, what is important is the ability of courts to discuss patent scope in terms of the underlying interests and effects. For example, the courts should be able to consider the effects of patent scope on communicative diversity and the generation of private informational power when the patent in question relates to core technologies underlying Internet-based communications.

Similarly, when the case at hand so suggests, they should consider issues like the freedom of science when determining the patent scope. The likely effects on competition should constitute a standard test in the analysis of patent scope. The practical scope of patent protection also depends on the availability of limiting doctrines. They provide partially alternative and partially complementary means to limit patent protection to conform to the conflicting interests. They will be discussed below.

371 Whereby the inventor discloses the invention and the society grants a temporary monopoly over the inventive contribution to the prior art in return. This view is based on the early English patent law. As inventions became to be seen as discoveries of pre-existing ideas in the 19th century, the justification of patents changed from labour to a contract between inventor and the state: the first communication to the public of the discovered knowledge of the art was compensated by the patent grant. See *Sherman & Bently* (1999), p. 156. See also *D. Cohen* (1998), p. 1093 and *Fisher* (2007), p. 81. It has also been used as a justification of patents in the USA. See *Chisum et al* (2004), p. 15.

372 See also *Ghidini* (2006), p. 26.

373 As pointed out by *D. Cohen* (1998), p. 1121, the German courts tend to favour the latter test, whereas the British courts tend to favour the former test.

374 When testing inventive step (or validity of a patent based on inventive step) the whole prior art at the time of the priority date is relevant, whereas when testing infringement, only the elements of the patented invention are relevant. See also *Durham* (2007), p. 972.

375 As *Weston* (1998), p. 77-78, notes, the critical part of the American tripartite test for equivalency is in practice the “way” part of the test. As also noted by *Weston (ibid.)*, German law does not require identity between the patented invention and allegedly infringing device with respect to the “way” they work. Thus, German law defines a broader set of equivalents than what is recommended here.

Limiting Doctrines

In addition to connecting the doctrine of equivalents to its deep level limitations and grounds of justification, it is important to develop concrete limiting doctrines assisting in the determination of patent scope. This is because the same problems may emerge in the interpretations under banners other than the doctrine of equivalents, be it literal or purposive construction, pith and marrow or the protection of sub-combinations.³⁷⁶ Some of these limiting doctrines will be introduced in the following.³⁷⁷ They are the relationship between prior or obvious art of the priority date and equivalents, element protection and the protection of sub-combinations and the reverse doctrine of equivalents.

A person skilled in the art should exclude from the patent scope and equivalence such alternative means to solve the problem which were available and known during the priority date (lack of novelty) or which were obvious (inventive step) and thus non-patentable during that time. Doing otherwise would enable the recapture of once freely available or obvious subject-matter under patent protection, also contrary to Article 56 EPC. The patent monopoly should only cover the new, innovative solution

³⁷⁶ See more closely about purposive construction and pith and marrow doctrines *D. Cohen* (1998), p. 1092-1103 1123-1125; *Weston* (1998), p. 47-51 and 62-68 and *Fisher* (2007), p. 12-21. The protection of sub-combination will be treated subsequently.

³⁷⁷ Additional questions comprise e.g. *the relationship between dependency patents and equivalents*. The question touches on the issue of whether patentable solutions emerging *after* the priority date could come within the scope of the pre-existing patent through the doctrine of equivalents. See about this question e.g. *Domeij* (2000), p. 316-317. The requirement that equivalents must be obvious excludes the possibility that patentable, non-obvious replacements or modifications could be considered as equivalents. As a general rule, the senior patent owner should not be rewarded for someone else's subsequent, non-obvious invention. Doing otherwise would unreasonably contribute to the nature of patents transforming into powerful instruments enabling the private regulation of future inventive activities. This would likely restrict technical progress and would be a serious restriction on entrepreneurial and inventive activities. Another question concerns *using the accessible grant files* to exclude variants or alternatives dropped during the prosecution history. The prevailing doctrine in Europe has been to rely on the grant procedure only exceptionally, if the changes are evident from the description itself or if the specification contains contradictory information. See e.g. the German case *Plastic Pipe*, Decision of 12 March 2002, X ZR 43/01 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 33, issue 3/2003, pp. 302-309 (also referring to case law from other European cases). *Singer & Stauder* (2003), p. 244-245 and 249; *Pechhold* (2005), p. 435 and *Hölder* (2006), p. 668 and *Tritton* (2008), p. 183 (and the case-law cited in them). Cf. however, with *Hoyng* (2003), p. 155-156 and *Pagenberg* (1993), p. 432-344. Yet, there is also national case law pointing to broader use of the file history. Narrowing the scope of a patent readable from the claims and description is less problematic than expanding it, as the patent owner knows the prosecution history and third parties would not accidentally infringe the patent as issued. Using the grant file to expand the scope of the patent would mean that third parties could infringe the patent accidentally. Thus, the protection of legal certainty and legitimate expectations of third parties speak in favour of permitting the usage of grant files to circumscribe the scope of the patent as defined in the claims and description, but not *vice versa*.

as patented, not pre-existing or anticipated art. This important limiting doctrine seems to be relatively commonly applied in European countries.³⁷⁸

As the known or obvious solutions of the priority date could not have been patented, it would be a very problematic extension of patent protection to include them subsequently within patent protection through the doctrine of equivalents.³⁷⁹ A conclusion to the contrary would also threaten legal certainty and would expand patent protection beyond the patent's disclosure and teaching. The success of the defence, often referred to as the *Formstein*-doctrine after a German precedent,³⁸⁰ should thus depend on whether the putatively infringing object would have been unpatentable instead of the patented invention on the priority date. If the elements differing from the patented invention would have turned the putatively infringing object either known (lack of novelty) or obvious (lack of inventive step) on the priority date, there should be no infringement.

The possibility of patentable inventions being at the same time equivalents is also connected to the possibility of *element protection* and *protection of sub-combinations*. The natural law –inspired conception of patents in France and Germany, in particular, connected with the notion of general inventive idea behind patent protection, have led to protection of sub-combinations or even some individual elements of patents. This has also been the position in some of the Scandinavian countries.³⁸¹ When such protection is possible, it is also feasible that replacing one of the features of the patent with a new and non-obvious element may lead to a dependency patent situation. Element protection and the protection of sub-combinations is a deviation from the all-limitations or all-element rule, according to which all limitations or elements of claims must be present for there to be an infringement. The all-limitations rule is the standard applied in the US.³⁸² It is also the main rule applied in most European countries. Protection of individual elements or sub-combinations is thus exceptional also in the European countries where such protection is deemed possible in the first place.

The courts in Germany have protected sub-combinations provided the sub-combination claimed was recognisable as an independent teaching for technical

378 Concerning Germany, see case *Moulded Curbstone*, Decision of 29 April 1986, X ZR 28/85 (Bundesgerichtshof), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 18, issue 6/1987, pp. 795-805. For Finland, see *Car Fender*, KKO:1981-II-184, Finnish Supreme Court Decision of 29 December 1981, Dno: S80/1146. See more closely *Domeij* (2000), p. 318-319 (referring to German, British and Scandinavian patent law); *Stenvik* (2001), p. 8-9 (referring to German, British and Scandinavian laws) and *Straus* (1999), p. 462-463 and 468-469 (discussing in more detail case law from Germany).

379 See also *Stenvik* (2001), p. 8.

380 *Moulded Curbstone* [Formstein], Decision of 29 April 1986, X ZR 28/85 (Bundesgerichtshof), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 18, issue 6/1987, pp. 795-805. See also *Pagenberg* (1993), p. 325.

381 See *Pagenberg* (1993) *passim* and *Stenvik* (2001), p. 16-17.

382 See *Chisum et al* (2004), p. 926-928 and *Stenvik* (2001), p. 16-17 and the case law referred to in both. The absence of compulsory licensing of patents in the US may have contributed to the strict adoption of the all-limitations rule.

application and produced an additional advantage.³⁸³ If the omitted feature in the allegedly infringing product constituted prior art and all the new and inventive features were reproduced, there is likely to be infringement. Some German court decisions have based their decisions on whether the infringer omitted only self-evident and economically useful elements that the user would be able to replace without difficulties. The criterion related to the essentiality of the omitted feature thus seems to develop: omitting an essential feature relating to what is novel and non-obvious in the invention is likely to place the competing device outside the claims of the patent.³⁸⁴ The specification and the file history may be used to determine what the essential features of the patented invention are.³⁸⁵ However, the interpretation under the current German patent law of 1981 remains somewhat uncertain, although there are indicators that the protection of sub-combinations is likely to continue at least in some form.³⁸⁶

To enable clear boundaries on the economic and informational power produced by patents the courts should adopt a restrictive approach towards the protection of sub-combinations. Only if certain features are objectively and absolutely unnecessary and inessential for the patented technical solution, omitting such features but reproducing all the others or their obvious equivalents could constitute a patent infringement. The test should be conducted by a person skilled in the art on the basis of claims and description. Reference to the notions of general inventive idea, solution principle or inventive teaching of the patent should be avoided, as these tend to unnecessarily abstract and expand the scope of patent protection.³⁸⁷

Instead, the analysis should more practically concentrate on the omitted feature's function and effects on the result and performance of the patented invention. Furthermore, the inventor should not benefit from a subsequent invention which renders an essential element of the patented invention inessential.³⁸⁸ Thus, evaluation should be based on the priority date. In addition to the more general reasons for narrow construction of patent scope elaborated previously, this narrow interpretation guideline is also based on the view that the inventor should know the elements of

383 Straus (1999), p. 465-466. Protection of individual elements is much more exceptional. See Pagenberg (1993), p. 337.

384 See Pagenberg (1993), p. 322 and 329.

385 Pagenberg (1993), p. 329 and 342-343.

386 See Straus (1999), p. 472-473 and Pagenberg (1993), p. 322-332.

387 Cf., however with Pagenberg (1993), at p. 338-340 and also *passim*. Pagenberg favours a broader scope of protection for sub-combinations. His propositions are based on the background idea that the aim of the patent system should be "fair protection of inventors" (*ibid.*, at p. 338). The invoking of the "inventive teaching" of the patent (*ibid.*, at p. 340) is reminiscent of the "general inventive idea" behind patents, with similar conceptual and practical problems. Also the question of geographically fragmented patent infringement could be addressed by instruments other than the protection of individual elements or sub-combinations, such as enabling (partial) extraterritorial infringement under some circumstances. See about the latter aspects Lee (2008), *passim*.

388 See also Weston (1998), p. 61.

his claim and test, when necessary, all independently patentable sub-combinations.³⁸⁹ Moreover, the claims in their totality constitute and define the patent monopoly: extending protection over individual features of claims would jeopardise legal certainty and undermine the importance to define publicly granted, competition-distorting monopolies applicable *erga omnes* with precision.³⁹⁰

Finally, the *reverse doctrine of equivalents* represents a limitation of patent scope developed in US case law.³⁹¹ According to the doctrine, a court may acquit the accused party even if that party's device is literally covered by the claims. The doctrine requires interpretation of patent scope and claims in light of the specification and the allegedly infringing object.³⁹² If the allegedly infringing object deviates so far in principle from the patented invention that it would be inequitable to hold the infringer liable, it may not infringe despite formally falling within the claims of the patent. Typically, in such instances the allegedly infringing object represents a considerable technological improvement. It may contribute more to the state of the art than the original invention. In such instances, the doctrine may alleviate hold-up situations that may result from the original patent owner's desire to block a superior innovation from the markets or its aspiration to extract its value through licensing terms.³⁹³

The rationale for the doctrine is thus that the allegedly infringing object, despite literally falling within the claims, is no more based on the patent's teaching. The reverse rationale is used for the extension of patent scope through the doctrine of equivalents where the patent's teaching is thought to extend beyond the literal meaning of the words used in the claims. In this sense, the reverse doctrine of equivalents could be considered as the logical mirror image of the doctrine of equivalents. It produces symmetry in the doctrines of patent interpretation and enables reaching equitable solutions.³⁹⁴

So far, the doctrine has not received foothold in Europe, although similar arguments have appeared in some national cases.³⁹⁵ One reason for this is probably that in European countries compulsory licenses may be available for dependency

389 See also *Weston* (1998), p. 61, for the last-mentioned argument. The patent should cover only one patentable invention. According to Article 82 EPC, the European patent application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept.

390 Accordingly, it has been argued that Article 69 EPC and its Interpretation Protocol may restrict the possibility of element protection and protection of sub-combinations. See also *Stenvik* (2001), p. 16 and *Pagenberg* (1993), *passim* (however adopting a more favourable approach towards the protection of sub-combinations).

391 See more closely *Merges & Nelson* (1990), p. 862-867 and 910-911 (1994), p. 12-13, *Burk & Lemley* (2003), p. 1657-1658 and *Domeij* (2000), p. 126-129.

392 *Chisum et al* (2004), p. 183.

393 See *Merges & Nelson* (1990), p. 866-867, for developing the last-mentioned argument. See also *Burk & Lemley* (2003), p. 1657-1658.

394 See also *Merges & Nelson* (1990), p. 910 and *Domeij* (2000), p. 127.

395 See more closely *Domeij* (2000), p. 128-129 (favouring the adoption of the doctrine in Europe) and *Stenvik* (2001), p. 18-19 (adopting a sceptical view towards the merits of adopting the doctrine in Europe, mostly based on considerations related to legal certainty).

patent situations.³⁹⁶ The need for the adoption of this doctrine also depends on other patent law doctrines capable of addressing the same problems. However, the reverse doctrine of equivalents could significantly reduce the need for compulsory licensing or application of competition law to patents.³⁹⁷ Compulsory licensing is very rare in practice. Moreover, even if the subsequent junior invention would not be based on the senior patent's teaching, although formally being within its claims, compulsory licensing could not normally release the junior inventor from patent royalties.³⁹⁸

Compulsory licensing for dependency patents thus serves another function by leading to licensing against remuneration where paying royalty is equitable in the sense that the junior invention is based on the teaching of the senior patent. The reverse doctrine of equivalents, on the other hand, releases the junior inventor totally from the scope of the senior patent, because it would be inequitable to let the senior patent owner to collect royalties from practicing an invention that is no more based on the senior patent's teaching. Thus, the reverse doctrine of equivalents and compulsory licensing are not to be seen as mutually exclusive doctrines. Rather, they complement each other, fulfil partially different functions and have thus partially distinct spheres of application.

The reverse doctrine of equivalents could be adopted and developed also in European patent law. This is called for by several parallel developments in European patent law. These are the expansion of the doctrine of equivalents, the continuing protection of sub-combinations in some European countries, the systematic expansion of patent eligible subject-matter and the non-existing practice of compulsory licensing. Limiting doctrines within European patent law are thus clearly needed.³⁹⁹ There seem to be no impediments in the EPC or the international intellectual property treaties as such for such a development. The doctrine could provide a workable means for courts to adjust originally overly broad protection in relation to radical improvements and could also limit the expansion of patent scope in the course of the general development of science and new technological environments.⁴⁰⁰

In addition to the hold-up situation described above, the doctrine would be particularly useful in cases where the claims of a patent are invoked in a substantially different, new environment compared to that of the patented invention. Where the new opportunities or "prospects" related to the patent have only opened up after

396 See more closely the subsequent discussion of compulsory licensing. Another factor is probably the fact that in the US, the date of infringement is used to determine equivalents. As this typically expands the range of equivalents, limiting doctrines are needed more than in the system where the priority date is used to determine equivalents.

397 *Stenvik* (2001), p. 19, considers that the problems could be remedied by compulsory licensing.

398 See more closely Article 31(h) and (k) of the TRIPS Agreement and the treatment of compulsory licensing subsequently.

399 See also the subsequent treatment of the abuse of rights –doctrine as a potential European development having a similar limiting function.

400 Restricting the doctrine of equivalents to what was obvious at the priority date would alleviate the need to apply the reverse doctrine of equivalents, as the scope of the patent would not as likely expand in the course of time and technological and scientific development.

such general technological or scientific developments having nothing to do with the original invention, there is no reason to reward the original patent owner a second time or grant it the position to control the evolution of this new environment.⁴⁰¹ For example, extending the scope of an older patent granted for an incremental invention concerning manual filing and reference system to linking in the Internet environment could be blocked through the reverse doctrine of equivalents even if linking would be literally encompassed by the claims.⁴⁰² In such a situation, the “new prospect” emerged because of general technological and scientific development related to the Internet. This technological development was scarcely in the mind of the patent owner and could not constitute any additional incentive for the original invention.⁴⁰³ Granting the patent owner additional economic and informational power over such new technological environments would not be in appropriate relation to the inventive efforts of the patent owner or the functions of patent law.

5.4.4 Scope of Patent Power II: Exceptions and Limitations

Introduction

The practical scope of patent monopoly and the economic and informational power based on it can also be defined through exceptions and limitations to patent protection. When compared to the definition of patent scope through the interpretation of claims and description with the assistance of the related doctrines of interpretation, three important differences emerge.

First, the international regulation of exceptions and limitations to patent protection is relatively extensive. The TRIPS Agreement, in particular, censors the usage of exceptions and limitations to a far greater extent than the interpretation of the scope of patents. Article 30 of the TRIPS Agreement establishes a three-step test for the permissibility of exceptions within patent law. Article 31 of TRIPS regulates compulsory licensing. It will be addressed subsequently. A TRIPS panel has also applied the non-discrimination principle found in Article 27 of TRIPS to the

401 The situation may be different with pioneering, originally radical inventions. Their scope may somewhat expand in the course of time and subsequent technological development.

402 See the US case *British Telecommunications PLC v Prodigy Communications Corp.*, 217 F.Supp.2d 399 S.D.N.Y., 2002, where British Telecommunications PLC’s patent for accessing computer data over telephone was argued to extend to the Internet. However, the Internet, which competitor’s system enabled subscribers to access, did not literally or equivalently infringe British Telecommunications PLC’s patent. It is possible, however, to construe a case where the end-result would have been different.

403 Developing on the US Supreme Court case *Graver Tank & Mfg Co v Linde Air Products Co*, 339 US 1959, 605, linking does not necessarily perform the same or similar function to manual filing and referencing. It may also perform it in a substantially different way, but may nevertheless fall within the literal words of the claims. In such a situation, the reverse doctrine of equivalents could be applied.

analysis of exceptions, although Article 27 formally concerns patentability only.⁴⁰⁴ The interpretation of Article 30 TRIPS will be discussed in the following.

Article 30 of the TRIPS Agreement is based on the model provided by Article 9(2) of the Berne Convention and is worded similarly to Article 13 of the TRIPS Agreement (copyright).⁴⁰⁵ According to Article 30, “Members may provide limited exceptions to the exclusive rights conferred by a patent, provided that such exceptions do not unreasonably conflict with a normal exploitation of the patent and do not unreasonably prejudice the legitimate interests of the patent owner, taking account of the legitimate interests of third parties”. According to a WTO panel, the limited exception “connotes a narrow exception – one which makes only a small diminution of the rights in question.”⁴⁰⁶ However, the panel recognised that providing an exception for regulatory approval process was possible, as the additional period of market exclusivity being restricted with the exception was not to be regarded as a natural or normal consequence of enforcing patent rights, but rather as an unintended consequence of the conjunction of the patent laws with product regulatory laws.

The panel evaluated “normal exploitation” empirically *and* normatively, the latter connoting a test whether the manner of exploitation prohibited by the exception “was ‘normal’ in the sense of being essential to the achievement of the goals of patent policy.”⁴⁰⁷ The panel also gave weight to the goals of patent policy when interpreting the criterion of “legitimate interest” and defined it “as a normative claim calling for protection of interests that are ‘justifiable’ in the sense that they are supported by relevant public policies or other social norms”. It explained as an example that an exception for scientific experimentation would be in line with the patent policy and societal interest to facilitate the dissemination and advancement of technical knowledge.⁴⁰⁸

Compared to a WTO panel interpreting the corresponding test within copyright law, the patent panel did not use the extent of economic losses caused by the exception to the patent owner as its principal criterion.⁴⁰⁹ Thus, the approach of the patent panel could permit an exception even when it reduces the (potential) income of the patent owner considerably. More important than the extent of economic losses as such would be the effect of such losses on the achievement of the goals of the patent policy and

404 Canada – Patent Protection of Pharmaceuticals, Report of the Panel WT/DS114/R (17 March 2000). See also *Dinwoodie & Dreyfuss* (2005), p. 876 (criticising the panel decision and holding that requiring exemptions to be technologically neutral is particularly anomalous as this would make a broader than necessary exemption more acceptable under the TRIPS Agreement than a narrower one).

405 The differences are treated subsequently under copyright.

406 Canada – Patent Protection of Pharmaceuticals, Report of the Panel WT/DS114/R (17 March 2000), at paragraph 7.30. See also *Senfleben* (2006), p. 417.

407 Canada – Patent Protection of Pharmaceuticals, Report of the Panel WT/DS114/R (17 March 2000), at paragraph 7.58. See also *Senfleben* (2006), p. 424.

408 Canada – Patent Protection of Pharmaceuticals, Report of the Panel WT/DS114/R (17 March 2000), at paragraph 7.69.

409 For the copyright case in question, see WTO panel report, Section 110(5) of the US Copyright Act, June 15, 2000, NT/DS160/R. See also *Senfleben* (2006), *passim*.

the existence of “*other public policies or other social norms*” constituting the justifiable interests behind the exception.

Thus, the basis for evaluating permitted exceptions was predominantly the extent to which they were in conformity with the goals, rather than with the letter, of international patent law. This teleological approach could permit even far-going exceptions to the exclusive rights addressing specific problems,⁴¹⁰ provided the exceptions are sufficiently in line with the goals of patent policy and backed up by legitimate policies or values the society pursues through its legislation.

The encouragement to evaluate the exceptions against the objectives of the patent policy can also be seen as an invitation to analyse the market failure situations of patent protection. Where the exclusive rights conferred by a patent fail to advance invention and dissemination of technical knowledge, an exception capable of remedying the market failure situation in question would likely be permitted, even if it would curb some of the exclusive rights considerably. Likewise, the panel’s interpretation of the three-step test enables taking into account the reasons behind market power enabled by the exclusive patent rights. To the extent market power is enabled or strengthened by factors external to patent protection, limiting the effects of such external factors within patent laws is likely tolerated.

Provided the above interpretation holds in future panel decisions, Article 30 of the TRIPS Agreement could enable a relatively rational analysis of exceptions. Yet, due to the substantively restricted WTO-context of application, it is difficult to accommodate fundamental rights or competition law argumentation in the analysis of the exceptions, as the WTO *acquis* has neither constitution nor competition law to relate the argumentation to. These and other problems related to the three-step test will be discussed subsequently in sub-chapters 5.5.3 and 5.7.4.

Second, invoking an exception or limitation is typically uncertain and thus involves a considerable risk of costly litigation. A credible threat of an infringement suit based on the practice of broad construction of patents is often a sufficient deterrent even if an exception or limitation is potentially available. Smaller enterprises, in particular, may not be financially able to test the interpretation of the exception or limitation in court proceedings. When compared to narrow construction of patent scope, the availability of an exception typically provides a more limited relief in terms of geographical area affected, substantive rights available, remuneration payable and the sphere of persons empowered.⁴¹¹ Moreover, especially within areas of cumulative

410 The panel held in Canada – Patent Protection of Pharmaceuticals, Report of the Panel WT/DS114/R (17 March 2000), at paragraph 7.92, that Article 27 of the TRIPS Agreement “*does not prohibit bona fide exemptions to deal with problems that may exist in certain product areas*”.

411 See Article 31 of the TRIPS Agreement, which regulates compulsory licenses. Compulsory licenses may be authorised predominantly for the supply of the domestic market on individual merits and after efforts to obtain authorisation from the right holder on reasonable commercial terms and conditions. The scope and duration of such use is limited to the purpose for which it was authorised and the use is non-assignable. Moreover, the right holder shall be paid adequate remuneration in the circumstances of each case. See, however, Article 31 (k) of the TRIPS Agreement, which limits some of these rules in case of compulsory licenses on the basis of anticompetitive practices.

innovation and complex or standardised products testing the applicability of an exception or limitation could lead to counter measures, as both parties are likely to be in breach of the claims of the other party's patents. Broad patents and the availability of exceptions and limitations thus may not resolve problems related to patent thickets. Cross-licensing, patent-pooling and consolidation of industries which all involve competition-related problems, are thus not avoided by the favouring of exceptions and limitations at the expense of optimising patent scope or patentability of subject-matter.

Third, even if there are exceptions and limitations available, narrow interpretation of exceptions may in practice result in a broader scope of protection than the alternative of circumscribing protection originally through narrow interpretation of patent claims. The doctrine of narrow interpretation of exceptions may result from the idea that exceptions to a main rule should generally be interpreted narrowly.⁴¹² It may also result from the specific background ideology behind patent law. Natural law-based conception of patent law treats exceptions and limitations as encroachments to the innate rights of the inventor and suggests narrow interpretation of exceptions on this basis. Likewise, ordoliberal approach may recommend abstaining from state intervention in the market mechanism and thus disregard the reactive balancing of the property rights with the interests other than those of the patent proprietor.⁴¹³ Economic theories emphasising the importance of well-defined rights in the hand of the patent owner similarly treat exceptions with suspicion. For example, Kitch argues that any form of compulsory license destroys the prospect function of patents as the patent owner loses the ability to control who can utilise the patent.⁴¹⁴

Thus, the existence of a statutory exception or limitation protecting certain interests should be no ground to enact easily obtainable broad rights in all fields of technology. Likewise, it should be no ground to abstain from developing doctrines limiting the scope of patent rights. Nevertheless, the exceptions may fulfil important objectives in limiting the reach of exclusive patent rights when the actions of a third party fall within the scope of the patent, but advance a purpose protected with the exception or limitation. Two important exceptions to patent protection will be addressed in the following: *experimental use* and *compulsory licensing*. In both cases, the focus will be on the patterns of interpretation, background ideologies and societal and competition-related implications, rather than on detailed discussion of case law and scholarly literature.

412 See about the genesis of this doctrine in European law (with an emphasis on Germany) *Holzappel & Werner* (2009), *passim*. Yet, the authors note that this doctrine has played a limited role in German patent law.

413 See *Beier* (1999), p. 257 (stating that the determination of reasonable license fees by a court or administrative agency amounts to state intervention in the market mechanism contrary to the principles of a free market economy as they are anchored in the EC Treaty).

414 *Kitch* (1977), p. 287.

Experimental use

Experimental use of patented inventions is usually enabled in European patent laws to allow research and further improvements of the existing inventions or for the purpose of invalidation of patents that should not have been granted in the first place. It is evident that the right to experiment can be connected to the functions of patent law, as the principal objective of patent law can be seen to facilitate continuous technological development and the progress of the science.⁴¹⁵

Importantly, the right to experiment with patented inventions can also be seen as an important social obligation of intellectual property, through which states implement their obligation to protect fundamental rights on a horizontal level. The exception is connected to freedom of science and research as well as to freedom to pursue trade or profession. The right to experiment protects these as individual rights and (predominantly) as collective goods: freedom needed for scientific, innovative and creative activity and freedom of the market necessary for the pursuance of trade and profession. Without the right to experiment, further development of patented technologies could often become monopolised by the patentee.⁴¹⁶ By enabling horizontal control of patent-granting activities benefiting competitors, the right to experiment also facilitates the abolition of unmerited patent monopolies, and thus indirectly limits state action otherwise more likely enforcing illegally granted exclusive rights against others.

The experimental use provisions of the European patent laws typically follow the Community Patent Convention, which has now been replaced in practice by the Proposal for a Community Patent Regulation.⁴¹⁷ The experimental use Article of the Community Patent Convention was introduced almost verbatim into most European domestic laws.⁴¹⁸ The experimental use Article of the proposed Community Patent Regulation is based on the model provided by the Community Patent Convention. According to Article 9(b) of the Proposal, *acts done for experimental purposes relating to the subject-matter of the patented invention* are outside the exclusive rights. As there is a separate exclusion in Article 9(a) of the Proposal for acts done privately *and* for non-commercial purposes, the concept of experimental use extends broader

415 See e.g. *Klinische Versuche I*, Decision of 11 July 1995, (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 28, issue 1/1997, pp. 103-113.

416 Thus, what was stated with regard to competitive pressure and diversified innovation previously with regard to the scope of patent rights, applies *a fortiori* here. The right to experiment with patented inventions also relates to compulsory licensing on the ground of dependency patents. Dependency patents would be relatively unlikely, should all experimentation with the patented invention belong to the exclusive rights of the patentee. See the treatment of compulsory licensing subsequently.

417 Proposal for a Council Regulation on the Community patent, COM/2000/412 final (OJ C 337 E, 8/11/2000, p. 278-290. See also the revised text: Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent, dated 8 March 2004.

418 *Cornish* (1998), p. 735-736 and *Ruess* (2006), p. 97. For a useful comparison of national case law from Germany, Netherlands and the UK, see *Cornish* (1998), *passim*. For UK patent law on experimental use, see also *Cornish & Llewelyn* (2007), p. 254-256 and for German law *Ruess* (2006), p. 95-102.

and comprises acts beyond private and non-commercial use.⁴¹⁹ This interpretation is also confirmed in case law of several European Union member states, which seem to converge towards a common European approach.⁴²⁰

Experimental use is typically possible to a greater degree in Europe than in the US, as also commercially sponsored research may benefit from the exception in Europe.⁴²¹ The mere fact that an experiment is conducted with a view to unspecified commercial activity in the future should not prevent it from benefiting from the exception in Europe, provided it does not actually involve such activity. This is because commercial experimentation does not necessarily lead to commercial exploitation of the patented invention, as the experimenter may either invent around the patented invention and thus avoid infringement,⁴²² or test whether there are grounds for invalidating the patent. The decisive criterion deployed in the leading European decisions seems to be whether the experimentation is to gain information in the pursuit of scientific research. Even if this information is subsequently used for commercial interests does not preclude it benefiting from the experimental use exception. Thus, contrary to the application of the patentability requirements, there is no strict demarcation between basic and applied research at this stage, as both basic and applied research may benefit from the exception.⁴²³

However, the exception extends neither to the commercialisation of successful results nor to trials to discover whether an entity can produce commercially according to the patent.⁴²⁴ Furthermore, where the testing of the invention is undertaken *merely* to satisfy medical or agricultural authorities, potential consumers or other third parties about the already known qualities of a product, the experimentation is beyond the exception.⁴²⁵ Provided the predominant purpose of experimentation is within the exception,⁴²⁶ each of the exempted acts must be necessary in order to achieve the object of the experiment.⁴²⁷ It has been suggested that decompilation for discovering the structures of a computer program to find out interoperability are outside the experimental use exception.⁴²⁸ There is generally no express compulsory licensing or automatic authorisation of reverse engineering in patent law. Thus, to the extent

419 *Cornish & Llewelyn* (2007), p. 254. See also *Benyamini* (1993), p. 271-272, for an interpretation of an identical provision in the Community Patent Convention (CPC).

420 See *Cornish* (1998), at p. 736-737 and 746.

421 For the US case law, see *Roche Products Inc. v Bolar Pharmaceutical Co. Inc.*, 221 USPQ 157 (C.D. Cal. 1982) and *Madey v Duke University*, 307 F. 3d 1351 (Fed. Cir. 2002), which further narrows the notion of experimental use. See also *Kamperman Sanders* (2003), p. 165; *Cornish & Llewelyn* (2007), p. 254-255 and 829, for UK law; *Ruess* (2006), *passim*, for a comparison of the US and German patent laws on experimental use and *Chisum et al* (2004), p. 1263-1268 (as regards the US law on experimental use).

422 See *Benyamini* (1993), p. 275-276.

423 See more closely the case law analysis by *Cornish* (1998), p. 748-753.

424 See *Cornish & Llewelyn* (2007), p. 254; *Benyamini* (1993), p. 276.

425 *Cornish* (1998), p. 753.

426 According to *Cornish* (1998), at p. 753, the courts in Europe no more require that the motivation must be solely or exclusively to gain more scientific knowledge.

427 *Benyamini* (1993), p. 276-277. See also *Cornish* (1998), p. 746.

428 See *Cornish & Llewelyn* (2007), p. 829.

reverse engineering would constitute an act infringing the patent rights,⁴²⁹ even reverse engineering permitted by the Software Directive would be precluded.⁴³⁰ In any case, even if research involving interoperability is permitted, the patented interoperability elements cannot be used without the patent owner's authorisation.⁴³¹

If the legitimate reasons to conduct experiments include finding out something about the invention (for instance whether and under what conditions it produces the effects described in the patent), figuring out whether the invention can be modified or improved, and investigating whether there are grounds for invalidating the patent (including testing industrial applicability and the sufficiency of the disclosure),⁴³² the experimenter could often rely on the presence of a legitimate ground when decompiling the computer program. As already discussed, even if the information is later used for commercial interests, the exception may apply.

Permitting decompilation for interoperability purposes under experimental use would also be in line with the functions of patent law. Mere decompilation would not industrially exploit the patented invention as it stands, but would rather enable discovering the needed information and pursuing interoperability through non-infringing means. This could lead to new inventions and advancement of technology competition. Thus, provided the exception is not interpreted narrowly, but against the function of patents and the experimental use exception, it is feasible that achieving interoperability could function as an independent aim under the experimental use exception. The problem could be, however, that the patent does not relate to interoperability, which suggests that the experimentation aimed at discovering the interoperability information, does not relate "*to the subject-matter of the patented invention*". The experimentation with a computer program for that purpose could also necessarily involve the use of several patents, only some of which may relate to interoperability. Hence, it would be advisable to introduce a specific provision in European patent law to permit reverse-engineering for interoperability purposes.⁴³³

Yet, more important than devising such provision to be adopted by the legislator is the development of the interpretations of existing law on the basis of the exception's connections to fundamental rights -related interests and the furtherance

429 According to Koelman (2006), p. 826, "*provisions in national patent acts that allow research in a more general sense may cover research for the purpose of achieving interoperability*".

430 See also Cornish & Llewelyn (2007), p. 829. Cf. with recital 50 of the Information Society Directive, which safeguards the regime established for reverse engineering under the Software Directive 91/250/EEC from the Information Society Directive provisions on technological measures. The Information Society Directive will be treated in more detail subsequently.

431 See also Koelman (2006), p. 826-827.

432 See Benyamini (1993), p. 278-279.

433 For a suggestion in this direction, see also Koelman (2006), *passim*. Furthermore, it is also possible to experiment with the invention in countries where the protection is not in force, or where the approach to experimental use is the most lenient. This connotes that experimental use, like reverse engineering right within copyright law, regulates more the geographical location of experimentation and technical analysis than what is possible overall. Also for this reason, it would be preferable to introduce an extensive reverse-engineering exception in European patent law for interoperability purposes.

of the same aims exclusive rights are intended to further. *The right to experiment with existing technologies may be seen as one of the basic technological rights in the networked information society, capable of advancing several collective goods related to communicative and technological diversity, reduction of excessive informational power and freedom of science and entrepreneurship.*

As such, experimental use constitutes a paradigmatic example of a limitation of intellectual property not to be interpreted narrowly, but against its underlying purposes and values present in each context of application. It could ideally develop in the direction of permitting any experimentation with patented technologies not involving commercial production or similar practices interfering with the core of patent owner's rights. To an extent patents set limits on scientific work, even when conducted commercially, and the proliferation of the technological knowledge the patent law institution is anyway supposed to further through the disclosure and publication requirements, it starts to operate against its own functions and hence also against its societal justification.

Compulsory Licensing

Compulsory licensing of patents has its origin in the British patent law of 1883, the already referred to Patents, Designs and Trade Marks Act. Although there were some other historical examples of compulsory licensing schemes, the British rules provided the example to be followed internationally.⁴³⁴ Now an overwhelming majority of countries belonging to the World Trade Organization have compulsory licensing provisions in their domestic patent laws.⁴³⁵ Compulsory licensing in Europe is mostly based on national laws: the European Patent Convention does not regulate compulsory licensing. The proposed Community Patent Regulation contains provisions on compulsory licensing.⁴³⁶ However, it does not harmonise the national patent laws of the member states. It will be treated subsequently in more detail.

The patent laws of the European Union member states enable compulsory licensing for various reasons. For example, the Finnish and Swedish Patent Acts enable compulsory licensing in case of non-working patents (Section 45), dependent patents (Section 46), considerable public interest (Section 47) and prior use (Section 48).⁴³⁷ Like with the determination of the scope of patent rights, the basic conceptions and underlying justifications of patent law affect the application and interpretation of the compulsory licensing provisions. For example, the emphasis can be on the evaluation of the actions of the patent owner (whether there has been abusive exploitation) or on the relative weight of the public interest behind the legislative ground for compulsory

434 See more closely *Brand* (2007), *passim* and at p. 217, explicitly.

435 *Saunders* (2002), p. 438.

436 Proposal for a Council Regulation on the Community patent, COM/2000/412 final (OJ C 337 E, 28/11/2000, p. 278-290, Articles 21 and 22. See also the revised text: Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent, dated 8 March 2004. The revised text also modified the compulsory licensing provisions, as discussed subsequently.

437 See more closely *Bruun* (2001), p. 85-85 and *T. Mylly et al.* (2005), *passim*.

licensing when compared to the values attached to the ownership of patents. Such differences in the underlying ideologies may explain the historically diverse compulsory licensing practices in the presence of relatively similar legal provisions.⁴³⁸

In the following, compulsory licensing will be addressed from the perspective of competition in order to evaluate the remaining need for and characteristics of compulsory licensing under competition law. First, the international regulatory framework of compulsory licensing will be introduced. Subsequently, two compulsory licensing grounds of particular relevance for competition will be discussed: dependency patents and non-working. A more general-level analysis of the interaction between compulsory licensing under patent law and competition law will end the present treatment.

International Regulation of Compulsory Licensing

The Lisbon version of the Paris Convention enables, in its Article 5A(2), compulsory licensing: “Each country of the Union shall have the right to take legislative measures providing for the grant of compulsory licenses to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work.” Although the Paris Convention thus regulates compulsory licensing, its practical relevance has been minimal.⁴³⁹ For example, Article 5A(2) has been interpreted relatively recently by the German Federal Supreme Court so that compulsory licensing does not presuppose abusive use of the patent. Furthermore, the Article was seen by the Court to regulate the case of compulsory license in the absence of any or sufficient exploitation of the patent only. Compulsory licensing by virtue of public interest or other possible causes was interpreted to be outside the scope of the Article, thus enabling unrestricted regulation of compulsory licensing for causes other than non-working of the patent.⁴⁴⁰

The TRIPS Agreement sets out more detailed conditions for compulsory licensing in its Article 31. The conditions, however, do not intend to harmonise the substantive grounds for granting compulsory licenses, except in the case of dependency patents and semi-conductor technology. Compulsory licensing of semi-conductor technology is possible only “for public non-commercial use or to remedy a practice determined after judicial or administrative process to be anti-competitive”. Regarding dependency patents, Article 31 requires that “the invention claimed in the second patent shall involve an important technical advance of considerable economic significance in relation to the invention claimed in the first patent”. Otherwise, the Article requires the authorisation for compulsory licensing to be considered “on its individual merits”, a condition likely

438 For example, the United Kingdom and Canada have earlier been particularly active in compulsory licensing. See e.g. *Beier* (1999), p. 260.

439 See *Kamperman Sanders* (2003), p. 169.

440 *Interferon-gamma*, Decision of 5 December 1995, X ZR 26/92 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 28, issue 2/1997, pp. 242-250.

to be interpreted flexibly.⁴⁴¹ The rest of the conditions regulate procedural matters and remedies available.

Contrary to the opinion of the German Federal Supreme Court in the decision referred to above, compulsory licensing provisions do not have to fulfil the three-step test contained in Article 30 of the TRIPS Agreement.⁴⁴² Exceptions to patent rights analysed under Article 30 of the TRIPS Agreement namely operate automatically, without a need for a specific authorisation from authorities or courts.⁴⁴³ Furthermore, the applicability of the non-discrimination principle found in Article 27(1) of the TRIPS Agreement to compulsory licensing is uncertain.⁴⁴⁴ On one hand, it sets a generally worded prohibition on discrimination on the basis of field of technology, place of invention or production. On the other hand, it deals with patentable subject-matter, not compulsory licensing.⁴⁴⁵ However, Article 27(1) of the TRIPS Agreement is seen to apply to compulsory licensing in the proposed Community Patent Regulation.⁴⁴⁶ Hence, no distinction is permitted between products originating within the Community and imported products.

Article 31(k) of the TRIPS Agreement also indicates that a compulsory license may be granted in order to remedy an anticompetitive practice. In such a case, the otherwise applicable requirements of prior negotiations, notice and limiting the license predominantly to supplying the domestic market do not apply. Moreover, the finding of an anticompetitive practice may also be taken into account in determining the amount of remuneration (if any) in such instances.⁴⁴⁷ Finally, the competent authorities may refuse to terminate the license, if it is likely that the anticompetitive conditions will recur.

The *Doha declaration* and its subsequent implementation⁴⁴⁸ are an important development in international patent law, as they demonstrate the inevitability of embedding WTO patent law in a broader societal context and value-base. In particular, they demonstrate the *need* to accommodate public health -concerns in the

441 See more closely *UNCTAD-ICTSD* (2005), p. 468.

442 The German court argued in the *Interferon-gamma* -decision that the German legislature had complied with Article 30 of the TRIPS Agreement by subjecting the grant of compulsory license to the requirement that the impairment of the right granted to the patent holder is only lawful if it is "indispensable" in the public interest.

443 See *UNCTAD-ICTSD* (2005), p. 430.

444 See the discussion in *UNCTAD-ICTSD* (2005), p. 480-481.

445 However, this did not prevent a TRIPS panel from applying Article 27 of the TRIPS Agreement in the context of exceptions to patent law. See Canada – Patent Protection of Pharmaceuticals, Report of the Panel WT/DS114/R (17 March 2000). For a criticism of such an application of Article 27, see *Dinwoodie & Dreyfuss* (2005), p. 876-877.

446 Proposal for a Council Regulation on the Community patent, COM/2000/412 final (OJ C 337 E, 28/11/2000, p. 278-290), at p. 24 of the proposal. See also the revised text: Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent, dated 8 March 2004.

447 See also the treatment of the competition norms of the TRIPS Agreement in the beginning of chapter 7.

448 *Doha Declaration* (2001). See also WTO Doha Implementation (2003).

interpretations of the compulsory licensing provisions of the TRIPS Agreement.⁴⁴⁹ The European Union implementing regulation extends the scope of the Doha-rights to the least developed countries and certain low-income developing countries which are not members of the WTO.⁴⁵⁰ Even though there have been no decisions utilising the European Union implementing regulation yet, it is feasible that it will have an effect on controlling the licensing and pricing practices of the patent owners in case of pharmaceuticals indispensable for public health. Moreover, as the European Union implementing regulation goes further than the Doha-rights in protecting the public health interests of the developing countries, it demonstrates the capacity of the European Union-legislator in some circumstances not only to implement the minimum international obligations safeguarding the public health -interests capable of curbing patent rights. In some instances, it may go further and protect the values at stake more generally, irrespective of the developing country's WTO membership.

Dependency Patents

The need for compulsory licensing in case of dependency patents first emerged in the nineteenth century, after great improvements on existing patented steam engines generated a widely shared conviction that denying patent protection for improvements would connote that technological progress would be halted during the term of the original patent.⁴⁵¹ The growing awareness that a patent may confer too much lead-time over competitors and stop progress at the stage of the originally patented technology favoured the international adoption of compulsory licensing as a solution to the problem of dependency patents.⁴⁵² The original rationale of compulsory licensing in case of dependency patents is thus on enabling sequential invention and on limiting the patent monopoly for the sake of decentralised inventive activities and the progress of technologies. The British rules on compulsory licensing in case of dependency patents have been connected to the individual's common law right to liberty of action in the pursuit of his trade.⁴⁵³

As already mentioned, Article 31(l) of the TRIPS Agreement regulates compulsory licenses for dependency patents. The use of the first patent is authorised to permit the exploitation of the second patent that cannot be exploited without infringing the first patent, if the invention claimed in the second patent involves *an important technical advance of considerable economic significance* in relation to the invention claimed in the first patent. Moreover, the owner of the first patent is entitled to a cross-licence

449 As noted by *Draho* (2007), p. 23, the Doha Declaration does not create any rights overriding the TRIPS Agreement. Instead, it provides constitutional-type regulation of principle, by recognising the need to recognise and acknowledge the right of states to protect public health in the presence of patent protection according to the TRIPS-standards.

450 See more closely Regulation (EC) No. 816/2006 on compulsory licensing of patents relating to the manufacture of pharmaceutical products for export to countries with public health problems.

451 In the sixteenth and seventeenth centuries, there was no need for improvement patents as patents were specific, short-lived and technologies and industries changed slowly. See *Brand* (2007), p. 230.

452 *Brand* (2007), p. 230-232.

453 See *Brand* (2007), p. 230.

on reasonable terms to use the invention claimed in the second patent. Finally, the use authorised in respect of the first patent must be non-assignable, except with the assignment of the second patent. The other applicable conditions set out in Article 31 of the TRIPS Agreement for compulsory licensing, such as prior negotiations for a voluntary license, must be followed as well.

On the European level, Article 12 of the Biotechnology Directive⁴⁵⁴ enables compulsory licensing in case of a dependency patent or a plant variety right, against appropriate royalty and subject to a cross-license on reasonable terms. The new plant variety or invention must constitute a significant technical progress of considerable economic interest compared with the invention claimed in the patent or the protected plant variety, for enabling the issuance of a compulsory license. Furthermore, the applicant must have applied unsuccessfully to the holder of the patent or of the plant variety right to obtain a contractual licence.⁴⁵⁵

Likewise, the proposed Community Patent Regulation enables compulsory licensing in case of dependency patents in its Article 21(2), which has been modified after the Commission's original Proposal. The modified version reads:⁴⁵⁶

“On request, the Community Patent Court may grant a compulsory licence in respect of a first patent to the proprietor of a national or Community patent or to the proprietor of a plant variety right who cannot use his patent (second patent) or his national or Community plant variety right without infringing a Community patent (first patent), provided that the invention or new plant variety claimed in the second patent or plant variety right involves an important technical advance of considerable economic significance in relation to the invention claimed in the first patent. In the case of a compulsory licence in respect of a dependent patent or plant variety right, the owner of the first patent shall be entitled to a cross-licence on reasonable terms to use the patented invention or protected plant variety.”

In addition to the Union level legal measures, several European Union member states have utilised the possibility of compulsory licensing in case of dependency patents. British, French, German and Italian patent laws now enable, among others, compulsory licenses in case of dependency patents.⁴⁵⁷ For example, Section 46 of the Finnish Patent Act enables compulsory licenses for dependency patents.⁴⁵⁸

454 Directive 98/44/EC on the legal protection of biotechnological inventions.

455 See also Tritton (2008), p. 203.

456 See the revised text: Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent, dated 8 March 2004.

457 See Cornish & Lewelyn (2007), p. 299-301 (UK), Hilty & Geiger (2005), p. 641 (France and Germany); Ghidini & Arezzo (2005), p. 160 (Italy), respectively. However, unlike most European laws, the US patent laws do not enable compulsory licensing for the purpose of dependent, derivative innovation. In the US, compulsory licensing of patents is possible under the Atomic Energy and the Clean Air Acts in cases of particular public interest. See more closely Beier (1999), p. 263-264 and Saunders (2002), p. 445-448.

458 However, although dependency patent situations may relate to competition-related concerns, this has not been an expressed justification for the Section 46 of the Finnish Patent Act. There is practically no relevant case law interpreting this provision. This means that such justifications have not been elaborated in case law either. See also T. Mylly et al. (2005), *passim*.

“The proprietor of a patent for an invention whose exploitation is dependent on a patent held by another person may obtain a compulsory licence to exploit the invention protected by such patent if deemed reasonable in view of the importance of the first-mentioned invention or for other special reasons.”

The proprietor of a patent in respect of which a compulsory licence is granted under subsection 1 above may obtain a compulsory licence to exploit the other invention unless there are special reasons to the contrary.”

Enabling compulsory licenses for the exploitation of dependency patents is an important pro-competitive aspect of patent law, as it enables the utilisation of “high profile” derivative inventions even if the owner of the first patent refuses to license. Compulsory licensing for the exploitation of a dependency patent thus furthers dynamic competition, rivalry in innovation. To be more specific, it furthers high profile derivative innovation as not all derivative innovation benefit from the possibility of compulsory licensing based on a dependency patent situation.⁴⁵⁹ Furthermore, the availability of a cross-license avoids the risk that the owner of the second patent obtains a decisive competitive advantage *vis-à-vis* the owner of the first patent. Finally, the resulting duopoly may enhance price and quality competition.⁴⁶⁰

However, determining what could constitute *an important technical advance of considerable economic significance in relation to the invention claimed in the first patent* may be increasingly difficult to predict and determine, as there is by definition no existing information about the economic significance of the junior invention which could not have been exploited in the presence of the senior patent. On the other hand, the value of the first patent may reside not on its technical advance, but on market developments, such as network efforts and tipping, or standardisation efforts. It may be difficult to insulate afterwards the economic value produced by the technical advancement of the patented invention as such from such market developments. Consequently, it seems that the consideration of the first patent owner’s market position could produce surprising results. If the first patent constitutes an essential patent inside an important interoperability standard,⁴⁶¹ its economic significance would likely be high in relation to any invention claimed in the second, dependent patent. The same applies for a patent constituting the core of a systems technology towards which the markets have tipped. Thus, paradoxically, the more market power the first patent produces, the less likely it seems to be that the dependency patent ground of compulsory licensing could alleviate the competition-related problems present.

It furthermore seems likely that compulsory licensing based on a dependency patent situation does not apply where a new process is invented to produce a product enjoying product patent protection, even if the new process would represent *an important technical advance of considerable economic significance*. A comparison between a patented process and a patented product could not produce the information needed for this purpose in the first place. As Article 31(1) of the TRIPS Agreement requires an important technical advance of considerable economic significance *in relation*

459 See also Ghidini (2006), p. 38.

460 See also Ghidini (2006), p. 37-39 and Ghidini & Arezzo (2005), p. 160-163.

461 Standards are treated subsequently in chapter 7.

to the invention claimed in the first patent, such compulsory licensing would likely not be tolerated under the dependency patent ground. Hence, without revising the TRIPS Agreement and the comparable national and regional provisions accordingly, such a dependency situation could only be addressed by other compulsory licensing grounds, such as public interest ground.⁴⁶²

In more general terms, the dependency patent ground for compulsory licensing could not typically be used to address competition-related concerns beyond enabling important enough sequential innovation. Concerns of complementary, system-based innovation or allocative or productive efficiency could not easily be channelled through the dependency patent ground of justifying compulsory licensing. This ground for compulsory licensing is thus restricted to the relatively atypical scenario of sequential, but radical enough invention which constitutes *both* dependency *and* an important technical advance of considerable economic significance with regard to the first patent. As such, however, it could solve some of the problems similar to ones addressed with the doctrine of reverse equivalents, treated previously. Yet, as argued, compulsory licensing and the doctrine of reverse equivalents serve partially different functions and could thus be applied cumulatively.

Non-working

Compulsory licensing in case of non-working of a patent developed from the compulsory working requirement and the need for a compromise with the anti-patent free trade movement, combined with protectionism emerging in late Victorian Britain. Once the specification supplanted the working requirement as the main consideration for the patent grant and patents were increasingly seen as property rights instead of privileges in the late eighteenth century Britain, the courts became reluctant to require the proprietor to work his invention. Instead, compulsory licensing for non-working of a patent became the new compromise solution, surprisingly connecting the protectionist interests with the free trade sentiments of the anti-patent movement.⁴⁶³ However, countries with an export-oriented economy, such as Germany and the US, have rejected the national obligation to work patents and compulsory licensing on this basis.⁴⁶⁴

Article 21(1) of the proposed Community Patent Regulation enables compulsory licensing for non-working. The Council has modified also this provision. The modified Proposal reads:⁴⁶⁵

“The Community Patent Court may grant a compulsory licence for lack or insufficiency of exploitation of a Community patent to any person filing an application four years or later after the patent application was filed and three years or later after the patent was granted if the patent proprietor has not exploited

⁴⁶² See also Ghidini (2006), p. 29-30. A compulsory license could be grounded for example because the new process is a considerable improvement in terms of environmental protection.

⁴⁶³ See more closely Brand (2007), p. 219-228; Beier (1999), p. 262-265 and Saunders (2002), *passim* (concentrating on US law).

⁴⁶⁴ See Beier (1999), p. 263-264.

⁴⁶⁵ See the revised text: Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent, dated 8 March 2004.

the patent in the Community on reasonable terms or has not made effective and serious preparations to do so, unless he provides legitimate reasons to justify his inaction. In determining the lack or insufficiency of exploitation of the patent, no distinction shall be made between products originating within the Community and imported products.”

Compulsory licensing for non-working is important, as it connects the exclusivity of the patent to the fulfilment of the functions of the patent system: technological development. Even if the original reasons for the non-working ground for compulsory licensing have been predominantly protectionist, the modern reasons relate to the prevention of technology suppression and abusive inhibition of other technological development through techniques like fencing and blocking competitors through aggressive patenting and patent litigation.⁴⁶⁶ Typically, such instances may involve an attempt to preserve the (dominant) position of the patent owner based on the utilisation of pre-existing technology.⁴⁶⁷ For this reason, non-working as a ground for compulsory licensing can often be connected to competition-related considerations and the application of competition law.

It is thus theoretically possible that this ground for compulsory licensing could be used to address offensive exercise of patents whereby the patented technology is only used for holding out of others or for the extraction of supra-competitive profits. Yet, the current widely dispersed practices of defensive and offensive patenting⁴⁶⁸ connote that tailoring this ground of compulsory licensing to address the most harmful of these practices only would be very difficult in practice.⁴⁶⁹ Moreover, the patent owners could avoid relatively easily compulsory licensing for working the invention themselves to some extent or by granting one entity a license to do so. Patent owners could justify relatively easily their inaction with vague business reasons, such as financial, technological or competitive uncertainty or various delays in the realisation of business plans. Thus, this ground for compulsory licensing could not adequately address the problems related to patented standards and refusals to license essential patents, for example. In these instances, the patent owners also typically produce themselves, or at least have licensed some parties to do so. Hence, the working requirement is typically easily satisfied.

⁴⁶⁶ See also *Brand* (2007), p. 219 and *Saunders* (2002), *passim* (concentrating on the aspect of technology suppression).

⁴⁶⁷ Instances of technology suppression are not only urban legends or theoretical possibilities, but existing reality in many instances. See more closely *Saunders* (2002), *passim*.

⁴⁶⁸ The European Commission is also concerned of unused patents. See *An Industrial Property Rights Strategy for Europe* (2008), at p. 7, where the Commission says that it will study the extent of possible problems with unused patents, including evaluating their causes and suggesting remedies.

⁴⁶⁹ *Saunders* (2002), at p. 418-419, suggests that “*the best evidence of harmful patent suppression is nonuse, coupled with refusals to license, followed by an aggressive policy of bringing infringement suits against any competitor that attempts to patent or market a competitive technology*”. Such conduct would suggest that the patent owner has decided to forego use of the patent and the opportunity to make profits through licensing.

Compulsory Licensing and Competition-Related Concerns

In practice, the granting of compulsory licenses for any permitted purposes seems to be now very rare in most of the European Union member states from where information is available.⁴⁷⁰ For example, in Finland there has been only one case before courts dealing with compulsory licensing of patents.⁴⁷¹ In Germany, since 1950 no compulsory licenses have been granted by final judgement. This international trend has led some commentators to argue that the institution of compulsory licenses has lost its practical significance in industrialised countries.⁴⁷² Thus, the extent to which the theoretical availability of compulsory licenses under patent laws could induce or encourage voluntary licensing by lessening the bargaining position and market power of the (first) patent owner, may be negligible.⁴⁷³ Moreover, although the TRIPS Agreement permits it, the courts seem to be reluctant to interpret the compulsory licensing provisions from the perspective of competition-related concerns. The relatively recent *Interferon-gamma* -decision⁴⁷⁴ from Germany is particularly illustrative. Its central outcomes will be explained briefly below.

In the *Interferon-gamma* -judgement, the German Federal Supreme Court (*Bundesgerichtshof*) opined that the public interest necessary for compulsory licensing under patent law in Germany could not be satisfied:

“merely on the basis of the exclusive position enjoyed by the patent holder, even if the latter enjoys an actual monopoly on the market. As a reward for the publication of his invention and the efforts, risk and costs involved, the patent holder is granted by law an exclusive right which he is able to exploit irrespective of the competitive position.”

The Court continued that for this reason:

“public interest can only be affected if there are particular circumstances that subordinate the unrestricted recognition of the patent holder’s exclusive right and interests to the interest of the general public in the exploitation of the patent by the party seeking a license. Only then is there justification for a major impairment of the patent holder’s rights against his will in the form of a compulsory license”.

The Court interpreted there to be changes in attitudes towards compulsory licensing which connoted that the older case law was not automatically applicable in the determination of public interest. The older case law in Germany had found public

470 See e.g. Koelman (2006), p. 835 (generally); Cornish & Llewelyn (2007), p. 301 (UK); Hilty & Geiger (2005), p. 641 (Germany and France); Beier (1999), p. 259-260 (Germany) and T. Mylly *et al.* (2005), *passim* (Finland). Ghidini & Arezzo (2005) and Ghidini (2006), *passim*, do not provide any recent case law from Italy either.

471 See Bruun (2001), p. 87.

472 Beier (1999), p. 259-260.

473 Cf., however, with M. Levin (2007), p. 318 and Ghidini & Arezzo (2005), p. 163, who seem to place great practical and theoretical significance for this possibility.

474 *Interferon-gamma*, Decision of 5 December 1995, X ZR 26/92 (*Bundesgerichtshof*), translated into English in International Review of Intellectual Property and Competition Law, vol. 28, issue 2/1997, pp. 242-250.

interest in cases of danger to entire sectors of industry, to prevent the closure of businesses or large-scale redundancies, to increase operational safety, to promote the health of the general public or to guarantee the uninterrupted supply of electrical energy.

The special circumstances capable of still justifying the public interest were first of all seen to exist in case of abusive exploitation of patent rights. In addition to this, there may be other circumstances justifying the grant of a compulsory license, “*particularly of a technical, economic, socio-political and medical nature*”. The Court emphasised the importance of case-by-case analysis and the balancing of the patent holder’s interests against all the other relevant points of view concerning the interests of the general public. As the grant of a compulsory license was seen by the Court to constitute “*a significant encroachment on the patent holder’s legal and constitutionally protected rights*”, the balancing of interests must be subjected to the principle of reasonableness. This led the Court to the conclusion that a compulsory license cannot be granted in a pharmaceutical if the public interest can be satisfied with other “*more or less equivalent alternative products*”. The discovery of new uses for a patented product that affects the medical care of the population was not seen to fulfil the public interest criterion, even if the licensee had obtained a dependent use patent. The Court argued that the extension of the product patent to the application not disclosed by the defendant patent holder is the result of absolute protection for a substance invention intended by the legislature. Thus, reflecting such argumentation and the noted changes in the attitudes, the Court saw no possibility for a compulsory license based on public interest.

The German court’s reluctance to internalise competition-related considerations within patent law and within the concept of public interest required for compulsory licensing, in particular, is remarkable. The *Interferon-gamma* -case can be contrasted to the more recent *Standard-Spundfass* –decision of the same court.⁴⁷⁵ There the Federal Supreme Court applied German competition law to find a discriminatory refusal to license a patent within a standard as prohibited abuse. The Court stated that compulsory licensing under patent law and competition law serve two different purposes.

Under patent law, the required special or particular circumstances, which could satisfy the public interest criterion, depend on the individual instance where a certain entity is applying for a compulsory license. Whether the public interest is in favour of such an entity depends on the weighing of patent holder’s interests against all the other relevant points of view concerning the interests of the general public. On the other hand, under competition law the licensing claim serves to enforce the generally applicable prohibition of abusing a dominant position. The Court continued that the public interest under patent law does not necessarily comprise competition-related

⁴⁷⁵ *Standard-Spundfass*, Decision of 13 July 2004, KZR 40/02 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 36, issue 6/2005, pp. 741-754. See also *Orange-Book-Standard*, Decision of 6 May 2009 (*Bundesgerichtshof*), KZR 39/06 (Germany).

concerns as these are taken into account under competition law.⁴⁷⁶ Thus, the existence of the possibility to compulsory license under patent law does not affect the possibility to licensing claims under competition law. Conversely, the abuse of a dominant position under competition law is neither a necessary precondition nor sufficient in and of itself for granting a compulsory license under patent law.

As the two cases from the German Federal Supreme Court demonstrate, compulsory licensing claims under patent law and competition law can be seen to serve – at least partially – different purposes. Whereas compulsory licensing under patent law is restricted in its effects to the *individual instance* where a certain entity is seeking a compulsory license, compulsory licensing under competition law may lead to an obligation to grant a license to *all* interested market participants, subject to some qualifying criteria. The requirement in Article 31(a) of the TRIPS Agreement, that compulsory licensing under patent law must be considered on individual merits connotes that each application for a compulsory license must undergo a process of review to verify whether it meets the general criteria for the granting of a license.⁴⁷⁷ Under competition law, no such requirement exists. Should the refusal to license an additional entity constitute the once established abuse of a dominant position the patent holder has a positive obligation to license to avoid the continued or recurring breach of competition law.

Nevertheless, the TRIPS Agreement does not block developing competition-oriented compulsory licensing under patent law. This is well recognised in Article 31(k) of the TRIPS Agreement, which provides exceptions from some of the compulsory licensing conditions when the ground for compulsory licensing is to remedy an anticompetitive practice. Furthermore, Article 5A(2) of the Paris Convention confirms that compulsory licensing under patent law is possible “*to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent.*”

Taken together and when connected to Article 8(2) of the TRIPS Agreement which also enables the regulation of abusive practices, these provisions could constitute a ground functioning on the international level upon which courts and administrative

⁴⁷⁶ The Court noted that only in the field of semiconductor technology Section 24(3) of the German Patent Act states that a compulsory license can be granted for a patented invention only if this is necessary to eliminate the anticompetitive conduct of a patent holder that has been ascertained in court or administrative proceedings. From this, the Court made the conclusion that it is only in this one particular case where the patent law remedy of compulsory licensing is made dependent on the additional establishment of an inadmissible restraint of competition (“*Damit wird (nur) für einen besonderen Fall die patentrechtliche Zwangslizenz zusätzlich von der Feststellung einer unzulässigen Wettbewerbsbeschränkung abhängig gemacht*”). – However, Article 31(c) of the TRIPS Agreement, which the German Patent Act here implements, does not exclude reliance on competitive grounds for compulsory licensing under patent law, as demonstrated by Article 31(k) of the TRIPS Agreement. As noted before, Article 31(c) merely restricts compulsory licensing in the case of semiconductor technology to public non-commercial use or to remedy a practice determined to be anticompetitive. Thus, from Article 31(c) one cannot make an *e contrario* conclusion that competition-related concerns would be excluded from the possible grounds of compulsory licensing in other instances.

⁴⁷⁷ See also UNCTAD-ICTSD (2005), p. 468.

agencies in Europe could develop doctrine based on the national or Community compulsory licensing provisions. Institutional solutions could be devised to ensure that each new application for a compulsory license on competition-related grounds is “*considered on its individual merits*” as required by the TRIPS Agreement. Such a development would be welcomed, as it would ideally alleviate the pressure now put on the application of competition law. It would also ideally inform the specialised patent community – the patent authorities and courts above all – about the competition-related problems connected to patents post grant. This could enhance the preparedness of the patent community to analyse patent law from the perspective of competition.

The above indicates that the question whether competition-related concerns should be brought under the compulsory licensing provisions of patent law or remain the exclusive domain of competition law is also a question of institutional appropriateness and the desired consequences of institutional choices. Specialised competition law authorities and courts have the expertise and experience in handling market power and competitive constraints. They are used to economic and market analysis and are typically not hesitant to immunise any areas of law from even relatively far-reaching application of competition law. Competition law affects in any case the scope of property rights on competition-related grounds. Specialised patent authorities and courts, on the other hand, tend to constitutionalise patent law from within and more eagerly immunise the exclusive rights of the patent proprietors. These institutional differences based on different keys for constitutionalising patent law are visible in the long-lasting trend of courts in Europe and the US to restrain from compulsory licensing under patent law for any grounds, and the continuing practice of competition law authorities and courts (at least in Europe) to enable compulsory licensing for competition-related grounds.

The question of institutional choice can be reflected in the framework of the Proposal for Community Patent Regulation. The Commission’s original Proposal included Article 21(3), according to which the *Commission* could authorise the exploitation of a Community patent when it is necessary to remedy a practice determined after judicial or administrative process to be anticompetitive. However, this provision was deleted with the transfer of compulsory licensing authority to the Community Patent Court, a specialised patent court attached to the General Court (ex. Court of First Instance).⁴⁷⁸ Likewise, Recital 6 of the proposed Regulation was modified accordingly. The original text of the Recital stated:

“Any negative effects of a monopoly created by a Community patent should be prevented through a system of compulsory licences. The Commission should therefore be given decision-making powers in this matter. Commission decisions are subject to appeal under Article 230 of the Treaty before the Court of First Instance of the European Communities and before the Court of Justice of the European Communities.”

478 See Preparation of the meeting of the Council on 11 March 2004: Proposal for a Council Regulation on the Community patent (revised text), dated 8 March 2004.

The modified text agreed by the Council in turn reads:

“Any negative effects of a monopoly created by a Community patent should be prevented through a system of compulsory licences. This is without prejudice to the application of Community competition law by the Commission or national authorities. However, the Community Patent Court should be entrusted with the grant of compulsory licences in situations not falling under Community competition law.”

Thus, by transferring the decision-making power over compulsory licensing from the Commission to the Community Patent Court, the competencies between the Commission and the Patent Court were clearly demarcated. Compulsory licensing falling under competition law belongs to the exclusive province of the Commission (and the national competition authorities) and is excluded explicitly from the compulsory licensing powers of the Community Patent Court. This institutional arrangement is likely to exacerbate the exclusion of any competition-related considerations from compulsory licensing under patent law. The Community Patent Court will characteristically be a specialised patent court without jurisdiction to grant compulsory licenses in situations falling under Community competition law. For this reason, it will probably abstain from any considerations and argumentation reminiscent of competition law.

Despite the typical formulation of the actual compulsory licensing provisions in the Commission's original proposal, the grounds given by the Commission for compulsory licensing were largely based on antimonopoly and abuse of rights considerations. In addition to Recital 6 of the proposed Regulation quoted above, this was visible in the grounds given for individual Articles, where under Article 21 of the Proposal the Commission stated that “[t]he system of compulsory licences is designed to provide guarantees against abuses of the rights conferred by the patent”. For the reasons stated above, the first sentence of the modified Recital 6 alone is unlikely to guide the Community Patent Court towards basing any of its compulsory licensing interpretations on antimonopoly or abuse of rights considerations. These concerns are explicitly left for Community competition law and competition authorities.

Conclusion

It is evident that compulsory licensing under patent law does not adequately control the economic and informational power produced by patents. Compulsory licenses are not granted in practice and the conditions for their granting are generally not based on competition-related grounds. On an international level, the overlaps of protection may lead to a situation where compulsory licensing of a patent is in theory possible, but would be useless because of data exclusivity, for example.⁴⁷⁹ The potential of the compulsory licensing provisions, in the light of their historical origin and wording, to develop into instruments capable of also addressing market power concerns,

⁴⁷⁹ See *Sell* (2007), p. 61, noting that to require the patent owner's consent for marketing approval (data exclusivity) for a patented item connotes that it will be almost impossible to use compulsory licensing as otherwise authorised by the TRIPS Agreement.

has largely been missed. Thus, the patent law institution seems to leave – also with regard to compulsory licensing – the concerns related to economic and informational power intentionally for the application of competition law. On the European level, this development is also confirmed by the modified Proposal for Community Patent Regulation. At the same time, the practical absence of compulsory licensing under patent law seems to reflect a functional hierarchy of societal values, whereby the preservation of competition ranks highest as a value capable of restricting the exclusivity of patent rights.

The values inherent in the compulsory licensing provisions of patent laws have not vanished, however. In the absence of compulsory licensing taking place under patent law in the industrialised countries, these values may become relevant in the application of competition law, where *de facto* compulsory licensing is still possible. Article 31(k) of the TRIPS Agreement that treats compulsory licensing based on competition-related grounds more leniently when compared to other causes, strengthens this conclusion. It is thus feasible that non-working or dependency patent situations could become constructed as instances of competition law application, provided it is possible under competition law.⁴⁸⁰ Likewise, it is not excluded that also some other grounds for compulsory licensing become litigated under competition law. For example, many of the historical public interest grounds mentioned in the *Interferon-gamma*-decision above (danger to entire sectors of industry, to prevent the closure of businesses or large-scale redundancies, to increase operational safety, to promote the health of the general public or to guarantee the uninterrupted supply of electrical energy) could well be connected to the current or historical functions and objectives of Community competition law.

Moreover, in the absence of legislative or interpretive reform under patent law, concerns related to freedom of information and communication may become the emerging new instances of public interest connected to the application of competition law. For example, questions like access to essential patents underlying important communications standards or systems technologies may be seen not only as instances of providing competitors access to essential facilities necessary for rivalry or economic efficiency, but also as instances of securing communicative diversity or plurality of information. Such hidden potential of competition law will be elaborated in more detail in the following chapters 6 and 7, in particular.

5.4.5 Conclusions on Patent Law

At the time the patent law institution was established, invention was a matter of individual tinkering. The inventor's energy and financial resources limited the

⁴⁸⁰ For treatment of non-working and technology suppression in US antitrust law see *Saunders* (2002), p. 434.

possibilities to monopolise an industry.⁴⁸¹ Now multinational enterprises compete, patent and produce on a global scale. Inventive activities have evolved from local tinkering towards the industrial revolution, internationalisation and later globalisation of the economy. Patent law has had to face unprepared the data-technical and communications revolution of the late 20th and early 21st centuries as part of the ongoing transformation from the industrial to networked information society. It has assumed in these developments a role not anticipated by its historical concepts and doctrines. It could convey power not only over individual technological trajectories, but increasingly also over services and structures of communications.

To avoid the patent institution becoming a device for the generation of uninhibited technological and informational power on a global level it must comprise effective internal and external safeguards capable of preventing the emergence of such excessive power in the first place. When such excessive power emerges nevertheless due to network effects, standardisation or similar reasons, there should be adequate instruments within both patent laws and other legislation for addressing the undesirable effects of such power.

As the patentability threshold is connected to the scope of patents through the obviousness-criterion, it seems that patent law is easily entrapped in either producing too many rights with low threshold of non-obviousness or fewer but too broad rights with high threshold of non-obviousness. Having too many rights granted for insignificant contributions may lead to excessive patenting in the hope of securing with several patents the result achievable with one, broadly construed patent. Taking into account the costs of patenting and the ensuing transaction costs caused by multiple patents, the merit of this solution is questionable.⁴⁸² Lowering the patentability threshold would mean that sectors characterised by incremental development and the presence of small and medium-sized operators would be subjected to patenting, as not patenting would risk the entrepreneur being excluded from its markets.

The end-result caused by the increased costs of patenting and patent enforcement, as well as the fragmentation of multiple patent rights, could well be consolidation, concentration and homogenisation of the markets once characterised by a plurality of market actors. On the other hand, the alternative of high threshold of non-obviousness results in fewer rights, but reserves for the patent owner not only one technological solution but potentially the future evolution of the technology. Basic technological principles could be monopolised, resulting in negative effects on freedom of science and private control over technological trajectories affecting communications and freedom of others.

The way out of these dystopian alternatives could be based on exclusions from patentability, doctrines and principles limiting patent scope without recourse to the obviousness-test and the development of exceptions and limitations to patent rights. Patent law should be reconstructed from the perspective of fundamental rights and

481 See *Mansfield* (1968), p. 71.

482 Cf. with *Ghidini* (2006), p. 33-35, who favours this approach.

democratic effects and applied contextually. Especially where the sector and case at hand involves core systems technologies affecting communications and entrepreneurial and inventive activities on a broad scale such alternative systematisations could produce important insights complementing the more traditional dogmatic systematisations or systematised constructions of patent law based on economic analysis.

Yet, *patentability* has followed the transformations of capitalism by extending patent protection to new subject-matters whenever they have started to emerge as commercially significant even when there have been explicit statutory exclusions to the contrary, like in the case of computer programs. In conformity with the structural proprietary bias, such flexibility and adaptation of patent law has not enabled sector-specific abstentions from protection when exclusivity is not necessary. Following this logic, the societal significance of information technology – the fact that inventions within these areas “*penetrate most branches of society*” has merely demonstrated for the patent-granting authorities the need to extend patent protection accordingly as it “*leads to very valuable inventions*”. At the same time, formalistic instruments neutralising the politics of the patentability question have developed. The notion of technical character, in particular, turns the issue of patentability into a seemingly neutral question of engineering: determination of whether the subject-matter falls under the category of technological.

Although national traditions continue to differ, the interpretation of the scope of patents presents similar overall logic of expanding protection, as demonstrated by the renewals to the EPC-system and the recognition of the doctrine of equivalents on the European level. Like with the criterion of technical character for patent eligible subject-matter, the notions of “*fair protection for the patent proprietor*” and “*a reasonable degree of legal certainty for third parties*” are substantially empty categories, mere labels to be attached to outcomes reached some other ways. The limiting doctrines of patent scope are underdeveloped and incoherently applied on the European level. Moreover, any theoretical premises available when constructing patent scope (except the prevailing legal positivism with a proprietary twist) are weak. Evolutionary theories seem to provide a usable model anchored in institutional economics, but so far lack institutional support in patent case law and doctrines. Although some limiting doctrines exist on national level in European countries, the possibilities to facilitate a decentralised model of invention and competition under the current regulatory framework are not sufficient.

In any instance, as the narrow interpretation of patents typically seems to lead the patentees to introduce uncertainties and vague language in the patent claims and the patent authorities to accept these, or to multiple patents instead of one broader covering the entire technical area, there is no easy way out of too broad patent protection. Taken as a whole, this leads to greater market and informational power of patent holders. The approach favoured here, the integration of constitutional and democratic considerations in the determination of patent scope on a contextual basis should be further developed in legal scholarship. To improve the likelihood of such an alternative theoretisation to have any effects on the institutional practices, it could be connected to supporting considerations emanating from other systematisations. For

example, evolutionary economics could be utilised to provide additional support for the proposals made.

Finally, even though some interpretations of important limitations and exceptions to patent exclusivity, such as the experimental use exception, illustrate the potential of patent law to accommodate relatively many-sided considerations, the inherent doctrines and provisions of patent law do not function ideally. The three-step test and compulsory licensing provisions as written in the TRIPS Agreement censor possibilities for reform and possibly even the application of certain existing exceptions. Moreover, the absence of compulsory licensing practice and the insulation of competition policy interests from the possible grounds of compulsory licenses both on national and European levels testify that the power created with patent law is consensually left for other legal institutions, and the application of general competition law, in particular.⁴⁸³

As will be argued subsequently in more detail, the limitations and exceptions to patent law (and to intellectual property generally) should not be interpreted narrowly as a general rule. The limitations and exceptions often advance interests related to fundamental rights and collective goods. They may also have the function of enabling workable competition needed for the realisation of the objectives of exclusive rights or of securing the presence of scientific and cultural commons being a pre-requisite for invention and creation. Systematisations and theoretical models based on constitutional law and economic analysis alike could thus imply the need to renounce rigid interpretive premises based on the idea of narrow interpretation of limitations and exceptions to exclusive rights.

5.5 Concretisation II: Copyright and Related Protection

5.5.1 Introduction

Like patent law, copyright has its roots in the medieval privilege-system of Venice: modern copyright was first anticipated there by the fifteenth-century printing privileges. Before the invention of printing, there was no need for exclusive rights or literary property. Copying itself was a form of art, required considerable skills and expertise, and was a very time-consuming process. Even though most privileges were given to printers, and soon assumed the function of censorship, some were issued to authors. Originally, this reflected honouring or rewarding services for the crown, as well as the medieval conflation of writing and the reproduction of writing under

⁴⁸³ Thus, the statement made by Ghidini (2006), at p. 14, that the patent system “*manifests a rich dialectic interrelationship between the need to guarantee a differential return on activities and investments poured in R&D, and the need to safeguard the actual chance of third parties’ subsequent innovation and thereby the competitive fabric of the market(s) concerned*”, is not agreed upon. The patent system may contain the seeds for such a development (e.g. in the compulsory licensing provisions), but the recent trends and practices of patent law rather indicate that it remains a dormant potential.

the general concept of making books. Yet, with all probability, the first public edict in Europe intended to secure the interests of authors also originates in medieval Venice.⁴⁸⁴

As with patents, the system of printing privileges spread to other European countries in the sixteenth century. A similar pattern emerged throughout Europe. The printers and publishers formed powerful guilds and asked for protection against unauthorised copying of their editions. Their interest to control the book markets through monopolies in printing coincided with the public authorities' interest to control public discourse within their territories: the invention of printing and trade in books together constituted a novel situation, where there was a new, effective means of making information available to the people.⁴⁸⁵ Hence, public authorities started to issue exclusive privileges to print certain writings, a number of works or a class of works for limited times to printers and publishers, and sometimes to authors.

The building blocks of what is now called copyright were subsequently developed in England. Common law copyright can be seen to have emerged from the system of printing patents based on the royal prerogative,⁴⁸⁶ as well as from the by-laws and practices of the English Stationers' Guild in the late 15th and early 16th centuries, protected by the Stationers' Company's monopoly on printing. The latter was based on a royal charter of 1557. Thus, also in England the original constituents of what later became to be known as common law copyright were by-products of a regime of regulation based on book trade, privilege-type monopolies and censorship.⁴⁸⁷ Hence, the early stages of the copyright's formation were not motivated by rewarding authors for their labour or incentivising creation, which are depicted as the main functions and societal justifications of copyright in the current mainstream copyright jurisprudence.

However, the Statute of Anne from year 1710, the first Parliamentary English copyright act, granted temporally and substantively limited exclusive rights to authors, and had the expressed aim of inducing learning, writing and publication of new books.⁴⁸⁸ Although the Act enabled the acquisition of copyright for persons other than the author, only the author did not have to purchase the right and only the author was permitted to renew the fourteen years original term of protection.⁴⁸⁹ The term of protection built on the model provided for by patents for mechanical inventions and

484 See more closely *Rose* (1993), p. 9-11 and 20.

485 See *Davies* (2002), p. 20 and *Rose* (1993), p. 9-16.

486 See more closely *Patterson* (1968), p. 78-113.

487 See *Ibid.*, p. 20-150; *Sherman & Bently* (1999), at p. 11-42 and also *passim*, *Rose* (1993), p. 1-48, *Davies* (2002), p. 28-33 and *Samuelson* (2002), p. 66-67.

488 See *Laddie et al* (2000), p. 51-56 and also *Samuelson* (2002), p. 67. As *Sherman & Bently* (1999), at p. 207, write, reflecting the increasingly autopoeitic nature of law and the increasing influence of legal positivism, Statute of Anne became to be seen as the genesis of copyright law. Yet, in their interpretation there was in England no (modern) copyright law, as understood today, until the middle period of the 19th century. See also *Patterson* (1968), *passim* (also emphasising that Statute of Anne should be seen as a continuation of previous developments).

489 See *Patterson* (1968), p. 13 and 146.

thus also the old English Statute of Monopolies.⁴⁹⁰ This borrowing reflected a more general pattern; cross-fertilisation between all areas of intellectual property protection, now understood as neatly separated categories of intellectual property law.⁴⁹¹ The Statute of Anne was also the first copyright statute unconnected with censorship. It enabled the gradually emerging view of copyright as property; comparable to physical objects of property ownership, but at the same time enabled the gradual removal of copyright from the sphere of natural rights, instead giving copyright a legal-positivist quality, which subsequently demarcated it from Continental copyright.⁴⁹² Although the Statute excluded from its coverage books in foreign languages,⁴⁹³ it contained in other respects many of the functions and principles of modern copyright. The Statute ultimately became a model greatly influencing copyright law throughout the world. In particular, it is considered as the direct ancestor of US copyright law.⁴⁹⁴

What were the factors resulting in the transition to an author-centric copyright? Important contributions in England by *John Locke*, *Daniel Defoe* and *Joseph Addison* had argued in favour of recognising the rights of the authors and thus contributed to the general discussion, and ultimately to the final contents of the Statute of Anne, too.⁴⁹⁵ Furthermore, the stationers lobbied for enacting the Statute in the form of providing perpetual copyright, as this could have provided them with monopolistic positions similar to the ones lost with the abolition of the licensing system.⁴⁹⁶ However, perhaps equally importantly, when enacting the Statute of Anne, the Parliament in England was concerned about stationers' monopolies and their potential to regain their positions preceding the repletion of the licenses, through the new proposal.⁴⁹⁷ Thus, placing the author in the centre of the law could have been partially instrumental in the ideological and political resistance of monopoly. The transformation of copyright from the system of privileges to an author-centric system of limited exclusive rights also overlaps with the gradual ending of absolute monarchy in Europe. In this transformation, the monarch as the source of the right to prohibit unauthorised copies was thus replaced with the author himself.⁴⁹⁸

It is often emphasised in comparative literature that in Continental European copyright tradition, copyright is traditionally understood from the perspective of natural law, whereas in the countries of the common law tradition the economic and

490 *Rose* (1993), p. 45.

491 See *Sherman & Bently* (1999), *passim* and at p. 214, explicitly.

492 See *Burkitt* (2001), p. 153.

493 *Davies* (2002), p. 12.

494 See e.g. *Patterson* (1968), p. 7 and *Davies* (2002), p. 5.

495 *Rose* (1993), p. 34-44.

496 See also *Patterson* (1968), p. 147 and *Burkitt* (2001), p. 149.

497 See *Patterson* (1968), p. 13-17; 147 and 150 and *Rose* (1993), p. 47.

498 *Davies* (2002), p. 23.

social arguments are said to constitute the primary grounds for protection.⁴⁹⁹ The *droit d'auteur* –tradition would thus be based on natural property and the author's legal control over it, whereas the Anglo-American copyright tradition would be based on the notion of monopoly.⁵⁰⁰

Yet in *France* the authors' rights, as they emerged from the French Revolution, were not likely as personalist in nature as often depicted, but also inspired by instrumental and economic considerations. The often referred to absolute character of the author's property right concerned unpublished works only. Concerning published works, the revolutionary decrees protected foremost the interests of publishers and disseminators. Moreover, the 1791 decree intended to enlarge the public domain by repealing the monopoly of the Comédie-Française and by declaring the right of all citizens to establish theatres and produce plays. Authors' rights were adjunct to these freedoms. Also in the 1793 decree authors' rights were seen from the broader perspective of public education. What this implicated in practice was that the French revolutionary decrees were, in addition to being concerned about the authorial rights, at least equally concerned about the interests of publishers and disseminators by creating for the stationers and theatrical companies a legitimate basis against piracy or infringement post disclosure, as well as about education and monopolies in the distribution and dissemination of works.⁵⁰¹

In *Germany*, in turn, the evolution of copyright from the granting of printing privileges to printers and publishers towards recognising the rights of the authors took a longer time when compared to England or France: in the early 18th century, the author still did not have any rights in his work. The first modern copyright law, the Prussian Law of 1837, was perhaps as much a product of book trade as a legislative materialisation of German philosophers', *Fichte's*, *Kant's* and *Hegel's* above all, thoughts on the natural rights of authors.⁵⁰² Like in France, the natural law basis of German copyright law rather grew gradually in the course of subsequent legislative and case law developments.⁵⁰³ Thus, in a historical perspective authorship, originality, natural rights of authors, literary and artistic property, as well as the perceived need to incentivise new creation for utilitarian reasons, are very recent phenomena throughout Europe, as are the modern copyright laws and ultimately the concept of copyright itself as a distinct, now archetypal and taken-for-granted category of intellectual property rights.

Despite the early history of copyright being strongly connected to the facilitation of book trade, establishment and regulation of publishing monopolies, control of

499 See e.g. *Grosheide* (1994), *passim*; *Strowel* (1994), *passim* (also noting that it is not possible to reduce either *droit d'auteur* to principles of property or copyright to ideas of monopoly, *ibid.*, at p. 239) and *Davies* (2002), p. 17 (also noting that the differences should not be overexaggerated) and *Burkitt* (2001), *passim*.

500 See also *Strowel* (1994), p. 236-237.

501 See more closely *Ginsburg* (1994), p. 143-158; *Burkitt* (2001), p. 160-161 and *Davies* (2002), p. 139.

502 See *Geller* (1994b), p. 166-170 for an introduction to the "authorship paradigm" of copyright.

503 See in more detail *Davies* (2002), p. 179-202 and *Burkitt* (2001), p. 164-168.

public discourse and, at least in England during the enactment of the Statute of Anne, also to the resistance of strong monopolistic positions of publishers and printers, copyright is now often seen as unproblematic from the perspectives of both expression and competition.⁵⁰⁴ *In an ideal form*, copyright functions as an *engine of freedom of expression* as the exclusive rights are seen to incentivise new expression.⁵⁰⁵ Moreover, it is capable of liberating the creators from economic, political or religious patronage, *thus producing structural democratic effects*.⁵⁰⁶ It would similarly safeguard competition and entrepreneurial freedom by leaving room for alternative and derivative expression.⁵⁰⁷ Furthermore, an ideal copyright regime would not foster excessive concentration of copyright ownership and the related power on the markets.

The foregoing democratic potential of copyright is largely dependent on the doctrines and principles of copyright itself. The degree of originality required is thought to exclude mundane works from protection. Moreover, reflecting one of the strongest justificatory moves in the historical formation of copyright protection, the exclusion of ideas and principles from protection in accordance with the idea/expression-dichotomy allegedly leaves scope for alternative expressions and competition. Through this argumentative move concerning the scope of copyright protection, it was possible for the proponents of literary property to argue that upon publication the ideas and principles contained in a work were left in common.⁵⁰⁸ The ideas and principles underlying a work are typically said to be accessible and freely usable once a protected work is published: traditionally copyright has not regulated access to or normal use of works.⁵⁰⁹ Thus, in an ideal copyright world, only where the idea and expression merge, but copyright subsists nonetheless, the need to consider freedom of speech or the application of competition law would emerge.⁵¹⁰

The separation between the intellectual object and the material object embodying it is considered to be part of the established *quid pro quo* of copyright: the creator obtains statutorily limited exclusive rights for a limited term against the publication

504 For example, Tritton (2008), p. 467, says that it is often described as a "qualified" monopoly rather than an absolute monopoly such as patent, registered design, trademark or plant breeders' right. Cf., however with Ghidini (2006), p. 52-60, who considers copyright law to be more problematic from the perspective of competition than patent law. See also Ghidini & Arezzo (2005), at p. 172. For a historical analysis addressing these common differences in conceptualising copyright and patent law, see Sherman & Bently (1999), p. 155-156, in particular.

505 See the decision of the US Supreme Court in *Harper & Row, Publishers, Inc. v Nation Enters.*, 471 US 539 (1985), at p. 558.

506 See more closely Netanel (1996), p. 287-292 and 339-364.

507 However, as pointed out by Ghidini & Arezzo (2005), p. 167 and Ghidini (2006), p. 56-57, there is no specialised tool in copyright law which would enable derivative use.

508 See more closely Sherman & Bently (1999), p. 30-33.

509 As pointed out by Dusollier (2005), p. 201, access to works has traditionally been regulated either through the property right in the original embodiment of the work or through contracts with distributors.

510 Hugenholtz (2005b), p. 208, says that outside *sui generis* database right the need for compulsory licensing of copyright would only rise "where idea and expression merge, but copyright protection is granted nonetheless".

of the creative work and the ensuing use and access rights of the public. Furthermore, various public-interest exceptions and limitations to copyright are supposed to safeguard competition-related concerns as well as freedom of speech and other values in a balanced manner. This is also presumed in the Continental system, where the often more narrowly tailored exceptions are perceived as exceptions to the property right granted. In the common law system, in turn, the typically more flexible and open exceptions are rather regarded as limits on the grant of property.⁵¹¹

However, it seems that current copyright law has travelled far from its ideal form. It has evolved into a mechanism, the primary function of which is to reward economic investments and to protect the distribution channels and business models of corporations already controlling vast amounts of copyright-protected materials.⁵¹² It is also evident that copyright law is not neutral with regard to the creation it induces.⁵¹³ As current modes of interacting, communicating and expressing oneself often necessitate the use of copyright-protected cultural icons, images, music and stories,⁵¹⁴ copyright favours the creation of entities already in control of the stock of popular re-usable cultural items at the expense of ones needing permissions to use it.⁵¹⁵ It also appears that an expansive copyright leads to the diversion of demand from existing works: publishers typically invest in works that are close substitutes for proven, commercially successful hits. It is typically more rational for them to capture even a small percentage of the solidified mainstream markets than to take the risk of creating a new niche market.⁵¹⁶ This implies that an expansive copyright law may be prejudicial for expressive diversity.⁵¹⁷

The characteristics of information and many copyright-based markets also lead to the concentration of market power based on copyright. High sunk costs of information products, their non-rivalrous nature, uncertainty of demand and the ease of copying connote that the markets easily develop towards global oligopolies capable of mitigating the risks involved and enforcing the rights achieved. This applies even more so to markets having network effects, where the development towards one dominating technology is typical. Furthermore, copyright-dependent markets such as motion picture films present particular characteristics related to the risks involved

511 See generally about the different copyright traditions and the Anglo-American and Continental copyright traditions in particular e.g. *Davies* (2002), *passim* and *Burkitt* (2001), *passim*.

512 See e.g. *Tritton* (2008), p. 488, who says that the European Commission's approach has been to harmonise up and it has consistently repeated that more copyright is self-evidently better thing. See also *Geiger* (2008a), p. 178-183, noting two significant changes underlye copyright: copyright increasingly becomes protection of investments and technologies.

513 See *Benkler* (2001), p. 277-285 and *Netanel* (2005), p. 158-160.

514 See *Balkin* (2004), *passim*.

515 See *Netanel* (2005), p. 160, who argues that such expression comprises a prime component of the system of free expression.

516 *Abramowicz* (2004), p. 45-68 and *MacMillan* (2002), p. 488-491.

517 See also *Netanel* (2005), p. 168.

and the distribution network. These features also contribute to the formation of global oligopolies controlling the majority of culturally important copyrights.⁵¹⁸

The transformation of copyright law is a multifaceted phenomenon that can only be briefly touched upon here.⁵¹⁹ Despite international and European harmonisation of copyright, there is neither unified conception of copyright, nor harmonised doctrines of copyright within Europe. The continental tradition of *droit d'auteur*, based largely on German ideology and French practice, continues to differ from the Anglo-American tradition of utilitarian copyright.⁵²⁰ Hence, any discussion of copyright on the European level must either accommodate the differences of tradition or concentrate on the harmonised and shared parts of the doctrine. Harmonisation of copyright may also produce divergences in application when the European or international transplants (or *irritants*) are embedded in the diverse domestic copyright frameworks, with differing traditions and doctrinal developments.⁵²¹ In the following, selected European copyright doctrines and developments will be treated in order to discuss copyright's inherent problems and the challenges it faces in its relationship with freedom of competition and freedom of speech.

5.5.2 The Scope of Copyright Power I: Idea/Expression Dichotomy, Originality and Reproduction Right

Idea/Expression Dichotomy

Whereas claim interpretation should be able to determine the basic scope of a patent, the dichotomy between protectable expression and unprotectable ideas is thought to define the basic scope of copyright protection. In addition to this, the practical scope of copyright protection is affected by the existence and interpretation of exceptions and limitations to copyright, as well as the application of competition law, fundamental rights law and other applicable norms within the areas covered by copyright. The following will challenge the basic idea/expression dichotomy as understood in mainstream copyright doctrine. On one hand, the TRIPS Agreement states in its Article 9(2) that copyright protection only extends to expressions and “*not to ideas, procedures, methods of operation or mathematical concepts as such*”. The same principle is expressed in a recital and Article 1(2) of the Software Copyright Directive, for example.⁵²² On the other hand, the characterisation of the *reproduction right* in

518 See about the relationship between copyright and film *Barron* (2004) and *MacMillan* (2002), both *passim*.

519 In addition to the sources referred to above, see the contributions in *Elkin-Koren & Netanel* (2002) and *MacMillan* (2005). I have treated some aspects of these transformations in the Finnish context, See *T. Mylly* (2004) and (2007), both *passim*.

520 See generally *Burkitt* (2001), *passim* and the more detailed analysis of *Davies* (2002), *passim*.

521 See generally e.g. *Teubner* (1998), *Legrand* (1996), *Nelken* (2003) and *Legrand* (2003), all *passim*.

522 Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, OJ L 122, 17 May 1991, p. 42-46.

Article 2 of the Information Society Directive as interpreted by the European Court of Justice is broad enough to cover derivative works building on the ideas of pre-existing works, as will be discussed subsequently in more detail.

As already indicated, the idea/expression dichotomy of copyright law has been one of the major arguments for literary property in the first place. The dichotomy also plays a central role in the general justification of current copyright law: as its inherent doctrine it has the intended function of settling both the freedom of expression and antimonopoly concerns raised with regard to copyright protection. However, as is well known, the dichotomy is not very useful in demarcating the protected from the unprotected. As noted by *Sherman and Bently*, the conflicting demands of *identifying* an intangible and *abstracting* from it to enable the extension of protection to other embodiments of the work can never be satisfied fully. The vain search for the essence of a work between the concrete embodiment and abstract ideas and knowledge necessarily leads to a transcendental dimension in protection.⁵²³

Instead of being able to define the protectable work in the abstract like argued by legal dogmatic treatments of copyright, the determination of the scope of copyright protection should be context-specific. The boundary between protected and unprotected in a work should hence be affected by the actual case at hand. The demarcation is not a question *a priori*, based on the abstract deduction from the normative concept of an *idea* or protectable *work*. It is rather a question *a posteriori*, based on the comparisons between the elements of the original and the putatively infringing and other works, accompanied by constant weighing and balancing of the contextually determined interest, values and other applicable norms in a principled spirit. By explaining what types of actions come within the scope of exclusive rights, also the reproduction right as characterised in the Information Society Directive participates in the definition of what is protected in a work in an infringement situation, and thus also in the demarcation between protectable expression and ideas and principles outside copyright protection.

In practice, copyright protection extends beyond mere expression: the plot of a novel may be protected even where the dialogue and description are re-written, to take one example.⁵²⁴ What is clear under current copyright laws is that the exclusive rights protect not only against verbatim copying or against direct competition. Derivative use of a protected work or even a small part of it for non-competing purposes is also typically covered by the exclusive rights:⁵²⁵ copyright law does not make a fundamental distinction between copying others' works literally for the purpose of economic exploitation and imaginative, creative or critical use of others'

523 *Sherman & Bently* (1999), p. 55-56.

524 See e.g. *Laddie et al.* (2000), p. 97-114 and *Cornish & Llewelyn* (2007), p. 811-812.

525 See also case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported. The Court states at paragraph 47 that: "the possibility may not be ruled out that certain isolated sentences, or even certain parts of sentences in the text in question, may be suitable for conveying to the reader the originality of a publication such as a newspaper article, by communicating to that reader an element which is, in itself, the expression of the intellectual creation of the author of that article".

work.⁵²⁶ The wide characterisation of reproduction in Article 2 of the Information Society Directive tells us that the exclusive right covers “*direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part*”. As the European Court of Justice has ruled – to the surprise of many – that the Information Society Directive also harmonises the threshold of originality required for protection, the elements for determining the idea/expression dichotomy in Europe are now largely in the hands of the European Court of Justice. Based on the principles which the Court uses in its interpretations – *a high level of protection* and *legal certainty for authors* – it is likely that both individual fragments and underlying ideas would be protected.⁵²⁷

As copyright protection extends to translations and even to adaptations to other art forms, it should be obvious that the idea/expression dichotomy is not an operative one, but merely a statement of an abstract principle or a policy objective. Where does the protected expression turn into unprotected ideas cannot be answered by recourse to this dichotomy alone.⁵²⁸ By proclaiming to protect expression only, but by simultaneously extending protection beyond literal copying, copyright by necessity protects some of the underlying ideas. This is the case especially with functional objects of protection like computer programs, whereby any expression in source code has a functional purpose. However, the same applies to any derivative use not based on verbatim copying. The possibility that some of the most abstract elements underlying works can be excluded from protection does not connote that what remains is pure expression.⁵²⁹

Moreover, *operationalising* the idea/expression dichotomy has been and continues to be both practically and philosophically problematic. From a more practical

526 See *Rubinfeld* (2002), p. 53-59, suggesting that imaginative works should be free from claims for damages as well as injunction. Secondary authors should only be liable – at the most – to allocate to the copyright holder the share of the secondary authors’ profits attributable to their use of the underlying work. See also the Commission’s treatment on transformative use in *Green Paper, Copyright in the Knowledge Economy* (2008), p. 19-20. Rubinfeld’s suggestion would be very difficult to implement on a practical level: deciding what is imaginative and what exploitative, connected with the obvious difficulty of determining the attributable share to the underlying work(s), would upgrade copyright law into a new level as lawyers’ heaven. Yet, the proposal has its merits.

527 See case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported (at paragraphs 31-48).

528 See also e.g. *Koktvedgaard* (1965), p. 109-113; *Newman* (1999), at p. 703, and from the perspective of the philosophy of universals and particulars, *Powers* (2004), *passim*.

529 The difficulties of demarcating the unprotected ideas from the protected ones are well illustrated by the US case law concerning computer programs. Cf. *Whelan Associates v Jaslow Dental Laboratory, Inc.*, 797 F.2d 1222 (3d Cir. 1986) and *Computer Associates International v Altai, Inc.* 982 F.2d 693 (2d Cir. 1992). In the first mentioned case the Third Circuit assumed that a computer program could have only one idea, everything else being expression. The structure and logic of the program were thus seen as protectable subject-matter (expression) in the program. In the latter case the Second Circuit applied a so called *abstraction-filtration-comparison* (or *a-f-c*) test intended to reveal different levels of abstraction inherent in the program and enabling the comparison between the protected elements. See more closely about this case law e.g. *Lemley et al* (2000), p. 113-149, *Newman* (1999), p. 695-696 (also criticising the *Altai*-approach) and *Bainbridge* (1999), p. 83-96.

perspective, written texts, music, visual works and computer programs, among other objects of copyright protection, are formed, used and experienced differently. It may be useful to divide written texts into layers of abstraction for excluding the more abstract and general elements from protection. However, this conceptual exercise is not directly transferable into other modes of expression; devising applicable tests intended to separate the protectable expression from the unprotectable ideas universally and covering all modes of expression are doomed to fail.⁵³⁰ Finally, there is nothing in the dichotomy itself or the devised tests advising where to draw the line between protectable and unprotectable ideas even within one category of works.

From a more philosophical perspective, it is doubtful whether there could be any *original* expression (provided the threshold of originality has any significance) without it being based on the underlying ideas of how to construct and inter-relate the work's expressive elements. If original expression cannot exist in the absence of the underlying ideas, demarcating the expression from the underlying ideas may prove artificial or even conceptually impossible. Copyright law's faith in the idea/expression dichotomy is based on the fallacy that it could be easily operationalised. At least 2.500 years of continuing philosophical controversy over universals and particulars, on which the dichotomy must ultimately rely, proves otherwise.⁵³¹

Thus, it appears that demarcating the protected from the unprotected in works by simply labelling something in the work as a protectable expression and something as an unprotected idea is an *outcome* of decision-making in a concrete application situation, not its instrument. As such, the idea/expression dichotomy disguises the ultimately political nature of the decision-making and neutralises the decisional power of the judge and the politics of the legal doctrine. Where the boundary between protected and unprotected should lie depends on the decision-maker's views and the copyright doctrine's accepted truths about the purpose of copyright in incentivising or rewarding creation, on its function in securing the public domain or the freedom to utilise elements of existing works for the sake of self-realisation, artistic or entrepreneurial freedom, competitive markets, and so forth. It also depends on the views of the decision-maker and mainstream copyright doctrine about the nature and prerequisites of creativity: on the perceived need for rewarding or incentivising the creation of (some kinds of) works in the first place, and on the balancing between and valuing "original" and "derivative" creation.

Moreover, the boundary between protected and unprotected in works is affected by the existence and interpretation of exceptions and limitations to copyright, as these may either strengthen the need to filter out some elements from protection in the first place or connote that the interest to keep free can be adequately taken into account in the application of the exceptions or limitations. However, what was stated previously

530 See also Newman (1999), *passim* (pointing out for example that "one cannot divide a visual work into neat layers of abstraction in precisely the same manner one could with a text". The same applies to music and computer programs, among others).

531 See more closely Powers (2004), *passim*, who points out that the philosophical controversy over universals and particulars cannot be avoided when addressing the idea/expression dichotomy.

with regard to exceptions to patent law applies similarly to copyright: invoking an exception is always uncertain, the principles guiding their interpretation could restrict their relevance, and the international regulation of copyright may further restrict the availability of exceptions on the national and regional levels.

Originality Threshold

In the Continental copyright tradition originality is connected to individual creativity, vested in the intellectual effort of an author. In the Anglo-American tradition, in turn, originality is based on the investment of sufficient skill and labour.⁵³² The differences in the underlying ideologies of the originality threshold explain the difficulty of harmonising the requirements for obtaining copyright protection. The objective to restrict copyright to the form of the work instead of its underlying ideas has also led to the general lowering of the originality requirement and a very low threshold of originality in some countries (notably the United Kingdom), as the originality threshold and the scope of protection given by copyright are interconnected.⁵³³ However, the level of originality required for copyright protection also affects the evaluation of how large parts of the work are capable of infringing in the sense that they constitute original expression.⁵³⁴ Lowering the originality threshold leads in practice to smaller works and smaller parts of larger works becoming protected.

Like with the inventive step and scope of patent rights, the connection between the originality threshold and scope of copyright protection implies that copyright is either everywhere or there exist fewer, but more extensive and thus otherwise troublesome exclusive rights. Yet, there is no all-element -rule in copyright law.⁵³⁵ This connotes that a copyrighted work may be divided into elements, each element considered original in its own terms and thus protected individually. Since the reproduction right covers also *partial* reproduction of works thus divided, even single elements of a work *not* fulfilling the originality threshold could in theory become protected under exclusive rights.⁵³⁶ Such an outcome following the mainstream dogmatic logic based on the separation of the notion of protected work from the exclusive rights of the author defined subsequently (for example reproduction) questions the adequacy of the mainstream doctrine based on abstract classifications and deductions. From

532 Grosheide (1994), p. 209.

533 See e.g. MacMillan (2002), p. 483. The low threshold of originality corresponds with the protection of any expressive elements. Requiring more from works to be protectable under copyright tends to lead to evaluating the conceptual and more abstract elements in works. It would be somewhat illogical to subsequently exclude the elements required for the originality threshold from protection. Thus, maintaining a low originality threshold may help, but does not guarantee, the exclusion of conceptual and abstract elements from copyright protection.

534 See also Tritton (2008), p. 534 and Davison & Hugenholtz (2005), p. 116.

535 See about this rule in patent law under heading 5.4.3.

536 See however case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported, where the Court seemed (at paragraph 47) to restrict infringement under Article 2 of the Information Society Directive to parts of the work which, in themselves, constitute “the expression of the intellectual creation of the author of that article”.

this perspective, copyright appears as more far extending and problematic than the exclusive rights related to patents.

Copyright is thus faced with the generic problem of either monopolising ideas or fragments of expression too extensively. Also the latter alternative is problematic, as it leads to excessive restrictions on the use of fragments of existing works, including mundane works like news reporting or product information, and cultural icons and symbols like fractions of recorded music, literature, photography and other visual works. The utilisation of such fragments is an important constituent of the current communication paradigm based on the Internet.⁵³⁷ On the other hand, proposals to return to pre-existing, higher threshold of originality required for copyright protection are not without problems as this would likely lead to more extensive monopolisation of the underlying ideas.⁵³⁸ The tension in copyright law between too many trivial rights and too extensive fewer rights is not easily resolvable. Addressing this tension is not possible without recourse to and choosing between the theories underlying copyright protection, perceptions of creativity and the need to incentivise it through law, and ultimately broader theories encompassing also the effects of copyright on expression, self-realisation and society. Yet, as with other dogmatic copyright doctrines, the threshold of originality is typically applied as an abstract, neutralising category detached from such background considerations.

The surprising attempt by the Fourth Chamber of the European Court of Justice in *Infopaq International* to define the threshold of originality under the generally applicable Information Society Directive as a European Union law concept was based on the definitions of originality in the Software Copyright Directive, Database Directive and Term Directive.⁵³⁹ Although the first of these Directives, the Software Copyright Directive, intended to strike a balance between the German high standard of originality and the British low standard of originality for computer programs,⁵⁴⁰ the Fourth Chamber's premise was the perceived objective of the Information Society Directive to introduce "a high level of protection". The adopted originality threshold, the work being its "author's own intellectual creation", would thus assume a different connotation following such single-sided proprietary premise. Similarly, also the

537 See *Balkin* (2004), *passim*. See also *Waldron* (1993), at p. 882, noting that it is not ideas as pure propositional entities untainted by the form in which they are expressed that circulate in the modern culture, but forms and expressions.

538 *Geiger* (2008a), at p. 186-188, suggests returning to the originality level applied in France previously as a remedy to the privatisation of information by copyright law.

539 Case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported. The Software Copyright Directive and Database Directive will be treated subsequently. The "Term Directive" is Directive 2006/116/EC on the term of protection of copyright and certain related rights (OJ 2006 L 372, p. 12). The fact that the Court had to borrow the language from these other Directives effectively demonstrates that the purpose of the Information Society Directive was not to harmonise the originality threshold.

540 See more closely the subsequent treatment of copyright protection of computer programs.

exclusive rights of the author were construed broadly.⁵⁴¹ Based on such a single-sided logic and reasoning, the Fourth Chamber considered it necessary to state that (at paragraph 46): “Words as such do not, therefore, constitute elements covered by the protection”.

Compared to the *Promusicae*-case treated in the previous chapter,⁵⁴² *Infopaq International* would strengthen proprietary values without any effort to relate the questions at hand to the constitutional conflicts inevitably underlying the relevant doctrinal premises and principles of interpretation. The Community Courts should not follow *Infopaq International* in their future cases. The same applies to national courts. They should instead proceed on the alternative trajectory opened up by the *Promusicae*-judgement, and the more detailed analysis of the Advocate General in the same matter, in particular. Advocate General’s Opinion in *Google v Louis Vuitton Malletier* also provides well-considered general premises for courts to follow and build on in all intellectual property cases.⁵⁴³ *Infopaq International* could thus ideally represent the apex of the proprietary line of interpretation, to be rejected as a misunderstanding of the requirements emanating from the total European Union legal system. In any case, legal scholars and national courts should vigorously challenge such selectively formalistic judgements in the spirit of critical legal scholarship and constitutional pluralism, and produce argumentative premises and proposals acceptable more generally and not only from the perspective of unbalanced recitals to an unbalanced Directive.

Reproduction Right

The low threshold of originality applied in some member states should be seen in the light of the very broadly defined reproduction right in Article 2 of the Information Society Directive. According to Article 2 of the Directive, the reproduction right is the exclusive right to *authorise or prohibit direct or indirect, temporary or permanent reproduction by any means and in any form, in whole or in part*. The wording is reminiscent of the famous *Dassonville*-formula in the area of free movement of goods, which the European Court of Justice had to limit in the *Cassis de Dijon* and *Keck*-case law.⁵⁴⁴ It should be noted that this extremely broad definition of reproduction right applies generally without being restricted to technological contexts involving digital works or the Internet. According to the Commission, “[t]he basic principle underlying the Directive was to provide the rightholders with a high level of protection;

541 Case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported (at paragraphs 30-43).

542 Case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271.

543 Joined Cases C-236/08, C-237/08 and C-238/08, *Google France, Google Inc. v Louis Vuitton Malletier etc.*, opinion of Advocate General delivered on 22 September 2009, not yet reported (at paragraphs 102-111).

544 See more closely about this case law sub-chapter 7.8 and *Craig & de Búrca* (2008), p. 668-720.

hence the scope of exclusive rights was very broadly defined".⁵⁴⁵ In *Infopaq International*, the Fourth Chamber adopted this as its premise for the interpretation of Article 2, thus leading to the idea that the already broad language deployed in that Article "must be given a broad interpretation".⁵⁴⁶

Defining the reproduction right by a technical occurrence of the fixation of the work departs from the traditional perception of reproduction, where attention is also paid to the enablement of the perception of the work on the part of the public. By including all technical fixations within the concept of reproduction, the mere use of works becomes protected. As argued by *Dussolier*, the use of works should be governed by contractual means, not by the expansion of the reproduction right.⁵⁴⁷ The idea of all copies, including transient digital ones, being relevant for copyright purposes also connotes that the most basic actions related to the Internet – linking, searching, browsing, using computer programs and file-sharing – despite now being part of the daily human interaction and typically desirable phenomena, are suspect from the perspective of copyright law. They need a specific justification in copyright law, an explicit exception or limitation to be compliant with the stricture of copyright law. Hence, copyright regulates and censors not only individual expression, but also the modern communicative infrastructures and services based on the Internet and digital content in a pervasive way. In addition to targeting individual speakers, copyright increasingly regulates the providers of this communicative infrastructure – Internet service operators, search engines and file-sharing services.

Once the reproduction right operates on the European level, it is somewhat understandable that the Fourth Chamber also sought to *contra legem* harmonise the threshold of originality. In member states where the level of originality required for copyright protection has been low (like the UK), the reproduction of even a small and inconsequential part may infringe. Once the reproduction right becomes construed as a European Union law concept, it does not likely permit national derogations like the doctrine of *substantial taking* as traditionally applied in the UK.⁵⁴⁸ Thus, the combination of low level of originality and the inapplicability of the doctrine of substantial taking would easily have led to the expansion of the protectable subject-matter in member states with low originality threshold. The doctrine of substantial taking can namely be seen to serve the same function as the higher originality threshold applied in other member states.⁵⁴⁹ The broad reproduction right also implies that new creation loosely based on existing works, such as transformative creative works and musical genres based on sampling and re-use, increasingly become treated

545 *Green Paper, Copyright in the Knowledge Economy* (2008), at p. 4.

546 Case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported (at paragraphs 40-43).

547 See *Dussolier* (2005), p. 202.

548 See about the substantial taking -doctrine e.g. *Cornish & Llewelyn* (2007), p. 454-456.

549 See also *Tritton* (2008), p. 534. As already discussed, the level of originality required for copyright protection affects the evaluation of how large parts of the work are capable of infringing (in the sense that they constitute original expression). See also *Davison & Hugenholtz* (2005), p. 116.

as derivative works needing the permission of the original copyright owners. This development tends to produce both freedom of expression and competition-related problems and in the end less creation, contrary to the objectives of copyright law.

The ultimate indeterminacy of copyright's inherent doctrines in demarcating the protected from the unprotected connote that the pressure on well-developed and robust exceptions and limitations is evident. Without flexible and sufficient exceptions and limitations, copyright thus constructed remains deformed: an unbalanced regime only providing rights and security for the right holders. The analysis now turns to this other major element defining the practical scope of the copyright power. As previously, the discussion relates to the level of general doctrines. Instead of discussing individual exceptions and limitations in detail, the analysis concentrates on the patterns of interpretation and their normative limits on the international and European levels.

5.5.3 Scope of Copyright Power II: Exceptions and Limitations

General

The digitisation of information and the core position of the Internet, at the latest, connote that copyright pervasively regulates communication. Rather than regulation of creativity (being a contradiction in terms), copyright's principal province has become media, communications and freedom of expression.⁵⁵⁰ Furthermore, due to copyright protection extending to information technology, compilations of data and technological protection measures, copyright regulates more than ever the conditions of technology competition. Also the more traditional objects of copyright protection, aesthetic, literal and musical creations, have increasingly become strategic competitive assets in competition for the control over techno-economic paradigms. This is caused by the concentration of the media and entertainment industries and their convergence with the technology industries, as well as by the technologisation of the traditional objects of protection through digitisation, content-formats and technological protection.

Nevertheless, copyright follows the logic neither of media and communications regulation nor of competition law. Instead of weighing the multiple values at stake, it tends to follow single-sided property logic. Exceptions and limitations to copyright have been exhaustively enumerated in the Information Society Directive.⁵⁵¹ This is not a viable strategy especially when considering the rapidly changing technological

⁵⁵⁰ See also Netanel (2005), p. 149 and Still (2007), p. 27-34.

⁵⁵¹ Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society, Article 5. For a critique of this approach, see Heide (2000), *passim*. In its *Green Paper, Copyright in the Knowledge Economy* (2008), at p. 5-6, the Commission reflects on the possibility of introducing (more) compulsory exceptions and other alternatives, such as "encouragement or guidelines for contractual arrangements between right holders and users for the implementation of copyright exceptions", the latter likely being the easiest regulation option without much practical effect on the interpretation of the law or market transactions.

environments of application. The enumerated exceptions and limitations should also be seen in the light of the very broadly defined reproduction right and the objective of “*high level of protection*” underlying interpretation. Moreover, exceptions and limitations must pass the three-step test, as will be discussed below in more detail. This may further narrow the exceptions and limitations to copyright.

There is only one obligatory exception in the Information Society Directive. Article 5(1) exempts temporary acts from the reproduction right, provided they are transient or incidental parts of a technological process and satisfy the other applicable requirements as well. In *Infopaq International*, the Fourth Chamber argued that as Article 5(1) derogates from a general principle established by the Information Society Directive, it must be interpreted strictly. Following the single-sided proprietarian logic embraced by the Chamber, it construed the general principle underlying the Directive to be “*the requirement of authorisation from the rightholder for any reproduction of a protected work*”. It also invoked the notion of legal certainty, but not as a general concept guiding interpretation. Instead, “*legal certainty for authors with regard to the protection of their works*” was the kind of legal certainty desired.⁵⁵² Hence, instead of construing Article 5(1) as a necessary inherent limitation of exclusive rights for the enablement and facilitation of communication and freedom of expression in the technological environments built around computers and the Internet, the Chamber restricted its analysis to an extremely narrow perspective based on the proprietarian reading of individual provisions of the Directive. As will be argued subsequently,⁵⁵³ such an interpretation is not acceptable from the broader perspective based on European Union law, which also comprises constitutional elements.

Also from the perspective of market power, copyright has the least-developed instruments available of all intellectual property rights. As argued by *Ghidini*, this may be explained by and be acceptable in the traditional paradigm of copyright based on the often unlimited replaceability of aesthetic and intellectual objects of copyright protection.⁵⁵⁴ For example, there is no compulsory licensing comparable to patent law, no mechanism to enable derivative creation, and the term of protection does not correspond with the need to incentivise any creation. However, the absence of such instruments within copyright law cannot be accepted from the perspective of the current objects of copyright protection, such as computer programs and databases.

Finally, as already said, many of the mitigating doctrinal instruments available under the US copyright law, the fair use and misuse doctrines above all, do not exist on the European level.⁵⁵⁵ This may partially explain the relatively frequent recourse to competition law in European copyright cases. It is unlikely that such mitigating doctrines could be developed on the European level for three reasons. First, the

552 See case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported (at paragraphs 56-59).

553 See more closely sub-chapter 5.7.2.

554 *Ghidini* (2006), p. 61-62.

555 Similarly, there is no clear *merger*-doctrine in European copyright law – the idea that protection should be denied when there is only one or a limited number of ways to express a certain idea.

copyright traditions of the member states differ considerably. Consensus needed for legislative reforms or harmonisation through case law developments are unlikely to emerge spontaneously. Second, the relevant copyright directives typically limit the exceptions and limitations available for the member states. Only a few exceptions are obligatory. It is thus unlikely that the Community Courts could start to develop new limitations or exceptions, as their primary role in this regard is, regrettably, to guarantee a “*high level of protection*” and to censor the exceptions and limitations applied on the domestic level. Third, the three-step test as currently interpreted on the WTO-level would not likely allow new statutory exceptions like fair use, even if the European or domestic legislators so preferred.

Three-Step Test as a Limitation of Limitations

As with Article 30 of the TRIPS Agreement with regard to patents, Article 13 TRIPS contains a three-step test intended to censor the availability and scope of copyright exceptions and limitations for the Members of the WTO. Whereas the test was first introduced to international patent law with the TRIPS Agreement, within copyright law Article 13 TRIPS reproduces, but also broadens the three-step test based on Article 9(2) of the Berne Convention.⁵⁵⁶ The latter Article is restricted to exceptions to the reproduction right. Article 13 of the TRIPS Agreement, on the other hand, covers all exclusive rights under copyright law. It reads as follows:

“Members shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the right holder.”

In theory, the substantive standards for the evaluation of exceptions and limitations have not changed due to the TRIPS Agreement.⁵⁵⁷ Both should generally be understood as addressing the legislatures in the Union countries and Members of the WTO, respectively.⁵⁵⁸ The three-step test is cumulative, connoting that each part of the test must be fulfilled for an exception or limitation to be acceptable. Article 13

⁵⁵⁶ See generally about the three-step test *Senfileben* (2004) and (2006) and also about the proposals to amend it *Geiger* (2009c), all *passim*. With the WIPO Copyright Treaty of 1996, Article 9(2) of the Berne Convention has also been extended to all authors’ rights, not only the reproduction right. See also *Davies* (2002), p. 280.

⁵⁵⁷ WTO panel report, Section 110(5) of the US Copyright Act, June 15, 2000, NT/DS160/R, at paragraph 6.81. See also *UNCTAD-ICTSD* (2005), p. 194-195. However, it is obvious that the binding mechanism for settling disputes in the WTO changes the situation in that the national interpretations of the three-step test may now be overruled by a body operating on the global level. The trade-related context of the WTO also affects the interpretations and seems to lead to single-sidedly economic interpretation models.

⁵⁵⁸ See, however the French Supreme Court decision *Perquin and UFC Que Choisir v SA Films Alain Sarde, Sté Universal Pictures vidéo France et al.*, Decision of the Supreme Court (Cour de Cassation, First Civil Chamber), 28 February 2006, where the court applied Article 9(2) of the Berne Convention when excluding a copyright exception applicable under national intellectual property law. For a critical commentary of the decision, see *Geiger* (2006b), *passim*.

differs from Article 30 TRIPS in that the latter disallows only exceptions to patent rights that do not *unreasonably* prejudice the legitimate interests of the right holder. Moreover, Article 30 TRIPS also explicitly requires interest weighing by its reference to the legitimate interests of third parties.⁵⁵⁹

When interpreting Article 13 of the TRIPS Agreement, the WTO panel attached great weight to the conclusion of a study group preparing the 1967 Stockholm Conference for the Revision of the Berne Convention.⁵⁶⁰ According to it: “*all forms of exploiting a work, which have, or are likely to acquire, considerable economic or practical importance, must be reserved to the authors.*”⁵⁶¹ The panel accordingly reserved as normal exploitation and thus outside any potential exceptions not only the forms of exploitation “*that currently generate significant or tangible revenue*”, but also the forms which, “*with a certain degree of likelihood and plausibility, could acquire considerable economic or practical importance.*”⁵⁶²

An exception conflicts with normal exploitation if the activities pursued under it enter into economic competition with the ways that copyright owners normally extract value from their copyrights, “*and thereby deprive them of significant or tangible commercial gains*”. An exception would be in harmony with normal exploitation should it be confined “*to a scope or degree that does not enter into economic competition with non-exempted uses.*”⁵⁶³ The panel concentrated on the curtailment of the economic value of the exclusive rights also in the application of the third step, the unreasonable prejudice to the legitimate interests of the right holder. The prejudice would reach an unacceptable level “*if an exception or limitation causes or has the potential to cause an unreasonable loss of income to the copyright owner.*”⁵⁶⁴

The test, as construed by the panel, is a peculiar combination of Continental copyright tradition’s natural law argumentation with its proposition that all forms of exploiting a work should belong to the author, and Anglo-American emphasis on the economic rights of the copyright owner. However, as *Cornish* and *Llewelyn* have argued, the test should be seen in the light of the multiple exceptions in place at the time the test first appeared in the Berne Convention (1967) and was not altered thereafter.⁵⁶⁵ Moreover, as *Geiger* reminds, most limitations safeguard some fundamental rights or related collective goods, and purport to balance them against the exclusive rights.⁵⁶⁶ From this perspective, the

559 See also *UNCTAD-ICTSD* (2005), p. 193-194 and 430-442 and *Senfleben* (2006), p. 412.

560 The study group consisted of Swedish government and BIRPI (the predecessor of WIPO) representatives.

561 WTO panel report, Section 110(5) of the U.S. Copyright Act, June 15, 2000, NT/DS160/R, at paragraph 6.179.

562 *Ibid.*, at paragraph 6.180. See also *Senfleben* (2006), p. 425.

563 Panel report referred to in previous footnote, at paragraphs 6.181 and 6.183 and *Senfleben* (2006), p. 426.

564 Panel report referred to in previous footnote, at paragraphs 6.224-6.229 and *Senfleben* (2006), p. 433-434.

565 See *Cornish & Llewelyn* (2007), p.855.

566 See also *Geiger* (2006a), p. 398.

ownership rights of the copyright owner are not to be seen in a *prima facie* hierarchically superior position with regard to other fundamental rights.⁵⁶⁷

As has been emphatically argued in scholarly literature, this would require a re-interpretation of the three-step test, an analysis starting from the third step which enables balancing of the interests involved, followed by the “*normal exploitation*” test construed as the core of the exclusive rights and followed by the test of “*certain special cases*”, also interpreted flexibly enough.⁵⁶⁸ However, such a re-interpretation seems to be far from the expressed premises of the WTO panel. *As such, the three-step test fences the exclusivity inherent to copyright by establishing a kind of judicial review for exceptions based on proprietary values. It can be seen as a form of inherent constitutionalisation of intellectual property law in neoliberal spirit.*

Even if the re-interpretation of the three-step test were not feasible on the WTO-level, it should be obvious that one legal institution cannot one-sidedly regulate its relationship with other legal institutions. This applies *a fortiori* to copyright’s relation to fundamental rights. Copyright law (or any other law) cannot avoid the requirement of conformity with fundamental rights protection by establishing an internal test intended to limit the scope of exceptions and limitations. The interpretations of copyright law have to be in conformity with fundamental rights even after the application of the three-step test. From this perspective, the three-step test is merely a preliminary stage in interpretation, internal reworking of the exceptions and limitations within the framework of WTO copyright law, as will be further discussed in sub-chapter 5.7.4.

The test is problematic also from the perspective of economic analysis of intellectual property law, as new works tend to compete with the existing ones. The thus created competition may always be seen to create economic prejudice to the rights of the copyright owner.⁵⁶⁹ Moreover, a market for licenses and thus a potential loss of income related to the copyright exists whenever copyright law prevents a particular use. The loss of income would realise whenever the related transaction costs would not prevent licensing from taking place. Yet, defining the acceptability of a limitation by restricting the analysis to transaction costs only would preclude considering the societal value of uses covered by the limitation. It would also preclude considering the effect of a limitation on the incentive of the copyright owner to create in the first place.

It is thus feasible that the social gains from a limitation far exceed the potential loss of the copyright owner (if any because of transaction costs), and that the copyright owner becomes overcompensated in the absence of the limitation. In such instances, excluding the limitation by recourse to the three-step test would produce deadweight loss. *Yet there is nothing in the established logic of the three-step test to prevent such outcomes being not only problematic from the perspective of the public policies,*

567 See generally also Lavapuro (2007), p. 162-163.

568 See more closely Senfleben (2004), p. 193 and 125-133 and (2006), p. 436; Geiger (2006a), p. 398 and (2006b), *passim* and (2009c), p. 637-638 and Geiger, Griffiths & Hilty (2008), *passim*.

569 See also Heide (2000), p. 221, regarding the last-mentioned aspect.

fundamental right -related values and collective goods pursued with the exceptions, but also from the perspective of the instrumental, economic objectives of exclusive rights.

European Union copyright directives embrace the three-step test as a regulatory instrument either by referring to the Berne Convention or by borrowing the language of the three-step test itself.⁵⁷⁰ The inclusion of the test in European Union secondary legislation could have far-going effects. In particular, it is said to be unclear whether the three-step test as included in Article 5(5) of the Information Society Directive is addressed not only to legislators, but also to courts.⁵⁷¹ Article 5(5) uses the expression “-- shall only be applied in certain special cases --”. Recital 44 of the Directive also uses the expressions *application* and *exercise*. It reads as follows:

“When applying the exceptions and limitations provided for in this Directive, they should be exercised in accordance with international obligations. Such exceptions and limitations may not be applied in a way which prejudices the legitimate interests of the rightholder or which conflicts with the normal exploitation of his work or other subject-matter. The provision of such exceptions or limitations by Member States should, in particular, duly reflect the increased economic impact that such exceptions or limitations may have in the context of the new electronic environment. Therefore, the scope of certain exceptions or limitations may have to be even more limited when it comes to certain new uses of copyright works and other subject-matter.”

Although directives are addressed to the member states and require implementation, the question thus remained whether the three-step test itself should be implemented in domestic laws to enable its application by courts. Some member states implemented the test while others did not.⁵⁷² Its implementation could produce absurd constitutional constellations: domestic courts could start to limit, censor or even overrule domestic statutory exceptions and limitations to copyright based on another domestic copyright norm. As the WTO-norms do not produce direct effects based on Union law, and it is likely that the three-step test as part of copyright directives could not produce direct effects, national implementations could operationalise the test to be applicable in domestic courts. In any case, the test could produce *indirect effects*, an obligation (or at least increased motivation) on the part of domestic courts to interpret national limitations and exceptions consistently with the three steps as explicated in

570 See Article 6(3) of Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, OJ L 122, 17 May 1991, p. 42-46; Article 6(3) of Directive 96/9/EC of the European Parliament and of the Council on the Legal Protection of Databases and Article 5(5) of Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (OJ 2001 L 167, p. 10). See also *Senftleben* (2004), p. 245.

571 See *Geiger* (2006b), p. 689-690, and the additional sources referred to there. *Tritton* (2008), p. 536-537, talks of a four-step test on the basis of the Recital 44 to the Information Society Directive (29/2001/EC). He seems to hold that the test is to be applied by the courts.

572 See more closely *Geiger* (2006b), p. 690. Italy, Greece and France have implemented it in national legislation. The Belgian legislator, for example, did not, but stated that it may nevertheless function as a guideline for the courts and tribunals when the law is applied.

the directive in question or the international instrument binding the Union and its member states.⁵⁷³

Recital 44 of the Information Society Directive quoted above suggests that an over-protective bias could result from a consistent interpretation with the Directive. Nevertheless, when the member states implement or give effect to European Union norms, Union-level fundamental rights must be protected.⁵⁷⁴ A fair balance between the various fundamental rights protected by the Community legal order must be struck also when they implement or enforce the three-step test as included in the directives.⁵⁷⁵ This requires an interpretation departing from the single-sided protective spirit characterising both the Information Society Directive and the application of the test on the WTO-level. *On the Union and national levels, the test itself should be interpreted in the light of the applicable fundamental rights instruments which do not place certain protected values hierarchically beyond others*, but require their weighing in context. Such an interpretation is available and *necessitated* by fundamental rights law on the European and national levels. Yet, simply embracing such fundamental rights analysis on the WTO-level is more problematic, as will be discussed in sub-chapter 5.7.4 in more detail.

5.5.4 Copyright Protection of Computer Programs

After computer programs started to become commercially significant, copyright gradually emerged as their primary form of protection. Even though essentially being functional in nature in that computer programs are not enjoyed as such, but run on a processor and are thus part of a technological process, they are also constituted of text in the form of programming language (source code). Computer programs thus have a dual character, being machines constructed by literary building blocks. The latter feature made copyright an internationally easy solution for the protection of

573 See also sub-chapter 3.3.2 about the effects of international law in Union law. About the effects of directives in the interpretation of domestic law, see e.g. case C-106/89, *Marleasing SA v La Comercial Internacional de Alimentacion SA*. [1990] ECR I-4135. Interpretive effect is also possible in horizontal relations between individuals. It could also be argued that direct reference to the Berne-Convention or the use of the language of the Berne-TRIPS three-step test establishes a *Fediol*-type effect in that the lawfulness of the exceptions and limitations introduced in the EU directives would be subject to the three-step test in the proceedings brought before the European Court of Justice. Case 70/87, *Fediol v Commission* [1989] ECR 1781.

574 See case 5/88, *Wachauf v Germany* [1989] ECR 2609, at paragraph 22; case C-2/92, *The Queen v Ministry of Agriculture, Fisheries and Food, ex parte Dennis Clifford Bostock* [1994] ECR I-955, at paragraphs 12-14; case C-107/97, *Criminal proceedings against Max Rombi and Arkopharma SA* [2000] I-3367, at paragraph 65; case C-540/03, *European Parliament v Council* [2006] ECR I-5769, at paragraphs 104-105. See also chapter 4.

575 This can be concluded from case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271 (at paragraphs 61-70).

computer programs, even though the special characteristics of computer programs speak in favour of *sui generis* protection.⁵⁷⁶

Now computer programs are recognised as copyrightable subject-matter under Article 10(1) of the TRIPS Agreement and Article 4 of the WCT, both requiring their protection as literary works under the Berne Convention.⁵⁷⁷ In the European Union, computer programs are protected by copyright if the program is original in the sense that it is the author's own intellectual creation.⁵⁷⁸ The wording of the Software Directive was aimed at striking a balance between the German courts' high standard of originality required for copyright protection and the British low standard.⁵⁷⁹ Although the Software Directive has been characterised previously as a relatively successful instrument with regard to balancing the competition-related interests with those of protection, it entails several problems generic for the copyright protection of computer programs.

First, protection through copyright implies that the term of protection must be the same as for other literary works. Taking into account the pace of development on the software and related markets, the term of 70 years after the death of the last surviving author has no function in introducing competition-related interests to protection. Hence, other aspects of protection, such as the scope of protection granted and the exceptions and limitations available for competitors, become crucial from the perspective of securing competition-related interests.

Second, the functional nature of computer programs makes them special in the sense that despite their first sale on the markets, their normal use (running the program) remains restricted.⁵⁸⁰ Running the program on a processor is based on copying. The exclusive rights extend to any permanent or temporary reproduction of a computer program "by any means and in any form, in part or in whole".⁵⁸¹ Moreover, there is no exception in the Directive for temporary copies.⁵⁸² Hence, normal use of computer programs had to be established specifically, by way of an exception to the exclusive rights of the copyright owner. It is thus provided for in Article 5(1) of the Directive that the lawful acquirer of a computer program may do any of the acts otherwise reserved for the copyright owner without the latter's authorisation, where they are necessary for the use of the computer program "in accordance with its intended purpose, including for error correction". Yet this "right" may be contracted away, and thus reserved exclusively for the copyright owner. The intended purpose

576 See Samuelson, *et al.* (1994), *passim* for an argument in favour of *sui generis* protection.

577 See more closely UNCTAD-ICTSD (2005), p. 152-159.

578 Article 1(3) of Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, OJ L 122, 17 May 1991, p. 42-46.

579 See Cornish & Llewelyn (2007), p. 809 and Tritton (2008), p. 491. More extensively about the protection of computer programs in Britain, see e.g. Bainbridge (1999), *passim* and Laddie *et al* (2000), p. 1609-1647.

580 See also e.g. Dusollier (2005), p. 201.

581 See Article 4 of the Software Directive.

582 Cf. with Article 5(1) of the Information Society Directive, which exempts temporary copies of other copyrighted works subject to stringent conditions. See also the text under heading 5.5.3.

of the program also restricts the scope of actions available for the user even in the absence of specific contractual provisions prohibiting certain uses. The exception thus does not limit the control-potential of the copyright owner over subsequent uses of the computer program in any meaningful way.

Relatedly, the lawful user's right based on Article 5(3) of the Software Directive to observe, study or test the functioning of the program in order to find out its underlying ideas and principles had to be specifically provided for as an exception to the rights of the copyright owner. This exception is similarly restricted to the acts the user is already entitled to do with the program according to the terms of the copyright license.

What follows from the above is that even though the right to distribute a physical copy of a computer program will be exhausted after its first sale within the EEA, and may not be avoided by simply calling the transaction licensing, the new owner of the copy will not be liberated from the terms of the license agreement. The terms may thus regulate the subsequent use of the program, subject only to the lawful user's right to make a necessary back-up copy,⁵⁸³ the right to observe, study or test the functioning of the program in order to find out its underlying ideas and principles while performing any of the acts already permitted by the license, and the limited right to decompile the program for achieving interoperability of an independently created computer program with other programs, as will be discussed subsequently in more detail.

Moreover, as computer programs are increasingly distributed in intangible form only (that is, without fixating them on a medium like a CD), any exhaustion may not take place. Thus, the copyright owner may increasingly control also the further circulation of the program after its first sale or licensing within the EEA. Only the compulsory exceptions mentioned above cannot be avoided by contractual stipulations in the license agreement. Otherwise, the copyright owner could remain in total control of any future uses of programs distributed in intangible form only.

The foregoing should be contrasted to the situation with tangible copyright-protected works other than computer programs. In their case normal use of the work, for example reading a book, using it for teaching or analysing its structure and ideas when reading it – also for competing (and even for infringing purposes) – is not within the exclusive rights of the copyright owner once the book has been bought. There is nothing to stop others from “decompiling” a book through deconstruction or other techniques to uncover the underlying structure and syntax for any purpose whatsoever. The structure, ideas, principles, characters and syntax of a book are readily available for a skilled reader. In contrast, even after computer programs have been sold on the markets, the ideas and principles underlying them typically remain secret, as there is no requirement to publicise their source code. Reverse-engineering the program to find out the underlying principles and ideas is restricted, as will be discussed in more detail subsequently.

As the compulsory exceptions of the Software Directive do not exempt mere use of computer programs for any activities on the adjacent markets, competition-

583 See Article 5(2) of the Software Directive.

related problems emerge. For example, the copyright owner may reserve to itself the adjacent markets for teaching, repairing and maintaining the computer program, among others, as these activities typically require using the computer program. This is evidenced for example in the Finnish Competition Authority's *Oracle*-decision,⁵⁸⁴ where Oracle Finland Oy was found to have abused its dominance due to excessive royalty claims based on the turnover generated on the adjacent market for teaching. There was nothing in copyright law to stop Oracle from prohibiting a lawful acquirer of its program from running it for teaching purposes.

Furthermore, the exclusive right to use and the absence of an exception for temporary copies comparable to that found in Article 5(1) of the Information Society Directive defies the fact that computer programs necessarily become temporarily reproduced on servers and personal computers alike in the course of normal use and performance of the Internet. Although the right holders may not choose to sue the Internet service operators for copyright infringement, extending the reach of exclusive rights and thus the legal arsenal available for right owners to censor normal Internet usage and private use of copyrighted works is not acceptable.

Third, decompiling or reverse-engineering the program for finding its structure, principles of operation, as well as the interfaces necessary for reaching interoperability, remain limited. Decompilation is possible only to the extent expressly authorised by Article 6 of the Directive. *The right to reverse-engineer does not depend on the eventual copyright protection of the underlying structures, principles and interfaces being uncovered. Thus, the restricted right to decompile may confer limited protection also for unprotected elements underlying a program.* They may not be accessed at all, or used subsequently for purposes other than reaching interoperability. Moreover, there is no exception in the Directive for research purposes alone, be it commercial or uncommercial in nature. This is a serious flaw in the Directive.⁵⁸⁵

The Directive thus enables reverse engineering to a limited extent to enable the creation of interoperable programs. Decompilation is permitted without the authorisation of the right holder where reproduction of the code and translation of its form are *indispensable* to obtain the information *necessary* to achieve the interoperability of an independently created computer program with other programs. Importantly, the right to reverse engineer cannot be frustrated by the usage of technological measures.⁵⁸⁶ The right to decompile should extend to efficient interoperability. Access to the most efficient routines should thus be allowed.⁵⁸⁷

However, decompilation must be confined to the parts of the original program necessary to achieve interoperability.⁵⁸⁸ Furthermore, the information obtained may

584 *Oracle Finland Oy*, decision of the Finnish Competition Authority, dated 22 December 1997, Dno 521/61/94.

585 For a critique of such outcomes, see *U-M. Mylly* (2005a), p. 232-233 and 239-256.

586 This is the combined effect of Article 7(1)(c) of the Software Directive 91/250/EEC and recital 50 of the Information Society Directive 2001/29/EC. See also *Heide* (2000), p. 228-229.

587 See Recitals 10-12 and 23 to the Directive and *Laddie et al.* (2000), p. 1634.

588 See more closely *U-M. Mylly* (2005a), p. 242-243.

not be used for goals other than to achieve the interoperability of the independently created computer program and may not be given to others, except when necessary for the interoperability of the independently created computer program. This seems to prevent the existence of an independent market for interface information.⁵⁸⁹ Moreover, it may not be used for the development, production or marketing of a computer program substantially similar in its expression, or for any other act which infringes copyright. Yet the expression “*or for any other act which infringes copyright*” means that the sole test should be infringement of copyright: only if the new program infringes the copyright of the decompiled program, does the decompilation become prohibited.⁵⁹⁰ This also importantly implies that decompilation is permitted not only to create a program interacting with the target program (for example an application), but extends to the creation of a program directly competing with the target program (for example an alternative operating system).⁵⁹¹

Finally, Article 6(3) contains a modified three-step test: the provisions of Article 6 may not be interpreted in such a way as to allow its application to be used in a manner that unreasonably prejudices the right holder’s legitimate interests or conflicts with a normal exploitation of the computer program.⁵⁹² However, the test should not lead to narrow interpretation of the right to decompile. The right holder’s legitimate interest should not be to control access to the structures, ideas and principles underlying a copyrighted work. Neither is normal exploitation of a computer program typically based on access control to its underlying unprotected elements or on licensing them to third parties. The right to decompile cannot be contracted out.⁵⁹³ However, it has been argued that confidentiality obligations related to the licensing of non-published computer programs could affect some of the rights deriving from Article 6 of the Software directive.⁵⁹⁴

The exact scope of the right to reverse engineer is unclear and unsettled in many respects. There are no Community Court precedents available.⁵⁹⁵ The uncertainty tends to broaden exclusivity, as the risk of copyright infringement could lead to abstentions from efforts to reverse engineer.⁵⁹⁶ Yet the program could simply be bought or licensed outside the European Union and decompiled there. As far as the program being developed does not infringe the copyright in the decompiled program, there is nothing to prevent the use of the information thus received in the creation of a new

589 See also *Heide* (2000), p. 227. However, the interpretation of the Directive is not entirely clear in this respect.

590 See also *Laddie et al* (2000), p. 1633.

591 See *Villarejo* (2006), p. 550 and *Laddie et al* (2000), p. 1635. See also *European Commission* (1991), p. 67-68. Cf. with *UNCTAD-ICTSD* (2005), p. 157, where it is erroneously said that reverse engineering for purposes of creating competing products is prohibited.

592 The Commission considers that the member states have an obligation to incorporate this modified three-step in their domestic laws. See *Tritton* (2008), p. 498-499.

593 See Article 9(1) of the Software Directive.

594 See also *Laddie et al* (2000), p. 1639.

595 See also *Tritton* (2008), p. 497. For US law, see *Lemley et al.* (2000), p. 229-247.

596 See also *Laddie et al.* (2000), p. 1640.

program sold within the European Union. For globally operating firms, the country with the required infrastructure *and* the most lenient approach to reverse engineering defines the extent of decompilation possible.⁵⁹⁷ The restricted and uncertain right to decompile under the Software Directive is a problem predominantly for smaller firms operating within the Union only.

However, it should be noted that reverse engineering often fails as a technical operation.⁵⁹⁸ Furthermore, the owner of the target program may always modify the application programming interfaces and thus prevent interoperability. Moreover, as the reverse engineering is typically time consuming and may take place only after the target program is on the markets, it cannot provide a generic solution to the interoperability problems. Finally, reverse engineering does not prevent the blocking use of copyright, should a particular copyrighted code be needed for example because of standardisation.⁵⁹⁹ These factors indicate – irrespective of the exact extent of the right to experiment or reverse-engineer – a continuing role for competition law in the software and related markets where interoperability is crucial for most business activities. The right owner may be reluctant to publish voluntarily interoperability information. The publication of interfaces could lock parts of the ongoing development or could enable the development of a substitute for the program, not only the development of interoperable applications.⁶⁰⁰ The right owner may try to leverage its position into adjacent markets to strengthen its position on the primary markets or simply to make profits from the adjacent markets.

Fourth, although Article 1(2) of the Software Directive firmly states that ideas and principles, which underlie any element of a computer program, are not protected by copyright, Article 4(b) confirms that copyright protection extends to the translation, adaptation, arrangement and any other alteration of a computer program. How to draw the line between adapting or altering an expression on one hand, and utilising the ideas and principles underlying the program, on the other hand, in all instances of non-literal copying? The question is of utmost importance when determining how much room is left for competition by the copyright protection of computer programs. On the sliding scale between utilising the most basic ideas and verbatim copying, the further the copyright protection extends to ideas, the more competition is restricted. Moreover, an idea and its expression may merge in the sense that the expression is dictated by the idea, more or less. In such instances it may be grounded to exclude the expression from copyright protection as protecting the expression would also protect the idea. Thus, the distinction between protected expression and unprotected ideas and principles does not provide an operative solution, but merely a principle to be qualified with additional considerations.

597 See also *Samuelson* (2005), p. 639 and *Laddie et al.* (2000), p. 1640.

598 See e.g. *Laddie et al.* (2000), p. 1628-1629.

599 See also *Ghidini & Arezzo* (2005), p. 167.

600 See e.g. *Laddie et al.* (2000), p. 1627-1628.

The ways to approach this question have varied from the cumbersome abstraction-filtration-comparison test, merger and *scènes à faire* -doctrines applied especially in the US to the more down-to-earth test based on the concept of “over-borrowing” enough of the copyrighted program to constitute an original work in its own right, as understood in English case law.⁶⁰¹ Copyright interpretations should react to the increasing market power generated through network effects and lock-in characterising the software markets. They should also react to the patentability of technical ideas underlying computer programs. Ideas need no further protection through copyright. Automatic protection of unpublished ideas could produce problematic market and informational power. Analysis of the extent of copyright protection for computer program interfaces indeed demonstrates that copyright protection of these elements *has* subtracted to some extent in the US and the European Union alike.⁶⁰²

Irrespective of such countervailing developments, the *quid pro quo* of copyright is not fulfilled in case of computer programs. The term of protection is in effective terms eternal, the exclusive rights extend to the normal use of the protected subject-matter, the rights do not become effectively exhausted and there is no automatic publication of the ideas and principles underlying the programs protected by copyright. A relatively simple modification of the Software Directive could partially alleviate the last three mentioned inadequacies.

This possible solution would be based on rewriting the exhaustion of computer programs to cover not only the distribution right within the Community,⁶⁰³ but also the reproductions necessary when running the computer program on a computer. The mere use of a computer program (its running on a computer) after its first sale within the EEA would thus be liberated. This would mean that the copyright owner could not prohibit a lawful owner from normally running the computer program, including any such running on adjacent markets like teaching or maintenance, or running it for the purpose of decompilation. There are no compelling reasons why the copyright owner of a computer program should be able to control the existing and potential markets based on the mere use of the program, when the adjacent markets based on the mere use of other copyrighted works are not reserved for the copyright owners. Moreover, as copyright restricts not only business activities, the problem may extend to the use of a computer program in personal capacity, as well as to use at public universities.

Similarly, the unrestricted right to decompile the program after its first sale on the markets would foster the publication of its underlying structure, principles and interfaces needed for interoperability. Such a right would not evidently make legal the inclusion of otherwise infringing derivative or directly copied elements in a subsequent program, but would merely bring computer programs closer to other categories of works whereby the structure, principles and ideas underlying the work

601 See e.g. *Lemley et al.* (2000), p. 113-148 (US law) and *Laddie et al* (2000), p. 1645-1647 (UK law).

602 See *U.-M. Mylly* (2005b), p. 766-767.

603 See more closely Article 4(c) of the Software Directive. See also case T-198/98, *Micro Leader Business v Commission* [1999] ECR II-3989, on the interpretation of this provision.

become automatically disclosed upon the first publication of the work in question. As with other works protected by copyright, it should only be the inclusion of protectable expression in a subsequent work that requires the permission of the original copyright owner, not access to the work itself and its underlying principles.

The exhaustion of the use-rights should not depend on the contingent issue whether the computer program has been distributed in tangible or intangible form. As liberating such uses would be based on the exhaustion of rights, individually negotiated licenses would be excluded from this effect. Likewise, such exhaustion should overrule neither site-licenses, nor the slicing of licenses to business and personal uses. Thus, teaching a computer program or decompiling it for commercial purposes would require the acquisition of a business license, should such be provided by the right owner. Similarly, the exhaustion of use rights should not enable exceeding the number of work stations permitted by the license agreement.

Quite evidently, the above is not intended to be a flawless proposal for a law reform, but an idea worth further analysis. Various less extensive alternatives could be devised to alleviate the problems identified above. For example, obligation to publicise source code after certain market share threshold and upon request could be one alternative. An experimental use exception comparable to European patent laws could enable the realisation of the objectives related to freedom to conduct research and freedom of science, as well as the copyright-related objectives related to the freedom and dissemination of ideas and principles underlying protected works. To exclude overlapping experimentation with the same program and thus economic waste, such information should be freely shareable once discovered. This would also induce voluntary publication of the information on the part of the copyright owner.

5.5.5 Protection of Databases

Databases are protected under Article 10(2) TRIPS and Article 5 WCT. The scope of international protection has expanded from the requirements of the Berne Convention, Article 2(5). The latter restricted protection to copyrightable literary or artistic works and required originality in both the selection and the arrangement of the compilation. The TRIPS Agreement and the WCT require originality in either the selection *or* the arrangement of the collection. Furthermore, the elements constituting the compilation may now be other than literary or artistic works (“data or other material”) and are not required to constitute copyrightable subject-matter themselves. However, database protection should not extend to the underlying data or material itself, but only cover the creative efforts related to the selection or arrangement.⁶⁰⁴

604 See also *UNCTAD-ICTSD* (2005), p. 167.

The Database Directive⁶⁰⁵ is an extension to the international protection of databases.⁶⁰⁶ In addition to harmonising the conditions of copyright protection for databases, the Directive establishes a *sui generis* database right in its Article 7. Copyright protection means a life plus 70 years term for databases that, because of the selection or arrangement of their contents, constitute the author's own intellectual creation. The exclusive rights of a copyright owner in a database cover a broad range of activities, starting from reproduction in its various forms to any communication, display, distribution or performance to the public. The permitted exceptions include reproduction for private purposes of a non-electronic database, use for teaching or scientific research, public security or for the purposes of an administrative or judicial procedure. Other exceptions to copyright, which are traditionally authorised under national laws, are permitted, as well. The implementation of the exceptions is subject to the three-step test of the Berne Convention as incorporated in Article 6(3) of the Directive.

The *sui generis* protection is independent of copyright protection. Not being restricted to competitive situations and having a fixed term of protection, it is a true exclusive right.⁶⁰⁷ According to Article 7 of the Directive, the *sui generis* right emerges as a consequence of qualitatively or quantitatively a *substantial investment* in either the obtaining, verification or presentation of the contents to the database. According to the European Court of Justice, a substantial investment in the obtaining, verification or presentation of the contents to the database refer to investment in the creation of the database as such, to the exclusion of investments in the creation of the data itself. The Court reached this conclusion based on teleological interpretation: the objective of the *sui generis* right is to promote the establishment of storage and processing systems for existing information, not the creation of new materials capable of being collected subsequently in a database.⁶⁰⁸

This interpretation of the *sui generis* right decreases the likelihood that databases being foremost spin-off products of other principal activities obtain database

605 Directive 96/9/EC of the European Parliament and of the Council on the Legal Protection of Databases. For a definition of what constitutes a database, see Article 1(2) of the Directive and case C-444/02, *Fixtures Marketing Ltd v Organismos prognostikon agonon podosfairou AE (OPAP)* [2004] ECR I-10549, at paragraphs 18-36. See also *Hugenholtz* (2005b), p. 205-206.

606 Cf. also with *Feist Publications Inc v Rural Telephone Services Co.*, 499 U.S. 340 (1991), where the US Supreme Court denied protection on the basis of "sweat of the brow" (investment and effort alone). Instead, sufficient skill and judgement in the selection and arrangement of the contents is required for copyright protection of a database.

607 The first proposal for a Database Directive has been characterised as being based on the concept of unfair competition. However, subsequently the Commission's approach changed and the final Directive has no traits of unfair competition remedies. See *Hugenholtz* (2005b), p. 209-210.

608 Case C-203/02, *The British Horseracing Board Ltd and Others v William Hill Organization Ltd* [2004] ECR I-10415, at paragraphs 32-49. See also cases C-46/02, *Fixtures Marketing Ltd v Oy Veikkaus Ab* [2004] ECR I-10365 at paragraphs 28-42; C-338/02, *Fixtures Marketing Ltd v Svenska Spel AB* [2004] ECR I-10497, at paragraphs 23-37 and C-444/02, *Fixtures Marketing Ltd v Organismos prognostikon agonon podosfairou AE (OPAP)* [2004] ECR I-10549, at paragraphs 37-53.

protection.⁶⁰⁹ As the investments in the creation of the independent materials and data as such are excluded from the investments triggering the *sui generis* protection, single-source information monopolies are not automatic outcomes of such investments: in principle, the elements constituting the database may still be collectable elsewhere by anyone willing to make a similar database.⁶¹⁰ In addition to being important from the perspective of competition, the interpretation reduces the extent to which the database right is capable of protecting data as such. As pointed out by *Hugenholtz*, this interpretation is also in line with the freedom of expression as guaranteed by the European Convention and other human rights instruments.⁶¹¹

However, investments in presenting created data may result in protection as well as investments in subsequent verification of the database. Based on national case law and Advocate General opinion, the required level of investments is relatively low.⁶¹² Furthermore, the contents of the database may be protected by copyright, thus creating an obstacle for parallel collection. As the exceptions available under the *sui generis* database rights are more limited than under copyright law, including copyrighted content in the database may exclude some of the exceptions otherwise available.⁶¹³ Even in the absence of copyright protection, created information could be protected by technological measures and controlled by contracts purporting to exclude its subsequent inclusion in any (competing) database.⁶¹⁴ Furthermore, some or all of the information contained in the database may have disappeared from freely available sources subsequent to its inclusion in the database, thus leading to the database becoming the single source for that information. Finally, being the only one to record data occurring in nature or other information leaving no subsequent traces may result in single-source databases.⁶¹⁵

In practice, much valuable information is unavailable from public sources. The cost of duplicating an initial effort by collecting data independently is economic waste. The prospect of sharing the profits of the database market with the original database producer may often preclude competition even in commercially successful database markets. Thus, even if the European Court of Justice's judgement has

609 See more closely *Hugenholtz* (2005b), p. 212-214, about the origins of this doctrine in Dutch case law and parliamentary history. See also *Davison & Hugenholtz* (2005), p. 114-115.

610 See also *Derclaye* (2005), p. 21. See, however, what is said about the exclusive right of extraction subsequently.

611 *Hugenholtz* (2005b), p. 214.

612 See *Hugenholtz* (2005b), p. 216; *Davison & Hugenholtz* (2005), p. 115 and *Derclaye* (2007), p. 284 and Advocate General Stix-Hackl in case C-46/02, *Fixtures Marketing Ltd v Oy Veikkaus Ab* [2004] ECR I-10365, at paragraph 49.

613 See also *Derclaye* (2005), p. 21-22.

614 See *Davison & Hugenholtz* (2005), p. 115.

615 As noted by *Derclaye* (2007), p. 288, it may be difficult to decide whether recording data with specialised equipment for measurement qualifies for obtaining or creating the data, having decisive implications for the *sui generis* right. Similarly *Hugenholtz* (2005b), p. 214-216, noting that "Distinguishing between data 'creation' (generation) and data 'obtaining' (gathering) raises philosophical questions well beyond the ambit of intellectual property and competition law".

avoided the most problematic interpretations, many database markets are in practice characterised by duopolies or even near absolute monopolies. Where a database is the sole source of information contained therein, the *sui generis* right could lead to an absolute downstream information monopoly in derivative information products and services.⁶¹⁶ It is difficult, if not impossible, for courts to solve the problem of *de facto* monopolisation of data through a combination of database right and other protection measures.

The *sui generis* right is an exclusive right to prohibit the *extraction* or *re-utilisation* of the whole or of a substantial part, evaluated qualitatively or quantitatively, of the contents of the database. Quite importantly, the European Court of Justice defined the concept *substantial part* based on the scale of investment made in the extracted or re-utilised part.⁶¹⁷ The other possibility would have been the intrinsic value of the data for the defendant. However, this could have led to the database right easily becoming a property right in valuable information.⁶¹⁸ Moreover, according to Article 7(5) of the Directive, the exclusive right also enables prohibiting the repeated and systematic extraction or re-utilisation of insubstantial parts of the contents of the database when these acts imply a conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker of the database. Its function is “to prevent repeated and systematic extractions or re-utilisations of insubstantial parts of the contents of a database, the cumulative effect of which would be to seriously prejudice the investment made by the maker of the database just as the extractions or re-utilisations referred to in Article 7(1) of the directive would”.⁶¹⁹

Extraction refers to the transfer of the contents of the database to another medium whereas re-utilisation refers to the making available to the public of the contents of a database. The European Court of Justice stated in *Directmedia Publishing* that – based on the wording and purpose of the Database Directive – the Community legislature sought to give the concept of extraction a wide definition.⁶²⁰ Accordingly, extraction refers to any unauthorised act of appropriation of the whole or a part of the contents of a database. The decisive criterion is simply an act of transfer of all or part of the contents of the database to another medium, which may be a medium differing in its nature from the original database. Furthermore, the technique of extraction makes no difference: even manual copying of parts of the contents may infringe the rights of the original database owner. Moreover, not only mechanical reproduction, but also partial

616 See also *Hugenholtz* (2005b), p. 203-204.

617 Case C-203/02, *The British Horseracing Board Ltd and Others v William Hill Organization Ltd* [2004] ECR I-10415, at paragraph 71.

618 See also *Davison & Hugenholtz* (2005), p. 116.

619 See case C-203/02, *The British Horseracing Board Ltd and Others v William Hill Organization Ltd* [2004] ECR I-10415, at paragraphs 83-95 and case C-304/07, *Directmedia Publishing GmbH v Albert-Judwigs-Universität Freiburg* [2008] ECR I-7565, at paragraph 43-44.

620 Case C-304/07, *Directmedia Publishing GmbH v Albert-Judwigs-Universität Freiburg* [2008] ECR I-7565, at paragraph 31-33. See also the Opinion of Advocate General Sharpston in the same case, at paragraphs 31-59 and case C-545/07, *Apis-Hristovich EOOD v Lakorda AD*, judgement given 5 March 2009, not yet reported.

reproduction involving adaptation and critical assessment in the form of omitting and adding materials according to some qualitative criteria, is within the exclusive rights of the original database owner. According to the Court, such efforts merely connote that the new database, too, may be protected by the database right.⁶²¹

Hence, the objective pursued by the act of transfer is immaterial for determining the existence of extraction. The mere purpose of on-screen display of the contents of a database may involve transfer of all or a substantial part of the contents of the database, and is thus of itself an act of extraction the owner of the database rights may regulate through a combination of the exclusive right to extract and contract.⁶²² The right of the public to “consult a database”, excluded from the protection of the *sui generis* right in a previous case,⁶²³ was narrowed in *Directmedia Publishing* to the “right” of third parties already having the right to access the database, possibly against payment, to consult the database for information purposes. The right to consult is thus nothing more than the inevitable consequence of a lawful user’s right to access the database to access it also for information purposes. The European Court of Justice was happy with such a revocable right as a guarantee that the right of extraction could not lead to ownership of information or restriction on the freedom of access to information.⁶²⁴

Similarly, the Court was content with the potential application of general competition law to the *sui generis* right, confirmed in Recital 47 and Article 13 of the Directive, as well as the Commission’s periodic reports of the regime established by the Database Directive, regulated in Article 16(3) of the Directive and intended to verify, among other issues, whether the application of the *sui generis* right has led to abuses of dominant position or other interference with free competition. Competition law would have applied within the area of the Directive irrespective of Recital 47 and Article 13. Hence, the reference to the continued application of competition law should not have been taken as a justification ground to exclude competition-related concerns from the interpretation of the exclusive rights. Likewise, the fact that the European Union legislator was so worried about the anticompetitive potential of the Database Directive that it inserted a specific monitoring rule in the Directive,⁶²⁵ should not have affected the interpretation of the extraction right so as to enable its broad interpretation. *The existence of competition law thus functioned as a pretext for strong protection, leading simultaneously to the impairment of the freedom of competition and freedom to impart information.*

Extraction or re-utilisation of the original database may also be *indirect*, connoting that *the data utilised may be taken from authorised sources other than the original*

621 Case C-304/07, *Directmedia Publishing GmbH v Albert-Judwigs-Universität Freiburg* [2008] ECR I-7565, at paragraph 34-49.

622 *Ibid.*, at paragraph 47.

623 See Case C-203/02, *The British Horseracing Board Ltd and Others v William Hill Organization Ltd* [2004] ECR I-10415, at paragraph 54.

624 Case C-304/07, *Directmedia Publishing GmbH v Albert-Judwigs-Universität Freiburg* [2008] ECR I-7565, at paragraph 51-54.

625 See also *Ullrich* (2005b), p. 729.

database.⁶²⁶ Hence, collecting the data from an authorised source and extracting or re-utilising it even for non-commercial purposes not competing with the original database may be prohibited by the owner of the rights in the original database, provided the parts taken together constitute a substantial part of the contents, in quantitative or qualitative terms.⁶²⁷ The protection of indirect use increases the potential of the *sui generis* right to protect the information itself.⁶²⁸ It implies that the absence of access to the original database may not save an alleged infringer from liability, as access to other authorised sources, where parts of the information contained in the original database are reproduced, may be sufficient. Thus, even when the alleged infringer can prove that it has applied its own criteria in selecting materials, reproduces only parts of the existing database, and has only had access to indirect sources containing elements of the original database, the exclusive right to extract may be infringed. *The effect of this is that the first person to make a particular database following some logical and verifiable criteria obtains in practice an exclusive right, a monopoly in the data itself.*

This is what took place in the already referred to *Directmedia Publishing*. In that case, professor *Knoop* and the Albrecht-Ludwigs Universität Freiburg, as compilers of the original database containing the titles of the most frequently referred verses in German literature between 1730 and 1900, were protected against a subsequent CD-ROM database producer, *Directmedia Publishing GmbH*. The latter used the original database only as a guide by studying it on-line, followed its own selection criteria, included most of the listed verses from the overlapping period, omitted some of the poems and added others of its own choice, and finally took the actual verse texts from its own digital resources. Yet, despite individual selection criteria, only partial reproduction of the titles in the CD-ROM and the addition of new poems following the applied selection criteria, the Court concluded an infringement of the extraction right is at hand in such a circumstances. Thus, any existing listing following some verifiable, logical or commonly acceptable criteria, and requiring substantive investments, may not in practice be reached even independently by another person or producer.

For example, producing a listing of the most problematic intellectual property cases of the Community Courts in a law review article or a book, following for example the criterion of critical reviews in the relevant literature, could be protected against a subsequent listing using its own qualitative criteria, and only provided substantial parts of the cases overlap.

The term of the *sui generis* right is 15 years from the completion of the database or from its becoming available to the public during that 15-year period. However, substantially modifying the contents of a database qualifies the database for a new term of protection. Even the verification of the contents of the database could result in a new term of protection.⁶²⁹ Thus, dynamic databases pose a threat of perpetual

626 Case C-203/02, *The British Horseracing Board Ltd and Others v William Hill Organization Ltd* [2004] ECR I-10415, at paragraphs 52-67 and case C-304/07, *Directmedia Publishing GmbH v Albert-Ludwigs-Universität Freiburg* [2008] ECR I-7565, at paragraph 47. See also *Tritton* (2008), p. 528 and Advocate General *Sharpston* in the *Directmedia Publishing* –case, referred to in this footnote (paragraph 56-57 of the Advocate General’s Opinion, concerning indirect extraction).

627 See more closely about the concepts *quantitative* and *qualitative* part case C-203/02, *The British Horseracing Board Ltd and Others v William Hill Organization Ltd* [2004] ECR I-10415, at paragraphs 70-82.

628 See also *Aplin* (2006), p. 117.

629 See recital 55 to the Directive. See also *Hugenholtz* (2005b), p. 208 and *Lim Tze Wei* (2006), p. 26.

protection, save was the protection conceived to be restricted to the new data added to the database and not the whole database.⁶³⁰ Should the renewal of the term cover the whole database, the result could be perpetual monopolies over large compilations of information, covering both direct and indirect use.

Article 9 of the Directive allows a limited exception related to extraction for private purposes of a non-electronic database, extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved, as well as extraction or re-utilization for the purposes of public security or an administrative or judicial procedure. The exhaustive list of exceptions included in the Directive is very limited.⁶³¹ There is no provision enabling temporary copies. Similarly, there is no exclusion of governmental information from protection, or exceptions for libraries, the press and so forth.⁶³² Moreover, the exceptions may be frustrated with a combination of technological protection and contractual clauses. This further strengthens the exclusive rights of a database maker and reinforces the market power enjoyed by sole-source database makers.⁶³³ It has been proposed that the exceptions applicable to copyright and allowed by the Information Society Directive 2001/29/EC should be extended to the *sui generis* right. Some of the exceptions should be made mandatory for the member states.⁶³⁴ It is easy to agree with such proposals.

Furthermore, a regime of non-voluntary licenses within database legislation, once dropped from the Database Directive proposal,⁶³⁵ has been suggested to address the problem of single-source databases.⁶³⁶ Reliance on competition law, even if possible under the scheme of the Database Directive, may prove burdensome and inefficient due to the specific requirements developed in the case law of the European Court of Justice, the costs involved and the difficulty and onus of proof relating to definition of markets, market power and abusive exercises.⁶³⁷ For these reasons, introduction of compulsory licensing in the Directive would be a better option than expanding the

630 See *Aplin* (2006), p. 123-125; *Derclaye* (2007), p. 287 and *Lim Tze Wei* (2006), p. 26.

631 See e.g. *Derclaye* (2007), at p. 286-287, stating that the protection for database producers is only slightly reduced by the exceptions and that the only exception that may sometimes affect database producers is the third one allowing extraction or re-utilisation of a substantial part of any database for the purposes of public security or administrative or judicial procedure. See also *Davison* (2003), p. 91-92.

632 See also case *ADV-Firmenbuch*, 9 April 2002, where the Austrian Supreme Court concluded that the Database Directive does not leave room for an exception concerning governmental information. See also *Hugenholtz* (2005b), p. 207.

633 See Articles 13 and 15 of the Directive and *Derclaye* (2007), p. 289-291.

634 See *Davison* (2003), p. 92; *Kur et al* (2006), p. 556-557; *Cornish & Llewelyn* (2007), p. 835 and *Derclaye* (2007), p. 297.

635 See about the original proposal *Davison* (2003), p. 50-60.

636 See *Kur et al* (2006), p. 554-555 and *Derclaye* (2007), p. 297.

637 See also *Davison* (2003), p. 43-49 and 280. See, however case *ADV-Firmenbuch*, 9 April 2002, where the Austrian Supreme Court applied the *essential facility* –argumentation to the *sui generis* rights of a government agency.

application of general competition law.⁶³⁸ However, one problem with such an addition to the Database Directive is that the compulsory license should be broad enough to obligate the database owner to deliver the data without technological protection and free of unfair or discriminatory terms.⁶³⁹ Drafting such a comprehensive compulsory license provision under a substantively restricted Database Directive would be difficult, if not impossible. Hence, provided the *sui generis* right is not abolished, recourse to competition law could become a permanent feature of database markets.⁶⁴⁰ Absent reform of the Directive, competition law must be activated and fine-tuned to avoid the ill effects of database monopolies.

As a conclusion and compared to the Software Directive, the Database Directive is poorly motivated as a whole, has less-developed exceptions and fails in establishing a reasonable balance between the exclusive rights and competition. The *sui generis* right has no built-in limitations comparable to copyright, as there is no equivalent to the idea-expression dichotomy or exclusion of information from protectable subject-matter.⁶⁴¹ Quite the contrary, the *sui generis* right leads to proprietary rights in data which are often difficult or even impossible to overcome.

This reflects an underlying policy change in European intellectual property protection: the focus is not on traditional creativity and innovation, but on the protection of economic investments and modes of distribution.⁶⁴² The exclusive rights are broad and strong, the protection requirement is low, the exceptions are very narrow and the term of protection is potentially perpetual. Competition-related concerns are consensually left for the application of general competition law. In fact, the mere continued potential to apply Community competition law, as recognised in the Database Directive, functions as a justification ground for broadly constructed and competitively insensitive exclusive rights. Similarly, the freedom to access and depart information contained in databases is left for the mercy of the database owners.

Even though the case law on the *sui generis* right has avoided some of the most troubling interpretations in that the investment in the creation of the database as such, to the exclusion of investments in the creation of the data itself, is necessary for the *sui generis* protection to emerge, the potential of the *sui generis* right to establish single-source information monopolies remains noticeable. This is caused by the broad and competitively problematic interpretation of the right of extraction, the natural

638 See also *Hugenholtz* (2005b), p. 217. Cf. with *Lim Tze Wei* (2006), *passim* (proposing increased reliance on competition law as it is better equipped to deal with monopoly power and market position, but leaves database owners the strong protection they need).

639 See also *Hugenholtz* (2005b), p. 216.

640 See *Westkamp* (2001), *passim* for an analysis regarding the application of competition law to the *sui generis* database right.

641 See also *P. Virtanen* (2005), p. 364-367; *Hugenholtz* (2005b), p. 203 and 208 and *Lim Tze Wei* (2006), p. 45. Thus, the equation made by Advocate General *Sharpston* between the *sui generis* right and the protection of text through copyright, is misleading. See case C-304/07, *Directmedia Publishing GmbH v Albert-Ludwigs-Universität Freiburg* [2008] ECR I-7565 (at paragraph 45 of the Opinion). Copyright does not ideally protect the ideas or information, whereas the *sui generis* database right does.

642 See also *Geiger* (2006a), p. 381 and *Lavapuro* (2007), p. 167-168.

tendency of the database markets to become mono- or oligopolistic, and the lack of adequate limitations and exceptions in the Database Directive.

Furthermore, compared to other forms of protection, it may be difficult or even impossible for the competitors to know the level of investments made in the production of a database. The database as such may not always indicate the amount of work and investments made in producing it. Similarly, there is typically no way to discover which materials available elsewhere originate from another database. Thus, it is often impossible to judge what constitutes indirect extraction or re-utilisation of the original database. These uncertainties work in favour of existing database producers and may even prevent the making of new (meta)databases utilising existing recourses. Tellingly, the Commission itself has admitted that there is no evidence that introducing the *sui generis* right has resulted in any increase in database production in Europe.⁶⁴³ Thus, it has become apparent for some scholars that the *sui generis* right should not have been introduced in the first place.⁶⁴⁴ It is surprisingly easy to agree with such hard conclusions.

5.5.6 Technological Measures

According to Article 6(1) of the Information Society Directive, member states must provide adequate legal protection against the circumvention of any technological measures.⁶⁴⁵ Article 11 of the WCT also requires this. However, whereas the WCT only requires protection against technological measures that prevent uses covered by copyright and gives in principle immunity to copyright limitations and exceptions, the Information Society Directive protects against any use protectable by technologies, including acts covered by limitations and exceptions.⁶⁴⁶ Access control thus becomes independent of copyright protection.⁶⁴⁷ Moreover, the Directive requires member states to provide adequate legal protection against any activities, including the manufacture, distribution and possession for commercial purposes of devices which are promoted, advertised or marketed for the purpose of circumvention of, or have only a limited commercially significant purpose or use other than to circumvent, or are primarily designed to enable or facilitate the circumvention of effective technological measures.⁶⁴⁸

643 First evaluation of Directive 96/9/EC on the legal protection of databases (2005), p. 20 and 23.

644 See *Cornish & Llewelyn* (2007), p. 836 and *Kur et al* (2006), p. 551-552.

645 See more closely Article 6(1). See also Article 6(3) of the Directive for a definition of "technological measures" and "effective".

646 See e.g. recitals 39 and 45 of the Information Society Directive.

647 See also *Dusollier* (2005), p. 203 and *Heide* (2000), p. 222 and 224. However, according to recital 50 of the Information Society Directive, the regime established by the Software Directive (91/250/EEC) is not affected by the Information Society Directive. This means, among other things and as already indicated, that reverse engineering permitted by the Software Directive remains permitted after the coming into force of the Information Society Directive, as well.

648 See more closely Article 6(2) of the Directive.

The legal protection of technological measures demonstrates the symbiotic relationship between law and technologies (or code) in regulation: the weakness of code – the possibility of new code reverse engineering or decrypting the original code – is being remedied by legal regulation purporting to immunise the original code from technological tampering.⁶⁴⁹ As a corollary, copyright law becomes a technology right protecting access to works. A combination of technological measure and contract can effectively regulate the behaviour of individuals and redefine the contents of copyright law.⁶⁵⁰ Public interest exceptions to copyright can be restricted and non-copyrightable subject matter can be *de facto* protected, as technical measures do not filter the unprotected ideas or public domain parts from the protected expression. It also appears that courts accept contractual restrictions limiting the statutory exceptions to copyright.⁶⁵¹ With Digital Rights Management (DRM) technologies, even the need for contracting disappears: the technology itself may regulate the permitted uses of works.

Although Article 6(4) of the Information Society Directive obliges the member states to "take appropriate measures" to ensure that right holders make available to the beneficiary of certain exceptions or limitations the necessary means of benefiting from that exception or limitation, the Directive does not anticipate what those measures could be.⁶⁵² The vagueness of the Directive, connected with the strategy to restrict the "appropriate measures" to specified exceptions and limitations only, connotes that the vast majority of exceptions and limitations under national laws can be made ineffective by technological protection measures.⁶⁵³ Moreover, Article 6(4) does not enable an exception to Article 6(2) of the Directive. Thus, manufacturing or dealing in anti-circumvention devices or providing such services is unlawful even where such devices would enable the users to benefit from the exceptions or limitations authorised by Article 6(4).⁶⁵⁴

The effects of this new form of protection are multiple. Only a few aspects can be touched upon here.⁶⁵⁵ The first relates to innovation and creativity. In addition to the fact that the protection of technological measures foremost safeguards the marketing and distribution of already existing content, it could negatively affect the conditions for creativity and innovation. Innovation is by its nature also a social process whereby the *users* often adopt new and unexpected ways to use technologies, products and works.⁶⁵⁶ This process is based on experimentation and improvement. The legal

649 See also *Sideri* (2007), p. 70.

650 See also *Still* (2007), p. 2, 104, 109-110 and 120-121.

651 See e.g. *Elkin-Koren* (2001), p. 197-207. Recital 45 of the Information Society Directive states: "[t]he exceptions and limitations referred to in Article 5(2), (3) and (4) should not, however, prevent the definition of contractual relations designed to ensure fair compensation for the rightholders insofar as permitted by national law."

652 See more closely Recital 51 and Article 6(4) of the Directive. See also *Akester & Akester* (2006), p. 160; *Dussolier* (2005), p. 203 and *Dinwoodie* (2007), p. 110-112.

653 See also *Tritton* (2008), p. 539.

654 See also *Akester & Akester* (2006), p. 161.

655 See more closely *T. Mylly* (2007), *passim*.

656 See e.g. *Tuomi* (2002) and *von Hippel* (2005), both *passim*.

protection of technological measures and the related control exercised by right holders may abolish or severely restrict this possibility: user-generated innovation becomes possible only for the firms controlling large stocks of copyrighted materials and for "pirates" and "crackers" operating on the other side of the law. Moreover, as new works often compete with the already created ones, the temptation to use technological measures (and related contracts) to discourage or disable the usage of exceptions and limitations fostering derivative innovation and creation may be particularly high.⁶⁵⁷ As a corollary, the legal protection of technological measures ridicules the function of copyright law in functioning as an incentive for new creation.

On a more general level, the legal protection of technological measures and the related control by the right owners privatises and strengthens copyright protection considerably. In digital environments, information increasingly becomes a privately regulated and controlled issue.⁶⁵⁸ This further dilutes the democratic features of copyright – free circulation of works once released on the markets, freedom of the ideas inherent in works and the right to utilise the works in critique, research, teaching etc. As the traditional democratic elements of copyright are thus diluted, it becomes necessary to consider the public functions of copyright – freedom of speech and other democratic functions – when applying contract law, consumer protection law and competition law, among others.

With information, content and databases, switching costs increase in any case with time, due to the aggregation of information and protected content in the selected format. This tends to strengthen and solidify the position of the firms controlling the leading formats. The lock-in may be overcome if the information and protected content can be ported to another system.⁶⁵⁹ Another possibility is that the other system technology is made compatible with the leading format. The lock-in caused by format-based investments is exacerbated by the protection of technological measures. The prohibition to circumvent a technological protection measure typically connotes that the users are excluded from porting the information and content into another system. This is an outcome of technology, contract and law protecting both.

Moreover, the providers of competing formats and platforms may not be able to provide the users with devices for the purpose of circumvention, as this could be contrary to Article 6(2) of the Information Society Directive. For example, according to a Finnish Appellate Court interpretation, many users of the Linux operating system may not legally view DVDs on their computers, as the used CSS-protection prevents not only unauthorised copying, but viewing as well.⁶⁶⁰ The circumvention of the CSS-protection typically enables both viewing and copying. Thus, the non-availability of CSS-licenses for some Linux versions, in combination with the anti-circumvention

657 As argued by Heide (2000), p. 222.

658 See also Reichman & Franklin (1999), *passim*; Elkin-Koren (2001), *passim*; Dusollier (2005), p. 203 and Dinwoodie (2007), p. 102-113.

659 See e.g. Shapiro & Varian (1999), p. 123.

660 *Public prosecutor v Rauhala*, Helsinki Court of Appeals decision of 22 May 2008, Dno: R 07/2622.

legislation, disables the Linux operating system and places it in a serious competitive disadvantage as an open source, freely distributed technology.

At the same time, by not licensing the CSS-protection for Linux-distribution on terms acceptable for open source development, the DVD-manufacturers protect their existing product markets for the DVD-players. Obviously, this phenomenon is not restricted to Linux or DVDs, but covers all protected formats and all systems. Thus, the Information Society Directive exacerbates the lock-in to leading formats and technological platforms and as a corollary, the tendency of the network effects -affected markets, and in particular, the converging digital information and communications markets, to produce enduring monopolies.⁶⁶¹ The restricted right to reverse-engineer under copyright law, the possibility to protect interoperability elements under patent law and the lack of corresponding reverse-engineering right connote that overcoming lock-in by making the competing system compatible with the leading formats is increasingly difficult.

5.5.7 Conclusions on Copyright and Related Protection

Copyright emerged from censorship and the system of privileges. In Statute of Anne, the granting of rights to authors, among other potential copyright holders, was largely motivated by the intent to prevent the Stationers' re-gaining their monopoly position. The author as the centrepiece of copyright law developed gradually, diversely and incompletely, resulting in differences in the underlying justification of *droit d'auteur* and copyright, respectively. The Continental approach is often said to be based on natural law, whereas the Anglo-American approach is said to be based on instrumental justification and the idea of restricting a legal monopoly encroaching the public domain to the minimum possible.

The basic doctrines of copyright, the threshold of originality required for protection and the idea/expression dichotomy above all, have a justificatory and operational function in avoiding the copyright law from returning to its roots, into a system enabling private censorship and monopolistic positions. Similarly, the exceptions and limitations to copyright could have the function of relating the protection interests to the public interest in a sustainable manner.

Yet, the originality threshold monopolises either ideas or fragments of expression too extensively and thus manages to avoid neither censorship nor the creation of monopolies. Likewise, the idea/expression dichotomy mainly functions as a label attached to the outcomes reached otherwise. As such, its function is mainly justificatory. Finally, the definition of the exclusive rights, such as the reproduction right in the Information Society Directive, is in no proportion to the existence (or rather the absence) of exceptions and limitations on the European level. The function of the international and European levels of copyright regulation predominantly remains

661 This effect of technological protection is also noted by *Fitzgerald* (2001a), p. 126.

that of establishing overly broad exclusive rights and censoring any limitations and exceptions existing on the member state -level. The relevant case law of the Community Courts has not brought counter-weights to these trends. The European Court of Justice has taken as its starting point the establishment of a *high level of protection*. In contrast to trademark law, the interpretations of copyright law show no traces of competition analysis. Despite the fact that copyright laws now greatly regulate the nature of competition within information, communications, information technology and content markets (among others), copyright interpretations are predominantly based on the image of personal rights of the original authors.

Moreover, copyright now censors not only individual expression, but also inhibits the use of communicative infrastructures and technologies that would otherwise enable spontaneous interaction within the civil society. Protection of technological measures and the ensuing privatisation of copyright further connotes that the exceptions applicable on the member state -level lose part of their practical relevance as they can be circumvented by licenses, the utilisation of DRM-technologies, or both. This implies that the public functions related to copyright must increasingly be considered in the application of other laws, such as contract and competition laws. Finally, the protection of technological measures also exacerbates lock-in to dominant technological formats and thus assists in sustaining and strengthening market and informational power based on the control of techno-economic paradigms.

Protection of databases and technological measures, as well as copyright protection of software all betray copyright's societal promise in that what becomes protected does not have to be the result of creativity, but of economic investments. Furthermore, the right to use the work or even access it may be denied, thus leading to *de facto* (software and technological measures) or even *de lege* protection of ideas, principles or factual information (database right). Moreover, for all these forms of protection, the term of protection is in practical terms perpetual as the database right is easily renewable, as life plus 70 years of protection for software does not have a practical limiting effect, and as public domain materials may be appropriated by using technological measures. Typically, it is the various combinations of these forms of protection used that cause most of the problems. Their cumulative use enables taking advantage of the strongest rights and the least restrictive exceptions and limitations.

Finally, the ownership and control of copyrighted works is highly concentrated. This applies in particular to the most popular works, the most likely expressions to be used in independent derivative works and criticism. The industries based on copyright – media, entertainment and software above all – are characterised by oligopolistic competition and the last-mentioned by persistent monopolies. Copyright collecting societies aggregate copyrighted works under their control and exercise market and informational power. What makes any of this concentration particularly problematic is not only deadweight loss in economic terms, but deadweight loss in freedom of speech terms. As *Netanel* has pointed out, copyright's deadweight loss also means that some potential audiences and speakers are deprived of access to existing expression and the ability to use that expression in conveying a message. This connotes that for freedom of expression reasons we should typically tolerate a lesser degree of copyright

owners' market power than within other sectors of the economy. For the same reasons, copyright owner's market power in general should be placed under a close scrutiny in all competition law analysis.⁶⁶²

Some ideas on how to align copyright protection of computer programs with the traditional objectives of copyright law related to freedom of access to published works and freedom to utilise their underlying ideas and principles were presented above. In addition to this, modifying copyright interpretations to the effect of excluding creative derivative works from exclusive rights would facilitate the creation of new works building on the existing ones.⁶⁶³ This would admittedly constitute a far-going departure from the current copyright practices and would likely require legislative reformulation of the reproduction right on the European level.

Yet, such a change would likely encourage the creation of new works, dissemination of expressions and competition. Competition law cases like *Magill* would not emerge under a liability or profit sharing rule.⁶⁶⁴ In addition to the excessive term of protection and the overridability of exceptions in the digital environment, this is one of the basic problems with current copyright law both in its relation to competition and freedom of expression. Freeing derivative use for non-exploitative uses (imaginative, creative or critical purposes) against a profit-sharing rule,⁶⁶⁵ and shortening the term of protection considerably would cure many of copyright's problems both in terms of freedom of expression and competition. The net effect of inducing creativity, freedom of expression and competition would likely be positive. Such reduction of economic and informational power enabled by copyright law would thus likely be in conformity with copyright's own objectives and societal legitimation.

However, the dense and hardly modifiable international and European regulation of copyright, among other reasons, makes it evident that any such legislative changes are very unlikely to take place in the foreseeable future. We are left with the existing legal institutions and international instruments curbing their reform on one hand, and with the interpretive steps, alternative reconstructions, systematisations and contextual application of intellectual property law achievable in case law and scholarly work, on the other hand. The approach favoured in this research is based on embedding copyright law, as well as other intellectual property rights, on a broader normative and discursive context comprising fundamental rights norms and discourses as well as economic analysis of intellectual property law. Depending on the context, diverse norms, systematisations and discourses may assume more or less relevance. In the following, potential interpretive and conceptual responses to the problems identified will be discussed on a more general level, without restricting the discussion to a particular type of intellectual property.

662 See also *Netanel* (2005), p. 150 and 166-167 and the discussion in chapter 4.

663 See also *T. Mylly* (2004), p. 237 and (2005), p. 219; *Rubinfeld* (2002), p. 53-59; *Netanel* (2005), p. 171 and *Geiger* (2006a), p. 403.

664 See also *Geller* (1994b), p. 177 (asking whether copyright law itself could be formulated to preclude the "perverse market effects" present in the *Magill*-case) and *Geiger* (2006a), p. 403-404.

665 See *Rubinfeld* (2002), p. 53-59, for such a proposal.

5.6 Constitutionalisation(s) of European Intellectual Property

5.6.1 Towards Interactive Constitutionalisation of Intellectual Property?

In order to substantiate the notion of economic constitutional law and private informational power enabled by intellectual property it was necessary to pursue a discussion concentrating on the legislative and doctrinal developments in Europe. Core areas of European patent and copyright law, in particular, were treated and discussed with a relatively critical undertone. What are the broader implications for the theoretical positions developed in this research?

The constitutionalisation of European intellectual property law is at the crossroads. In one direction, intellectual property becomes constitutionalised through inward-looking, self-referential development. In this direction, the international intellectual property instruments like the TRIPS Agreement, together with certain European-level provisions, such as the basic definitions of the exclusive rights in the relevant directives and regulations, the three-step test as incorporated in TRIPS and European Union law, as well as Article 17(2) of the EU Charter, provide the basic set of norms against which the legitimacy and interpretations of the substantive intellectual property provisions become contrasted.

Such constitutionalisation represents fortification or fencing of intellectual property against other laws and their embedded values. It is based on branch of law -specific coherence and legal tradition as understood by the increasingly transnationally oriented intellectual property expert community. Rather than engaging intellectual property norms in interaction and dialogue with other norms and discourses on a *prima facie* level playing field or seeing the intellectual property norms from a more comprehensive perspective of fundamental rights protection, such inward-looking constitutionalisation erects restraints on the extent to which non-proprietary values and interests may affect the exclusive rights. In its strong forms, it represents neoliberal constitutionalisation and reflects the structural proprietary bias identified in this research.

Such constitutionalisation becomes easily detached from other forms of social regulation. This development can also be seen as part of the long-term fragmentation of private law in general and as such is unsurprising on a broader perspective.⁶⁶⁶ The proprietary ideology behind the inherent constitutionalisation of intellectual property is equally unsurprising. The globalisation of capitalism necessitated an effective and strong intellectual property system functioning on the global level. The proprietary ethos can thus be connected to the processes of globalisation and informatisation of capitalism, as will be discussed in the ending chapter of this book.

Another way to “constitutionalise”, reconstruct and systematise intellectual property is based on economic analysis, typically reflecting utilitarianism or instrumentalism. Adopting such a premise could support the idea that only the minimum incentive necessary to encourage the maximal benefit, on balance of other public interests, is

666 See generally *Teubner* (1999), p. 71. See also the discussion in chapter 3.

all that can be justified and should be accepted in intellectual property legislation. From this perspective, every form of intellectual property right can be seen as a distortion of free-market principles.⁶⁶⁷ Yet, the outcomes of such a perspective depend on the preferred premises in economic theory. For example, prospect theory and evolutionary economics seemed to produce largely conflicting proposals regarding patent law. Thus, looking intellectual property through the prism of economics does not produce a coherent overall picture, but a plurality of competing perspectives.

A third way to constitutionalise and reconstruct intellectual property – and typically the only one conceived as constitutionalisation – is to accommodate it with the system of fundamental rights. This approach is based on systemic coherence as seen from the prism of fundamental rights, understood as the core principles and values of the legal system, radiating their effects over all laws. Constitutionalising intellectual property rights by accommodating them with fundamental rights law recognises the multiple effects of intellectual property on diverse lifeworld contexts as well as fundamental right -related collective goods. As the previous discussion of rights constitutionalism indicates, such constitutionalisation is by no means an automatic, neutral or unproblematic process. Rather than implying the enclosure of the dynamics of intellectual property institution's own doctrinal development, such constitutionalisation could connote additional dynamics and implicate refined analysis paying attention to consequences and multiple values and interests in the interpretations of intellectual property laws.

The perceived threat inherent to fundamental rights -based constitutionalisation of intellectual property law is the potential loss of economic dynamics of intellectual property on one hand, and the potential frustration of its inherent branch of law -specific doctrines and principles, on the other hand. To an extent the latter's frustration would be based on unintended side effects, misunderstandings of the relevant doctrinal nuances or the cumulative effects of different parts of the broader intellectual property system, such threats could be realistic. On the other hand, attempts by outside expert communities to reconstruct the underlying foundations of intellectual property law from the perspective of fundamental rights protection (or other alternatives) may be opposed by the specialised intellectual property community in any case.

An approach based on *dialogical constitutionalisation* and *multiple overlapping systematisations or reconstructions of law considered simultaneously* seems preferable for many reasons. Mainstream fundamental rights doctrine and constitutional adjudication have their limitations in handling private power and in reacting to broader anonymous processes like economic globalisation and commodification. As a response, critical constitutionalism inspired by fundamental rights law should be expanded from the domain of traditional constitutional law to private law spheres like intellectual property law. Intellectual property laws pursue a plurality of objectives and must accommodate diverse rationalities, values and interests. Fundamental rights analysis must often be complemented with economic analysis and cultural, artistic and technological discourses

667 See e.g. *Barton* (1997), p. 441.

and perspectives, among others, to enable the fuller consideration of such pluralistic objectives and context-specific requirements of legal decision-making.

Being partially incompatible in their basic assumptions, the competing constitutionalisation projects enable constant critical reflection of each other's premises and prescriptions produced, and thus reasoned attempts to modify any proposals to constitutionalise or reconstruct intellectual property. Alternative reconstructions of intellectual property law could enable contextual application of law in that the contextually determined requirements emanating from the situation at hand could affect which of the premises should be preferred over the others in case of conflicting proposals. Concerns related to constitutional and democratic values do not materialise in all cases. When they do, the decision-maker benefits from systematisations and reconstructions of the relevant laws based on fundamental rights and should emphasise them more than in cases more clearly restricted to the economic sphere.

As has been said, even in the presence of disagreement concerning the fundamental premises, the outcomes may be compatible with each other. For example, the proposals advanced in this research based on constitutional values and democratic theory may often be compatible with evolutionary economics and infrastructure theory. The proposals stemming from standard microeconomic theory also remind us that exclusive rights always come with social costs. For critical legal scholarship, this could also mean that using economic analysis, or at least accepting economic analysis as a basis for alternative reconstructions and systematisations of the relevant laws emphasised when the context at hand so requires, might facilitate in some instances the penetration of the constitutional values pursued.

The constitutionalisation of intellectual property protection seems to take place through three parallel developments having relatively limited visible interaction. Where it matters the most – mainstream intellectual property doctrine and case law – the inward-looking constitutionalisation of intellectual property protection dominates over the outward-looking constitutionalisation, the latter being predominantly in the hands of legal scholars. The mainstream intellectual property doctrines and case law reflect proprietarian bias. Many of the recent legislative developments on international and European levels represent constitutionalisation and fencing of intellectual property in neoliberal spirit. The mainstream legal scholarship, in turn, is increasingly based on single-sided economic analysis typically excluding the broader societal and democratic effects connected to private informational power enabled by intellectual property rights. As will be discussed in more detail in the subsequent chapter and has already been illustrated in chapter 2, such effects have become pervasive in the networked information society.

There are thus particular reasons for legal scholarship to pursue critical constitutional perspectives based on democratic theory and rights constitutionalism. These provide necessary counter-weights and alternatives to the predominating discourses and developments. Below, some of the structural impediments on the level of European intellectual property protection for the proposed approach to take place will be summarised and further elaborated.

5.6.2 Structural Problems of European Intellectual Property Law

The current proprietary phase of European intellectual property protection connotes that legislative outcomes are unlikely to be acceptable either from the perspective of constitutional values or economic analysis. Instead of pursuing a policy based on economic optimisation or a balance between fundamental rights and the related collective goods, *strong or high level of protection* is what the Commission now desires. New forms of protection, such as the *sui generis* database right, have been established without adequately considering the social costs or non-economic repercussions. The extension of patent and copyright laws into new areas has been welcomed by generally referring to the need for the both legal institutions to adapt to the changing technical and societal circumstances.

Yet, the adaptation has been selective. It has not been sensitive towards the diverse logics of creation and invention. Instead, a strong form of intellectual property protection is seen to be the generic solution, enabling the creation of markets in intellectual assets. This simplistic trading and incentive logic is a monocular through which intellectual property or innovation policy is seen. Hence, copyright protection should extend to any piece of music or text, in any form in any new technological environments, such as the transitory copies in the digital media and the Internet. Likewise, a “text” constituting a computer programme should as a general rule obtain copyright protection. Similarly, patent protection should be technology neutral in a sense that invention within any new area, such as gene technology or software, should obtain protection even against explicit statutory exclusions from patentability to the contrary.

Such a universal entitlement to protection has led to the “natural” expansion of resources protected with intellectual property rights without ever making the policy question *should* intellectual property protection exist in such areas, and if yes, *to what extent* and *how*. Such expansion of protectable subject-matter has typically first been the work of patent offices and courts, to be later codified in law. Surely, distinguishing legitimate adaptation and undesirable expansion is a controversial issue and thus part of the on-going debate. However, even the adaptation should not be automatic. It should be based on the purposes of the related intellectual property laws and comprehensive interests and values rather than private aims. Yet, the inclusion of new areas within patent or copyright protection is now *automatic*, possibly only needing some adaptations of technical nature within patent offices and copyright courts, to be later codified in legislation. The latter merely clarifies what has already, *ipso facto*, taken place. Hence, only the ones objecting the inclusion of new areas or subject-matter within the protected domain act politically and must find legal support for the exclusion, as they stand against the inner-logic of protection which is automatic adaptation and *technological neutrality*.

Moreover, weighing the benefits of establishing or extending protection on one hand with the constraints and harms imposed on others directly or indirectly by affecting collective goods on the other hand, seems to be particularly burdensome on the European level. This is due to a considerable structural problem peculiar to

European intellectual property protection outside trademark and design law, namely the almost total absence of compulsory, harmonised exceptions and limitations on the European level. This causes an imbalance on the European level. The values and interests behind the limitations and exceptions become considered only negatively when testing whether the exceptions fall within the categories of exhaustively enumerated exceptions (for example the Information Society Directive) or whether they satisfy the criteria imposed by the three-step test as interpreted in European law (the Software Directive, the Database Directive and the Information Society Directive).

Furthermore, if the European courts follow the interpretations of the WTO panels in applying the three-step test, there would be no substantive evaluation of the public policy reasons behind the exception or limitation even at this stage, but rather formal application of each prong of the test. In any case, the outcome of this evaluation could not be that the national exception or limitation is inadequate with respect to the values and interests it is intended to protect. The role of the European level is thus to establish strong or high level of protection throughout the Union and to censor the existence and application of exceptions and limitations. Only some of the interests and values behind the exceptions and limitations could become expressed on the European level case law when the Community Courts interpret the rare compulsory exceptions.

Such regulation of intellectual property protection on the European level is deformed. There are no European level checks on any balance within intellectual property law. The fundamental right -related and economic grounds underlying the exceptions and limitations are, as a rule, no concern for the European legislator. This may be a remnant of the ordoliberal legacy which left the social and distributive policies for the concern of the member states and contrasted (and often censored) these against the basic economic freedoms operating on the European level.

In addition to the fact that such regulation is no real harmonisation capable of achieving the desired internal market objectives, it can be argued that the Union legislator neglects its obligation to protect fundamental rights on a horizontal level. When enacting intellectual property laws, the task of the Union legislator should be to ensure that individual right owners could not disproportionately restrict the fundamental rights of others, or seriously inhibit the realisation of fundamental right -related collective goods. Provided *strong* or *high level of protection* is established with the exclusive rights, the exceptions and limitations should correspond to these and be capable of adequately securing the realisation of the fundamental right -related values and interests behind them. Entrusting the task of protecting the fundamental right -related interests behind the exceptions and limitations to the member states by simultaneously imposing stringent restrictions on their potential scope and implementation hardly satisfies this obligation.

The European-level exclusive rights produce economic and informational power they are unable to handle with. Concerns related to them are consensually left for the Community competition law and the application of the exceptions permitted for member states. Intellectual property rights are about producing competitive effects, about creating temporary market power and imposing social costs for the

sake of increased invention, technological development and creation. From this perspective, it is very problematic if there are no European-level limits inherent to intellectual property laws on the market and informational power created. For example, the exclusion of competition-related grounds from the application of the compulsory licensing provisions of the proposed Community Patent Regulation places a disproportionate pressure on the application of Community competition law. The same applies to the rejection of the compulsory licensing scheme from the Commission's original proposal for the Database Directive. The existing regulation of reverse engineering within copyright law as well as experimental use within patent law is also too limited from these perspectives.

In the near future, improving the situation considerably with legislative measures seems unrealistic in the light of the extensive international regulation, the strong minority effectively lobbying for expanding protection and the structural problems identified above. It thus seems preferable to concentrate on the legitimacy and potential of the general doctrines of interpretation and the *allgemeine Lehren* of intellectual property protection on the European level. Yet, in many instances, identifying a European level of interpretation or *allgemeine Lehren* is artificial. For example, there are not yet centralised courts in Europe handling patent issues, but national courts with their particular doctrines and traditions. Likewise, despite the relatively intensive Community harmonisation within the area of copyright, the national courts are still greatly affected by their domestic legal traditions and background ideologies. The national courts provide competing interpretations, and as should be clear from the above, largely determine – in the narrowed interpretive space left for them by the exhaustively enumerated exceptions and three-step tests – the interpretations of the limitations and exceptions to copyright.

In such a framework, no single court or authority has the responsibility or ability to secure that the limitations on the freedom of others and collective goods following from a particular interpretation or doctrine are in an appropriate relation to the protection interests and the exclusive rights of the proprietor. To enable any reasoned weighing on the European level, the Community Courts should be aware of the totality of the exceptions and limitations as they are interpreted on the national level. Similarly, when interpreting the exceptions and limitations, the national courts should be aware of the current and anticipate the future interpretations of the exclusive rights by the Community Courts. They should also be able to consider the totality of the exceptions and limitations as applied and interpreted in other member states.

The developments characterised in this and previous chapters have led to intellectual property becoming an unforeseen instrument of private power. It enables private regulation of forms of social life and market interaction: exclusive rights increasingly imply *restrictions* of innovation and creation, as well as restrictions on other economic and non-economic action. They enable private regulation of communication, various lifeworld contexts of interaction and collective goods necessary for the realisation of fundamental rights. Yet, the mainstream intellectual property doctrine still purports to handle innovation and creativity as its exclusive domain and conceives intellectual property rights to be exclusively about facilitating innovation and creation. It is clear

that intellectual property protection should be rethought. The following thoughts and preliminary proposals are based on the ideas of dialogical constitutionalisation of intellectual property protection developed previously. In addition to sketching a general horizon against which intellectual property law could be construed, it is necessary to indicate how the adopted positions could affect some of the doctrines of intellectual property protection.

5.7 Some Feasible Outcomes

5.7.1 General

Intellectual property laws are essentially about regulating power over information and culture. From this perspective, it is not sufficient to perceive intellectual property rights as islands of autonomy created through a property-based right to exclude others. The analysis of intellectual property should extend to the interaction of a broader set of norms. Moreover, the outcomes of this interaction should be analysed from multiple perspectives. Without realising the way intellectual property and related laws participate in constituting a regime having to do with forms of life and market and non-market interaction we perceive desirable, there seems to be only one direction, that of the strong minority pursuing strong intellectual property protection.

The notion of economic constitutional law provides a perspective calling for expanding the legal institutions and sources analysed, broadening of the rationalities and underlying premises considered, and thus the questions asked. The partial irreconcilability of the competing modes of constitutionalisation further invite and facilitate opening up the value-bases and democratic ideals behind any propositions to constitutionalise intellectual property law, as well as behind any prescriptions and interpretations which implicitly or explicitly are based on such constitutionalisation attempts. In contradistinction to constitutionalisation restricted to one expert system, the dialogical constitutionalisation enables considering the outcomes and proposals of other constitutionalisation projects. Disturbances of fundamental rights and collective goods, the loss of economic dynamics intended by intellectual property protection, and finally also the frustration of the potential of the branch of law -specific, historically developed doctrines to independently adapt to economic and societal change in an acceptable manner are all relevant threats. The idea of economic constitutional law pursued in this research is pluralistic in the sense of being able to consider all these potential threats, yet capable of realising that such threats are currently not equal in their likelihood or significance.

Proceeding from the notion of economic constitutional law as understood here would lead to recognising in intellectual property contexts the conflictual and interdependent nature of rights on one hand, and rights and collective goods on the other hand. Identifying an owner of an intellectual property right would thus merely be one starting point in the analysis without strong subsequent presumptions concerning the individual sticks in the bundle of rights in the situation at hand. There

would be no taken-for-granted core in intellectual property rights leaving the owner autonomy or freedom to disregard the interests of others. Practical conclusions would be possible only after analysing all the individual rights and interests involved, as well as the consequences of a certain interpretation on collective goods.

It would require departure from simplistic rights-based thinking in that consequences matter and that individuals may have interests in the interpretation without being directly affected.⁶⁶⁸ It would similarly require departure from simplistic law and economics -based thinking in that not all consequences are reducible to short-term satisfaction of individual preferences. Evidently, it would finally require departure from the dogmatic, seemingly neutral intellectual property tradition. The inherent doctrines and typical argumentation patterns of intellectual property rights should be evaluated and tested from the competing perspectives provided for by fundamental rights law and economic analysis of law and depending on the context, possible other discourses and perspectives. The situation at hand also determines the respective weights of the competing perspectives and the systematisations or reconstructions of the relevant laws they produce.

It is necessary to give a few examples what the interpretive approach preferred here could mean on the level of the European intellectual property doctrine. Patent- and copyright-specific possibilities have been discussed previously. The following discussion relates to the *interpretation of exceptions and limitations* to intellectual property, the doctrine of *abuse of rights* and the *three-step test* and is not restricted to one particular right-type.

5.7.2 Interpretation of Exceptions and Limitations

Regarding *interpretation of exceptions and limitations* to intellectual property, the foregoing would mean that idea of narrow interpretation of exceptions and limitations to intellectual property rights should finally be rejected.⁶⁶⁹ It is sometimes argued that as the exceptions and limitations form an exception to the primary purpose or function of an intellectual property right, they should be interpreted narrowly as most exceptions to the main rule.⁶⁷⁰

However, seeing intellectual property rights as products of a legal institution regulating conflictual interests in information rather than as property-based islands of autonomy would suggest another construction. The statutory exceptions and limitations are an important constituent of the intellectual property institution in

668 See Pöyhönen (2000), p. 173-176 about the notion of *interest position*, intended to complement or even replace the formal notion of legal subject.

669 See also Pöyhönen (2000), p. 197 and Geiger (2008a), p. 192-196; (2008c), and (2009a), both *passim*.

670 See case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported (at paragraphs 56-59). See Holzapfel & Werner (2009), *passim*, for historical contextualisation and current significance of the idea of narrow interpretation of exceptions within copyright, patent and trademark law in Germany, in particular.

that they often relate to fundamental rights and collective goods related to them.⁶⁷¹ Furthermore, they often pursue the same instrumental objectives the exclusive rights do in the first place: the primary function of intellectual property rights is not only to incentivise invention and creation that would not take place in the presence of a market failure, but also to simultaneously facilitate follow-on invention, experimentation, dissemination of knowledge, critical discourse, artistic expression, and so forth.

For example, the experimental use exception of patent law relates to freedom of research and entrepreneurship and facilitates new invention, as discussed previously. Similarly, compulsory licensing based on non-use establishes an obligation on the part of the patent owner to further one function of the patent institution as a condition for the full realisation of rights. Such an obligation should be seen as an inherent limitation of the right pursuing the functions of the patent institution, rather than an external restriction of the originally absolute right.⁶⁷² Thus, there is no reason to interpret this or similar exceptions narrowly, but against the balance of fundamental rights involved, the economic objectives of protection and the functions of the exclusive rights in question, as explicated by the relevant expert communities.

The logic of narrow interpretation of exceptions is thus untenable also from the more restricted intellectual property perspective.⁶⁷³ The agreed-upon function or purpose of any intellectual property right has never been the maximisation of the proprietor's rights. Although intellectual property laws establish exclusive rights, the latter do not become the function or purpose of intellectual property.⁶⁷⁴ The statutorily limited exclusive rights are rather the means chosen to foster invention, creation and publication of new works and technical knowledge. The means chosen restricts the use of information and thus freedom of expression, competition and economic action. The inherent objectives of intellectual property related to innovation incentives and creation of new works may be fulfilled only under the threat of competing exclusivities, and in the presence of sufficient cultural and scientific commons, pools of freely usable cultural and knowledge-based resources. Interpreting the exclusive rights broadly and exceptions and limitations narrowly would frustrate this dynamics of intellectual property protection.

Hence, it is typically acceptable to interpret the exclusive rights and the exceptions and limitations thereto so that the ensuing restrictions on others remain as limited and unproblematic as possible, and in an appropriate proportion to the benefits achievable. Often, adding the reward of authors and inventors has no positive effect on the levels of inventive or creative efforts, as over-compensating the author or inventor merely

671 See also the analysis in chapter 4 previously.

672 As pointed out by Pöyhönen (2000), p. 74-76 and 105-108.

673 See also Hugenholtz (1996), p. 94-95, arguing that the limits to the exclusive rights cannot be regarded as exceptions to a rule but rather as methods by which the law limits the monopoly by endeavoring to establish a balance between the holder's rights and those of users, often relating to fundamental rights and basic societal needs. Similarly Geiger (2008c) and (2009), both *passim*, also emphasising that the limitations may function as protection mechanisms of the interests of creators.

674 See also Karo, Lavapuro & Mylly (2007), p. 18-19 (with regard to copyright).

leads to the creation of deadweight loss. This could lead to limitations on invention and creation of new works on the part of others.

It would be possible for courts in Europe to adopt an interpretive approach to exceptions and limitations promoted here. As the interpretation of exceptions and limitations outside trademark and design law is largely the task of the national courts, the highest courts of the member states have an important task to balance the strong and high level of protection established on the European level. The Community Courts should be supportive of such a development and insist on pursuing for a balance of fundamental rights and protection interests when interpreting domestic laws. The leading European decisions enable such a development. For example, the German Constitutional Court (*Bundesverfassungsgericht*) acknowledged in *Germania 3 Gespenster am Toten Mann* that freedom of the arts required an interpretation of copyright law departing from the traditional interpretation of the relevant provisions.⁶⁷⁵ Similarly, in the *Ashdown*-case the Appeals Court in England stated that when freedom of expression and copyright may conflict, the court has an obligation, insofar as it is able, to apply the copyright law in a manner that accommodates the right of freedom of expression.⁶⁷⁶ Such leading cases support fundamental rights -based interpretation of exceptions and limitations in Europe.⁶⁷⁷

On the international level, the three-step test does not require narrow interpretation of exceptions and limitations, but rather sets a standard against which the conformity of the national exceptions with the TRIPS-obligations is analysed.⁶⁷⁸ It should also be noted that the WTO Appellate Body has stated that the characterisation of a treaty provision as an “exception” does not justify its narrow interpretation. The wording of the particular provision viewed in context and light of the treaty’s object and purpose are instead the proper guidelines for interpretation.⁶⁷⁹ This approach is in line with the Vienna Convention on the Law of Treaties (Article 31 and 32) which does not give grounds for preferring one portion of the treaty text to another.⁶⁸⁰ The competing

675 *Germania 3 Gespenster am Toten Mann*, Decision of 29 June 2000, 1 *Bundesverfassungsgericht* 825/98. *Kunstfreiheit* is guaranteed by Article 5(3) of the German Basic Law. See also *Alston* (2005), p. 250-251 and *Geiger* (2006), p. 395-396. See also the German case law analysed in *Holzapfel & Werner* (2009), *passim* (proposing that the principle of narrow interpretation of exceptions no more applies, especially so outside copyright law).

676 *The Right Honourable Paddy Ashdown, MP PC v Telegraph Group Ltd.*, 2001 EWCA Civ. 1142 (Eng. C.A.).

677 See also *Geiger* (2008a), p. 194, discussing a case decided by the French Supreme Court. According to *Geiger*, the Supreme Court created a new exception of *accessory reproduction* for copyright.

678 See also *Geiger, Griffiths & Hilty* (2008), *passim*. The interpretation of the three-step test will be discussed more below. Cf. however with the Fourth Chamber of the European Court of Justice in case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported (at paragraph 58 where the three-step test was problematically used to support narrow interpretation of a limitation to copyright).

679 *EC Measures Concerning Meat and Meat Products (Hormones)*, AB-1997-4, WT/DS26/AB/R and WT/DS48/AB/R, (16 January 1998) (Adopted 13 February 1998), at paragraph 104.

680 See also *Palmeter & Mavroidis* (1999), p. 83-85.

values inherent in treaty provisions are thus not capable of being decided *ex ante* based on classifying some provisions as the “main rule” and other part an “exception”.⁶⁸¹

In conclusion, the regulation of exceptions and limitations on the international level does not justify a doctrine of narrow interpretation of exceptions either. Also from this perspective, interpretations should be case-specific and accommodate several competing and conflictual interests without pre-existing prejudices about their respective weights in the situation at hand.

5.7.3 Abuse of Rights Doctrine

A notion capable of accommodating both fundamental rights and competition-related economic concerns in intellectual property law is the *abuse of rights doctrine*. It also relates to the functions of intellectual property rights as explicated in intellectual property case law and jurisprudence and thus also to the inherent constitutionalisation of intellectual property law. Prohibition on abuse of rights is codified in several civil laws of the European states.⁶⁸² It has been analysed as a general private law concept capable of channelling fundamental rights analysis into horizontal private law relations,⁶⁸³ and as a doctrine fostering the interpretation of law in accordance with its social functions.⁶⁸⁴ As such, it could open intellectual property laws to principled discussion and broader constellations of law, thus furthering principled coherence. Rather than second-guessing the choices of intellectual property legislator, it could further the realisation of the values and functions considered central to intellectual property laws.

Furthermore, the abuse of rights doctrine could also invite increased economic analysis, as the consequences defining the right to invoke formal title in intellectual property would also be economic in nature. As a notion anchored in civil law or law in general, it would not only be an intellectual property-specific doctrine like *misuse* of patent or copyright law in the US, and would also enable departing from the standards adopted in competition law (in the US antitrust law) application.⁶⁸⁵ Hence, it could better than US-type misuse-concept connect intellectual property to broader constellations and developments of law,

681 See also *Howse* (2000), p. 55.

682 See *Guibault* (2002), p. 184-194 and 277-289 (discussing France, the Netherlands and Germany). See also *Jehoram* (2004), *passim*. It is also a doctrine existing in the Nordic countries. See *Pöyhönen* (2000), p. 102-103.

683 See *Pöyhönen* (2000), p. 102-109 (private law's abuse of rights doctrine is essentially about horizontal effects of fundamental rights). See also *T. Mylly* (2000b), p. 196-197 (building on Pöyhönen's ideas with regard to abuse of rights constituting an exception permitted by the European Court of Justice to the direct effect of directives). See also Article 17 of the European Convention and Article 54 of the EU Charter which prohibits abuse of rights and could be used to construct the general abuse of rights doctrine from the perspective of fundamental rights protection.

684 See *Guibault* (2002), p. 184-194.

685 Patent misuse is an equitable defence to patent infringement. Equity should intervene against a patent owner who has illegitimately tried to extend a patent's enforceable scope. See e.g. *Janis* (2005), p. 790.

and thus lessen the fragmentation of intellectual property law into its own discipline, detached from the general (civil) law.

Importantly, the prohibition on abuse of rights is also a Union law principle. The doctrine is now on the stage of active development on the European level.⁶⁸⁶ Advocate General *Maduro*'s discussion of the doctrine in the *Halifax*-case is illuminating.⁶⁸⁷ According to his analysis, the notion of abuse of rights has developed into a general principle of Union law, and is best characterised as a principle governing the *interpretation* of Union law. Should the invocation of a Union norm not correspond with the teleological scope of the norm invoked, the provision in question should be interpreted, contrary to its literal meaning, as not actually conferring the right. The doctrine thus functions as a self-protection measure of the Union legal system by ensuring that the rights it confers are not exercised "*in a manner which is abusive, excessive or distorted*". The Advocate General describes this principle as "*an indispensable safety-valve for protecting the aims of all provisions of Community law against a formalistic application of them based solely on their plain meaning*". Furthermore, as *Maduro* noted in his opinion, the principle must take into account the specific characteristics and principles of the norms in question.

The Court stated in the same case that according to settled case law, Community law could not be relied on for abusive or fraudulent ends. The invocation of Community rights (and domestic laws implementing them) may be abusive if the *essential aim* is to obtain an advantage contrary to the purpose of the provisions in question.⁶⁸⁸ In another case, the Court has applied the standard of "*wholly artificial arrangements*" and applied the principle when the right being exercised is not granted by Community law.⁶⁸⁹ It has also confirmed Advocate General *Maduro*'s characterisation of the doctrine as "*a general Community law principle*", further stating that individuals "*must not improperly or fraudulently take advantage of provisions of Community law*". This connotes that the application of Community legislation should not be extended to cover "*transactions carried out not in the context of normal commercial operations, but solely for the purpose of wrongfully obtaining advantages provided for by Community law*".⁶⁹⁰

686 See *Brown* (1994) *passim* and *de la Feria* (2008), *passim* about the development of the abuse of rights doctrine in EU law. See also case C-367/96, *Alexandros Kefalas and Others v Elliniko Dimosio (Greek State) and Organismos Oikonomikis Anasygkrotisis Epicheiriseon AE* [1998] ECR I-2843 and case C-373/97, *Dionysios Diamantis v Elliniko Dimosio ja Organismos Oikonomikis Anasygkrotisis Epicheiriseon AE* [2000] ECR I-1705 and joined cases C-255/02, C-419/02 and C-223/03, *Halifax plc and others v Commissioner of Customs and Excise* [2006] ECR I-1609.

687 See opinion of Advocate General in joined cases C-255/02, C-419/02 and C-223/03, *Halifax plc and others v Commissioner of Customs and Excise* [2006] ECR I-1609. See also Advocate General *Tesouro* in case C-367/96, *Alexandros Kefalas and Others v Elliniko Dimosio (Greek State) and Organismos Oikonomikis Anasygkrotisis Epicheiriseon AE* [1998] ECR I-2843 (at para 24).

688 Paragraphs 68, 74-75 and 81 of the *Halifax*-ruling.

689 Case C-196/04, *Cadbury Schweppes plc, Cadbury Schweppes Overseas Ltd v Commissioners of Inland Revenue* [2006] ECR I-7995; case C-456/04, *Agip Petroli SpA v Capitaneria di porto di Siracusa and others* [2006] I-3395 and Case C-162/07, *Amplificientifica Srl, Amplifin SpA v Ministero dell'Economia e delle Finanze, Agenzia delle Entrate* [2008] ECR I-4019. See also *de la Feria* (2008), p. 430.

690 Case C-321/05, *Hans Markus Kofoed v Skatteministeriet* [2007] I-5795, at paragraph 38.

In yet another context, the Court has established a “test” for abusive practices, according to which abuse of rights requires: 1) a combination of objective circumstances in which, despite formal observance of the conditions laid down by the Community rules, the purpose of those rules has not been achieved; and 2) a subjective element consisting in the intention to obtain an advantage from the Community rules by creating artificially the conditions laid down for obtaining it.⁶⁹¹

The invocation of the prohibition on abuse of rights before the Community Courts is in its early stages and has been somewhat sporadic, enabling the refinement of the doctrine only in the context of tax law. The Court’s formulations of the principle and its application have legitimately been context-specific, depending on the applicable norms and the practical situation at hand. The case law reflects the heterogeneity of the premises underlying the prohibition on abuse of rights.⁶⁹² Hence, no far-going conclusions can yet be drawn from this evolving case law. However, the case law demonstrates the potential of the principle to be applied throughout Union law, including intellectual property law.

Thus, certain abusive or distorted exercise of intellectual property rights against their teleological scope could be interpreted as an instance of abuse of rights, despite the formal title to invoke the rights. The existing case law on abuse of rights should be modified to correspond with the specific characteristics and principles of intellectual property protection. This necessarily involves complex policy- and principle-oriented analysis, as well as the evaluation of the existing means within intellectual property laws and other laws, such as competition law, to cope with the abusive invocation of intellectual property rights. The principles emanating from the European Union member states regarding abuse or misuse of intellectual property rights should also be considered when formulating the corresponding Union law doctrine.⁶⁹³

It seems likely that there is nothing in the international regulation of intellectual property which could hinder developing the doctrine through case law. As the prohibition on abuse of rights can be considered a general doctrine of law and a principle of interpretation, it does not require express legislative recognition by the Union legislature to render it applicable. The TRIPS Agreement in its Article 8(2) recognises on a general level that appropriate measures may be needed to prevent the abuse of intellectual property rights by right holders. Dysfunctional use or misuse in general seems to be covered by the Article.⁶⁹⁴ Also the Paris Convention, in its Article 5A (2), enables compulsory licensing to prevent abuses which might result

691 Case C-110/99, *Emsland-Stärke GmbH v Hauptzollamt Hamburg-Jonas* [2000] ECR I-11569, at paragraphs 52-53.

692 See more closely about the alternative underlying rationales of the abuse of rights doctrine *Guibault* (2002), p. 184-188. The three major criteria for finding abuse of rights are according to Guibault (*ibid.*, at p. 190) the concept of fault in civil law liability, the holder’s intention to cause harm, or the exercise against the purpose for which the right was conferred.

693 See about this case law *Guibault* (2002), p. 277-283.

694 See *UNCTAD-ICTSD* (2005), p. 548 and *Ullrich* (2005b), p. 733 and 740. See also *Janis* (2005), p. 776-777 and chapter 8, which treats the competition law -related provisions of the TRIPS Agreement, including Article 8(2).

from the exercise of the patent rights. Thus, the idea that intellectual property may be exercised abusively and that there should be measures to counteract such instances is an internationally recognised notion capable of being further developed in the context of European intellectual property law.

The highly contextual, interpretive nature of the abuse of rights doctrine connotes that it is not possible to characterise its possible consequences in the intellectual property contexts with detail. However, it could largely function as a potential defence in intellectual property disputes, or as a ground for invalidating protection obtained fraudulently and against the purpose of granting it in the first place. It could emphasise purposive, teleological interpretation of intellectual property law at the expense of formalism, could channel fundamental rights considerations into intellectual property case law, and could also direct the attention of intellectual property courts to situations where the exercise of intellectual property rights does not produce the intended effects, but only (competitively) harmful effects. Yet the doctrine should not substitute for all competition law application. It would be cumbersome to have recourse to this generic notion alone where complicated market data and analysis is required. Furthermore, it would not enable the imposition of fines and should not be used to impose continuing affirmative duties which are both possible under general competition law, as will be discussed subsequently.⁶⁹⁵

In the relative absence of compulsory exceptions and limitations to intellectual property protection on the European level, the notion of abuse of rights could also enable limiting the reliance on exclusive rights in similar circumstances, provided the reliance is not in conformity with the protection interest of the intellectual property right in question and frustrates the balance of fundamental rights or important public policy objectives. It could thus partially fulfil the functions adequate exceptions and limitations operating on the European level would have. Through this doctrine, the Community Courts could pronounce on some limits of exclusive rights even when the statutory exceptions and limitations largely operate on the national level.

The foregoing considerations will be briefly concretised here with a few examples related to competition-related interests. The intention is merely to indicate potential areas of application for the principle prohibiting abuse of intellectual property rights. The notion of abuse of rights could first of all be used in situations characterising the reverse doctrine of equivalents. As should be clear from the above treatment of this doctrine, in these situations extending the right to exclude is not in conformity with the objectives of patent law and would unduly restrict the freedom of action of others. Thus, the formalistic interpretation of patent law could give way for a teleological interpretation. The notion of inequitable invocation of patent rights behind the reverse doctrine of equivalents corresponds with the strong teleology and weighing of fundamental right and policy interests behind the prohibition on abuse of rights.

⁶⁹⁵ Cf., for example, with case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601. In this case both substantive fines and affirmative duties were imposed. The case also required complicated market data and analysis and could thus not adequately be treated with the abuse of rights doctrine.

Second, by fraudulently extending the term of patent protection, for example through the Supplementary Certificate Protection rules, or by artificially manipulating the conditions for the market authorisation of pharmaceuticals merely to block or delay generic competition or parallel imports, could be seen as instances of abuse of rights. Such a situation was at hand in *AstraZeneca* evaluated under the prohibition on the abuses of a dominant position.⁶⁹⁶ In such situations, extending the exclusive rights or relying on them is not in line with the protection interest and conflicts with the freedom of others, as well as with public policy objectives.

Finally, refusing to license could be considered as an instance of abuse of intellectual property rights, provided there is no valid reason for such a refusal (including the functions related to intellectual property protection), but merely the intention to exclude competitors from the markets. The examples given by the Court in the *Volvo*-case⁶⁹⁷ of potentially abusive conduct under the prohibition on the abuses of a dominant position – the arbitrary refusal to supply spare parts to independent repairers, the fixing of prices for spare parts at an unfair level or a decision no longer to produce spare parts for a particular model even though many cars of that model are still in circulation – could also be analysed under the general prohibition on abuse of rights. The same applies for the *Magill*-case,⁶⁹⁸ where the refusal to license copyrighted TV-program information did not in any way relate to the functions of copyright, but negatively affected the development of an ancillary market for comprehensive program guides.

Moreover, it can be argued that both *Volvo*- and *Magill*-cases were not about true market power based on intellectual property. In *Volvo* any market power was brand-specific and based on competitively suspect design protection for spare parts. In *Magill*, any market power was a by-product of the TV-stations' broadcasting activities, exceptional and unmotivated extension of copyright protection to factual data, and *Magill*'s specification of a derivative use for which there were no potential substitutes. Neither case was thus about intellectual property assuming a bottleneck position on any broader markets, but rather about invocation of intellectual property rights against their function and purpose, to the detriment of other enterprises and consumers. The general prohibition on abuse of intellectual property rights could be better suited to address the types of problems inherent to these cases.

The prohibition on the abuse of rights could also be used to address some refusal to license situations and market power generated through standardisation, network effects and tipping.⁶⁹⁹ Requesting an injunction and thus not limiting oneself to claims

696 See the Commission's Decision *AstraZeneca* [2006] COMP/A.37.507/F3, OJ L332/24. See also *Negrinotti* (2008), for an analysis of this decision. It should be noted that the selective de-registration for the purpose of blocking and delaying the entry of generic manufacturers and parallel importers was not executed through abusing intellectual property, but other legislation concerning marketing authorisation of generic drugs.

697 Case 238/87, *AB Volvo v Erik Veng (UK) Ltd.* [1988] 6211.

698 Joined Cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* [1995] ECR I-743.

699 See also the discussion of standardisation and patent protection in chapter 7.

on compensation only could be interpreted as an excessive reliance on formal patent rights and thus abuse of rights in some cases.⁷⁰⁰ These instances could involve, for example, misleading in the standardisation process or giving promises to license, as well as dependencies created by previous licensing practice or wide enough industry adoption and implementation of the standard. Non-working of a patent could also lead to the rejection of an injunction as a remedy, as the patent owner would not fulfil the functions of patents by abstaining from working the patent and refusing to license.⁷⁰¹

Under such conditions, insisting on an injunction could be interpreted as inequitable behaviour, jeopardising the property, freedom of action and even the existence of other entities without the corresponding need to protect the formal patent rights in full. In such an instance, the prohibition on abuse of rights could legitimately convert the property rule inherent in a patent into a liability rule, provided requesting an injunction is out of proportion with regard to the purposes of patent protection and harms imposed on others. Requesting an injunction against good-faith implementers of an essential patent within an industry standard often presents such conditions, as in these instances the patent typically conveys market power over (an) industry sector(s),⁷⁰² not only over a particular technological solution capable of being invented around for the purposes implementation in the standardised technology.

In the absence of a case from the Community Courts applying the principle of abuse of rights to intellectual property law it is not yet possible to rely on the potential of this doctrine. Yet the doctrine exists both on national and Union levels and could be developed by European courts. Rather than producing any particular outcomes, the main function and merit of the principle is seen here to be in inviting principled discussion of intellectual property law. Through this doctrine, the functions of intellectual property protection, various contexts of application, as well as fundamental right and economic consequences could become considered in a principled discussion. As such, the development of this doctrine in the intellectual property case law of the Community and national courts would be warmly welcomed.

700 See *Orange-Book-Standard*, Decision of 6 May 2009 (Bundesgerichtshof), KZR 39/06 (Germany), where the Bundesgerichtshof formulated competition law conditions under which injunctions can be refused. See also The European Human Rights Commission's decision in *France 2 v France* (Appl. no. 30262/96), 15 January 1997. The copyright was not in violation of freedom of speech as there was no attempt to obtain an injunction prohibiting the defendant's television broadcast, but only the collection of unpaid royalties. Thus, the copyright was exercised in a manner corresponding with a liability rule. For a comparative perspective, see *Ebay, Inc. v MercExchange LLC*, 126 U.S. 1838 (2006), where the US Supreme Court limited the right of a patent owner to obtain an injunctive relief against infringement. See also *Frischmann & Lemley* (2007), p. 292-293.

701 The last-mentioned consideration has been relevant in older US case law. See *Merges* (1998), p. 126-127.

702 See also *Ghidini* (2006), p. 109.

5.7.4 The Limits of the Three-Step Test

The final question of interpretation discussed here involves the *three-step test*. It has also been discussed previously in the context of substantive copyright and patent law. Here the treatment of the three-step test proceeds on a more general level. The three-step test is an instrument inherent to international and more recently also European intellectual property law.

In the WTO framework it is applied in a trade-related context leaving aside other rationales of intellectual property protection and the interests, values and norms underlying the limitations and exceptions. Hence, the outcomes represent a partial intellectual property and normative perspective only. On this level, *the three-step test establishes a judicial review for exceptions based on single-sided economic values and hence participates in inherent constitutionalisation of intellectual property law in neoliberal spirit*. As an economically biased inherent test of intellectual property law it could not one-sidedly define the relationship between intellectual property and other legal institutions, such as fundamental rights law or competition law.

Otherwise fundamental rights would effectively be sub-ordinated under judicial review based on copyright and patent laws. It should obviously be the other way around: the conclusions reached within copyright or patent law should also be acceptable from the perspective of fundamental rights. There is no reason to presume that the balance between exclusivity and limitations reached after applying the three-step test is automatically in conformity with fundamental rights protection. As the *allgemeine Lehren* of copyright and patent law and the interpretations of the three-step test seem to exclude many-sided fundamental rights analysis, conflicts are likely.⁷⁰³

Similar considerations apply to the effects of the three-step test on the relationship between intellectual property and competition law. As stated above, the three-step test is an internal limitation of exceptions within patent and copyright institutions, respectively. Even though the three-step test is probably flexible enough to control limitations and exceptions implemented as restrictive delineations of the exclusive rights themselves,⁷⁰⁴ it is not designed to solve conflicts and interaction between distinct legal institutions, such as copyright law and general competition law. How could an instrument harmonising intellectual property protection globally, in the absence of comparable competition law harmonisation, settle their relationship definitively?

An interpretation according to which the general provisions of competition law should fulfil an internal test of copyright or patent law would position copyright and patent law *prima facie* above competition law. This interpretation could not be reached in the framework of the TRIPS Agreement. Its references to competition law are minimal, restricted to Articles 8(2), 31 (k) and 40 of the TRIPS Agreement which

703 In addition to the previous discussion, see especially Geiger, *Griffiths & Hilty* (2008), p. 707 (about the three-step test) and case C-5/08, *Infopaq International A/S v Danske Dagblades Forening*, judgement given 16 July 2009, not yet reported (about the copyright principles as applied by the European Court of Justice).

704 See *Senfleben* (2004), p. 256.

concern the principles of the TRIPS Agreement, the remuneration and procedure to be followed in compulsory licensing on anticompetitive grounds, and consultation procedure in case of abusive practices.

In the absence of substantive competition law harmonisation the TRIPS Agreement cannot settle the substantive relationship between intellectual property and general competition law on the international level. Implementing an intellectual property-specific general limitation or exception in competition law could be another issue, as it could be argued that the legislative technique used should not enable outright circumvention of the three-step test. However, general competition law norms such as the cartel prohibition and the prohibition of abuses of a dominant position are generally worded competition law provisions not constituting general limitation of copyrights or patents. Their effects on the exclusivity of patents or copyrights as guaranteed on international level are determined in individual contexts of application.⁷⁰⁵

The mere existence of the three-step test on the WTO-level is in any case problematic, as the current application of the test is only based on economic rationality. The substantive grounds behind the exceptions do not become evaluated or weighed against the protection interests. The possibility of the WTO-authorized sanctions encourages TRIPS-conformity. Irrespective of the weight of the public interest behind the exception, be it based on fundamental rights or public policy grounds, the three-step test seeks to set an absolute threshold beyond which no statutory exception is permitted to go. As the courts tend to avoid institutional conflicts whenever possible, a decision based on one-sided economic rationality could be allowed to determine the practical outcomes: economic rationality as reflected in the application of the three-step test could eventually take hold of fundamental rights and not *vice versa*.

The widely-spread critiques of the three-step test and the declaration of legal scholars intended to offer a more reasonable interpretation of it are positive developments. Like the declaration says, the three steps should be interpreted as a whole. Moreover, and as was discussed above, the test should not be used to construe limitations and exceptions narrowly.⁷⁰⁶ Yet *the fact remains that the WTO is a trade-centred organisation*. Its panels do not represent expertise in fundamental rights law. Its norms do not reflect a fundamental rights dimension. Moreover, there is no existing or even potential consensus on the international level about the desirable relationship between fundamental rights and intellectual property (or trade) law. A comprehensive overall assessment of the limitations covering fundamental rights considerations, as proposed by the declaration,⁷⁰⁷ would thus in any case be problematic on the WTO-level.

705 In any case, the Court of First Instance (now the General Court) considered in the *Microsoft*-case that even the indirect effect of TRIPS Agreement does not apply to the provisions of the EC Treaty, such as Articles 81 and 82 EC, now Articles 101 and 102 FEU. See case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, at paragraph 798. With regard to the three-step test as adopted in the EU intellectual property directives it could be argued that the directives should not be construed so as to affect the interpretation of the Treaty provisions.

706 See Geiger, Griffiths & Hilty (2008), *passim* (declaration originally signed by 26 legal scholars).

707 See Geiger, Griffiths & Hilty (2008), p. 709-710.

A WTO panel judging the acceptability of exceptions and limitations on the basis of a comprehensive evaluation comprising fundamental rights would lack legitimacy in the absence of substantive fundamental rights standards in the WTO *acquis*. As there is no consensus at sight, proposing operational fundamental rights provisions to be included in the WTO law is unrealistic. In any event, simply adding isolated fundamental rights provisions to the WTO *acquis* would not change the trade-logic and economic bias of the interpretations. Instead, it could merely be used to legitimate the interpretations with the aura of fundamental rights balance. Similar critical objections apply with regard to the proposed reference to the Universal Declaration in the TRIPS Agreement.⁷⁰⁸ The WTO dispute settlement organs could become *the* authoritative bodies on a global level interpreting the meaning of the Universal Declaration in the context of intellectual property rights. The WTO would still be based on trade and economic rationality. Such an outcome is hardly desirable. It would most likely produce more new problems than solve the existing ones.

The approach favoured here is based on treating the national and European levels differently from the WTO-level when interpreting the three-step test. What is needed from the national and European-level courts alike is the realisation of the limited perspective and narrow regulatory context when the three-step test is applied on the WTO-level. Instead, *when applying the test on the European or domestic levels, the national and European-level courts should accommodate comprehensive fundamental rights considerations in their interpretations*. This is enabled by the fact that, in contradistinction to the situation in the WTO-framework, the test becomes embedded in a regulatory context including fundamental rights as its core ingredients.⁷⁰⁹

Both national and European-level courts have an *obligation* to interpret directives and the corresponding national laws, international treaties and primary Union law in conformity with fundamental rights protection. *This obligation also extends to the three-step test at all levels: as part of WTO law, intellectual property directives and their national implementations.*⁷¹⁰ *The operation of the three-step test on both Union- and domestic levels could thus differ substantively from the existing interpretations of the similar test functioning on the WTO-level.* Yet, the potential problem with the WTO panels sanctioning its members on the basis of the three-step test is still there. Something should be done with the WTO-level, too.

708 For such a proposal see Geiger (2006a), p. 388-389 and (2009c), p. 631. Implementing such a reference in the framework of the TRIPS Agreement only to the exclusion of other WTO law would be politically *and* legally problematic: why should the other parts of WTO law, like GATT and GATS, be treated differently in this respect? What would legally follow from a reference to the Universal Declaration in TRIPS, but not in other WTO law?

709 Geiger (2009c), p. 637 at footnote 45 with further references, says that national courts have already started to interpret the three-step test in a different way than the WTO panel.

710 Regarding WTO-level there is an analogy with joined cases C-402/05 P and C-415/05 P, *Yassin Abdullah Kadi and others v Council* [2008] ECR I-6351, discussing the effects of United Nations law in European Union law. Regarding directives and their national implementations, see case C-275/06, *Productores de Música de España (Promusicae) v Telefónica de España SAU* [2008] ECR I-271. See also the discussion in sub-chapter 4.2.

Rather than proposing the inclusion of human rights provisions in the WTO *acquis* or otherwise urging the dispute settlement organs to fully embrace fundamental rights analysis in their interpretations (likely leading to the problems discussed above), the WTO dispute settlement organs should self-reflexively recognise the limits of their competence, the particularity of their perspective and the potential for conflicts with norms not present in the WTO *acquis*. *When applying the three-step test, they should leave a broad margin of appreciation for the WTO Members when the latter have made a reasonable claim that the exceptions and limitations under scrutiny relate to fundamental rights or related public goods.* This proposal is based on the international law doctrine of margin of appreciation and the specific constitutional value and impact of human rights on treaty interpretation.⁷¹¹ The doctrine of margin of appreciation has been developed in the case law of the European Court of Human Rights, among others. However, the proposal made above would turn the effects of the doctrine as understood in the European Convention *acquis* upside-down. Instead of limiting the universality and penetration of fundamental rights, it would subject the WTO dispute settlement organs under an obligation to exercise restraint and flexibility when the limitations or exceptions relate to fundamental rights.

As the three-step test is formulated (but not so far applied) as a flexible standard-type discretionary norm, it is particularly amenable to the application of the doctrine of margin of appreciation. It provides very limited conduct-guidance and should preserve a significant zone of legality within which the WTO Members are free to decide about their limitations and exceptions.⁷¹² The WTO Appellate Body, too, has adopted a non-intrusive standard of review in some of its rulings.⁷¹³ The judicial deference required from the WTO dispute settlement organs in the application of the three-step test would thus mean that provided the Member makes a reasonable, good-faith claim that the limitation or exception is based on the protection of fundamental rights or related collective goods, the WTO dispute settlement organ should show judicial restraint and accept that the limitation or exception is within the zone of legality.

It would not need to enter into substantive fundamental rights argumentation, but merely recognise the limits of the WTO acquis reflecting trade and economic rationality only. The judicial review based on the three-step test would thus be operationally limited, but not precluded. As the doctrine of margin of appreciation may be seen as a general doctrine of international law,⁷¹⁴ it could guide in the application of the three-step test without any changes in the WTO *acquis*. Moreover, to an extent human rights

711 See about the doctrine of margin of appreciation as part of international law e.g. *Shany* (2005), *passim*. See also in the TRIPS-context *Helter* (1998), p. 440 and *Picciotto* (2002), p. 236-237 (not however related to the three-step test). See about the impact of human rights law on treaty interpretation *Scheinin* (2009), *passim*.

712 See *Shany* (2005), at p. 912-917, for types of norms amenable to the application of the doctrine.

713 See e.g. *EC Measures Concerning Meat and Meat Products (Hormones)*, AB-1997-4, WT/DS26/AB/R and WT/DS48/AB/R, (16 January 1998) (Adopted 13 February 1998). See also *Shany* (2005), at p. 928-929, for additional WTO-level case law connected to the doctrine of margin of appreciation.

714 See *Shany* (2005), *passim*.

law requires its integration in the WTO *acquis*, *building on the doctrine of margin of appreciation could constitute the most realistic and least problematic way for the WTO dispute settlement organs to embrace it.*

In addition, bold application and development of fundamental rights law is required as a counter-weight when the application of the three-step test could otherwise frustrate fundamental right -related interests behind statutory limitations and exceptions. The inherent constitutionalisation of intellectual property law in neoliberal spirit, as reflected by the current interpretations of the three-step in the WTO framework, thus produces systemic impulses to rights constitutionalism and fundamental rights law. Fundamental rights law discourses could produce their own tests and criteria intended to provide as concrete limits as possible on intellectual property rights. Finally, exceptions and limitations on domestic level should be actively developed by legislators, courts and scholars alike. If multiplied in several WTO Members, such efforts could ultimately affect the interpretations of the three-step test on all levels of its operation.

5.8 Concluding Perspectives and Transitional Thoughts

Intellectual property law commercialises authorship and invention, and is presumed to make these processes of new wealth-creation as marketable objects. The adopted strategy is thus the manipulation of the boundary conditions for the decisions of private individuals and enterprise. The Scandinavian legal realists were correct in proposing that intellectual property should be seen in the light of general competition law principles and ideology. Yet what constitutes general competition law principles and ideology is all but self-evident, as will be discussed in the next main chapter. The position endorsed here is that the effects of intellectual property protection should *also* be analysed from systemic and lifeworld perspectives: how do intellectual property rights regulate forms of life, communication and the use of information, and how do they participate in the construction of a broader regime affecting major features of economic culture.

However, as has been discussed in this chapter, any elements within intellectual property law based on competition law principles are largely missing. In accordance with the current proprietary ideology, *strong protection* of intellectual property has become the norm. As a counterweight to the desired strong protection, the Commission has instead emphasised the role of general competition law, as mentioned before. In the Commission's recent phraseology, *rigorous application of competition rules* should balance the expanded and strengthened intellectual property institution. Similarly, the European Court of Justice has used the continued possibility to apply competition law as a ground for a broad construction of the exclusive right of extraction in the framework of the *sui generis* database right, as discussed previously.

Competition law should thus be capable of remedying the potential (unidentified) problems created with strong protection. However, as will be discussed in the following two chapters, neither is European competition law up to the task designed for it. Even

if it could address the exercise of economic power produced by intellectual property rights in some contexts, if rightly constructed, most of the problems generated with strong protection remain outside its potential scope of application. Thus, *ultimately the role of competition law seems to be to function as a justificatory scheme for strong intellectual property rights.*

The following chapter will analyse the functions, objectives and general doctrines of European competition law and relate it to economic constitutional law. Like with intellectual property law, the problems seen, interpretations reached and proposals endorsed depend on the adopted background ideology and theory of competition law. Thus, without such a discourse, relating competition law to intellectual property law and analysing its potential to address any problems generated with the intellectual property institution would be a fruitless exercise.

6 Competition Law, Market Power and Civil Society

6.1 Chapter's Contents and Central Arguments

The discussion on the goals of competition law is an old one.¹ In the US, Bork has said that defining the goals of antitrust is a precondition to rationalising it and for building a coherent set of rules.² The Chicago School has managed to accentuate the discussion on the objectives of competition law transnationally. Yet, its project of confining the objectives of competition law to enhancing economic efficiency only has been most successful in the US. European competition law maintains a plurality of aims: a consensus on a single objective of European competition law seems not plausible.³ The diversity of competing and complementary goals characterises European competition law. This is European competition law's particular strength rather than its yet unmodernised feature.

Understanding the goals and systemic position of competition law is of paramount importance when applying and interpreting its relatively openly worded and concise basic norms. Competition law treats intellectual property -enabled economic and informational power differently depending on the underlying theory. Whereas ordoliberal competition law may have a strict standard for evaluating "abusive exploitation" of intellectual property rights, Chicago School may consider most such uses as economically efficient and hence permitted. The basic orientation is different: ordoliberalism treats certain acts of dominant firms as being contrary to the constitutive rules of the economy as such, whereas Chicago School competition law concentrates on the short-term effects of such acts.

Integration-oriented competition law, in turn, may adopt a prohibitive approach towards intellectual property -related measures compartmentalising the internal market, possibly at the expense of economic efficiency. Austrian economics -based competition law would pay little attention to static market dominance and effects on prices, but would concentrate the limited market interventions to practices artificially

1 See e.g. contributions in *Ehlermann & Laudati* (1998a), *passim* and *Dabbah* (2005), p. 46-51 for references and for a short description of the relevant discussions. See also the subsequent discussion under this chapter.

2 *Bork* (1978, 1993), p. 50 ("What is the point of the law – what are its goals? Everything else follows from the answer we give").

3 See also *Joerges* (1994), p. 34.

restricting the natural dynamism of the markets through the processes of rivalry and creative destruction of existing technology markets.

The central questions addressed in this chapter concern the underlying ideologies, functions, objectives and institutional possibilities of European competition law. For the purposes of this analysis, European competition law will be placed in a historical, developmental perspective. Although there is considerable pressure on European Union competition law to develop in the direction of the Chicago School economic efficiency becoming the sole operational objective, there are also countervailing tendencies based, among other things, on the aggregation and effects of market power calling for an alternative developmental trajectory.

The second part of the chapter builds on such tensions, historical insights and economic constitutional law. The last mentioned enables embedding competition law in a fuller normative framework and discussing theoretical perspectives beyond the typical competition law discourses. By its very nature, competition law involves delicate balancing between private and governmental power and between private and government -imposed restrictions on the freedom of the markets and market participants.⁴

Such balancing cannot proceed solely based on the internally construed objectives of competition law. The diversity of market actors, the prospects of smaller enterprises to enter the markets, the degree and exercises of economic power tolerated and the appropriate role of governmental measures in the operation of markets are constituents of an economic and societal order importantly affected by the competition law institution. Competition law is one of the core instruments through which the basic characteristics of the markets become determined: welfare economics cannot decide what kind of competition and markets a society is willing to pursue through its competition norms.

My argument is that effects related to communicative structures and informational power should be increasingly considered under competition law. This is typically in conformity with the inherent objectives of competition law, provided it seeks to maintain its societal legitimacy by controlling competitively and societally the most harmful forms of market power. In the networked information society, the structures of competition increasingly overlap with the structures of communication. Privately imposed restrictions of competition often directly translate into restrictions of communication or communicative diversity.

The proposed response on the part of competition law application – its increasing reflexivity with regard to the communicative structures and informational power – can be seen as a partial departure from the ordoliberal ideology, which saw the civil society as predominantly a systemic environment whose popular support competition law, and the economic constitution formed around it had to achieve. Importantly, the approach proposed here would connote self-limitation and abstention in some instances of competition law application and bold application in others. Hence, *the*

4 See generally Amato (1997), *passim* for an argumentation in this direction.

approach advocated would not imply a general or even an increased role for competition law as a limitation of the expanded intellectual property right institution. It would simply mean embedding competition law in economic constitutional law and evaluating its effects against an additional layer of considerations in appropriate instances.

The chapter will also argue for greater contextuality of competition law application in general. Although it is often possible to identify other policy instruments through which particular non-efficiency objectives may be pursued, competition law cannot remain neutral with regard to its own effects on other social spheres, norms and rationalities. Addressing such interaction of competition law with other social spheres and rationalities also requires the broadening of focus from the intrinsic objectives of competition law. Competition law's mission should thus not be the blind imposition and expansion of uniform economic rationality on all social spheres.⁵

6.2 Functions and Objectives of Competition Law

6.2.1 Societal Functions of Competition Law

The capitalist process of competition is based on the pursuing of firms' individual interests. The latter may not always overlap with the collective interest of the capitalist economy.⁶ Individual firms cannot realise the consequences of their particular actions viewed collectively, nor can they foresee future circumstances shaping and transforming present tendencies. Hence, governmental action is needed to mediate these individual interests and raise them up in the collective and longer-term interest of the market economy and ultimately of individual market actors.⁷

It is thus possible to see competition law as a justified restriction of private economic freedom as far as the unrestricted pursuit of private interests by firms may negatively affect the public interest in a competitive economic system.⁸ The basic societal function of competition law could thus be connected to the collective and longer-term interest of the capitalist market economy and society as a whole, as distinct from the individual, short-term interests of private firms. This was already a fundamental premise for ordoliberals who emphasised the collective good nature of the market economy, incapable of taking care of itself by individual actions of market actors.

In addition to risks within the economic system, the pursuance of self-interest in market-dependent activities produces various other risks as side effects of economic

5 It should also be noted that within economics the rentseeking literature calls the basic presumption of all competition being virtuous into question. Non-price competition, such as competition in lobbying, advertising, marketing and even research and development may lead the society worse off. See e.g. *Mueller* (1996), p. 303 and 436. See also *Geroski* (2002), p. 76. The arguments advanced here, however, go beyond this economic argumentation and have their basis in legal and normative rather than economic theories.

6 Cf. with *Smith* (1789, 2002), *passim*.

7 See e.g. *Schachter* (1998), p. 43-44.

8 See also *Baquero Cruz* (2002), p. 156 and *Jenny* (1999), p. 9-10.

activities. These risks, often global in their reach, regularly exceed the economic system and structure the whole society.⁹ Most of these other risks, such as environmental degradation or health hazards, have not been competition law concerns, even though competition law must increasingly be applied in contexts where such interests are involved. However, some of the other risks caused by unrestrained pursuance of firms' self-interest may be more than merely relevant considerations in competition law analysis. In the media sector, for example, private market competition and freedom of the media and communication do not wholly coincide as believed in classical freedom of speech theories.¹⁰ This has resulted in some countries in the partial subsumption of freedom of speech concerns under the control of media mergers, as already indicated.

Similarly, competition law treatment of standardisation in Europe has emphasised standardisation processes' democratic features as part of its acceptability, as will be discussed in the next main chapter. The examples demonstrate how, as with most other economic regulation,¹¹ competition law's own rationale is not exhausted to preserving the self-regulating structure of the economy. Also within sectors such as books, agriculture or pharmaceuticals diverse non-efficiency interests involved legitimately affect the application of competition law.¹²

The competitive process does exist in a vacuum. It is dependent of legal and other societal institutions.¹³ The distinct historical and cultural environments have nurtured distinct models of competition law: there is no overarching consensus either on competition policy objectives or on how to achieve them in practice.¹⁴ The competitive process is thus a cultural and historically bound phenomenon. It is now regulated and structured by competition law and other legal institutions not only for the purpose of maintaining the internal rationality of the economy and for protecting its longer-term interests, but also for adapting and making the competitive process and markets compatible with other social spheres, their particular values and rationalities.

Such a view of competition and markets enables seeing the functions of competition law in a contextual and evolving societal and cultural perspective. Competition law

9 Beck (1992), p. 222-223 and also *passim*. See also e.g. Rawls (1973), p. 268-269; Habermas (1992, 1996), p. 432-436 and Santos (2002), p. 346.

10 See generally Keane (1991), p. 45-46, 52 and 153. See also chapter 4.

11 See more closely Teubner (1987), p. 32.

12 See also e.g. Joerges (1994), p. 43 and Wesseling (2000), p. 94-109.

13 See Polanyi (1944, 1957), p. 3 and also *passim*. Markovits (1987), p. 364, connects this idea to competition law and points out that an unregulated economy cannot produce the effects expected from competition laws. In addition to an active antitrust policy, Markovits identifies property law, contract law and consumer law institutions as prerequisites for a system capable of producing the effects expected from "unregulated competition". As Braudel (1979, 1986a), at p. 224-230 and also *passim*, has demonstrated the capitalist system(s) and its market mechanisms have slowly evolved on the basis of highly regulated social and economic life. Thus, the "self-regulating" structure of the economy has always been based on norms and the existence of institutions.

14 See e.g. Doern & Wilks (1996), p. 1-3; Cini & McGowan (1998), p. 3-10 and Dabbah (2005), *passim* (discussing the differences between competition laws of several jurisdictions and prospects for international harmonisation).

is not neutralised, but instead seen as one of the central policy instruments through which the societies define the characteristics of competition and market interaction, as well as control the exercise of market and informational power having repercussion within and beyond the economic sphere.

For example, the relaxation of competition law related to horizontal cooperation has enabled and facilitated various forms of self-regulation by market actors, such as patent pools and standardisation cooperation. Such relaxation often serves useful ends by recognising the current forms of networked enterprise and collective technology-creation.¹⁵ Yet, the relaxed policy also often enables the networked firms to shape collectively the conditions of competition, market opportunities and thus the development of markets.¹⁶ This, in turn, could create tensions beneath competition law's surface and bring up the competing basic visions of freedom and equality underlying the competition law institution: freedom from government versus freedom from privately aggregated power? Competition seen as a sphere of action guaranteed by contractual freedom and property ownership, or competition guaranteed by rough equality and the absence of powerful economic entities' coercion?¹⁷ The accentuation of these tensions underneath the competition law institution affects its further development through legislative and doctrinal transformations. Seen from this perspective, competition law appears as a cyclical process whereby the prevailing competition law regime sows the seeds of its own decline either in the form of allowing the intensification of economic power and concentrations or in the form of over-extensive application, leading to the frustration of the internal dynamics of markets.

The cultural-historical conception of competition also enables seeing freedom of competition in relation to other societal, normatively stipulated goals. Giving absolute primacy to freedom of competition is a normatively postulated choice placing a particular economic rationality above the rationalities of other social subsystems. This is unacceptable already on constitutional grounds as goal conflicts should not be resolved by granting absolute primacy to one value or public interest. Instead, competition law should be applied reflexively in the various environments of its operation by considering the non-market rationalities present. This connotes sensitivity to social and political context.¹⁸

15 See more closely about these developments in the next main chapter.

16 See also *Ullrich* (2006), p. 4-7 and the next main chapter.

17 See *Peritz* (2000), at p. 17 and also *passim*, for an illuminating discussion of the basic differences in conceptualising industrial liberty and equality underlying the Sherman Act.

18 In the context of private law in general *Teubner* (1999), p. 77, suggests a "social discourse test" in addition to a market simulation test based on economics. The idea seems to be useful in many competition law cases as well.

The institutional rationality of the concrete social sector involved *has* been a relevant consideration in some competition law cases.¹⁹

The reflexivity and contextualisation advocated here would connote that in the interpretation and application of competition law workable competition should be seen as a particular interest pursued with competition law, but simultaneously as an interest requiring compatibilisation and balancing within the competition law institution against other interests, rationalities and values. Rather than prescribing blind expansion and strengthening of market logic and economic schemata, competition law could provide a mechanism for such a weighing and compatibilisation exercise. Yet, there are obvious limits to the spread of reflexivity in competition law analysis: as already discussed, a wholly self-regulating capitalist market economy would not function in a democratic and decentralising manner, but would continue to produce the problems competition law intervention is intended to address. It is precisely the centralising tendencies and costs imposed on consumers by unrestricted self-regulation that competition law is designed to restrict in the first place.²⁰

6.2.2 Debate on the Objectives of Competition Law

It is relatively usual to distinguish the political objectives of competition law from the more direct objectives relevant in the enforcement of competition law.²¹ The idea behind such separation is that the fundamental or ultimate objectives relating to economic prosperity, welfare of citizens, pluralism and democracy are relevant in the political decision adopting a competition law, whereas competition policy and enforcement should narrow their focus to the maintenance of effective economic competition. The argument goes that competition policy and enforcement should not be overloaded

19 See e.g. case C-67/96, *Albany International BV v Stichting Bedrijfspensioenfonds Textielindustrie* [1999] ECR I-5751 and case C-309/99, *Wouters and others* [2002] ECR I-1577, paragraph 97. Even *Cassis de Dijon* -style mandatory requirements -justification has been considered possible in the area of competition law. See *Baquero Cruz* (2002), at p. 153, basing his conclusion on the interpretation of case C-309/99, *Wouters and others* [2002] ECR I-1577. Other constitutional values may sometimes require a restriction of competition. This is also recognised in the state-action -doctrine and the European Court of Justice's case law dealing with state measures. See in more detail *Baquero Cruz* (2002), especially at p. 160, analysing state measures fixing book prices; *de Witte* (2001), p. 253, referring to the need to take into account the cultural policy functions exercised by public broadcasters and *Wesseling* (2000), 105-109.

20 As Teubner notes, reflexive law as a legal strategy necessarily fails if social asymmetries of power and information can resist institutional attempts at equalisation. *Teubner* (1993), p. 277. The question of reflexive law can only be touched upon here. See more closely *Teubner* (1983), p. 254-257 (stating that the idea is to create the structural premises for a decentralised integration of society by supporting integrative mechanisms within autonomous social subsystems, at p. 255). See also *Teubner* (1997), *passim*. (connected to competition law).

21 See *Schaub* (1998), *passim*; *Wolf* (1998), p. 131; *Hawk* (1998), p. 353 and *Kirchner* (1998), p. 521. As *Wesseling* (2000), p. 72-73, notes, it has been common to construe EC competition law as forming an a-political, technical set of rules which could – in tandem with the free movement provisions – be enforced in order to promote realisation of the common market.

with too many objectives, as this would render competition policy ineffective.²² Other than economic welfare objectives should be pursued outside competition law and distort competition as little as possible.²³ In other words, competition policy and enforcement should abstain from *directly* fostering the fundamental or ultimate objectives of competition law, which only constitute the motivational background of the historical competition law legislator and the societal factors legitimising the competition law institution.²⁴

However, such a distinction is untenable. It is not possible to insulate the political reasons or motivations of a legal institution from its interpretations. Doing otherwise could transform the legal institution in question into its travesty. From a historical and ideological perspective, there are no grounds for declaring economic efficiency the sole internal objective of Union competition law. Even if economic efficiency admittedly constitutes an increasingly important objective of Union competition law, it is not its sole aim. The most important other objectives relate in particular to controlling economic power for the sake of a decentralised market characterised by pluralism and dispersed decision-making, safeguarding freedom as a value in itself, preventing the capture of political process by the interests of dominant firms, enabling economic integration of distinct geographical areas, as well as to lowering the barriers between the economy and the civil society.

These broader values of competition law may be threatened by *laissez faire* and excessively interventionist competition policy alike. Overemphasising one aim of competition law – be it market integration or economic efficiency – leads to the frustration of the other objectives. Although it is evident that competition authorities or courts do not operate with concepts such as democracy, pluralism of the markets or communicative diversity in most of their decisions, in some cases they may have to. Therefore, these broader objectives or functions of competition law should form part of the intellectual mindset of competition law application and constitute an integral part of competition law theory developed in legal science.

6.2.3 US Antitrust: From Democratic Ideals to Economic Efficiency

From Jefferson to Chicago School

Although having been a subject of debate between the Harvard and the Chicago Schools,²⁵ the background motivation of the US antitrust law has been the fight against trusts and economic power in defence of smaller producers and traders. The accumulation of economic power, cartelisation and the increasing inequality among the citizenry called into question liberty of contract and inevitability of competition

22 See *Jenny* (2000), p. 22-24, for a concise description and criticism of such a view.

23 See e.g. *Motta* (2004), p. 30 and *Crampton* (1994), p. 57.

24 See e.g. *Schaub* (1998), p. 120-126.

25 See e.g. *Fox* (1987), *passim* and *Lande* (1999), p. 873-876.

as the foundations of political economy. These developments also called into question the adequacy of common-law regulation, reflecting the primacy of liberty of contract, in the new economic conditions.²⁶

The resulting antitrust laws reflected public opinion of farmers, labourers and small entrepreneurs rather than economists. The latter generally opposed the enactment of the Sherman Act.²⁷ Its legislative history is said to demonstrate *a total lack of concern for allocative inefficiency*.²⁸ Fox and Sullivan have said that the US antitrust law is “rooted in a preference for pluralism, freedom of trade, access to markets, and freedom of choice”.²⁹ It was the unfair transfers of wealth from consumers to trusts and monopolies, the broader aims of controlling the excessive social and political power held by the latter, as well as their power to reduce entrepreneurial liberty and opportunity of small businesses that were the decisive motivations for the Sherman Act.³⁰ In its final form the Sherman Act reflects the language of the common-law: the original language of “full and free competition” was substituted with the common-law language of “contract--in restraint of trade” and “monopolize, or attempt to monopolize--trade”, and equipped with civil and criminal remedies clearly beyond the common law’s contractarian framework.³¹

Judge Hand’s words in *Alcoa Aluminium* case illuminate the original ideology of US antitrust laws. In his analysis, the Congress was not necessarily actuated by economic motives alone: “It is possible, because of its indirect social or moral effect, to prefer a system of small producers, each dependent for his success upon his own skill and character, to one in which the great mass of those engaged must accept the direction of a few”.³² Amato holds it to be unquestionable that the US antitrust laws can be seen as a translation of Jefferson’s democratic ideals; a society of producers as far as possible equal among themselves and all independent of each other, in order to avoid the inequality of wealth and the disparity of power both in civil relationships and in the relationship with political power.³³ The history of US antitrust law thus demonstrates that antitrust law could once be connected to broader objectives than those of today.

A significant narrowing of US antitrust law’s objectives has taken place since the Reagan administration, in particular. The intellectual motor behind this narrowing has been the Chicago School. It emphasises economic efficiency in the form of effective allocation of resources and typically accepts only output restrictions and price raising as relevant harms to competition. The Chicago School has been characterised as the

26 Thorelli (1954), p. 63-163 and Peritz (2000), p. 11.

27 See generally about the early US antitrust policy Thorelli (1954) and Peritz (2000), both *passim*. See also Fox & Sullivan (1987), p. 936-956; Cini & McGowan (1998), p. 6-7 and Virtanen (1998), p. 66-77.

28 Lande (1999), p. 888.

29 Fox & Sullivan (1987), p. 936 and Lande (1999), p. 874-888.

30 See Lande (1999), p. 888 and 899-906.

31 See more closely Peritz (2000), p. 13-26.

32 *United States v Aluminium Co. of America*, 148 F.2d 416 (2d Cir. 1945). Quoted also in Amato (1997), p. 97 and treated in Peritz (2000), p. 174.

33 See Amato (1997), p. 97. See also Petersmann (1999), p. 148-149 and Dabbah (2005), p. 33.

standard ideology of US antitrust law.³⁴ *Posner* declares that economic efficiency is now the only prevailing and valid perspective of US antitrust law, calling any other possible perspectives *populist*.³⁵ Exclusionary non-exploitative practices, openness of markets and diversification of economic power are now also treated as *non-economic* issues belonging to the past of US antitrust law.³⁶

Moreover, although antitrust laws were once also perceived to have a role in preventing the manipulation of the political process in favour of large corporations, also such concerns seem to be beyond the permitted goals of current US antitrust law.³⁷ The same applies for interests now related to democracy, like communicative diversity within the media and communications sectors.³⁸ The gradual emergence of the post-Chicago School as the mainstream US antitrust law theory does not imply an ideological change.³⁹ Although its recommendations are often more reasonable due to refinements in the underlying economic theory, the two Schools (when distinguished) share the same ideological premises.

Yet, some US antitrust scholars argue that in some occasions, relevant competitive harm may not only result from an output restriction or from an anticipated output restriction.⁴⁰ Thus, as elegantly said by *Fox*, despite the success of the Chicago School, at least some US courts may still base their decisions on an (typically implicit) assumption that the markets are more likely to reward merit, should they not be inhibited by unjustified exclusions. They may base their decisions on the background idea that although we may not know the direction of the competitive process, it is preferable to let the chances of competition, rather than the strategies of dominant firms, take the main responsibility for the development leading us there.⁴¹

One may thus conclude that the US antitrust model, often perceived as a monotonic expression of the Chicago School ideology, may on closer inspection reveal more

34 See e.g. *Fox* (1998a), at p. 157, saying that the US antitrust law is "relatively non-interventionist, and even monopoly firms are encouraged to engage in hard competition without regard to its impact on small firms" and *Hovenkamp* (1998), at p. 417, stating that since the 1970s, academic antitrust's mainstream has argued that efficiency ought to be the exclusive, or at least the dominant goal of antitrust. Also *American Antitrust Institute* (2006), at p. 2, holds that since the 1970s "the clear trend in the courts and enforcement agencies has been towards less intervention and in favor of a wider scope within which large enterprises may determine their business practices".

35 *Posner* (2001), p. vii-ix; 2 and 9. See also *Hovenkamp* (1998), p. 421. The classic formulation of totalitarian antitrust ideology can be found from *Bork* (1978, 1993), p. 51 ("The only legitimate goal of American antitrust law is the maximization of consumer welfare") and also *passim*.

36 See e.g. *Hovenkamp* (1998), p. 432.

37 See *Krattenmaker, Lande & Salop* (1987), p. 244.

38 See *Netanel* (2005), p. 154.

39 For a clearly written and insightful post-Chicago School contribution see e.g. *Farrell & Weiser* (2003), *passim*, based on the Chicago School basic presumption of an incumbent internalising the complementary efficiencies, but identifying important exceptions to it with policy recommendation consequences.

40 *Fox* (2002), *passim* uses as an example *United States v Microsoft Corp.*, 87 F. Supp. 2d (D.D.C. 2000), *re'd in part, aff'd in part*, 253 F.3d 34 (D.C. Cir), *cert. denied*, 122 S. Ct. 350 (2001).

41 *Fox* (2002), p. 384-391.

diversity and possibilities for competing interpretations than first expected.⁴² From the perspective of this research such potential diversity, connected with the democratic roots of US antitrust, implies that the possible path of convergence between the US antitrust and European competition law may not only be the a-historical, culture-free microeconomics of the (post) Chicago School. An alternative, and during *Obama's* presidency a perhaps a bit more plausible path of convergence could be built on some of the shared democratic ideals, broader historical objectives of the respective laws and the information society developments implying the transformation of market power from what is has been in the industrial society.⁴³

Concepts of Economic Efficiency and Consumer Welfare as the Basis of Antitrust Law Application

Even if economic efficiency was accepted to be the sole objective of competition law, competition laws and policies rarely specify whether this refers to efficiency in terms of *consumers' surplus*, *producers' surplus*, *total surplus* or *total welfare*. Consumers' surplus refers to the difference between what consumers in a market collectively pay for a product and what each consumer would be willing to pay over and above the actual price. Producers' surplus refers to the difference between the price that producers in a market collectively obtain for their products and the sum of those producers' respective marginal costs, including a normal profit. Total surplus is the sum of consumers' and producers' surplus. Total welfare includes, in addition, efficiencies likely to be brought about in markets other than the relevant market, including through dynamic competition.⁴⁴ Already this connotes that there is no consistent, universally accepted approach to efficiency.

Furthermore, efficiency as understood in price theory does not answer on what basis and how to balance between short-term, medium-term and long-term efficiency which do not often overlap.⁴⁵ The time factor also points to another generic problem of efficiency reasoning: predicting the efficiency gains of two alternative futures involves considerable uncertainties. The uncertainties manifest themselves both in terms of predicting the future with the restriction of competition in place and its contrafactual.⁴⁶ This is particularly troublesome in cases involving restrictions of innovation: the likely outcomes with a restriction in place and without it are, by necessity, educated

42 See in this respect *Grimes* (2003), *passim* (treating the Microsoft litigation from this perspective). Also *American Antitrust Institute* (2006), at p. 2, holds that "[m]any well-recognised antitrust scholars, commentators, and enforcement officials are increasingly concerned that American non-interventionism has reached beyond the point at which non-interventionist antitrust doctrine and enforcement policies are optimal."

43 See about the potential transformation of US antitrust e.g. *Waller & Woods* (2009), *passim*.

44 See *Crampton* (1994), p. 58-63. See also *Petersmann* (1999), p. 153.

45 *Fikentscher* (2003), at p. 17, makes this point succinctly.

46 See also *Krattenmaker, Lande & Salop* (1987), at p. 245; *Ehrlicke* (2003), at p. 124-125 (holding that this uncertainty connotes that "the new U.S. efficiency approach has defects which cannot be remedied" and recommends the US "to rethink the former approach of combining control of market structure and control of performance").

guesses.⁴⁷ It is almost impossible to prove the contrafactual, required by neoclassical economics, of what technologies (if any) would have succeeded had they not been inhibited by exclusionary practices.⁴⁸ Even if the competition law court or authority possessed perfect powers of projection, there is no economic theorem telling us which techno-economic future is better than the other.⁴⁹

Restrictions of innovation – and hence innovations that do not occur – are not felt as a cost by any particular consumers, but by the market as whole. Unlike restrictions of competition leading to price increases, restrictions of innovation will not be alleviated by competition from other providers, as restrictions of innovation affecting the market as a whole do not lead the consumers to move to another provider or product.⁵⁰ Finally, the question to which extent (if any) anti- and procompetitive effects occurring outside the borders of the particular nation applying competition law should be taken into account, is an unsettled question.⁵¹ The extent of economic globalisation, the rise of network enterprise as the paradigmatic enterprise form, and the global vision of multinational enterprises connote that such effects are pervasive.

Despite these practical and conceptual problems, for the Chicago School consumer welfare is a technical concept, a meter of economic efficiency. Sometimes it relates to the maximising of consumers' surplus calculated on the basis of their utility functions.⁵² Relatively often, it is defined as total surplus: if consumers lose but producers win more than consumers lose (or save costs), consumer welfare has been increased, it is argued, as consumers may invest in producers and thus become beneficiaries of producers' surplus.⁵³ This convenient definition of consumer welfare connotes that even if the great majority of consumers were net losers in a transaction causing greater producer surplus, a handful of consumer-shareholders would legitimise a claim that consumer welfare has been increased. Some commentators even leave the consumers totally out of the equation and restrict legitimate beneficiaries to producers only (producer surplus).⁵⁴ Instead of talking about producer welfare, the term economic welfare is preferred.⁵⁵ Further, conveniently, all operators involved and effects caused are restricted to one self-contained nation state unit, an unrealistic black box as depicted by *Twining*.⁵⁶

The thin conception of consumer welfare adopted by the Chicago School has very little to do with our intuitive perception of a person's welfare understood as what

47 See also *Geroski* (2002), p. 71-72; *Heyer* (2005), p. 415 and *Office of Fair Trading* (2002), p. 57.

48 A note made by *Fox* (2002), p. 384.

49 *Office of Fair Trading* (2002), p. 57.

50 See *Lemley & Lessig* (2001), p. 946.

51 See e.g. *Fox & Ordovery* (1995), *passim*; *Fox* (2001), p. 393-400 and the subsequent discussion under heading 6.3.5.

52 See *Hovenkamp* (1998), p. 426. As *Crampton* (1994), p. 58, notes, the term consumer welfare is misleading in that sometimes it refers to consumers' surplus and sometimes to total surplus.

53 See *Bork* (1978, 1993), p. 90-106; *Fox & Sullivan* (1987), p. 946-947.

54 See e.g. *Motta* (2004), p. 20-22.

55 *Motta* (2004), p. 30.

56 See *Twining* (2000), p. 50 and 70.

makes a person's life go well for him. If welfare is understood in the thin sense, it remains obscure why we should be interested in maximising welfare in the first place.⁵⁷ If efficiency benefits of producers justify a competition restriction harming the majority of consumers by resorting to either producer or total surplus, competition law would lose its nexus with its societal justification, as there is no mechanism in place compensating the consumers' losses caused by the competition restrictions from the profits made by the producers.⁵⁸

On the other hand, should one adopt a fuller, more intuitive definition of welfare, it remains doubtful whether competition promotes welfare thus defined.⁵⁹ This is questionable as the Chicago School defines competition in terms of efficiency, efficiency as the absence of inefficiency, inefficiency in terms of artificial output restraint, concluding that any activity that does not demonstrably limit output is efficient and thus procompetitive, ultimately resulting in nearly all firms' conduct being efficient and hence welfare enhancing.⁶⁰

Black maintains that neither the economic approach nor what he calls the philosophical approach to the maximisation of welfare supports the welfare-based argument for competition and competition law.⁶¹ He argues that competition law should intervene discriminatorily and concentrate on markets for products and services themselves promoting welfare. As competition law interventions are costly, competition law authorities should concentrate their efforts on the latter type of markets only. They should abstain from intervening in product markets reducing welfare or having no effect on welfare levels.⁶² It is subsequently argued that such distinctions should rather be made based on the effects of the anticompetitive measures on constitutional values.

⁵⁷ *Black* (2005), p. 33-61. Black's main target of analysis is Pareto optimality used in economics, its relation to maximisation of welfare and the question whether it is a good thing to maximise welfare. As to say that no one's welfare can be increased unless someone's is decreased does not imply that welfare is maximised in any intuitive sense, Black rejects Pareto optimality as an adequate definition of welfare.

⁵⁸ See *Virtanen* (1998), p. 346. The argument according to which the consumers would sufficiently share the benefits through shareholding, mutual funds, etc., is simply silly. For such an argument see e.g. *Motta* (2004), p. 18-21.

⁵⁹ *Black* (2005), at p. 48, states that once the concept of competition is broadened to cover competitive behaviour (and not only perfect competition in equilibrium) and once welfare is understood in the fuller sense of a philosophical theory, mathematical proof of competition maximising welfare no more exists. Competitive behaviour can be called *rivalry* in distinction to competition in a technical sense. Rivalry could be defined as *firms striving for potentially incompatible positions combined with a clear awareness by the firms involved that the positions they seek to attain may be incompatible*. See e.g. *Scherer & Ross* (1990), p. 16.

⁶⁰ *Fox & Sullivan* (1987), p. 959. The *Structure, Conduct, Performance* -model of the Harvard School of industrial organisation is more many-sided, as it also addresses the rivalry of firms. See e.g. *Scherer & Ross* (1990), p. 4-55.

⁶¹ See more closely *Black* (2005), p. 33-61.

⁶² *Black* (2005), p. 51. *Shelanski* (2006), at p. 400-401, states that the fact that competition (or antitrust) law promotes price competition even in case of products like cigarettes – the primary example used by Black – is no flaw of competition law, but a limit to its regulatory scope; such considerations should rather be left for the legislator.

Already this concise discussion about the basic notions of economic efficiency and consumer welfare points to their inherent problems as instruments of consistent and rational competition policy. The closer one gets to pareto-efficiency and producer surplus as the basis of relevant welfare, the more problematic it becomes to demonstrate why thus defined welfare should be pursued in the first place through competition law. However, the further one distances from pareto-efficiency and producers' surplus to the direction of consumers' surplus and total welfare, including effects on other markets and dynamic long-term effects, the further one gets from mathematical proof of competition advancing welfare thus defined, and the more practical and conceptual problems and uncertainties enter the equation.⁶³

In particular, the dynamic, evolutionary perspective of markets developed by Schumpeter presents a continuous challenge for Chicago-school -oriented competition policy based on price theory and static efficiency.⁶⁴ From an evolutionary perspective, the most harmful restrictive practices should be those hindering the emergence of new, more effective technologies, new commodities or new types of organisation. For Schumpeterian competition to function, potential competitors must have access to the competitive process which may require controlling the actions of monopolists designed not to benefit their own productive activities, but to harm or exclude competitors from the basic resources needed for competition. Competition law should thus turn its focus from excess profits enabling innovation to exclusionary practices.⁶⁵

However, rather than embracing Schumpeter's main conclusions necessitating the introduction of dynamic market analysis,⁶⁶ the Chicago School antitrust has transformed the evolutionary perspective into its travesty.⁶⁷ The cyclical process of creative destruction depicted by Schumpeter, and his faith in monopolistic innovation, have been used as rhetorical arguments reinforcing three already existing truths of static price theory: markets can take care of themselves; monopolistic power is temporary and even necessary; and the mixture of dynamic analysis with contrafactual

63 Balancing between different forms of efficiency, allocating the efficiency benefits between producers and consumers, short term and long term effects and contrafactual analysis are highly indeterminate procedures especially when based on a dynamic perspective. See also e.g. *Heyer (2005), passim* and *Eklöf (2006a)*, p. 267. The balancing always involves value judgements and decisions going beyond microeconomic analysis. Recognising the inherent indeterminism of microeconomics in competition law analysis should not lead one to the conclusion that due to the uncertainties involved competition law should be applied minimalistically so as to avoid "false positives", as this could lead to non-application of competition law in dynamic settings involving innovation-related activities, in particular. Cf. with *Heyer (2005), passim* (advocating the view that competition authorities and courts should assess with reasonable accuracy the possible error costs and their associated probabilities when making decisions).

64 See *Schumpeter (1942), passim*. See also *Dasgupta & Stiglitz (1988), passim*, pointing out deficiencies both in the static model and in Schumpeter's theory with regard to applying antitrust law within the dynamic industries. *Perez (2002), passim*, importantly connects technological evolution to financial capital and investment cycles.

65 See also *Kallay (2004)*, p. 96 and *Office of Fair Trading (2002)*, p. 18-19.

66 See *Schumpeter (1934, 2004)*, p. 61-67 and 90-94.

67 See also *Peritz (2003)*, p. 308-309.

argumentation produces considerable uncertainty and risk of bad decisions, false positives.⁶⁸

All three truths speak in favour of the hands-off approach already adopted. Instead of embracing dynamic theories and reforming competition analysis accordingly, they have thus been used as a source of indeterminacy and uncertainty when connected to instruments already deployed. Dynamism is typically constricted to information technology markets. Chicago School -oriented competition policy thus simply ignores and rejects dynamic theories for their main contribution and for the major parts of the economy. It uses them selectively to strengthen its own systemic premises. It could do no otherwise, as fully embracing dynamism would connote the demise of Chicago School competition policy.

The theory of contestable markets has experienced similar faith: it has been transformed into a simplified version according to which *all* markets are seen as self-policing and being perfectly contestable, as absent governmental restrictions on entry, all markets can be seen to face potential competition.⁶⁹ However, small entry barriers are constant and may give rise to large degrees of monopoly power: natural monopolies and oligopolies arising from sunk costs and non-convexities related to research and development and learning by doing are pervasive in modern industrial economies.⁷⁰ Legal institutions like the patent system may be used to artificially maintain, strengthen or leverage such monopolistic and oligopolistic positions.⁷¹

Thus, what many economists and Chicago School competition lawyers celebrate as *sound economics* and *modern* approach to competition law,⁷² in closer analysis proves to be a problematic candidate to form the core analytical premise of competition law application. Competition law should not be based on formal theorems of economic efficiency only, but also and predominantly on the *presumption* tested empirically that a competitive process characterised by rivalry and the absence of exclusion and privately imposed restraints of competition will result in a higher level welfare and innovation than the alternative.⁷³ This does not imply the rejection of microeconomics *as a tool* in the application of competition law. Yet a tool should not be confused with the aims of competition law. Neither should it disqualify other tools.

68 Bishop & Walker (2002), numbered paragraphs 2.43-2.45, provides an illustrative example. There the “dynamic considerations” are treated in two pages and their relevance is restricted to “dynamic environments” where firms compete not on prices, but on innovation. The rest of the two pages devoted to dynamic competition try to describe some characteristics of such dynamic markets, including Schumpeter’s thesis of creative destruction, the network effects and the claim that “monopoly is a necessary market structure that ensures that consumers benefit from firms undertaking risky innovative activities”. There is no attempt to make the “dynamic considerations” interact with price theory. Cf. Virtanen & Kyläheiko (2004), *passim* (an attempt to integrate dynamic elements in competition theory).

69 See Peritz (2000), p. 270.

70 See Dasgupta & Stiglitz (1988), p. 576 and also *passim*. The authors state that whereas the theory of potential competition “may have been well funded, was not well founded”.

71 See e.g. Gilbert & Newbery (1982), *passim* (analysing the pre-emptive patenting, among others).

72 See for an example e.g. Kallaughner & Sher (2004), p. 274.

73 See also *Office of Fair Trading* (2002), p. 58-59.

In any case, economic efficiency has not functioned as the historical rationale of US antitrust law, as the preceding discussion indicated. The same applies even more so to European competition law developments. They will be analysed in more detail below.

6.2.4 Evolution of European Union Competition Law: Mimicking the US Developments?

Ordoliberal Roots of European Union Competition Law

It is usual to regard European Union competition laws as adaptations or even imitations of US antitrust rules, in particular Sections 1 and 2 of the Sherman Act. The story goes that the German competition rules were enacted under the influence of US occupation authorities, later to be adopted in the EEC Treaty, enabling their further spreading to national competition laws across Europe.⁷⁴

Gerber has challenged this orthodox view and convincingly argued it to be a partial misunderstanding.⁷⁵ The intellectual roots of European Union competition law rather lie on German ordoliberalism and European competition law developments (notably in Germany) preceding and coinciding the Second World War and even the First World War. The US occupation authorities supported the development of German competition law on the basis of ordoliberal ideas, but superimposed neither US antitrust ideology nor antitrust laws on Germany, which had a relatively developed and original competition law ideology of its own by that time.

Thus, the presumption of a strong impact of German competition law on European Union competition law is correct,⁷⁶ but the presumption of an equally strong impact of US antitrust law on German competition law is mistaken.⁷⁷ European Union competition law has in turn constituted a model for national European competition laws, many of which are now almost blueprints of European Union competition rules (for example Sweden and Finland).⁷⁸ This historical background of European competition laws necessitates a closer look at ordoliberal competition ideology.

74 See e.g. *Bellamy* (1999), p. 16 (holding that the roots of European competition law go back to the allied decartelisation laws in Germany after the second World War. *Amato* (1997), at p. 41, held in 1997 this to be the prevailing opinion.

75 See more closely *Gerber* (1998a), *passim*. Explicitly stated e.g. at p. 3 and 431. See also *Gerber* (1998b), p. 112; *Amato* (1997), p. 39-45 and *Virtanen* (1998), p. 204 (concluding that there is little to support the view that the Allies compelled Germany to enact a certain kind of law).

76 *Gerber* (1998a), p. 261-265 and 332 (emphasising the role of e.g. *Walter Hallstein* in the development of EC competition law in ordoliberal direction). However, as *Maher* (2000), p. 164-165 notes, *Gerber* does not discuss adequately the concrete ways in which and the extent to which the EC competition rules developed in the direction of ordoliberal ideals. *Kallaughner & Sher* (2004), p. 268 say that "it is well established that the origin, development, and application of competition rules under the EEC Treaty was based on the policy and legal structure of German competition law". Also *Virtanen* (1998), p. 209 says that the ordoliberal influence on the establishment of the EEC competition rules was significant.

77 *Gerber* (1998a), p. 257-259 and 270. See also *Heinemann* (2002), p. 128-135 and *Virtanen* (1998), p. 204-210.

78 On a more general level about this convergence see *Dabbah* (2005), p. 105-109.

Whereas competition laws of some other European countries acted foremost as regulatory frameworks and instruments of general economic policy in the immediate aftermath of the War (notably in France), competition law took a different direction in Germany, following in important respects the theoretical insights of a group of scholars centred at Freiburg University and later calling themselves ordoliberals.⁷⁹ Ordoliberals were not satisfied with the prevailing economic thought having become isolated from political and social contexts of economic issues. They preferred the theories of classical liberalist writers, who had a broader theoretical focus and placed the economy and competition law at the centre stage of the society. By so doing, they adopted two important premises of classical liberalism: competition is required for economic welfare, and economic freedom is an essential constituent of political freedom.

Yet contrary to the teachings of the classical liberalists ordoliberals emphasised that the effectiveness of the economy depended on its relationship with the political and legal systems.⁸⁰ The latter constituted the basic structures within which the economic system operated. Competition law, in particular, would create and maintain the conditions under which competition and market would flourish, thus enhancing economic welfare and freedom of the market participants.⁸¹ Competition substituted exchange as the paradigmatic principle of the market. No more was the state only called for recognising and enforcing property rights in the fruits of one's work, and thus enabling production and exchange. It must also – and for ordoliberals predominantly – produce and maintain by its “*rules of the game*” the competitive process that ensures market freedom.⁸²

It is difficult to demarcate the political, ideological and economic reasons behind ordoliberal thinking. The Weimar history, demonstrating the self-destruction of economic freedom through economic concentration and the deployment of cartels as instruments of political steering,⁸³ was one of the political reasons for ordoliberal ideas. The further cartelisation of the German economy before the Second World War, enabling the takeover of the economy and its harnessing for the Nazi politics, was evidently an even more important development leading to particular emphasis on the protection of the competitive process not only from its inherent tendency to lessen competition and concentrate through contractual arrangements, but also from too far-going and direct governmental intervention. The main architects of the ordoliberal

79 It should be noted, however, that the German Competition Act (enacted in 1957), has been characterised as a watered-down version of the original proposal, due to business interests influencing the legislative process. See *Cini & McGowan* (1998), p. 9 and *Virtanen* (1998), p. 209.

80 See e.g. *Lemke* (2001), p. 193.

81 See *Gerber* (1998a), p. 237-246. See also *Fikentscher* (1998), p. 84 and *Virtanen* (1998), p. 206-210.

82 See also *Foucault* (1978-1979, 2008), p. 118-121. In other words, competition is not a naturalistic process, but it must be produced by careful governmental design and lengthy efforts.

83 See e.g. about the centrally planned cartelisation of the coal industry in *Nörr* (1995), p. 349-350 (describing the structure of the cartelisation including participation in compulsory regional cartels; the National Coal Association, which is described as a huge cartel at the level of the Reich; the National Coal Council, which is described as a corporatist assembly; and the minister of trade and commerce, which supervised and controlled the National Coal Council and enabled price fixing of coal for political reasons).

ideology, *Walter Eucken*, *Hans Grossmann-Doerth* and *Franz Böhm*, believed that the core of the problems had been the creation and misuse of private economic power.⁸⁴ The dispersal of private economic power was thus the core function of competition law and the broader concept of *economic constitution* in general.⁸⁵

However, in addition to political reasons for such dispersal of private power, ordoliberals shared an ideology according to which freedom of the individual market participants is a value in itself; a value which also fosters social integration and which should be protected not only against Marxist influences, but also against neoliberal forces.⁸⁶ The concentration of the markets and the use of private economic power were seen to threaten the freedom of the small and medium-sized undertakings, in particular. Ordoliberals were also concerned of social security and social justice. Contrary to the classical liberals, they realised that the unregulated market mechanism was not likely to take care of these values, as concentration of economic power created the perception that the market economy was not operating fairly. This, in turn, was perceived to be a major obstacle for social justice and the functioning of the market as a common identity matrix for the majority, thereby lessening the public support for the market economy.⁸⁷

Hence, as the desired economic system guaranteeing freedom of the markets and the market participants does not emerge spontaneously, it had to be created through rules and institutions. In accordance with *Ordnungspolitik* and the idea of economic constitution, the government could only act to implement the general norms, which constituted the framework for the operation of the economy. The economic constitution, the core of which was competition law, thus constrains the government from directly intervening in the operation of the economy except for the purpose of enforcing the general principles forming the core of the economic constitution. In the latter instances, the economic constitution requires the government to act. In this sense, the government does not intervene directly in the economy, or at least does not use *ad hoc* administrative discretion or make political decisions. It merely implements the economic constitution, which creates and maintains the basic structures of the economic system.⁸⁸

Ordoliberal competition law ideology should be distinguished from the paleoliberalism of *Hayek*, which is sometimes subsumed under late ordoliberalism.

84 In contrast to the critical theorists of the Frankfurt School, the Freiburg School of ordoliberals believed that it was the *absence* – not the presence – of economic liberalism that had led to fascism. See *Lemke* (2001), p. 193.

85 See *Amato* (1997), p. 99 and *Gerber* (1998a), p. 235. *Joerges* (2005), p. 468 defines the ordoliberal economic constitution as a commitment to the interdependence of a system of undistorted competition, individual freedoms and the rule of law – and the commitment to protect this balance against discretionary political influence. *Nörr* (1995), p. 345-351, demonstrates that the concept of economic constitution precedes ordoliberalism and goes back to the Weimar period and the idea of harnessing private ownership and initiative into the publicly controlled *Gemeinwirtschaft*.

86 See *Fikentscher* (1998), p. 83-84; *Gerber* (1998a), p. 239 and *Amato* (1997), p. 99.

87 See *Gerber* (1998a), p. 239-241. See also *Amato* (1997), p. 99 and *Lemke* (2001), p. 193-194.

88 See *Gerber* (1998a), p. 247-249 and *Maher* (2000), p. 163-164.

Hayek argued that competition law interventions in market structures are fundamentally impossible and lead to arbitrary economic interventionism. In Hayek's view, competition is a dynamic process of discovery and the market a complex and cybernetic system: it is self-regulating, environmentally open and evolutionary. Hayek saw competition as a *process* of information sharing, seeking and learning. Governmental intervention should be limited to the introduction of general rules to guarantee the basic conditions of free competition, as the results of governmental interventions could not be predicted. Direct control of market power is generally not necessary, as it is a temporary phenomenon.⁸⁹

Ordoliberals, in contrast, conceptualised monopolisation as a social phenomenon, capable of being regulated and even prevented through an appropriate institutional framework. Thus, monopolisation should not be perceived as an economic destiny, but the outcome of a failed political strategy and insufficient forms of institutionalisation.⁹⁰

Implications of Ordoliberal Roots of European Union Competition Law

Both the historical context in which the European competition laws have developed and the ideological framework upon which they are based differ from their US counterparts. Where the US antitrust laws pursued an image of Jefferson's society of equals and acted as a *negation* of power, the European competition laws were first enacted at the time many markets were already oligopolistic, promoting the role of competition law not as a negation but as a *limitation* of private power.⁹¹ Ordoliberals entrusted competition law with central societal functions both against politics and against the internal tendency of the economy to concentrate through contractual arrangements. In ordoliberal view, competition not only guides free initiative and self-interest in the direction of the public interest by positively influencing innovative activity and the process of price formation, but also contributes to the safeguarding of freedom by the provision of alternatives.⁹²

However, ordoliberals did not consider competition as a naturalistic process, but as an economic-institutional entity which is historically open and can be changed politically. Law in general and competition law, in particular, became essential parts of the economic-institutional base with which entrepreneurial forms could be created.⁹³ These insights of ordoliberalism should be reinvigorated. Competition law should be perceived as a political instrument with which important aspects of economic culture and the relations between the economy and other social spheres are regulated. It participates in constituting and shaping many collective goods related to fundamental rights, such as workable markets characterised by a plurality of actors

89 See *Hayek* (1960, 1993), p. 220-233. For critical descriptions of Hayek's main ideas, see *Teubner* (1987), *passim* and *Foucault* (1978-1979, 2008), p. 171-173.

90 See *Lemke* (2001), p. 194.

91 *Amato* (1997), p. 113-114. See also *Maher* (2000), p. 164 and *Möschel* (1989), p. 143.

92 See *Lenel* (1989), p. 29.

93 See *Lemke* (2001), p. 195-196 and *Joerges* (1994), p. 37-41.

and communicative diversity in the networked information society. As concluded earlier, it is a contradiction in terms to argue that competition law should remain a politically neutral instrument, but that it should simultaneously have as its sole objective the fostering of economic efficiency.

Ordoliberals did not restrict the relevance of economic freedom to the economic sphere, but saw it as an important component of the political system as well.⁹⁴ It had to be protected against politics, governmental intervention and private economic power. Economic freedom constituted the foundation on the basis of which state was both founded and self-delineated: the economic freedom produced the legitimacy for a form of sovereignty limited to guaranteeing economic activity.⁹⁵

Due to historical reasons, ordoliberals treated private economic power as a particular threat to economic freedom,⁹⁶ leading to an emphasis on the special responsibility of firms holding a dominant position. Dominance as such was usually tolerated in conformity with the role of competition law not as a negation, but as a limitation of private power.⁹⁷ This sharpened the analysis of *abuses* of dominance, leading to at times stricter scrutiny of dominant firms' behaviour than in the US under Section 2 of the Sherman Act. Although ordoliberals overstated the importance of economic freedom at the expense of other constitutional values, European competition law should not lose sight of the idea that the freedom of the markets should be protected as a constitutionally relevant value is something.

European Union Competition Law: From Freiburg to Chicago?

The preceding discussion sought to demonstrate that the European Union competition law provisions appeared from neither thin air nor were given by the United States. Ordoliberal ideas of competition and competition law affected the competition provisions of the Paris Treaty of 1952 establishing the European Coal and Steel Community (ECSC), which preceded the EEC competition norms and constituted a model for them. According to *Vernon*, the reasons for the ECSC competition Articles may have only partially related to seeing competition as an economic way of life. A possibly greater motivation may have been the fear that cartelisation could develop into the real political power of the Community, even capable of challenging the Community's sovereignty.⁹⁸ The perceived threats posed by economic power led to an elaborate regulation of dominance in Article 66 of the ECSC Treaty.

94 See *Möschel* (1989), p. 142 and 146-147; *Maher* (2000), p. 163-164 and *Jenny* (2000), p. 23, all noting that efficiency was only a by-product of freedom for ordoliberals. See also *Gerber* (1998a), p. 232-265 and 418, as well as *Barry* (1989), p. 116 (holding that for Eucken "*monopoly has perhaps as much to do with politics as economics*").

95 *Lemke* (2001), p. 196; *Joerges* (1994), p. 41-43.

96 See e.g. *Barry* (1989), p. 109-110.

97 However, as *Barry* (1989), p. 115-116, points out, *Walter Eucken* favoured state action to eliminate monopolies and break up concentrations of industrial power, rather than restricting abuse of power by existing monopolies.

98 See *Vernon* (1953), p. 197. See also *Gerber* (1998a), p. 337 (referring to *Vernon*).

However, by the time the Rome Treaty was signed the fear of European firms remaining too small to take full advantage of the large market being created affected the corresponding provision prohibiting abuses of a dominant position, now Article 102 FEU (ex. 82 EC).⁹⁹ As a corollary and in contrast to Article 66 ECSC Treaty, the prohibition of abuses of a dominant position in the EC Treaty became more neutral towards market concentration. On one hand, large enough firms were seen to enable international competitiveness. On the other hand, artificial impediments and incentives to market concentration were seen as harmful.¹⁰⁰ The EC Treaty prohibition of abusing a dominant position thus reminded the compromise of the German law, whereas its cartel prohibition corresponded more with the ordoliberal ideas of competition law.¹⁰¹

The recitals of the EC Treaty refer to the protection of “fair competition”. The prohibition of abusing a dominant position, in its first example of abuses, refers to imposing *unfair* purchase or selling prices or other *unfair* trading conditions. Thus, already the wording of the prohibition of abusing a dominant position hints that it was designed to regulate conduct of dominant firms in order to prevent them from unfairly using their power, not merely to prevent them from leveraging or protecting their power.¹⁰² This purpose corresponds with the ordoliberal ideas of competition law as a *limitation* of private economic power, too. As already mentioned, this basic approach to dominant firm behaviour led to the fact that the prohibition on the abuses of a dominant position has regulated the activities of dominant firms to a greater extent than Section 2 of the Sherman Act. The latter concentrates on challenging the *acquisition* or *maintenance* of monopoly power.¹⁰³

Another particular objective of European competition law akin to ordoliberal competition ideology relates to the openness of and access to the markets. The freedom of market participants is protected against dominant firms’ market strategies that are not based on competitive merits. In contrast to current US antitrust law, exclusionary practices may have constituted a relevant harm to competition, even if they simultaneously have not constituted exploitation. For triggering the application of the prohibition on the abuses of a dominant position, it has been enough if the practices have distorted the normal functioning of markets on competitive merits.¹⁰⁴

European Union competition law has also traditionally pursued market integration as one of its main objectives. This particular characteristic of European Union competition law is not based on ordoliberalism, but is a generic feature of European Union law. The competition provisions of the Treaty have been seen to complement

99 Originally Article 86 of the EEC Treaty.

100 See *Virtanen* (1998), p. 195. Also *Cini & McGowan* (1998), p. 17, note that the ECSC competition provisions were deemed to be inappropriate for use in other European markets. Cini & McGowan describe the EEC competition provisions as *watered-down version of the ECSC rules*.

101 See *Virtanen* (1998), p. 209-210.

102 See also *Fox* (2002), p. 393 and 405.

103 See *Joliet* (1970), p. 297.

104 See *Fox* (2002), p. 392-393.

the free movement provisions directed at member states: private restrictions are not allowed to frustrate what has been achieved with respect to protectionist state measures. In analogy, the competition aspect has to be taken into account when interpreting the free movement provisions of the Treaty.¹⁰⁵

It can thus be seen that European Union competition law pursues a multiplicity of goals. This has been considered in itself an essential feature of the European competition law system.¹⁰⁶ Furthermore, it is in practice often artificial to insulate the particular objectives of European Union competition law from other objectives of the European Union, such as the Community's industrial policy related to research and development, in particular.¹⁰⁷

The current trend to argue in favour of narrowing the objectives of European Union competition law towards one-dimensional economic efficiency should be placed against the historical background of European Union competition law objectives.¹⁰⁸ Several authors have acknowledged that the economic efficiency objective has been understood differently and it has traditionally played a lesser role in the interpretation of European Union competition law when compared to US antitrust law.¹⁰⁹ Gerber states that economic efficiency has been *notably marginal* as a goal of European Union competition law and argues that the abstract wealth-maximisation language may be at odds with other goals of competition law.¹¹⁰

However, the pressure towards the narrowing of competition law objectives to economic efficiency understood in the Chicago School sense is clearly visible in European Union competition law, as well.¹¹¹ The development towards economic efficiency at the expense of other objectives has already partially taken place in the competition policy of the Commission, as well as in the case law of the Courts.¹¹² This trend has also been critiqued. *Baquero Cruz* reminds that the single market is not yet achieved and in any case, it requires active supervision and maintenance. In addition to this, the direct applicability of the third paragraph of the cartel prohibition emphasises the judicial nature of the cartel prohibition as a whole, as opposed to

105 See e.g. case C-202/88, *France v Commission* [1991] ECR I-1223, at paragraph 41.

106 See *Gerber* (1998a), p. 420.

107 See also *Joerges* (1994), p. 43.

108 For such arguments see e.g. *Furse* (1996), p. 258; *Maher* (1999), p. 597 and 619; *Kirchner* (1998), p. 517.

109 See e.g. *Petersmann* (1999), p. 151. The ordoliberal views on market power are perhaps most clearly visible within the prohibition on the abuses of a dominant position in the tradition to disregard efficiency as a justification to prima facie abuse of a dominant position. See *Virtanen* (1998), p. 221.

110 *Gerber* (1998a), p. 420. It is interesting to note that *Sullivan & Fox* (1987), p. 944 say similarly about the original aims of US antitrust: "improved resource allocation was never a norm for antitrust".

111 See also *Amato* (1997), p. 95 and *Hawk* (1998), p. 354. Both concluding that the trend towards narrowing of competition law objectives encompasses most industrialised countries, including the EU.

112 See e.g. the *Commission's White Paper on Modernisation of the Rules Implementing Articles [81] and [82] of the EC Treaty*, executive summary, point 8 and *Baquero Cruz* (2002), p. 100-102. See also *Ehlermann & Laudati* (1998b), p. ix-xvi. However, the European Court of Justice, in particular, still emphasises the integration objective in some cases. See e.g. case C-453/99, *Courage Ltd v Bernard Crehan* [2001] ECR I-6297, at paragraph 20.

economics-based policy-approach.¹¹³ Now that the national courts can directly apply the cartel prohibition in its entirety, one can hardly speak of de-constitutionalisation of European Union competition law. The integration-objective of European Union competition law norms is thus probably not vanishing, but – slowly due to the enlargements of the European Union – decreasing its relative weight.¹¹⁴

The increased emphasis on economic efficiency also downplays other, historically accepted objectives of European Union competition law. The trade-off is thus between not only economic efficiency and market integration objectives, as often thought, but increasingly between economic efficiency and other generic competition law objectives. Should economic efficiency and openness or plurality of markets contradict, the prescription of mainstream competition law jurisprudence is to prioritise economic efficiency.¹¹⁵

In the following, the developments of European Union competition law objectives will be addressed in more detail with regard to abuses of dominant positions. In this area, the changes and the pressures for further change are perhaps the most visible and the most recent.

Abuses of Dominant Positions: A Paradigm Change?

For the ordoliberal, the taming of private economic power was the central objective of competition law. A competitive economy was to constitute of a market in which no firm has power to coerce conduct by other firms. It was the *absence of coercive power* rather than perfect competition in the neo-classical sense that was the defining characteristic of the competitive order desired by ordoliberals. In ordoliberal thinking, competition law had to provide the necessary means to eliminate the monopoly positions. As Gerber emphasises, this requirement was controversial, as it would have connoted a significant interference with private property, comparable to nothing but the wartime experiences of European firms.¹¹⁶

In ordoliberal competition ideology the divestiture of assets creating or maintaining the monopoly would not be required in cases of natural monopolies or monopoly positions based on legally protected rights. This was in particular so with intellectual property rights, or where the divestiture would otherwise be impractical or entail economic waste. In such instances, competition law would set a conduct standard for

113 *Baquero Cruz* (2002), p. 100 and 102 (also stating that one reason for the emphasis on economic efficiency, often at the expense of other competition law objectives, may be that the Court of First Instance prefers an economistic, technical approach to competition law and neglects the non-economic ends, such as preserving individual economic liberty or market integration, *ibid.* at p. 100-101). Cf. *Gerber* (1998a), p. 390 who holds that the competition law system is becoming less juridical and more political.

114 On the other hand, as *Gerber* (2001), p. 124 notes, the importance of the integration objective may even (temporarily) increase due to the accession of new member states to the European Union. Furthermore, Regulation 1/2003 *federalised* competition law in Europe to a considerable extent. Yet, such federalised competition law enforcement is now based on *substantive* competition law less concerned with economic market integration than competition law of the the 1960s or 1980s, for example.

115 See e.g. *Motta* (2004), p. 30 and *Bishop & Walker* (2002), numbered paragraphs 2.05-2.10.

116 See *Gerber* (1998a), p. 245-252.

such firms: they should act *as if* they did not possess such economic power. This high standard was to eliminate, if not the existence of monopolies, their importance.¹¹⁷ The as-if standard was based on a concept developed in German competition law: the basic distinction between performance-based competition or competition on the merits (*Leistungswettbewerb*) and impediment competition (*Behinderungswettbewerb*). The as-if standard would only prohibit impediment competition, namely conduct designed not to make firm's products or services more appealing for consumers, but to impede competitors' ability to perform.¹¹⁸

The concept of performance-based competition has been used in determining whether there has been abuse under the two-step test based on the prohibition of abusing a dominant position. For there to be abuse, there must first be a likely negative effect on the structure of a market and second, that likely effect must be caused by methods not classified as performance-based competition. This two-step approach, adopted in the European Court of Justice's decisions for identifying abuse,¹¹⁹ derived from the German competition law doctrine.¹²⁰

The European Court of Justice's classical case law on abuse is thus largely based on the structuralist ordoliberal approach emphasising the need to keep markets open and the need to maintain the structural process of rivalry which is presumed to be beneficial for the society in the long run and which excludes coercive market power.¹²¹ The abuse of market power prohibited in the Treaty thus relates to unjustified measures blocking or restricting competition on the merits.¹²²

The concept of performance-based competition is normative. Its purpose is to define conduct akin to competitive behaviour and thus outside the reach of competition law intervention. The fact that a certain conduct increases a firm's efficiency and creates

117 See *Gerber* (1998a), p. 252 and *Foucault* (1978-1979, 2008), p. 137.

118 See *Gerber* (1998a), p. 252.

119 See in particular case 85/76, *Hoffmann-La Roche & Co. AG v Commission* [1979] ECR 461 (at paragraph 6) and case 322/81, *NV Nederlandsche Banden Industrie Michelin v Commission* [1983] ECR 3461, at paragraph 10.

120 *Kallaughner & Sher* (2004), p. 269.

121 See also joined cases 6-7/73, *Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission* [1974] ECR 223, where the condemning judgement was based on the refusal's effect on the structure of supply on the market. See also case 27/76, *United Brands Company and United Brands Continentaal BV v Commission*, ECR [1978] 207, where the United Brands' refusal to supply was found abusive not because it necessarily eliminated a competitor from the market, but because it had the potential, if repeated often enough, to drive firms from the market, thus having a potential to pose a non-immediate threat to the structure of competition. The independence of small and medium-sized firms was particularly emphasised by the European Court of Justice, as only firms dependent on United Brands were allowed to stay in business (paragraphs 193-194). *Gerber* argues that the judgement introduced a concept of economic coercion into Article 102 FEU, ex 82 EC and would even be based on the German competition law concept of *relational market power*. See *Gerber* (1998a), p. 367-368.

122 See also case 311/84, *Centre belge d'études de marché - Télémarketing v SA Compagnie luxembourgeoise de télédiffusion and Information publicité Benelux* [1985] ECR 3261. According to the ruling, reserving an ancillary service for a firm belonging to the same group constitutes a breach of Article 82 EC (now Article 102 FEU), provided the refusal is not justified by technical or commercial requirements.

consumer welfare defined in the Chicago School sense does not necessarily connote that it is performance-based competition defined in the ordoliberal sense. Hence, although occasionally performance-based competition may reflect economic efficiency in the Chicago School sense, it is not based on it.¹²³ Rather, a dominant firm, irrespective of the reasons establishing its dominance, has a *special responsibility* not to allow its conduct to impair genuine undistorted competition on the common market.¹²⁴

Although in some cases the Community Courts have gone relatively far in protecting the openness of the markets through the application of the prohibition of abusing a dominant position,¹²⁵ and otherwise expanded the scope of the prohibition in question, the *Commission's* early monopoly policy has been characterised as largely ineffective.¹²⁶ Before the mid-1960s, the aim of encouraging large European firms as a means of promoting European industrial competitiveness dominated in competition law application, leading to relatively relaxed monopoly policy.¹²⁷ Until the 1970s, the Commission had taken no action under the prohibition on the abuses of a dominant position. There were even fears expressed that the prohibition of abusing a dominant position could remain a “dead letter”.¹²⁸ The first case under the prohibition of abusing a dominant position before the European Court of Justice was characteristically a request for a preliminary ruling.¹²⁹

The Commission's approach regarding the prohibition of abusing a dominant position started to sharpen after the Oil Crisis of 1973.¹³⁰ During the 1970s, the prohibition developed rapidly in the case law of the Court and the Commission. Technology rather than size of firms became the new key perceived to lead to firms' international competitiveness. This reduced the concern that the prohibition of abusing a dominant position might interfere with the objective of creating large enough firms able to match their US competitors.¹³¹ However, it has been estimated that the thrust of the Commission's enforcement efforts has been in the area of the cartel prohibition even after that. In addition to balancing between international competitiveness of

123 *Kallaugher & Sher* (2004), p. 270-271 and 282. See also *Fox* (2006), p. 70. Many microeconomics-based competition law treatments conclude that the process of rivalry should not form the basis of defining *effective* (in contrast to *workable*) competition. See e.g. *Bishop & Walker* (2002), numbered paragraphs 2.05-2.10.

124 See case 322/81, *NV Nederlandsche Banden Industrie Michelin v Commission* [1983] ECR 3461, at paragraph 10.

125 See e.g. case T-203/01, *Manufacture française des pneumatiques Michelin v Commission* [2003] ECR II-4071. In this *Michelin II* -case the Court of First Instance went as far as to state that it is sufficient to show that the abusive conduct of the undertaking in a dominant position is *capable of restricting competition* (at paragraph 239).

126 See *Cini & McGowan* (1998), p. 94. Certainly there are some early high-profile exceptions confirming the rule, such as the IBM settlement of August 1984. See the *XIVth Report on Competition Policy* (1984), p. 77 and *XXIst Report on Competition Policy* (1991), p. 81.

127 See *Cini & McGowan* (1998), p. 22.

128 See *Wesseling* (2000), p. 26-27.

129 Case 40/70, *Sirena Srl v Eda Srl and others* [1971] ECR 69.

130 See *Virtanen* (1998), p. 223.

131 *Gerber* (1998a), p. 366.

European firms and competition *within* the Community, the Commission's monopoly policy may have been pursued with less vigour due to the lack of powers by which the dominant position may be removed or diminished, or by which prices or other market conduct may be regulated.¹³²

The ordoliberal background ideology of the European-level monopoly control and the ensuing broad conception of economic power has functioned as the primary structuring device and the distinguishing feature of German and European competition law thinking from the US antitrust law. It provides background for the demands to limit the scope of the prohibition of abusing a dominant position. The same applies for the case law of the Community Courts, which has bolstered the control of dominant positions and thus broadened the scope of Article 102 FEU, ex. 82 EC.

To take one example *M. Waelbroeck*, among others, has argued that the prohibition on the abuses of a dominant position should only be concerned with anti-competitive abuses, as exploitative practices by a dominant firm may encourage entry into the markets and thus lead to more competition.¹³³ Furthermore, an exception similar to Article 101(3) FEU, ex. 81(3) EC, should be applied under Article 102 FEU, ex. 82 EC. This could be achieved through interpretive means.¹³⁴ On a more general level, such proposals can be seen as part of a relatively strong trend away from the ordoliberal structuralist approach towards economic efficiency -oriented application of European competition law. Welfare economics -based application of the prohibition of abusing a dominant position has rapidly become the mainstream prescription in competition law literature.¹³⁵

The movement towards efficiency argumentation is not restricted to the academia. The Commission has through several block exemption regulations and the accompanying guidelines modified the underlying premises of the cartel prohibition. In addition to rationalising competition law application in several respects, these new regulations and guidelines also demonstrate a shift from the ordoliberal competition law ideology towards efficiency reasoning.¹³⁶

The changes have not stopped at reforming the interpretations of the cartel prohibition, but have extended to the prohibition of abusing a dominant position. The most important effort by the Commission in this respect is to be found from a document published in 2009 and entitled "*Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*" (henceforth the Enforcement Priorities), as well as from the preceding "*Discussion Paper on the Application of the Prohibition on the Abuses of a Dominant Position to Exclusionary Abuses*" (henceforth

132 See *Cini & McGowan* (1998), p. 95.

133 See e.g. *M. Waelbroeck* (1998), p. 591 (saying that exploitative abuses can best be dealt with under a distinct provision concerning monopolies, Article 106 FEU, ex. 86 EC, in particular).

134 *D. Waelbroeck* (2005), p. 156. See also *Sher* (2004), *passim*.

135 See e.g. *O'Donoghue & Padilla* (2008), *passim* for a treatment of Article 102 FEU, ex. 82 EC from the perspective of welfare economics. See also e.g. *Motta* (2004), p. 411-532.

136 See also e.g. *Kerber & Vezzoso* (2005) *passim* (with regard to vertical restraints) and *Ullrich* (2003), *passim* (with regard to horizontal research and development cooperation agreements). See also *Eklöf* (2006a) and (2006b), *passim*, with regard to the *Commission Guidelines on the Application Article 81(3) of the Treaty* (2004).

the Discussion Paper). In these documents, the Commission purports to modify the scope of the prohibition of abusing a dominant position through re-interpretation, by re-evaluating the ideology and practices underlying the prohibition in question, and European competition law in general.

In the Discussion Paper, the objective of Union competition rules in general, and of the Article 102 FEU in particular, is said to be “*the protection of competition on the market as a means of enhancing consumer welfare and of ensuring an efficient allocation of resources*”.¹³⁷ Further echoing the teachings of the Chicago School, the prohibition of abusing a dominant position is limited to the prevention of exclusionary conduct “--likely to limit the remaining competitive constraints on the dominant company--”.¹³⁸ On the other hand, the Discussion Paper sends a mixed message and departs from the Chicago School approach in many respects. It recognises the need to balance between short, medium and long-term efficiency.¹³⁹ Furthermore, foreclosure is the core element of competitive harm, whereas in the US antitrust law actual or probable effect on price or output is required.¹⁴⁰ The substantive treatment of various abuses differs from US antitrust law, including tying, bundling and refusals to supply.¹⁴¹ The Commission’s subsequent position in the Enforcement Priorities reflects similar differences in approach.¹⁴²

Perhaps the most significant change would be the introduction of an *efficiency defence* through interpretation. According to the Commission’s initial position in the Discussion Paper Article 101(3) FEU, ex. 81(3) EC, could simply function as a *de facto* exemption also under the prohibition of abusing a dominant position. The Commission argued that if the conduct of a dominant company generates efficiencies and provided that all the other conditions of the third paragraph of the cartel prohibition are satisfied “--, such conduct should not be classified as an abuse under Article 82 of the EC Treaty [now 102 FEU]”.¹⁴³ In the Enforcement Priorities a dominant firm’s conduct is declared to be exempted for efficiency reasons provided four cumulative conditions are fulfilled:¹⁴⁴ 1) the efficiencies have been, or are likely to be, realised as a result of the conduct;¹⁴⁵ 2) the conduct is *indispensable* to the realisation of those efficiencies;¹⁴⁶ 3)

137 DG Competition Discussion Paper (2005), at paras 4 and 54 (concerning Article 82) and at paragraph 88 (concerning EU competition rules generally). The concept of *consumer* relates not only to private end-users, but also to all direct or indirect users, for example other producers, distributors etc. See e.g. Eklöf (2006b), p. 31.

138 DG Competition discussion paper (2005), at paragraph 54.

139 DG Competition discussion paper (2005), at paragraph 55.

140 In addition to the foregoing discussion on US antitrust, see *American Antitrust Institute* (2006), p. 6.

141 See more closely *American Antitrust Institute* (2006), p. 9-14.

142 See *Commission’s Enforcement Priorities* (2009), at paras 46-89.

143 DG Competition discussion paper (2005), at paragraph 8. See also *Commission’s Enforcement Priorities* (2009), at paragraph 30, where the conditions under Article 81(3) are only referred to indirectly.

144 *Commission’s Enforcement Priorities* (2009), at paragraph 29.

145 These may, the Commission explains, for example include technical improvements in the quality of goods, or a reduction in the cost of production or distribution.

146 Hence, there must be no less anti-competitive alternatives to the conduct that are capable of producing the same efficiencies.

the likely efficiencies generated by the conduct outweigh any likely negative effects on competition and consumer welfare in the affected markets; and 4) the conduct does not eliminate effective competition by removing all or most existing sources of actual or potential competition. The Commission specified the last condition:

“Rivalry between undertakings is an essential driver of economic efficiency, including dynamic efficiencies in the form of innovation. In its absence the dominant undertaking will lack adequate incentives to continue to create and pass on efficiency gains. Where there is no residual competition and no foreseeable threat of entry, the protection of rivalry and the competitive process outweighs possible efficiency gains. In the Commission’s view, exclusionary conduct which maintains, creates or strengthens a market position approaching that of a monopoly can normally not be justified on the grounds that it also creates efficiency gains.”

Introducing an efficiency defence under the prohibition of abusing a dominant position could be problematic. On one hand, the structure of the prohibition and its interpretations by the Community Courts would not seem to leave scope for a *separate* defence. Rather, provided sufficient pro-competitive, efficiency enhancing or justificatory elements are present, there is no abuse in the first place.¹⁴⁷ The strict requirement that the dominant company must show that the chosen alternative is *significantly* more efficient than the less restrictive alternatives,¹⁴⁸ was dropped from the Commission’s subsequent position in the Enforcement Priorities.¹⁴⁹ Yet it could have affected the *Microsoft*-judgement of the Court of First Instance (now the General Court) in that the Court required a *significant negative impact* on Microsoft’s incentives to innovate for there to be an objective justification based on innovation incentives.¹⁵⁰

If construed broadly, the efficiency defence could dilute the special responsibility of dominant enterprises as developed in the case law of the European Court of Justice.¹⁵¹ As already noted, it appears from the case law that abuse relates to a certain type of *behaviour* of a dominant firm influencing the structure of a market so as to weaken competition. A dominant firm may compete on merits, but may not lessen competition by having recourse to methods not characterised as performance-based competition. Even where a dominant firm’s conduct is in accordance with

147 See *Monti* (2005), p. 4-5 and Advocate General in case C-53/03, *Syfait and Others v GlaxoSmithKline plc, GlaxoSmithKline AEVE* [2005] ECR I-4609.

148 *DG Competition discussion paper* (2005), at paragraph 86. See also *Elhaug* (2006), p. 15 (criticising the Discussion Paper for introducing the requirement of significance with regard to the efficiency benefits).

149 See Commission’s Enforcement Priorities (2009), at paragraph 30.

150 See more closely the discussion of the innovation incentives –test under the next main chapter.

151 The Discussion Paper was not logical in all aspects. In the light of the Commission’s statement no restrictive agreement can constitute an abuse of dominant position, should the conditions of the third paragraph of the cartel prohibition be present. This means that contrary to what the Commission states earlier in the Discussion Paper Article 102 FEU, ex. 82 EC could never constitute an independent impediment for the application of Article 101(3) FEU, ex. 81(3) EC, as the conditions of Article 101(3) FEU, ex. 81(3) in Commission’s original view define, in the end of the day, the scope of Article 102 FEU, ex. 82 EC.

commercial usage, it may still constitute abuse.¹⁵² Dominant firms have market power to an extent that their unilateral actions – even if in accordance with commercial usage – may considerably weaken existing competition by restricting the freedom and opportunities of competitors or even by excluding them from the markets altogether. The special responsibility could be diluted for the sake of efficiency gains: in theory any conduct, irrespective of the methods used and restrictions of competition caused, could be exempted provided the efficiency gains weigh more.

The Commission's new monopoly policy reflects a longer-term development and transformation of competition law. A recent inspiration for the Commission has been a Report by the Economic Advisory Group for Competition Policy (EAGCP), entitled "*An Economic approach to Article 82*".¹⁵³ Although going beyond the teachings of the Chicago School in some respects, the EAGCP-Report largely applies its fundamental premises to European competition law and the prohibition of abusing a dominant position. The bottom line is: less intervention, based on welfare economics. Thus, competition authorities and courts should assess matters "*without prejudice to any particular market structure*." What distinguishes conduct requiring intervention from conduct not requiring it is a "*consumer welfare standard in the context of an effects-based approach*".¹⁵⁴ The cost-benefit language not only defines the application of competition law in concrete situations, but also its objectives.¹⁵⁵ In other words, welfare economics functions as an uncontested metatheory of European Union competition law by providing a point of justification for both the objectives of competition law and its material contents.

Although the trend towards Chicago School welfare economics is clear, the Commission sends a mixed message in its Discussion Paper and Enforcement Priorities. Its own competition law practice generally and related to particular areas like standardisation also implies that European competition law is in a stage of confusion.¹⁵⁶ The competition case law of the Community Courts strengthens this conclusion, thus possibly opening the field for alternative future developments. The perspective will be next broadened by embedding competition law in European economic constitutional law. The functions and objectives of a given legal institution are not exhausted to an intrinsic view, but are affected by the broader legislative environment within which the given legal institution operates.

152 Case C-333/94 P, *Tetra Pak International SA v Commission*, ECR [1996] I-5951.

153 EAGCP (2005).

154 EAGCP (2005), p. 9. The EAGCP position thus represents a very common microeconomics-based ideas of competition as economically efficient market outcomes and market power as pricing power. See e.g. *Bishop & Walker* (2002), numbered paragraphs 2.01-2.202.

155 *Sher* (2004), p. 243-246. See also and on a more theoretical level of economics *Crampton* (1994), *passim*. This ideological position will be addressed more fully under title 1.3.5 subsequently.

156 Competition law treatment of standardisation will be treated in the next main chapter.

6.3 Competition Law, Civil Society and Economic Constitutional Law

6.3.1 Introduction

The trend towards efficiency argumentation is centrally a policy pursued by the Commission through diverse soft law instruments. The transfer of power to the executive branch is a more generic phenomenon.¹⁵⁷ Similarly, the deployment of soft law instruments, such as the Discussion Paper, Enforcement Priorities and Notices, is nothing new in the context of European Union law, but could be problematic from the perspective of democratic accountability.¹⁵⁸ By thus setting the developmental trajectory of competition law, the Commission challenges the European courts to evaluate critically the adopted policy and to analyse its compatibility with the European competition law *acquis*. Competition law frustrates its basic societal justification based on the control of societally harmful market power if it was narrowed down into a mere manifestation and expansion of the economic efficiency standard.

The purpose of the following is to reconstruct competition law from the perspective of European economic constitutional law and to evaluate its interpretation and limits from such a broadened viewpoint. The latter part of the treatment purports to reconstruct European competition law from the perspective of the civil society, in particular.

For Chicago School the broadening of European Union's regulative focus is not a theoretical problem, but consistent with its program of expanding economic rationale and market schemata on other domains. As already pointed out by Foucault, Chicago School redefines the social sphere as a form of the economic domain.¹⁵⁹ In other words, having economic and social regulation under the same European Union umbrella is not only consistent with Chicago School neoliberalism, but even required by it as there is no logical division between the economic, social and political domains. They *shall all* follow economic rationality as an overarching metanorm: all domains are subjected to critical evaluation against economic rationality and market concepts.

The Chicago School has populist appeal in its simplicity and market orientation. Even though it is not an ideology largely supported in the academic discourses on European constitutionalism, it appears in diverse legislative proposals, formulations of European policies and their enforcement, and in competition law literature as the strongest follower of ordoliberal ideology. The constitutional perspectives elaborated here are also based on this perceived threat.

157 See generally about this development Sassen (2006), p. 234 and 269.

158 For the use of soft law in EU law see Wellens & Borhardt (1989); *passim*; Snyder (1993), *passim*. For a critical evaluation of this development on international level, see Klabbers (2006), *passim*.

159 Foucault (1978-1979, 2008), p. 240 and 243-247. See also Lemke (2001), p. 197 (discussing Foucault's views on ordoliberalism and Chicago School neoliberalism).

6.3.2 Constitutional Aspects of Competition Law: Traditional Perspectives

The cartel prohibition and the prohibition of abusing a dominant position alike are as literal norm formulations very brief, broadly written and lack institutional and procedural framework on the basic Treaty level, thus enabling their constitutional role in the sense that their practical content remained to be defined in case law, and also secondary legislation.¹⁶⁰

Furthermore, European Union competition law is based on the prohibition principle, connoting that constraints of competition are prohibited directly by law: there is no need for the competition law authorities to make actions illegal or invalid by a separate decision.¹⁶¹ This basic strategy has enabled the juridification¹⁶² and constitutionalisation of European competition law. The prohibition principle is further strengthened by the relatively recent shift from *ex ante* to *ex post* enforcement, implemented through Regulation 1/2003.¹⁶³ The Regulation also federalised European Union competition law to a considerable extent.

The most commonly discussed constitutional aspect of European Union competition law relates to its function as a means connected to the achievement of economic integration.¹⁶⁴ The European Court of Justice has interpreted the Treaty's competition rules by using teleology, the perceived primary telos traditionally being market integration rather than the protection of the competitive process as such. Yet, it has not been necessary to distinguish these two objectives in most cases.¹⁶⁵ Even though the role of market integration may have given room for objectives related to industrial policy and European competitiveness, European Union competition law is still connected to the systemic and fundamental aim of preventing private trade barriers between member states, often at the expense of short-term economic efficiency.¹⁶⁶

The complementary function of European competition law with the general market integration objectives and free movement provisions of the Treaty targeted at member states is illustrated by the fact that European Union competition law protects competition not only against private action, but also against actions of member states in the form of state aid, operation of public monopolies, enterprises entrusted with public functions, and state measures creating anti-competitive situations or reinforcing

160 See Gerber (1998a), p. 345.

161 The latter system is called the abuse principle. See e.g. Fikentscher (1998), p. 86.

162 Gerber (1998a), p. 346-347 describes the competing visions of EC competition law in the foundational period and concludes that gradually a juridical conception of competition law, supported by Germans, took hold.

163 Council Regulation (EC) No. 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1 [2003]. About this shift see e.g. Gerber (2001), p. 124.

164 See e.g. *Opinion 1/91 (EEA)* ECR (1991), I-6079, paras 15, 17-18 and case C-126/97, *Eco Swiss China Time*, ECR (1999), I-3055, paragraph 24.

165 See Gerber (1998a), p. 348-353.

166 See e.g. Wesseling (2000), p. 77 an 87 (discussing territorial exclusivity from this perspective).

the effects of anti-competitive private measures.¹⁶⁷ This is a particular constitutional aspect of European Union competition law as it means that competition law provisions may function as metanorms capable of affecting the application, interpretation and – due to direct effect and primacy – the validity of domestic laws. These features of European Union competition law can also be connected to the objective of separation of private from political power corresponding with the ordoliberal concept of economic constitution.¹⁶⁸

Yet, the shift of European Union competition policy's focus from market failures to regulatory failures, as reflected by the internal market programme of the 1980s, can also be connected to paleoliberalism of *Hayek*. Deregulation and privatisation are namely almost unavoidable consequences of this focus on regulatory failures.¹⁶⁹

One may also give freedom of competition *as such* a constitutional gloss. The European Court of Justice has stated that the principle of freedom of competition is a general principle of Community Law.¹⁷⁰ It has also in several instances interpreted operative competition law provisions in the light of the *former* general objectives of the Community, as explicated in the EC Treaty.¹⁷¹

This could be perceived to give European Union competition law constitutional character within the basic Treaty framework.¹⁷² *Petersmann* argues that fundamental rights law offers a justification of both individual liberty in the economic sphere and of competition as a decentralised means of expressing and coordinating individual preferences due to the interdependence between the exercise of fundamental economic rights and the freedom of the markets as a collective good. As freedom of the markets as a collective good fosters freedom of the market participants, which is protected by fundamental rights, the freedom of the markets needs constitutional protection against abuses of both political *and* private power.¹⁷³

As an instrument capable of fostering a decentralised economy with independent citizens, competition law may indeed be connected to the maintenance of democratic

167 See e.g. *Schaub* (1998), p. 118 and more closely about the topic *Baquero Cruz* (2002), *passim*.

168 On the genesis of European competition laws and the influence of ordoliberals on EC competition law see *Gerber* (1998a), *passim*. On this particular point, see also *Petersmann* (1999), p. 149-150.

169 See *Joerges* (2005), p. 472-473. The liberalisation of telecommunications, electricity and postal services can be mentioned as obvious examples of this trend.

170 Case 240/83, *Procureur de la République v Association de défense des brûleurs d'huiles usages* [1985] ECR I-531.

171 Article 3 (1) (g) EC, previously Article 3 f EC, according to which “for the purposes set out in Article 2 [EC], --the activities of the Community shall include a system ensuring that competition in the internal market is not distorted”). With regard to cases referring to this provision see e.g. the classical cases interpreting the prohibition of abusing a dominant position: joined cases 6-7/73, *Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission* [1974] ECR 223 and 27/76, *United Brands Company and United Brands Continental BV v Commission*, ECR [1978] 207.

172 See e.g. *Amato* (1997), p. 45.

173 See *Petersmann* (1999), p. 147-148.

institutions.¹⁷⁴ Moreover, workable market as a collective good may be connected to fundamental rights protection. Freedom to conduct a business and right to property may be seen to protect freedom of market participants. However, this should not mean that whenever freedom of competition is invoked, fundamental rights are invoked as a corollary. Fundamental rights cannot provide a justification for whatever competition law regime or application of competition law in individual instances. For example, extension of market logic and economic competition into areas following non-market rationality could scarcely be required by workable competition as a fundamental right-related collective good. Instead, a self-limitation of competition law's reach towards non-market rationalities could be constitutionally motivated, as will be further developed subsequently.

Hence, advancing freedom of competition values or enforcing competition law in individual instances is not tantamount to advancing the fundamental rights related to workable competition. Even if in an individual instance the fundamental right-related collective good and the protection of competition overlap concretely, there may be other public interests or fundamental rights involved. The latter may contradict the values related to workable competition.

Being part of European economic constitutional law does not imply placing market-oriented constitutional norms over other parts of the economic constitutional law, as acknowledging that European competition norms may protect constitutional values does not transform them into fundamental rights as such.¹⁷⁵ Thus, no automatic repercussions for competition law application follow from the established link between freedom of competition and workable markets, the collective aspect of some fundamental rights, such as freedom to conduct a business.

Rather than giving freedom of competition and competition law an uncritical constitutional gloss, competition law can be connected to constitutional law in that it is a legal institution capable of controlling economic power used by private economic entities.¹⁷⁶ When freedom of competition is seen through the prism of market power and not as a universal dogma, the constitutional function of competition law becomes more intelligible. Competition law could then be seen to protect primarily freedom of competition against restrictions of competition enabled and caused by market power of other economic actors.¹⁷⁷ Freedom of competition as a constitutionally relevant value should thus *not* be

174 See e.g. *Dahl* (2000), p. 171 and *Walzer* (1992), p. 100 and 106, on the connection between a decentralised economy and democracy, and *Scherer & Ross* (1990), p. 18-19, discussing the functions of competition in decentralising and dispersing power impersonally, not through the personal control of entrepreneurs or government officials; and its functions in enabling freedom of opportunity.

175 *Baquero Cruz* (2002), at p. 76 and 98, argues that EU competition norms could be defined as "constitutional rights" but not as "fundamental constitutional rights", as the former are instrumental to the constitutional objectives of the Treaty.

176 See also *Baquero Cruz* (2002), p. 4 and 31 and *Amato* (1997), *passim*.

177 Without limiting the additional role of European Union competition law in controlling government-made artificial restrictions and distortions of competition.

perceived as a universal competitive ethos or an expansionist mandate.¹⁷⁸ Competition law should *not* be construed as a legal materialisation of economic rationality perceived as an overriding imperative pervading the whole society.

The use of economic power may also restrict political freedom and extend to the social sphere, as already realised by ordoliberalism.¹⁷⁹ By deconcentrating industries and facilitating market access, competition law not only disperses and controls the exercise of economic power, but also privately held political power by reducing the possibilities of private entities to affect the legislation and social life in general.¹⁸⁰ Thus, although competition law can be seen to foster free market or workable competition as a collective good and the economic freedom of competitors as a corollary,¹⁸¹ it also relates to constitutional values and the related fundamental rights rooted in political and social spheres. By controlling privately exercised economic power, it promotes not only economic efficiency in a technical sense, but also a pluralistic society with no predominant powers. Rather than freedom of competition in the abstract, the control of economic power having repercussions within and outside the economic sphere is the key behind the most essential constitutional elements of European Union competition law.¹⁸²

If an anticompetitive measure simultaneously constitutes a restriction of a constitutionally protected right, the application of competition law may lead to the protection of the constitutionally protected right in question. Although the Court of First Instance (now the General Court) has interpreted its own formal *competence* to review the compatibility of a Commission competition decision with fundamental rights law relatively narrowly,¹⁸³ a fundamental right-related interest present in a case should be able to affect the *interpretation* of the competition law provisions in question. Freedom in its collective form, be it freedom of the markets or of communication structures, often coincides with the established competition law interest to maintain competitive structures and freedom of access to markets, as further developed in the following sections.

178 However, as *Petrella* (1996), p. 62 says, this may have already happened, as competition is largely perceived as a universal ideology.

179 See more closely the previous discussion of ordoliberal competition law ideology as well as the subsequent discussion regarding the function of civil society in competition law.

180 See also *Markovits* (1987), p. 340 and *Amato* (1997), p. 1-4.

181 See *Immenga* (1998), p. 179-180 and *Gerber* (1998a), p. 418 (noting that protecting economic freedom is intertwined, sometimes even equated with protecting competition).

182 As *Jenny* (2000), p. 24 notes, even if non-economic objectives of competition law may appear as economic failures of competition law from the perspective of a consumer welfare economist, the latter's perspective may in fact be viewed as a failure of the economist to recognise the collective good-related, non-economic aims pursued through competition law. To the extent it is not demonstrated that these legitimate non-economic objectives of competition law are produced at a cheaper cost and at least equally effectively through some other policy instrument, the criticism of the consumer welfare economist is misguided.

183 Case T-193/02, *Laurent Piau v Commission* [2005] ECR II-209 (at paras 78-79). The private regulation by FIFA potentially led to infringements of individuals' civil and economic liberties. This potential infringement could be examined by the Court only "in so far as any infringement of them reveals a concomitant breach of the rules on competition" and if the possible breach of fundamental principles "resulted in an infringement of the rules on competition."

6.3.3 Premises for Further Constitutionalisation of Competition Law

It is possible that a legal institution like competition law assumes new functions even without changes in the text of the legal norms.¹⁸⁴ This may be due to societal change, changes in commonly accepted values and changes in other legal institutions.¹⁸⁵ Privatisation, for example, could lead to modifications in the functions of many areas of law traditionally treated as private law in the form of increased public demands, ultimately blurring the distinction between private law and public law.¹⁸⁶ In the area of private law in general the reaction to privatisation has been the imposition of universal service regimes.¹⁸⁷ In the area of competition law (in a broad sense), itself on the borderline between private and public law, the reaction has been the introduction of forced access regimes (telecommunications and electricity), as well as the frequent use of the essential facilities doctrine and related principles in the application and interpretation of the general competition law norms.¹⁸⁸

It may seem that the ongoing narrowing of the objectives of competition law is evidence of a corresponding change of paradigm or basic societal functions of competition law. It could then be argued that the original multiple objectives of European competition law have been replaced by a new one, the largely technical function of fostering economic efficiency. This could justify the separation of the original political functions of competition law from its operational function related to economic efficiency. However, these very developments, seen from the perspective of the globalisation and information society processes, could also result in a deeper, yet slower process of transformation. Paradigmatic tension could develop beneath the competition law institution.¹⁸⁹ The increasing acceptance of market power for the sake of economic efficiency accentuates the ideological conflicts inherent to the competition law institution. The competing visions of freedom and equality are transformed in the information society into competing interpretations over the control of information markets and intangible essential resources.

The further the trend towards narrow economic efficiency argumentation develops, the more there is likely pressure on a countervailing development as market power becomes generic and the multiple effects caused by it pervasive. One possible outcome of this paradigmatic tension is that some democratic objectives of competition law gain

184 See the classical study of *Renner* (1949), *passim*. See also *Dworkin* (1986), p. 349-350, and for a more recent study on a function change in the area of private law *Wilhelmsson* (2001), p. 43 and 55-56 and also *passim*.

185 See generally e.g. *Dworkin* (1986), p. 349-350 and *Nuotio* (2002), p. 6-7.

186 See *Wilhelmsson* (1999a), p. 23-24 and (1999b), p. 224-225 and *Teubner* (1999), *passim*.

187 *Teubner* (1999), p. 67.

188 See more closely about the essential facilities doctrine under the next main chapter.

189 Also *Gerber* notes, however without further qualifying his statement, that the EU competition system is less stable than it is often assumed to be. See *Gerber* (1998a), p. 391. *Waller* (2001), p. 338 concludes that antitrust contains within itself the seeds of its own opposition in that every use of economics as a decision tool creates a pressure “to recognise and deal with legal issues using opposing conceptions of truth and social science”.

new momentum – and new forms. Seen from this perspective, distinguishing the broader societal objectives of competition law from the day-to-day operational objectives could be seen as a political agenda intended to replace the broader objectives with a new one, narrowly construed economic efficiency in the Chicago School sense. Evidently, calling thus defined economic efficiency non-political does not make it such. The opposite is true – it is precisely the operational relevance attached to the distinction between the original political objectives and the day-to-day objective of economic efficiency that makes the latter a pervasively political and ideological concept.

The inherent tension underlying competition law could already be seen to find its way on the institutional practices in the confusion of the courts and competition authorities when dealing with essential facilities and intellectual property rights. These conflicts represent in judicial form the paradigmatic tensions underlying the competition law institution. In a world of network effects, global technologies and technology standards, monopolies are not only the standard periodically reached in many markets, but also controlled and maintained through technological bottlenecks.¹⁹⁰ The control of bottlenecks related to communication networks connotes not only traditional economic power over competitors, but also often broader societal and informational power.

The purpose of the following is to reconstruct competition law from the vantage point of the civil society, in particular. Ordoliberals were wrong in largely separating the economy from other parts of the society, in treating competition law as an economic constitution distinct and separate from the constitution in general and in seeing the civil society as a systemic environment only.

It is self-evident that the civil society perspective could not suffice for a stand-alone metatheory of competition law. Yet, as part of the broader perspective based on economic constitutional law it could provide some outer limits to competition law application, affect its orientation and substantive interpretation in some instances. By connecting competition law to constitutional considerations and economic constitutional law, one could importantly avoid many of the unnecessary conflicts with other social spheres and legal institutions, including intellectual property law, which should be similarly embedded in constitutional discourse.

6.3.4 Competition Law and Civil Society: From Freiburg to Frankfurt?

Insufficiency of the Ordoliberal View

Ordoliberals shared an understanding of the political threats connected with both the concentration of market power and excessive state intervention. The most profound political threats were Marxism in the form of socialist economies on one hand and *laissez faire* neoliberal politics on the other hand. While the former threatened freedom

190 See more closely the following chapter.

by enabling overall state control of the economy, the latter threatened it by leading to concentration of private power.

The economic constitution was to be constructed so as to prevent any of these developments. Competition law assumed a role not only of controlling market power in order to insulate it from improper political influences and to guarantee freedom of the market participants. It also had the function of enabling the broadest possible public support for the market mechanism by appealing to humanist and social values. Only a social market economy could fulfil this function. The principles supporting this ideal were elevated to constitutional level: the economic constitution was designed to insulate the thus constructed market mechanism from destructive economic developments within the market mechanism *and* political developments outside the market mechanism.

The economic constitution concentrated on the relations between politics, law and the economy. Although ordoliberalism shared humanist values and was concerned about social issues, lifeworld and the civil society functioned primarily as something generating the popular support for the overall structure designed to guarantee a certain form of economy – in its core capitalist market economy with social dimensions controlled and guaranteed by law.¹⁹¹

As Sassen argues, politics has now largely internalised the facilitation of capitalist business opportunities as its *raison d'être*.¹⁹² The further perpetuation of the market system and its support are presumed and achieved by governance and manipulation of social norms.¹⁹³ Business has assumed political functions: market power could enable *direct* construction of techno-economic environments and social norms and meaning, and thus the establishing of the contexts where the indirect relations of lifeworld interaction become mediated. Whereas formerly firms needed politics as a mediator to realise the desired changes in lifeworld or the basic institutions and structures of the economy, now the dependency on politics (defined as the traditional legislative process), is increasingly replaced by firms' capacity to regulate these spheres directly. As argued in chapter two, firms may affect the communicative contexts of the lifeworld or the institutions and structures of the economy *directly*, without resort to the traditional political process as a mediator.

191 See e.g. Gerber (1998a), p. 239-241. Virtanen, director at Finnish Competition Authority and a known competition law scholar, makes a modern restatement of this legitimising function of lifeworld environment. He argues that the evaluation of the systemic repercussions of competitive restraints into political and social orders should complement and constrain welfare economics –based competition law application. When substantiating the argument he holds that the elimination of small traders from the markets, in particular, should also be evaluated from the perspective of social and political spheres, *as strong small enterprise tend to contribute to a political and social order that supports the market system and helps to perpetuate it*. See Virtanen (1998), p. 347-348.

192 Sassen (2006), p. 196-203, and chapter 2. See also e.g. Fourcade-Gourinchas & Babb (2002), *passim*.

193 See about the governance techniques e.g. Hunt (1993), p. 25-32 and Hunt & Wickham (1994), *passim* and about the manipulation of social norms and meaning Lessig (1995), *passim* (recognising the multiple roles of state authorities in the construction of social norms) and in copyright context Jensen (2003), *passim* (concentrating on private efforts to construe social norms).

This transformation has taken place partially through general privatisation and marketisation developments and partially through new, privatised ways of information society regulation, such as computer code, standardisation and various techniques and law-guaranteed resources enabling the construction of social norms and meaning. The capacity to deploy these new ways of regulation manifests itself as the most important form of social power possessed by firms. The new ways of regulation connote an unforeseen potential for private actors to affect the techno-economic and communicative environments (which overlap as explained below) and social norms and meaning in an enduring manner. As the private regulation may simultaneously affect all these spheres, it ultimately structures the whole society. This structuring capacity should be seen as the central form of socially relevant market power capable of being partially addressed with competition laws. Analysing the systemic repercussions of competitive restraints into political and social orders should accordingly concentrate on this structuring potential and its actual effects.

With regard to the Internet, the core of the competitive process functions within the central communicative structures of the civil society and affects them directly. *The techno-economic structures of communication are simultaneously structures of competition, which the firms may affect directly by various techniques of private regulation.* Exclusion of distribution channels, information sources or alternative access points to communication affects not only economic competition, but diminishes individual and collective autonomy, as discussed in chapter 2.

As these central communicative structures also enable new forms of cross-border political action bypassing central authority and could open a space for local social struggles, the firms' regulation of these structures also affects the forms and feasibility of such processes directly. It may also affect open source development by excluding some technological trajectories through patenting or by lessening the viability of open source products by reducing interoperability. Although the actions of firms are not usually based on political motivation but on commercial interests, they have the capacity to affect the public sphere and the collective goods related to social subsystems (at least partially) outside the economy. In this sense, while aiming to affect various economic parameters of the Internet environment, firms cannot avoid the political function of these actions, as they have direct repercussions in lifeworld and politics without any further mediation of politics. This is by far the most important repercussion of the Internet for competition law theory.

This means that the relationship between politics and competition law has assumed a new form in which the interrelations between competition, political processes and the civil society can no longer be neglected. The role of competition law in controlling both economic and political power is not being lost, as sometimes argued,¹⁹⁴ but is

194 Cf. Amato (1997), at p. 104-105, arguing that competition law has lost the potential to control the effects of market power in political process, as the markets have globalised and the control of market power existing nationally is being gradually lost.

transformed. Besides the indirect political power of firms to affect legislation,¹⁹⁵ the ability of enterprises to regulate the communication infrastructures through code has emerged as now perhaps a more important aspect of their politically significant market power, having repercussions for democratic culture, individual autonomy, and (through the functions of public sphere) the legitimacy of law.

This is why the civil society will be addressed in the following in the context of competition law. However, the argument is *not* that this should become the dominating perspective of competition law. Whereas ordoliberalism insulated the economic constitution and competition law from other parts of the constitution, the Chicago School, in contrast, expands the market logic to cover all aspects of the society and constitution. Both ideologies thus, in their own ways, neglect the independent relevance of the civil society, other constitutional values and the presence of non-market rationalities in the application of competition law. This is no more tenable as technological infrastructures built around the Internet constitute a core environment both for the competition in the networked economy and the interactions of the civil society.

Competition Law Seen from the Perspective of Civil Society

It is possible to identify four interrelated effects of competition law with respect to the civil society. *First*, the application of competition law may contradict with the internal non-economic rationality of a societal subsystem by purporting to replace the rationality in question with economic efficiency perceived as a universal norm. *Second*, competition law importantly participates in the determination of the degree to which the capitalist economy is penetrable towards the civil society. *Third*, techno-economic action in the form of potential restrictions of competition may have far-reaching societal repercussions as its unintended consequences. *Fourth*, when analysing market power relevant in competition law, the position of the technological or informational asset in the broader communicative and cultural context must form part of the analysis to enable distinguishing the more problematic situations from the ones where the application of competition law and the finding of (super) dominance is not necessary.

The *first* function of competition law with respect to the civil society relates to situations whereby the application of competition law may contradict with the internal rationality of a social subsystem by interfering with or even replacing a particular non-economic rationality (such as science, art or education) with economic efficiency perceived as a universal norm. The Chicago School's tendency to subsume all social spheres under economic efficiency perceived as a universal metanorm generates an increasing amount of rationality conflicts. Many of these are translated into conflicts between competition law and other social subsystems. They regularly involve norms

195 Which still is a problem; see the previous discussion under heading 5.3.2 and Sell (2003), *passim* (discussing private power behind the TRIPS Agreement). Hence, controlling this political power of firms continues to function as one substantive reason to control the concentration of economic (and thus political) power.

representing non-market rationality. Environmental, health, social security, education and cultural law, among others, may become conflictual with competition law due to the tendency to perceive these areas as part of the economic sphere and thus being fully subject to competition law application.

It was argued before that competition law should adopt a reflexive approach towards the various environments within which it operates by considering the non-market rationalities present in various contexts. The need for such reflexivity materialises not only with regard to particular institutions and arrangements, but becomes a more generic orientation as the economy is increasingly culturally inflected and culture is economically inflected, resulting in the blurring of the distinction between the economy and various cultural aspects of the civil society. The relativisation of this distinction implies that the formal requirements for the application of competition law are more often present than before. Rather than insulating such activities from the reach of competition law, reflexive application and socially aware contextualisation is needed. The effects of competition law should be evaluated not only in economic, but also in socio-cultural terms. A social discourse test is thus grounded indeed in the application of competition law.

For example, an obligation to license copyright could jeopardise aspects of copyright protecting artistic creativity and the integrity of the artist (moral rights). A constitutional conflict would emerge, involving freedom of the art as a constitutionally protected right and collective good, the integrity of the artist as recognised in copyright law and constitutional norms, and the interests and collective good-related values behind the application of competition law. Competition law should treat artistic rationality and the related norms of copyright and constitutional law as self-limitations of competition law application even if the requirements for the application of competition law were otherwise present. Such an embedding of the competition law application in constitutional discourse would be *required* by the constitutional norms present in such a situation.

Another example relates to open source development of computer programs. When implementing the competition law remedies imposed by the Commission on Microsoft related to the obligation to provide information needed for interoperability with the Windows operating system, Microsoft should not be allowed to license the interoperability information under confidentiality agreements typically used between commercial firms. This would make both the discussion of the interoperability information in open source development and its implementation in open source code impossible, thus threatening the inherent logic of this important form of networked social production. This interpretation would also be in conformity with the active integration of concerns related to communicative diversity under competition law, as discussed previously. It would also support the possibilities of the members of the civil society to develop technologies functioning as more democratic alternatives to the dominating commercial platform. The compatibilisation of the rationalities involved and the consideration of contextually determined constitutional values could thus require not only abstentions from the application of competition law and imposition of economic rationality on any domain, but also active measures.

The *second* function of competition law with respect to the civil society is that it affects the degree to which the capitalist economy is penetrable towards the civil society. From another perspective, by so doing it also inhibits the expansion and solidification of market power, thus reducing the possibilities of firms with market power to construct the techno-economic environments and social norms and meaning. Competition law regulates access from the civil society to economic activities by allowing or disallowing certain privately erected barriers to entry, restrictions of innovation or other freedom of action, as well as by determining the permissibility of measures excluding smaller rivals from the markets. Seen from this perspective, the favourable treatment accorded to the small and medium -sized enterprises in European competition law cannot be reduced to an argument according to which it is not *efficient* to use resources on agreements likely to have little impact on competition and welfare.¹⁹⁶ Rather, facilitating smaller-scale economic activities through the application of competition law endorses an economic culture whereby the plurality of *types* of actors and the accessibility of the economy towards the civil society are values the society is willing to pursue through competition law.

The general reduction of powerful market positions resulting from the furtherance of entrepreneurial pluralism through competition law would also address the problem of asymmetric and one-sided possibilities to construct social norms and meaning.¹⁹⁷ The various subtle techniques deployed in the construction of social norms and meaning escape the application of competition law (and typically the application of any other laws). The interest to address this asymmetric power could be subsumed under general competition law orientation based on the protection of pluralistic market structures from the expansion or artificial maintenance of market power.

From this perspective, too, competition law should protect the decentralised and pluralistic nature of markets from concentration as *one* of its objectives, as this furthers the democratic nature of the public sphere and the economy in terms of empowering the civil society in economic activities.¹⁹⁸ Securing such a process of rivalry between diverse market operators is an objective identifiable in the classic competition case law, treated above. Even though this case law is now under attack from the microeconomics-oriented competition law ideology, it is still possible to regard the diversity of market operators and the process of rivalry as aims underlying European competition laws.

In the current economic paradigm, network effects and system goods controlled largely by interoperability and intellectual property rights transform market power and

196 Cf. however with *Motta* (2004), at p. 17 and 22, who advances such an argument.

197 *Lessig* (1995), at p. 1037-1038, argues that if the commonly used marketplace metaphor for information were fully embraced, then we should worry not only about asymmetries of economic power like in standard antitrust law, but also about asymmetries of power to affect social norms and meaning.

198 The argument is thus not that competition law should protect the welfare of the small and medium -sized enterprises against the competitive challenge of larger firms. However, this interest could easily coincide with the objective of preserving pluralism and market access on the marketplace. See also *Pitofsky* (2006), p. 129.

take it into a new level. Should competition law remain a meaningful instrument of guaranteeing workable markets and the diversity of market participants as a collective good, the foregoing would mean that enabling diversified possibilities for innovation should constitute an important objective of competition law. The example of the private control of a communications standard through the ownership of intellectual property rights could also be seen from the perspective of smaller entrepreneurs, programmers, open source developers or individual content providers wishing to offer applications or content to be used in a standard platform.

When determining the principles concerning access to the platform, competition law, as a corollary, defines which types of entities in practice may have access to and operate on the given markets. Should the application or non-application of competition law lead to a *de facto* requirement of cross licensing, the possibility of prohibitive royalty rates, or inflexible access pricing not accommodating the particular interests of smaller firms or open source development, competition law would allow barriers on access from the civil society to economic activities and in effect – would allow competition law to discriminate against certain types of economic action.

However, in Chicago School efficiency reasoning the interests of the small and medium -sized enterprises and the objective of a decentralised, pluralist and workable market are named *populist* objectives. Similarly, enabling a heterogeneous base for innovation is not recognised as a concern due to the individualistic theoretical premises: neither the social and cultural embeddedness of innovation, nor the role of the civil society communities in innovation (as inventive users or as networked developers) finds any correspondence in the abstracted and universalised concepts used. These premises, if translated into concrete action, lead to a development whereby the demarcation line between the civil society and the economic activities becomes sharper: the civil society is seen as a herd of consumers whose only legitimate economic activity is buying products. A more elegant, yet equally restricted view of the civil society recognises its additional role as voters whose majority should support the existing forms of exchange on the public election days.

In ordoliberalism, in turn, the notion of economic freedom is too unqualified to provide a basis for a rational competition law application in this respect. The abstract notion of economic freedom could function as an underlying value for *laissez faire* competition law non-application and ordoliberal competition law application alike. However, when economic freedom is seen to relate not only to the formal positive freedom and the absence of governmental or private coercion (negative freedom) within the economic sphere, but also to the relationship between the economic sphere and the civil society as a function of the former's openness to the latter,¹⁹⁹ the concept becomes substantive. It no more enables

199 See also Walzer (1992), at p. 100 and 104, noting that limits could be fixed on the inequalities created by the market mechanism were the market politically constrained and open to communal as well as private initiatives. See also Dahl (2000), p. 171.

laissez faire competition application, a threat that ordoliberalism shared and which shaped their ordoliberal competition law. When connected to the enabling function of competition law in terms of diversified and heterogeneous innovation and economic action, the idea of competition law protecting economic freedom becomes even more substantiated.

The *third* function of competition law with respect to the civil society is that in the application of competition law it should be recognised that techno-economic action in the form of potential restrictions of competition might have far-reaching societal repercussions as their mostly unintended consequences. When related to the communication networks and the digital environment, the diversified possibilities of economic action and innovation manifest themselves as *digital* or more broadly, *communicative diversity*.²⁰⁰ This notion is not exhausted to consumers' perspective in terms of the diversity of goods and services available on the markets, which is the consumer aspect of the diversified possibilities for innovation and economic action.²⁰¹ Rather, it refers to users of communication networks and information resources as active participants of the emerging digital culture. Thus, the concepts relate not only to the number of actors and goods or services. They also refer to the variety in types of actors and types of goods and services being offered.

The ideal of communicative diversity overlaps with the more traditional competition law objective related to market pluralism, diversity of economic actors and avoidance of excessive market power. Within markets characterised by network effects and tipping towards a single system, maintaining these values is a conscious effort, the result of an active governmental policy. Active standardisation policy, regulation of interoperability and information-based market power within intellectual property and competition law are the key instruments of such a strategy. Instead of preventing network effects or artificially maintaining several non-operable systems, these instruments should be calibrated to reduce barriers to entry by promoting open, non-proprietary standards, enabling disclosure and adequate exceptions and limitations for achieving interoperability, as well as information disclosure and compulsory licensing obligations on the part of the firms controlling the dominant technological systems. When addressing the potential restrictions of competition, such additional analysis should increasingly complement the traditional competition law considerations. Economic welfare considerations should be *complemented* with

200 See more closely about the concept *digital diversity* in intellectual property context Fitzgerald (2001a), p. 122 (characterising it as diversity in software products). The notion of communicative diversity – which also resonates on the level of constitutional and democratic theory – as developed in chapter 4 is preferred here over the narrower concept of digital diversity.

201 And which could be seen as itself an interest competition law may legitimately pursue. See Amato (1997), p. 110 (however, recognising such consumer interest indirectly as part of a rhetorical question only).

social welfare considerations. Various non-competition policies and objectives of the European Union have affected the interpretation of Union competition law.²⁰²

For example, should the combined effect of intellectual property and competition law exclude open source development from achieving critical interoperability with the prevailing operating system, a particular type of innovation and development would be discriminated to the detriment of digital diversity and diversified possibilities for innovation. Competition law should protect this form of development from suppression for several reasons. Open source development does not need strong and often competitively problematic exclusive rights as its incentive. It produces consumer welfare and dynamic competition. Open source code and the structure of its development preclude most technology-based abuses. Finally, it typically promotes democratic technologies based on decentralised control, and lowers the barrier between the civil society and the economy.

Competition law should also be concerned with facilitating the end-to-end principle of the Internet, as innovation competition on the Internet has been dependent on its open nature and absence of central authority determining which activities are permissible and which are not. As Lemley and Lessig have noted, the end-to-end principle “*expands the competitive horizon by enabling a wider variety of applications to connect to and use the network. It maximizes the number of entities that can compete for the use and applications of the network. As there is no single strategic actor who can tilt the competitive environment (the network) in favor of itself, or no hierarchical entity that can favor some applications over others, an e2e [end-to-end] network creates a maximally competitive environment for innovation*”.²⁰³

Hence, also with regard to the end-to-end principle and its underlying protocols and standards, the ideals of nurturing a democratic culture based on communicative diversity and decentralised possibilities for meaning-making, and an environment facilitating dynamic innovation competition overlap. Facilitating open source development and the end-to-end principle through competition law is thus not only based on the obligation to promote communicative diversity as a fundamental right -related collective good. It is also in the interest of the inherent objectives of

202 Article 101(3) FEU, ex. 81(3) EC, has been interpreted in this sense e.g. in case 26/76, *Metro SB-Großmärkte GmbH & Co. KG v Commission* [1977] ECR I-1875, where the European Court of Justice stated at paragraph 21 that: “*The powers conferred upon the Commission under article 85(3) show that the requirements for the maintenance of workable competition may be reconciled with the safeguarding of objectives of a different nature and that to this end certain restrictions on competition are permissible, provided that they are essential to the attainment of those objectives and that they do not result in the elimination of competition for a substantial part of the common market*” . See also Wesseling (2000), p. 95-107. See also joined cases T-528/93, T-542/93, T-543/93 and T-546/93, *Metropole télévision SA and Reti Televisive Italiane SpA and Gestevisión Telecinco SA and Antena 3 de Televisión v Commission* [1996] ECR II-649, at paragraph 118. See also *Schepel* (2005), p. 317-318. Article 102 FEU, ex. 82 EC has been interpreted similarly. See e.g. case 6/72, *Europemballage Corporation and Continental Can Company Inc. v Commission* [1973] ECR I-215, at paragraph 24. See also the discussion of *Associated Press et al. v United States*, 326 U.S. 1 (1945) in the next chapter.

203 See *Lemley & Lessig* (2001), p. 930-931 and also *passim* (citation from p. 931).

competition law to advance these ends. The end-to-end principle relaxes the fear of strategic capture of both innovation competition and individual freedom in the Internet environment.

When the technological architectures of the public sphere(s) of the lifeworld are simultaneously structures of competition, the effects on the lifeworld of anticompetitive action should be relevant in competition law analysis, as they are significant from the perspective of democracy and can be translated to the language of fundamental rights. Should there be no more appropriate instruments available, the idea is thus to internalise within competition law application such externalities caused by anticompetitive action. The control of informational and market power enabled and facilitated by intellectual property rights is consensually and even consciously – like reflected in the European Commission’s policy statements – left for competition law. Intellectual property law has no built-in instruments to cope with the power it generates. Specialised communication laws are narrowly focused and do not enable the control of most anticompetitive actions affecting the public sphere(s) of the lifeworld. Competition laws are thus often the only available instruments enabling the consideration of the side effects on communicative structures of techno-economic anticompetitive exercise of market power. The protection of media pluralism is not adequately secured by merger control as on one hand the Commission is not well equipped to consider pluralism in its merger decisions, and on the other hand, the member states have not adequately utilised the possibility available to them under the Merger Regulation.²⁰⁴ Furthermore, although the relaxing of the cartel prohibition and the control of horizontal cooperation also serves useful ends, this also means that the joint creation of information monopolies is often beyond the reach of the cartel prohibition. Hence, communicative diversity should increasingly become evaluated as a constitutionally recognised value under the prohibition of abuses of a dominant position.

The arguments advanced here do not dispute that competition law should be distinguished from unfair competition law, contract law and specialised communications law. Competition law is not to protect individual competitors from unfairness or contractual wrongs in the absence of anticompetitive effects.²⁰⁵ Nor is its function to protect communication from any undemocratic effects, should these not simultaneously constitute restrictions of competition. Embedding competition law in a broader legal framework of economic constitutional law and fundamental rights enables such an approach without jeopardising the integrity of competition law

204 Article 21(4) of the Merger Regulation. See more closely e.g. *Idot* (2006), p. 190 and *Bernitz* (2006), p. 198. As *Hoikka* (2009), at p. 98, argues, also the European Union has an obligation to actively promote media pluralism. This view may also be based on Article 11 of the EU Charter of Fundamental Rights.

205 See also *Fox* (2002), p. 406 in the context of US antitrust law. In the context of European Union competition law see *Wesseling* (2000), p. 88-93. Unfair competition law has not been extensively harmonised within the EU. However, the EU trademark law incorporates important parts of unfair competition analysis. See e.g. Article 6(1) of the First Trademark Directive 89/104/EEC.

or transforming it into a consumer protection law, general communications policy or direct limitation on the expanded intellectual property law institution. *The scope of the competition law's application area would not (necessarily) expand, but cases having the implications identified above for the communicative structures would become more rigorously and fully analysed.*

The *fourth* function of competition law with respect to the civil society is related to the third. It relates to the identification of market power and the definition of (super) dominance relevant in competition law application. Whereas the characteristics of intellectual property enabled dominance will be treated in more detail in chapter 7, market power related to the communicative structures will be discussed below on a more general level. Neither market power, nor dominant position are unitary concepts, but comprise qualitatively distinct situations.²⁰⁶ Even intellectual property -related market power may be based on diverse types of competitive advantages which enable diverse types of restrictions of conduct and competition.

For example, intellectual property rights may enable control over the price of end-user products through brand-loyalty and trademark protection, power over the communication and innovation of others through the ownership of a popular software-platform, power over the core economic activities of competitors through the ownership of an essential patent underlying a technical standard, command over the derivative expressive activities of others through the ownership of copyright in a unique cultural product, or restrictions over a particular line of medical research through the ownership of the basic patents needed.

However, in both the relevant case law and microeconomic competition law literature market power is often seen as a rather homogeneous phenomenon. The widely used legal definition of a dominant position, given by the European Court of Justice in *United Brands*, concentrates on the capability of a firm to prevent effective competition being maintained on the relevant market by giving it the power to behave relatively independently of its competitors, customers and ultimately consumers.²⁰⁷ On the other hand, the Chicago School -oriented definition of market power defines it

206 See e.g. *Krattenmaker, Lande & Salop* (1987), *passim* (pointing out the vagueness and inconsistency in the definitions of market power and monopoly power as used in the US antitrust case law and literature, and maintaining that the crucial distinction is between anticompetitive economic power exercised by restricting one's own output and such power exercised by restricting the output of rivals). As stated before, the term market power used in this research is a general concept comprising different degrees of market power from monopolistic to various oligopolistic positions treated either under Article 101 or 102 FEU, ex. 82 and 81 EC, in particular. It also comprises different *types* of market power. *Dominant position* is a legal definition under Article 102 FEU, ex. 82 EC. It is thus a narrower concept than market power.

207 See the classic definition in case case 27/76, *United Brands Company and United Brands Continental BV v Commission*, ECR [1978] 207, at paragraph 65. This definition is referred to e.g. in the *Commission Enforcement Priorities* (2009), at paragraph 10.

as power over price: the possibility to reduce output and control price. The inelasticity of demand gives the producer an opportunity to raise prices.²⁰⁸

Market power thus defined is typically metered by first analysing the relevant product and geographical markets and then the market share of the firm under scrutiny within the thus defined markets. The methods for defining the relevant markets are in principle relatively well developed in competition law practice and microeconomic theory.²⁰⁹ Yet, the process is inherently indeterminate in several respects, thus decreasing the predictability of market power analysis.²¹⁰

Hence, additional criteria indicating dominance, such as economies of scale, vertical integration and well-developed distribution system, as well as superior technology, have been taken as further indicia of dominance in the legal practice.²¹¹ In technological contexts, the relevant markets are often *technology* or *innovation markets*.²¹² Albeit recognising that technologies and innovation may form independent areas of business and market power, these concepts are largely based on the idea of market power ultimately stemming from traditional product and service markets. In economic literature, entry and exit barriers have been addressed as important additions to the market power analysis based on market shares.²¹³ Market share analysis alone is thus not seen as an adequate criterion for establishing market power or dominance relevant in competition law.²¹⁴ Some consider that the whole process of defining the relevant markets could be avoided and the establishment of dominance based on other criteria.²¹⁵

Although evolving in the course of time, all these traditional factors are relatively long-lasting characteristics of the firm in relation to other firms within the defined relevant markets. It is this relationship of the economic entity in question to other

208 See e.g. *Landes & Posner* (1981), p. 937; *Scherer & Ross* (1990), p. 17 (from the perspective of *industrial organization*); *Hovenkamp* (1999), p. 78; *Bishop & Walker* (2002), numbered paragraphs 2.01-2.202. See for critical perspectives on this practice e.g. *American Antitrust Institute* (2006), p. 6 and *Fox & Sullivan* (1987), p. 959.

209 See *Commission notice on the definition of the relevant market* (1997). *Bishop & Walker* (2002), numbered paragraphs 4.01-4.95, provide a standard microeconomic treatment of market definition in competition law.

210 See e.g. *Salop* (2000), p. 194-201 and also *passim*.

211 See case 27/76, *United Brands Company v Commission*, ECR [1978] 207; case 85/76, *Hoffmann-La Roche & Co. AG v Commission* [1979] ECR 461; and case 322/81, *NV Nederlandsche Banden Industrie Michelin v Commission* [1983] ECR 3461.

212 For the concepts of technology and innovation markets see *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001) and *Commission Notice - Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements*. For a comparative analysis of innovation markets in EU and US competition and antitrust laws, see *Glader* (2004), *passim*.

213 See generally *Baumol, Panzar & Willig* (1982), (based on the theory of contestability of markets) and with regard to European competition law *Harbord & Hoehn* (1994), both *passim*.

214 See from different perspectives e.g. *Landes & Posner* (1981), *passim*; *Virtanen* (1998), p. 115, emphasising the nature of the competitive advantage behind the market share and developing an eclectic view of market power and *Kuoppamäki* (2003), p. 244, sharing *Virtanen's* view.

215 See e.g. *EAGCP* (2005), *passim*.

economic entities that characterises traditional definitions of market power and provides one firm the possibility to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.

How do the traditional definitions of market power fit with the current economic paradigm in which the core of the economy essentially consists of flows of information and communication, and where the control of these flows and communicative structures seems to be the most important form of both economic and social power? Even when recognising the different levels of competition, does the traditional definition of dominance apply to issues like the control of a proprietary platform having become a *de facto* industry standard? How about the control of unique content desired by other firms, or the control of a technical standard through patents without the necessity of any particular market power on the related product or service markets? Before answering these questions, additional perspectives on market power should be addressed.

The idea of anticompetitive economic power exercised by restricting the output of competitors constitutes an important addition to market power defined as power over price.²¹⁶ Exercising such ‘Bainian’ market power does not require pre-existing pricing power: a firm’s pricing freedom may be currently constrained by substitutes. If it manages to raise the costs of its substitutes, for example by denying them an input needed or by changing the technology of a platform used by its competitors, the firm in question may be able to ultimately raise its own prices and thus ultimately acquire traditional ‘Stiglerian’ market power. In this sense, the ‘Bainian’ market power can be seen as indirect power over price. Yet, the possibility to exclude competitors or restrict their output can be seen as an independent source of market power.²¹⁷

Both market share and entry barriers analysis prior to such restricting conduct do not necessarily point towards market power and finding of dominance *as it is the exclusionary conduct itself that can create the entry barriers by raising the costs of potential entrants*. The anticompetitive effect of such an action may also be the prevention of price decreases. They reduce consumer welfare as much as price increases.²¹⁸ The use of market share as a proxy for ‘Bainian’ market power, however, may have some use, as a firm with a large market share benefits more of the price increases for its output than its smaller rivals. Likewise, its greater bargaining power over input suppliers may result in exclusive rights in the needed inputs.²¹⁹

However, the central focus should be in the analysis of the *effects* of the alleged anticompetitive action. Defining the market position of the alleged infringer should

216 See *Krattenmaker, Lande & Salop* (1987), *passim*. See also *Office of Fair Trading* (2002), *passim* and *Stucke & Grunes* (2001), p. 300, for an endorsement of such an approach.

217 See e.g. *Kuoppamäki* (2003), p. 255 and 271.

218 *Krattenmaker, Lande & Salop* (1987), p. 248-258.

219 *Krattenmaker, Lande & Salop* (1987), p. 259-260.

be seen as an instrument in this process only.²²⁰ If the alleged anticompetitive conduct occurred and had a significant anticompetitive impact, then in that context the entity in question had considerable exclusionary market power and was dominant.²²¹ This may be seen as a logical proposition as the purpose of the inquiry into market definition and market power in the first place is to answer whether the conduct has the potential of adverse effects on competition. In the presence of direct proof of such effects, the preceding inquiry is unnecessary.²²² Hence, abuse and dominance cannot be logically separated into two distinct stages, whereby the analysis of the market position functions as the first, analytically separate test from the subsequent analysis of the abusive conduct.

Industrial organisation treats market power through the Structure-Conduct-Performance (SCP) model, and eclectic theories seek to combine elements from different theories.²²³ Whereas in mainstream industrial organisation market power is seen as an industry-specific phenomenon, eclectic theories also give weight to the competitive advantages possessed by specific firms. *Virtanen* discusses the competitive advantages approach and considers it as an important addition to structural market power analysis. A firm's competitive advantage is a competitor's disadvantage, a barrier it faces. Should the competitive advantage be strategically significant, particularly sustainable and far-reaching with regard to both competitors and customers (relating to the number of customers and competitors affected), the advantage would likely lead to the firm being dominant.²²⁴ The advantage may be insignificant in the sense that it does not enable regulating the conditions of transactions affected by the advantage without losing clientele. Likewise, it may be temporary in that rivals may quickly neutralise it through imitation or innovation. Even though most competitive advantages finally collapse, they may often be relatively resistant to erosion.²²⁵

Thus, there can be no general conclusion that the market dynamics alone neutralise all significant and far-reaching competitive advantages. As the sustainability of the competitive advantage is partly a result of the strategic action taken by the firm in question, its conduct and action may also affect the competition law evaluation of the competitive advantage in question.²²⁶ Strategic conduct capable of sustaining the competitive advantage artificially should affect not only the analysis of abuse, but also

220 See *Salop* (2000), *passim* and *Office of Fair Trading* (2002), p. 15 and 42-56 (also noting that the exclusionary market power is the most relevant to competition analysis in the dynamic markets of the information society).

221 *Office of Fair Trading* (2002), p. 45-46

222 *Stucke & Grunes* (2001), p. 300.

223 See *Sherer & Ross* (1990), *passim* for a basic introductory text to industrial organisation. *Virtanen* (1998), *passim* and *Kuoppamäki* (2003), *passim*, have developed an eclectic model of market power.

224 See *Virtanen* (1998), p. 102-134. The competitive advantages of firms are superior resources and capabilities. Resources are tangible and intangible inputs to the production process (*ibid.* at p. 102-103). Resources could also relate to tangible and intangible inputs only needed by competitors. With such resources a firm may be able to reduce the output of its rivals.

225 *Ibid.*, p. 113-115.

226 *Ibid.*, p. 114 and chapter 5.

dominance, as such conduct is an indication of the sustainability of the competitive advantage not based on competitive merits (*Leistungswettbewerb*).

Even if the advantage is relatively sustainable, it may have a narrow reach in the sense that only a few customers or competitors fall under the sphere of its influence. A narrow segment of affected customers or competitors would not amount to the owner of the competitive advantage possessing considerable market power, thus likely excluding dominance. A large number or a whole category of affected customers and actual or potential competitors would be required for such a conclusion.²²⁷ The rivals of a firm having an important competitive advantage may try to overcome it by using different strategies. They may try to replicate or imitate the competitive advantage in question. However, there may be several barriers for such imitation. Imitation may be more or less imperfect due to the inherent nature of the competitive advantage (for example tacit knowledge and know-how), or feasible but unprofitable. Moreover, there may be legal barriers to imitation, such as intellectual property rights or governmental approvals. If replication or imitation is not possible, the rivals are forced – in order to remain competitive – to circumvent the competitive advantage by innovative solutions.²²⁸

Should there be legal or *de facto* barriers for innovative solutions enabling the circumvention of the competitive advantage, the latter would give a sustainable benefit for its owner. For example, such barriers could be constituted of a governmental authorisation restricted to one or few entities, a broad patent conditioning access to entire markets, concentration of competing patents (or patent families), existence of a natural monopoly, strong lock-in to an existing system, markets characterised by powerful network effects, or solidified industry standards. In such instances, the self-correcting market dynamics would be blocked.

A proprietary product or service platform enables the control of applications, services and types of content running on or utilising it through interoperability, control of use and interconnection. Such platforms are typically software-based system products,²²⁹ but may also consist of a service partially protected by intellectual property rights, or of a physical facility used as a platform for providing services. It is typical that the applications, services and content running on them require interconnection and functioning together as a system. Hence, control over interoperability forms a bottleneck or primary market for interoperable secondary markets for applications, services and content. Control over a platform may give its owner market power irrespective of intellectual property, as interconnection with the platform may not necessarily require the utilisation of patents or other intellectual property rights

227 *Ibid.*, p. 107-109.

228 *Ibid.*, p. 116-122.

229 A system product consists of the basic hardware and software that define the metatechnology (systems technology) and all hardware, software, applications and content which is designed to operate in connection with the former by being interoperable with the metatechnology. For the concept of systems technology see *Wagner* (2000), p. 1076-1081 and also *passim* and *Merges & Nelson* (2004), p. 7.

inherent to the platform. Mere physical control over the platform may be sufficient to convey its owner power over the actions of others.

However, with effective secrecy of interfaces, or with exclusive rights over the interoperability components needed by others, such power becomes independent of the ownership in the physical infrastructure. Moreover, it also becomes more absolute in nature, enabling partial control of other platforms, applications and content seeking interoperability even when these do not directly interact with the proprietary platform. In particular, platform configuration in digital networks increasingly depends on the power to program the software controlling the network. Power over network configuration thus becomes partially separable from the ownership of the physical network. As multiple network platforms each supporting diverse communication patterns may co-exist on a single physical infrastructure, there typically exist several intangible infrastructural facilities needed for competition on the same physical network.

In some aftermarkets, like education, repair or maintenance of software, running the code and thus copying it is typically necessary. In such instances, already the control over the basic uses of the proprietary platform enables some extent of market power on the aftermarkets. Similarly, an essential patent in a technical standard becomes the central source of power, as the competitors do not desire interconnection with a platform, but implementation of the standard, which is dependent on the utilisation of the patent. *In typical information society contexts intangible competitive advantages protected by intellectual property rights and producing market power to their owners are thus multiplying due to techno-economic development and intellectual property protection.*

As the *Microsoft*-case demonstrates,²³⁰ traditional methods for defining dominance have not been abandoned in information society contexts. The Commission referred to *United Brands* in its definition of what constitutes a dominant position in the circumstances of the *Microsoft*-decision. Like in most other cases, it defined the relevant markets by analysing supply- and demand-side substitutability, assessed the market shares and evaluated the entry barriers. The latter were significant due to network effects and applications barrier. The traditional methodology could be deployed as Microsoft was itself producing products within all the relevant markets analysed, namely the market for client personal computer operating systems, market for work group server operating systems, and the market for streaming media players. The market for client personal computer operating systems constituted the dominating market as Microsoft's Windows operating system had become a *de facto* standard operating system used in personal computers. Thus, the basic methodology used for defining market power and dominance enabled the establishment of a (super) dominant position and further analysis of Microsoft's actions and inactions, ultimately constituting abuses of such a position.

When a proprietary product becomes a *de facto* product standard, a platform needed by others, the market share of the product in question usually informs about

230 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, Commission's Decision COMP/C-3/37.792.

its producer's market power: the standard emerges through the wide adoption of the product on the markets.²³¹ Its coercive force is based on the platform's spread and control over the markets. A high market share combined with entry barriers enables pricing both access to and utilisation of the platform relatively freely. In case of a proprietary product platform the ownership of the essential rights underlying it is typically concentrated in one firm. The ownership of rights enables controlling the behaviour of firms dependent on the platform through patent and copyright licensing, refusals to license intellectual property or disclose interoperability information, or by modifying the platform and its interfaces.

Thus, control over the platform needed by others conveys control over the conduct of firms dependent on it. This enables reducing the current and future competitive pressure. *The core of such market power is the strategic control over technological trajectories and economic activities of others based on the platform, rather than direct pricing freedom.* In addition to market share of the platform within the relevant markets, barriers to entry and other traditional indicia of market power, *the extent of such control is affected by the position of the platform within the broader communicative and techno-economic system.* This is why the platform should be analysed in terms of not only the relevant market and market share, which informs about the platform owner's current position. It should also be analysed as a competitive advantage, which informs about the ability of the platform owner to affect the dynamics of market developments and thus the elements of competitive pressure in future.

All proprietary platforms or system products confer some market power on the entities controlling them, as other firms may (be willing to) base their economic activities on the platform or system in question. The platform owner may have *vertical* or *relational* market power with regard to firms functioning on the aftermarkets or the markets for complementary products or services. Due to *lock-in*, it may also have power over the prices paid by its own customer base: the switching costs may lead the locked-in customers to pay more for the new editions, applications or services even in the absence of platform's horizontal market power. The same may apply for independent firms providing services on the aftermarkets or producing goods on the complementary markets. Their investments in learning may reduce their willingness to change the platform. This enables some pricing freedom over access to or utilisation of the platform.

Yet, even if the owner of a platform has a very large market share within the relevant market of the platform, which may further exhibit high entry barriers, the control over the technological trajectories and economic activities of others may be relatively marginal. This is because the market share and barriers to entry alone do not reveal much about the nature of the competitive advantage enjoyed, for example the number

231 See about *de facto* standards e.g. Egyedi (1996), p. 258-259. In formal standardisation the standardisation process precedes the standard and the standard precedes the implementations. In consortia standardisation they are parallel occurrences. See more closely the latter part of the next main chapter about standards and standardisation.

of economic operators dependent, or the scope and quality of the technological trajectories potentially influenced. Market share and barriers to entry inform us foremost about the platform owner's ability to price freely. When market power is conceived of as pricing freedom only, there indeed does not have to be a qualitative distinction between different relevant markets.

However, when market power is also seen as the ability to reduce current or likely future competitive pressure strategically by controlling the technological trajectories and economic activities of others, qualitative distinctions between different relevant markets must be made. This is so because the control over some relevant markets may simultaneously confer a competitive advantage capable of being utilised as a tool enabling the regulation of the level of competition confronted, as well as a leverage to gain control over other markets. The more important the platform is in terms of its technological centrality, its sustainability, as well as the number of competitors and customers affected, the more there are reasons to view the platform owner as possessing a substantial amount of market power and also being in a dominant position.

A comparison of the *IMS Health*²³² and *Microsoft* -cases provides an example of the differences emphasised here.

IMS Health controlled a de facto standard related to the provision of sales data on pharmaceutical products in Germany. The service platform was controlled through a copyright-protected brick structure developed by IMS Health, together with pharmaceutical producers, for the provision of regional sales data. Although the brick structure constituted a de facto industry standard in Germany, gave IMS Health a near monopoly position in the related services and affected the ways in which its clients adapted their related information and distribution systems, the proprietary standard gave IMS Health foremost pricing power. Its control over existing dependent businesses or technological trajectories was relatively marginal, as the proprietary brick structure did not constitute a basic platform needed for many other products, services or technologies. It was rather a relatively isolated de facto standard used in the communication between the service provider IMS Health and its clients in Germany. The firm seeking the right to utilise IMS Health's proprietary brick structure, NDC Health, was willing to enter the same markets IMS Health was dominating due to the success of its proprietary brick structure. It was willing to provide similar, directly competing services by utilising the same brick structure in Germany. The actual focus of the case was thus on price competition in Germany. There were no significant repercussions beyond price competition for the services in question, as the restrictions did not have a noteworthy effect on the total expenditure in the development of pharmaceuticals. Deciding the case either way thus did not affect issues like citizens' access to affordable medication.

On the other hand, Microsoft's market power emanated not only from its long-lasting very high (above 90%) market share or from high entry barriers. Its power to affect the technological trajectories and economic activities of others stemmed from the central importance of personal computer operating systems in the technological paradigm

232 See the Commission decision *NDC Health / IMS HEALTH*, COMP D3/38.044, OJ 2002/165/EC and the judgement of the Court in a preliminary ruling procedure concerning the same subject-matter in case C-418/01, *IMS Health GmbH v NDC Health GmbH* [2004] ECR I-5039. The case will be analysed also subsequently in chapter 7.

of communication and economic action based on computers and the Internet. The dependency of myriad firms and multiple technological trajectories on Microsoft was not due to Microsoft's market share and high entry barriers alone, as the comparison of these two cases demonstrates.

What was the source of Microsoft's market power was rather a combination of high market share and entry barriers *and* the centrality of the relevant markets in the broader communicative ecosystem based on computers and the Internet. Similarly, the competitive threats on Microsoft's dominance emerged partially – and typically in similar information society contexts – from outside its own markets and thus from products not in direct competition with Windows operating system. Microsoft's proprietary platform and conduct also affected the provision of diverse public and non-market goods. It was a *mixed infrastructure* conditioning both commercial and non-commercial activities. Hence, its market power comprised political and social dimensions capable of being internalised in the analysis of its market power and dominant position. In addition to affecting the analysis of abuse,²³³ such effects could be used to strengthen the *prima facie* finding of dominance, to implicate super-dominance (implying more rigorous treatment), or to speak in favour of active *ex officio* investigations and measures on the part of competition law authorities.

Thus, rather than seeing a particular proprietary platform and the enterprises active in the related fields in isolation, the platform in question should be seen in the context of the broader communicative ecosystem and the networks of related and dependent technologies. In *Microsoft*, such analysis can be found in the analysis of abuse, but not in the preceding analysis of dominance, as already the traditional methodology indicated super-dominance based on the near monopoly position on the operating system markets for personal computers.²³⁴ Neither the Commission nor the Court of First Instance had to devise any new, contestable theories regarding dominance.

Yet, the core features of Microsoft's market power, and the multiple potential and actual effects of its actions and inactions, become intelligible only after an analysis of the communicative and informational structures as well as the networks of related technologies where the operating system and other technologies involved are embedded. Microsoft's market power is centrally technology-enabled power to structure communication and information flows and exclude competition far beyond the primary markets of the operating systems for personal computers. Its control over the dominant operating system for personal computers had been, and could in the future increasingly be, used to structure the communicative environments built around the Internet.

Such considerations should also constitute part of the market power analysis. The traditional methodology is not sufficient, as it does not distinguish between cases where the market position enables power over price of products or services only

233 See more closely about infrastructure theory sub-chapter 7.6.2.

234 See about "super-dominance" case C-333/94 P, *Tetra Pak International SA v Commission* [1996] ECR I-5951.

from cases where it also enables power over technological trajectories and activities of others. A firm may have market power conceived of as pricing freedom, but may lack power to affect technological trajectories or economic activities of others. This distinction becomes of central importance when the case involves intellectual property rights, as the function of most intellectual property rights is to enable, through the manipulation of property rights and the incentives of firms, some power over price. The traditional methodology for establishing dominance, designed to discover power over price, is thus problematic as the only or principal criterion for establishing a dominant position based on intellectual property rights.

Furthermore, as the comparison between the *IMS Health* and *Microsoft* cases demonstrates, distinctions between *de facto* standards can be made. Market power in information society contexts is thus *not* typically embodied in relatively fixed inter-firm relations of domination (market share), but is rather mediated by technologies and information (exclusion from technologies and information needed for competition). Typical of such market power is its highly contextual and evolving nature: market power both emerges and often disappears rapidly in the course of technological and cultural-economic development. Such market power may also easily be transferred to others or even abolished, as the intellectual property enabled control of technologies and information may be transferred to others by licensing and assignments, or invalidated in court proceedings, among others. *The focus should thus shift from market power based on market share to the effects and impact of anticompetitive action and the position of the competitive advantage used in the broader techno-economic environment.*

The foregoing considerations become relevant also when analysing market power produced by the ownership of copyrights in unique cultural resources. Power over unique content should not be equated with market power leading to a finding of dominance. The temporary or narrow significance of the resource for various downstream uses typically relaxes most concerns related to market power. For example, copyright to a popular novel could be seen to establish some market power over several related markets dependent on copyright licensing: the markets for translations, feature-films, dramatic productions, TV-series, comic books and games, among others.

Although it is highly unlikely that a competition law court or authority would consider the author of a novel to be in a dominant position on the market for the related copyright licensing,²³⁵ there is nothing in-built in the standard exercise of defining the relevant markets which would inform *when* a relevant market for the licensing of a single copyrighted work should prevail over a broader market covering some close enough “substitutes” as well. As unique content is unique, there also exist unique markets for derivative uses, wholly dependent on the licensing of that particular

235 See also e.g. *Netanel* (2005), p. 162-163, with respect to US law.

input. The basic test of demand substitutability, now known as the SSNIP-test,²³⁶ could thus inform that there are no close enough substitutes for the intended use.²³⁷ If there are no substitutes, there is no supply substitution either, as copyright prevents others from offering the same unique content. There is no potential competition during the term of copyright protection either.²³⁸ There is nothing in the standard definition of the relevant markets and market power which would preclude finding all owners of unique content to be in a dominant position with regard to licensing for derivative purposes: as long as the intended derivative use relies on the unique features of that particular content, there is a strong case for a narrow market definition and thus for a finding of dominance. This demonstrates that the standard methodology does not fulfil its intended purpose.

The *Magill*-case,²³⁹ treated in more detail under chapter 7, is one example. The uniqueness of the information (TV-broadcast information) controlled by the broadcasters with copyright led to a narrow definition of the relevant markets, a *de facto* monopoly and thus to a dominant position restricted to the respective TV-broadcast information. Following this logic, most control of unique content desired by another firm for a derivative use leads to a finding of dominance due to the uniqueness of the information and the always existing potential of information to be used – either individually or combined with other information as in *Magill* – in some new, non-utilised contexts reflecting at least some commercial potential.

As with technological resources, the potential of content to function as an input for important downstream activities informs more of its owner's market power than market shares. The cultural-economic connotation of a particular content as a potential input for multiple voluminous and important downstream uses should be part of the market power analysis. To an extent the owner of rights controls content with considerable cultural or political significance, the related market power comprises a social and political – and freedom of expression – dimension capable of being internalised in the application of competition law and the related analysis of dominance. Due to digitisation and convergence of technologies and information resources around the Internet, *the whole communicative system increasingly has the characteristics of a highly complex system good consisting of several subsystems*. The openness of the subsystems and competition within them varies to a considerable extent. Some of the technological standards may be easily interchangeable, some not. In either case, they may be secret and proprietary or freely accessible and usable to all.

236 SSNIP stands for *Small but Significant and Non-transitory Increase in Price*. Postulating a hypothetical small, non-transitory change in relative prices and evaluating the likely reactions of customers to that increase is supposed to inform about demand substitutability. See *Commission Notice on the definition of the relevant market* (1997) and *Geroski* (2002), p. 69-70.

237 Also *Office of Fair Trading* (2002), at p. 55-56, notes that if one applied the SSNIP procedure using the current price (as typically done), one may find in many cases that the relevant product market would be as narrow as the product of the firm in question. See also *Ulrich* (2001), at p. 387-389, criticising formalistic determination of dominance in case of unique information.

238 Potential competition could reduce concerns over market power after the relevant markets are defined. See *Commission Notice on the definition of the relevant market* (1997).

239 Joined Cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* [1995] ECR I-743.

The system good -nature of the current communicative system built around the Internet connotes that market power can no more be evaluated atomistically, as the various subsystems are connected through protocols, interoperability and ongoing multi-level convergence: measures within one subsystem may reach multiple other subsystems. In industrial society, the traditional measurement of market power based on market share and additional factors was justified. The effects of products and technologies on other products and technologies were incidental. The market position of an enterprise was analysed individually as a function of the relevant products or technologies among substitutable products or technologies. Although still relevant, in many information society contexts systemic considerations must enter the analysis of market power.

The core forms of market power in the information society are exclusionary in nature. Such market power should be evaluated from the perspective of anticompetitive effects and impact on the markets. Dominance and abuse thus cannot be analysed separately. Analysis of dominance should not constitute the first filter definable in isolation from the impact of the measure on the markets. Evaluation of market power and dominance should increasingly become analysis of competitive advantages possessed by firms, investigation of the strategic significance of technological or informational assets as part of webs of interdependent technologies and flows of communication.

Some assets are positioned at the core of such interdependent webs, some at the peripheries. Control of assets at the core may imply strategic stranglehold over multiple technological trajectories, webs of communication and interaction. Rather than a very high market share in itself, control over such core infrastructural assets should imply hyperempowerment, or in terms of competition law *super-dominance* in the conditions of the information society.

To comprehend the market power of a given enterprise with a given technology in communicative contexts thus requires systemic evaluation capable of positioning the technology or information resource in question on the broader communicative system. *Power analysis in the communicative contexts of the information society should, instead of concentrating on power over price, become increasingly analysis of informational structures of power.* Such analysis should *complement* the more traditional market power analysis. This would connote the return of structural competition analysis in a modified form: whoever controls the flows and structures of communication holds both strategically and socially the most important form of power, as power over the communicative structures of the civil society and market power largely overlap. The system good -nature of the current communication paradigm connotes that there are several points of partial control, none of them complete, but many of them having the capacity to affect greatly both the lifeworld interaction and economic action based on the communicative structures.

Because the communicative system built around the Internet is global in its character, the effects caused by the measures of enterprises also increasingly occur on this level. This leads to the question to which extent domestic or regional competition laws may effectively regulate the harmful effects of excessive market power, but without

excessively encroaching on the capacity of other competition regimes to regulate firm behaviour from their enforcement perspective, and without frustrating the rights and obligations of firms under other competition law jurisdictions.

The basic question touched upon under the following sub-section is even broader: is it desirable or even possible that the constitutionalisation of competition law in the direction suggested above could take place at a time of economic globalisation and globalised competition when the demands for the international harmonisation (the traditional preference of the Union) or convergence of domestic and regional competition laws (the traditional preference of the US) are not only common, but quite often perceived as natural and unavoidable developments?

6.3.5 Constitutionalising European Competition Law and Globalisation

As competition becomes increasingly global and firms act transnationally independently and as parts of networks, the anti- and procompetitive effects of their actions may occur anywhere in the world. Despite the continuous heterogeneity of local geographical submarkets, the interconnectedness between them is of such intensity that in many cases it is grounded to talk of one global marketplace superimposed on top of smaller geographical submarkets.

From a global perspective, the actions of firms may thus look rather different from a particular domestic or regional perspective, where only part of the multiple effects may be evaluated. Economic globalisation could easily be interpreted to connote increased competition on global level, thus affecting both the objectives of competition law, for example in the form of pressure to allow concentration to enable global competitiveness, as well as in the form of more practical matters, such as the need to often broaden the relevant geographical markets in competition law analysis. On the other hand, the perspective of globalisation could also lead to the understanding of the increased power of private economic entities and the ensuing need to control that power through some existing legal mechanisms, such as competition law.

Furthermore, various domestic or regional measures have regularly effects on the global economy. Whereas many of the anticompetitive state measures, such as subsidies, antidumping and technological exclusion are regulated globally, private anticompetitive measures are regulated on the local and regional level. Hence, the pro- or anticompetitive effects of a firm's actions taking place outside the geographical area of a particular competition law regime may escape all competition law application or become subject to multiple regimes, each assessing only the effects falling within their geographical borders. However, global manufacturing networks and transnationalisation of business activities lead to increasing external surveillance of national and regional competition policies. Domestic and regional competition policies thus acquire an international or extraterritorial dimension even if this is not intentional.

For example, domestic competition law may not catch all actions that harm the nation's citizens. On the other hand, application of competition law may lead to

unintended regulation of firms' activities or frustration of their rights beyond the geographical borders of the nation applying competition law.²⁴⁰ Furthermore, a nation experiencing the anticompetitive effects may prohibit a transaction having its greater procompetitive effects elsewhere. This implies that the globalised context of competition often connotes wealth transfers from consumers in some countries to consumers and producers and owners in other countries.²⁴¹

In addition to the risk that many anticompetitive actions escape all competition law application or become treated too leniently under their home jurisdiction's competition rules, there is the risk that the most prohibitory jurisdiction will prevail, as the application of one out of several domestic competition laws may suffice to block an action having transnational or even global effects.²⁴² Furthermore, provided there exists a certain level of free trade and there are no insurmountable entry barriers, the local monopoly could operate under the threat of competition from abroad, thus diminishing the effects of its otherwise anti-competitive behaviour. Likewise, government responses to alleged market failures in the form of application of competition law should increasingly take the global effects of intervention or non-intervention into consideration.²⁴³ As a solution to these problems, extraterritorial application of competition law has been both over-broad and under-inclusive, as less developed countries often lack the instruments to control foreign firms, while more powerful nations may regulate actions beyond their borders, but typically adopt a domestic welfare vision.²⁴⁴

From the perspective of globalisation of economic phenomena and the ensuing problems resulting for domestic competition law application, one would expect the competition law regime to have globalised as well.²⁴⁵ However, competition law has been characterised as one critically important policy area that lies outside the jurisdiction of existing international institutions.²⁴⁶ Unlike harmonisation of intellectual property law, international harmonisation of competition law does not obtain similar support of most industries, due to the nature of the latter as a government imposed restriction on firms' conduct.²⁴⁷

240 See e.g. *Fox* (2001), *passim* for concrete examples and for a proposal to address some of the existing problems.

241 See *Gerber* (1999), p. 125.

242 See also *Fox* (2001), p. 390. *Weintraub* (1999), p. 33 provides an example concerning Santa Cruz Operation and Microsoft's licensing practices.

243 See generally e.g. *Jackson* (1997), p. 348-349.

244 See *Fox* (1999), p. 11-12. Generally about extraterritoriality and competition law see *Weintraub* (1999), *passim*; *Dabbah* (2005), p. 159-205 and in the context of transfer of technology *Cabanellas* (1988), p. 66-70.

245 See also e.g. *Gerber* (1998a), p. 435.

246 *Gilpin* (2001), p. 113. Cf. with *Sassen* (2006), p. 236-240, who characterises competition law as a paradigmatic example of a denationalised state agenda, converging in the hands of an intergovernmental network of competition law specialists. This partial convergence based on transnational expert culture does not necessarily require international institutions to be effective.

247 See *Ullrich* (1998), p. 46.

Furthermore, the diversity of goals pursued by various jurisdictions' competition laws increases the difficulty of international harmonisation.²⁴⁸ The Europeans, in particular, have made initiatives to create a global competition law regime, but the United States has usually opposed such endeavours.²⁴⁹ Instead of broad international harmonisation, the US has preferred the presumed convergence of competition laws towards the current US antitrust law paradigm. The latter, according to Gerber, is seen by most US antitrust lawyers to constitute an objectively and verifiably better or manifestly correct way of thinking about competition law, towards which the simple mechanism of rationality will lead other nations.²⁵⁰ Despite competition law again being on the agenda of the Doha Round of WTO-negotiations, it seems likely that the international competition law system will even after that be characterised by multi-level rules and enforcement, as well as differences in the substantive norms, the perceived objectives and functions of competition laws.

The absence of global regulation of competition law does not connote that competition law would not have reacted to the processes of globalisation. On the contrary, many of the changes underway are not only reactive, but may be perceived as proactive in their relation to the globalisation processes. Already the mundane process of market definition in competition law has both a reactive and proactive side in its relation to the globalisation processes, as opting for broad geographical market definitions tends to increase competitive pressures within the geographical markets thus defined.²⁵¹ Moreover, while strategic partnering, mergers, acquisitions, and the emergence of knowledge-based networked oligopolies have become the key elements of firms' corporate strategies related to risk sharing in globalised competition, competition law has reacted consensually and proactively to all these developments.²⁵² Ullrich argues that the development towards network enterprise

248 See also *Dabbah* (2005), p. 54-57.

249 See e.g. *Gerber* (1999), p. 127-130; *Petersmann* (1999), *passim* and *Dabbah* (2005), p. 277-285 and 290-291.

250 *Gerber* (1999), p. 133. For example, *Hawk* (1998), at p. 354-355, argues that the narrowing of objectives to efficiency is not a result of disagreement concerning the objectives of competition law, but that the narrowing mainly rests on jurisprudential judgement that economics provides better analytical tools to reach more predictable, well-reasoned results in particular cases than broader non-efficiency objectives. – However, the narrowing of competition law objectives towards economic efficiency cannot logically be explained by invoking economics relevant in determining the economic efficiency only. The reasons should be sought from elsewhere. From the US commentators *Grimes* (2003), at p. 256-258, seems to adopt a more realistic stance towards the development of competition laws internationally. According to him the most likely – and desirable – path of the international competition law regime is the path of pragmatism and evolution allowing diversity and conflict also characterising the US antitrust.

251 See *Dabbah* (2005), p. 43.

252 See also *Ullrich* (2003), p. 198- 220. Ullrich warns that on the macro-level the cooperation may result in a reduction of overall competition in the form of the uniformisation within the variety of products on offer, as an example. Such privately managed markets could supersede spontaneous organisation of the market through free competition.

accepted by competition law questions the notion of competition based on the idea of full-function enterprises acting individually on the markets.²⁵³

With regard to merger control, the trend towards allowing larger concentrations for the sake of global competitiveness and efficiency benefits is equally clear.²⁵⁴ These developments concentrate both individual and collective market power and thus place pressure on the prohibition of abusing a dominant position. However, as discussed previously, economic efficiency gains may increasingly justify measures negatively affecting the level of competition prevailing on the markets. The change of emphasis from competitive structures towards economic efficiency may enable an increasing number of actions hindering small-scale and local competition, provided there are sufficient economic gains on the part of the enterprise in question, some of which are passed on to the consumers. From another angle, this change of emphasis facilitates private, transnationally exercised power as efficiency gains both justify measures previously prohibited, and lead, through exclusionary effects, towards further concentration and geographical expansion of market power.

At the same time, the expansion of the relevant geographical markets largely disconnects the nexus between relevant market power under competition law and the capacity of traditional political influence at national level: firms influencing politics on domestic level may not be considered as dominant firms under the enlarged relevant geographical markets of competition law.²⁵⁵ Whereas the potential of competition law to function as a restraint of firms' *indirect* political power at national level (through their influence on the legislature and administration) is partially being lost as the relevant markets exceed national borders and increasingly consist of global markets, competition law could still control the deployment of *direct* political power of firms which is not restricted to the national level. Firms increasingly regulate the communication infrastructure and define information policies through technologies and contracts. State borders and international comity are no constraints for such activities. However, the global character of these structures also connotes that the firms' measures are beyond the effective reach of a single national government.

Through its proactive approach and emphasis on economic efficiency, competition law facilitates the economic globalisation processes and the transition of power from states to markets. The global expansion of markets has been said to lead to the replacement of national public interest with a global concept of regulation as efficiency and the replacement of the regulatory state with that of the competitive state. The law assumes the function of a counterweight to politics instead of being conceptualised as "frozen politics".²⁵⁶ Economic efficiency becomes the guiding principle through which other (historical and potential new) objectives of competition law must be evaluated.

253 *Ibid.*, at p. 221-222, also maintaining that the incentive function of the attribution of risks, as well as the responsibility and rewards, are weakened through the sharing of risks through networks.

254 See e.g. *Ehrlicke* (2003), p. 117-118.

255 See *Amato* (1997), p. 104-105.

256 See on a general level *Sassen* (2006), p. 196 and 202.

The new priorities of governments, related to economic efficiency and locational competition are seen to contradict with the aims of openness and pluralism of the markets.²⁵⁷ The latter *political* objectives may be perceived to decrease the economic efficiency and locational value of an area for the multinational enterprises: effective control of market power on regional level for the sake of maintaining competitive structures comprising diversified types of enterprises could admittedly be seen to contradict with the efficiency of the transnationally operating firms. The economic efficiency paradigm of competition law, if fully adopted, could thus become a conservative censoring mechanism functioning as a counterweight to politics.

Divergence of competition laws on the international level may create legal uncertainty, diverging obligations and costs for the firms having a global vision and acting transnationally as multinational enterprises and parts of global networks.²⁵⁸ Contradicting objectives of competition laws and the potentially ensuing contradicting outcomes on the global level may lead, in turn, to political conflicts on governmental level. Although international harmonisation of competition laws could in theory proceed on the lines proposed here and recognise the cultural boundedness and multiple functions and objectives of competition law regimes, any more far-going harmonisation would likely proceed on the path of the politically and culturally neutralised economic efficiency model.

However, heterogeneity and diversity on international level may also be seen as an advantage enabling innovativeness, experimentation, learning and adaptability.²⁵⁹ In the long run the international regime of competition regulation could develop most advantageously by allowing such variation and heterogeneous evolution. Furthermore, any legal instrument dealing with large concentrations of economic power must adequately deal with the strong political influence exercised by the ones holding the economic power. Diversity of enforcement may be required for competition law to survive these political pressures, as Grimes has said.²⁶⁰

More fundamentally, despite economic globalisation and the emerging transnational legal culture of competition law experts, the competition law institutions are socio-culturally and ideologically rooted to the extent that forcing too far-going harmonisation or rapid convergence would frustrate such embeddedness of competition laws. It would lead either to material application detached from the socio-cultural realities and values, or to socio-culturally embedded decisions detached from the presumed contents of harmonised or converged rules.

257 For the changed government priorities see e.g. *G. Anderson* (2005), p. 30-32 and *Sassen* (2006), p. 196-202.

258 However, as pointed out by *Grimes* (2003), at p. 239, similar consequences may follow from the application of antitrust laws of one single country, like the USA.

259 See more closely *Kerber* (2003), *passim* (basing his argumentation on the economic theories of federalism). Also *Grimes* (2003), p. 256-258, emphasises that diversity brings about richness, strength and flexibility to the international competition regime. On a more general level see *Unger* (1996), *passim*.

260 *Grimes* (2003), p. 258.

The plea for heterogeneity of competition law regimes on international level and the support for the strengthening of the constitutional character of European Union competition law should not be interpreted to mean that all international harmonisation would be undesirable or that European competition law should not be affected by economic globalisation. On the contrary, globalisation is one of the most important on-going developments affecting the underlying premises and application of competition law. Rather than uncritically facilitating the economic globalisation processes and allowing the aggregation of market power for the sake of global competitiveness, the reaction should be in the direction of increasingly estimating the pro- and anticompetitive effects of firm action on a global level and judging the measures based on existing norm complexes.

The domestic and regional competition authorities and courts should increasingly be understood as sites of authority, each capable of affecting the actions of transnationally operating firms and the socio-economic phenomena existing on a global or transnational level. Such measures, however, are always partial and based on the local norm complexes, the values and theories underlying them. Perhaps more important than the avoidance of conflicts is the awareness of different competition law sites and their decisions, and the values and theories underlying them. The decisive point is to take into account the effects of different sites' actions (or inactions) on the factual circumstances, and to learn from the argumentation of the other sites.

The *Microsoft*-case provides one example where the Commission took into account the US antitrust actions and the results achieved by the consent-decree.²⁶¹ Avoiding the duplication of the results already achieved, the Commission concentrated on other aspects of Microsoft's global conduct. This pattern of action corresponds to the idea of geographically dispersed sites each being aware of other sites' actions and inactions, each being able to coordinate their action to some degree and being able to control some aspects of global phenomena like Microsoft.

What the global orientation suggested above would mean in more practical level is more complex, however. Fox and Ordovery have suggested *a world welfare standard* as an alternative to the national welfare standard.²⁶² Fox argues that in addition to economic benefits the suggestion has a moral and political dimension as well: competition law application disregarding the effects beyond the nation's borders lacks (international) legitimacy. To facilitate such universal application of competition law nations should, in addition to counting the costs and benefits on a global scale, provide rights of

261 See also Jones (2006), p. 36.

262 See Fox & Ordovery (1995), p. 16 and Fox (2001), p. 393. World welfare standard is defined as the aggregate level of consumer benefits and profits realised by consumers and firms in all pertinent countries. The suggested model would also be subject to proper scope for national and local autonomy. The authors consider the suggestion compelling with respect to private restraints of international dimension, and government facilitation of them, in particular, and would raise monopolisation and abuse of dominant position to world agenda only in terms of market access. Not only antitrust harm, but also pro-competitive, efficiency and technological benefits should be estimated on a global level (of the contracting nations).

process to affected persons and bodies beyond their borders as well as agree on rules of priority allocating the cases involving drastic reliefs like break-ups or injunctions to be decided under the most appropriate jurisdiction. Fox notes the obvious inherent risks involved and also acknowledges that such changes could not be achieved through interpretation, but would require statutory change and international cooperation.²⁶³

Thus, even though a world welfare standard as part of the formal criteria applied in competition law may yet seem utopian, European competition law both adapts to and modifies the current globalisation processes. The interconnectedness of geographical markets necessitates a look beyond the traditional geographical borders to enable a more comprehensive analysis of the situation. Even in the absence of a formal world welfare standard the effects of both firm actions and the intended competition law application should be assessed comprehensively.

The *first* reason is the increasing interconnectedness of geographical markets through lessened trade barriers, network enterprise as the new paradigmatic form of doing business, as well as the new global communication networks based on the Internet. In this environment, both the pro- and anticompetitive effects first experienced abroad easily travel across territorial borders and may travel back in some form or another and thus affect the welfare experienced on domestic markets.

Second, the firms affected by competition laws have a transnational or global business vision. Analysing their incentives to invest in innovation, in particular, must necessarily be based on a global horizon. *Third*, as the structures of communication are global, the effects of anticompetitive action on these structures must increasingly be analysed on a global perspective. This is the case in particular with innovation and intellectual property rights involving information technology.

A drug manufacturer, for example, could react to compulsory licensing of its patents lowering the prices of its drug in a developing country by increasing the related license fees and prices charged for the drugs within the European Union. Should the licensing scheme used within the European Union become scrutinised under Union competition law, the (procompetitive) effects occurring outside Europe should be considered, as they affect the globally determined incentives of the drug manufacturer to invest in research and development and may provide an acceptable justification for an otherwise objectionable price increase. On the other hand, a refusal to license essential patents within a global technology standard would likely connote anticompetitive effects also outside Europe by reducing the applicant's economies of scale. On the other hand, a decision to impose a *de facto* compulsory patent license based on European competition law could affect in some instances the globally determined innovation incentives only within one region.

263 Fox (2001), p. 393-397.

6.4 Concluding Perspectives and Transitional Thoughts

Competition law is about controlling private measures reducing rivalry and freedom of the markets. Such private measures may be based on contract, collusion or measures taken by single economic entities with sufficient market power, and may be in the form of any modality of regulation as characterised by Lessig:²⁶⁴ direct invocation of legal norms like in a refusal to license intellectual property (law), utilisation of the price mechanism to achieve the intended effect, for example in the form of predatory pricing or price squeeze (market), reliance on loyalty within a cartelistic group or the threat of informal sanctioning to implement an anticompetitive intention (social norms), the manipulation of technologies (architecture/technology) or any combination thereof.

In the information society contexts, the manipulation of technologies is becoming the predominant modality. As the relevant technologies are typically privately owned and controlled, intellectual property increasingly becomes intermingled with the competition law evaluation of such actions.

At the same time, the technological structures of competition are structures of communication and lifeworld interaction. Private attempts to regulate these structures and the ensuing competition law responses define not only the level of rivalry on the markets and the relationship between intellectual property and competition law, but necessarily participate in the design of the democratic nature of networked public spheres of the lifeworld, as well as economic culture. Market power related to such structures enables direct political and social impact, without the traditional political process as a mediator. As the economy becomes culturalised and culture commodified, deciding upon the conflicts between intellectual property and competition law and devising the related doctrines cannot avoid having societal significance.

One possible answer to the problem of private regulation of communicative structures through technological design and excessive informational power in general is in promoting and enabling counterweights capable of challenging the authoritarian nature of private regulation. Promotion of non-proprietary, open interoperability and communication standards based on the absence of central authority, freedom of reverse engineering and experimentation with technologies, and the securing of effective interoperability with dominant technologies through the interpretations of intellectual property and competition laws alike, would empower alternative technologies and alternative modes of research, development and production. As a corollary, such efforts would reduce the market power of the dominant monopolist not based on the superior quality of its own technology, but network effects and lock-in maintainable through interoperability and interfaces to other products, services and technologies. As the application of competition law entails inherent risks related to excessive imposition of either economic or bureaucratic rationality on social spheres and markets, such efforts should be actively considered with regard to intellectual property, communications and other relevant laws.

264 See the related discussion in chapter 2.4 previously.

However, also competition law should increasingly facilitate rivalry by supporting technological architectures enabling market access and diversified competition. It should also be in conformity with the traditional competition law objectives – and the more recent ones related to dynamic competition – to avoid a situation whereby one monopolist controls the webs of interdependent markets and avoids the Schumpeterian gale of creative destruction by directing the technological trajectories of others and by conditioning access to the basic resources needed for competition. Recognising the democratic significance of intellectual property – competition law interaction and giving such considerations relevance in competition law would thus not necessarily imply a radical departure from the institutional possibilities already recognised and inherent in competition law.²⁶⁵

One of the purposes of this chapter has been to discuss critically the direction and underlying thinking of European competition law and to recognise the different implications following from a particular competition law ideology: how market and informational power becomes treated in the application of competition law depends on the underlying theoretical perspectives. The key differences between the main ideological counterparts discussed with regard to their approach to competition law and market power law could be depicted with the following simple diagram.

Approach to competition law based on:	Chicago School competition ideology	Ordoliberal competition ideology.	Modern constitutional and democratic theory.
Primary function of competition law:	The only permitted function of competition law is to guarantee economic efficiency.	Guarantor of economic freedom and economic constitution based on liberal values.	Evolving functions, now also control of private power, protection of workable markets and diversity.
Interpretation starts from the following premises:	Microeconomics, objective of the economically most efficient outcome.	Written competition law norms interpreted in the framework of ordoliberal tradition and doctrines.	Interpretation of competition norms as part of a broader normative and societal context.
View of private economic power:	Although monopolies cause deadweight loss, economic power as such is not necessarily problematic, but instead quite often economically efficient.	Concentration of private economic power restricts economic freedom, may be problematic for the political process and should be abolished or strictly controlled.	Concentration of private economic power decreases freedom and pluralism of market actors, monopolises the possibilities to participate in public discourses and should thus be controlled.

²⁶⁵ See also the discussion of standardisation in the next main chapter. The competition law treatment of standardisation in Europe already seems to have integrated considerations related to democracy to some extent.

Inherent dilemma:	How to accommodate dynamism and innovation in a model centrally based on static price theory?	How to protect economic freedom by simultaneously controlling private power and governmental power both restricting it?	How to restrict the negative societal effects of market power by simultaneously maintaining the dynamism of the economy?
Main problem viewed from outside:	Could microeconomics legitimately determine the societal functions and objectives of competition law in an ahistorical and largely universalistic manner?	Why should the supreme constitutional concern be economic freedom insulated from other constitutional values recognised in modern constitutions?	How could constitutional law redefine the established objectives and traditions of a legal institution without institutional support and exact methods with which to balance the objectives?

Rather than arguing that competition law should be conceptualised as being a generic solution to the multiple problems caused by the expansion of intellectual property rights, the present chapter has sought to connect the European competition law institution to modern constitutional discourses. This is intended to enrich – not to replace – the typical argumentation models of competition law and also to provide an alternative way to reconstruct the competition law institution normatively not only as a highly specialised and functionally oriented law of the experts in microeconomics, but as part of the more comprehensive European legal order.

The next main chapter will evaluate the norms, doctrines and patterns of argumentation directly connected to the limitation of intellectual property –enabled market and informational power with competition law and the prohibition of abusing a dominant position, in particular. The perspective will be evolutionary. The development of the doctrines will be connected to general European Union law and the perspectives developed in the previous chapters.

7 Competition Law – Limits to Private Informational Power?

7.1 Chapter's Contents and Central Arguments

This chapter will concentrate on questions directly affecting the application of competition law to intellectual property -enabled market and informational power. These include the relevant court-created doctrines, norms expressly regulating this interaction, and the related scholarly discourses. The focus will be on competition law treatment of a refusal to license. The doctrines, norms and academic discourses intermingle and participate in constituting the interaction between intellectual property and competition law and thus also the competition law limits of informational power based on intellectual property. Competition law treatment of patented standards will be used as a concretisation.

The chapter opens with an analysis of a potential attempt to constitutionalise the interaction between competition law and intellectual property: the competition provisions of the TRIPS Agreement. These competition law norms are vague and largely procedural in nature. They form part of an intellectual property instrument embedded in the broader WTO *acquis* and provide the only hard-law norms on the international level specifically addressing the relationship between intellectual property and competition law. So far, they have not been interpreted by the WTO dispute settlement organs. However, they have been analysed in scholarly literature, and have the potential of being used to advance certain application or non-application of competition law to intellectual property rights. Although being competition law norms, they should be seen as an attempt to constitutionalise intellectual property – competition law interaction from the perspective of international intellectual property law: the provisions are detached both from a broader set of competition norms and any identifiable competition law ideology.

After this, the research will analyse the evolution of doctrines developed in case law and seeking to direct the application of European competition law to intellectual property rights. These comprise the separation between the *existence and exercise* of intellectual property rights, the notions of *specific subject-matter* and *essential function*, the *essential facilities* doctrine and the more recent *new product* requirement as well as the *innovation incentive* -justification.

The analysis of this doctrinal development will be relative detailed. The evolution of the doctrines reveals most clearly the prevailing approach of the Community

Courts to intellectual property -enabled informational and economic power. The discussion also seeks to identify doctrinal constraints and premises for alternative future developments. The multiplicity of the doctrines and concepts developed in case law may seem somewhat chaotic. Yet, the frequent changes of approach, multiple levels and patterns of argumentation even in single judgements, inconsistencies and inadequacies of argumentation, and the apparent lack of comprehensive vision, demonstrated by the development of the doctrines as *ad hoc* solutions to problems and arguments as they emerge, opens opportunities for alternative interpretations and thus also for future judicial developments. This becomes also evident from the existing scholarly work interpreting and criticising the doctrines and hence partially constituting their contents. Another purpose of the discussion of the doctrinal developments is to relate it to general European Union law and to the notion of European economic constitutional law, in particular.

Competition law should not only be seen as an instrument capable of optimising intellectual property rights with the pressure of competition needed for innovation and economically effective transactions (traditional complementarity). It could also be seen as a control-mechanism of techno-economic power for the advancement of market pluralism and communicative diversity. Competition law therefore complements intellectual property law also in the sense that it enables partial control of informational power enabled or facilitated by the intellectual property institution. It could thus be seen to foster the plurality and diversity of actors and types of actors the intellectual property institution and the economic phenomena like globalisation of production, network effects and standardisation are likely to reduce. Hence, competition law has an important, but delicate constitutional role in complementing intellectual property rights, which produce informational power for the sake of innovation and creation, but leave the control of excessive exercises of that power to other legal institutions.

The discussion of intellectual property rights underlying standards serves to illustrate the need for contextual application of competition law. The (legislative) environment of application should be taken seriously. Such environments comprise not only general European Union laws and policies, but also privatised regulation by standards bodies and consortia. The specific functions of standardisation and standards in European Union law have already led to the integration of democratic concerns in the application of Union competition law. Hence, the proposals of this research to further constitutionalise competition law application on a contextual basis may not seem a radical departure from some of the existing practices, after all.

7.2 A Global Solution? Competition Norms of the TRIPS Agreement

7.2.1 Introduction

The competition norms of the TRIPS Agreement and the discourses around them participate in the constitution of the interaction between intellectual property and competition law on a global level. As part of binding European Union norms, and despite their lack of direct effect, the competition norms of the TRIPS Agreement also affect the boundaries of intellectual property – competition law interaction in Europe. They constitute norms or norm fragments potentially influencing the perceptions and decision-making of European competition authorities and courts. They also affect the scholarly discourses and models proposed by legal scholars intended to address the application of competition law to intellectual property rights. At the same time, the competition norms of the TRIPS Agreement can be seen as an attempt to constitutionalise the intellectual property standards as defined in the TRIPS Agreement from an obvious external threat competition law poses to them. Yet, the significance and contents of the competition norms of the TRIPS Agreement remain contestable, thus enabling alternative readings of the (constitutional) standards the norms seek to set.

The competition provisions of the TRIPS Agreement are currently the only formally binding norms in a multi- or plurilateral international treaty specifically addressing the relationship between competition and intellectual property law.¹ Moreover, the WTO provides in practice the sole institutional framework on the international level where the intellectual property -related application of European Union competition law may be negotiated and challenged by countries. Thus, albeit not constituting an appeals procedure, the interpretations of the European Commission and the European Courts in matters concerning this interaction could be challenged on the WTO-level by having recourse to the dispute settlement procedure.

Yet, the competition norms of the TRIPS Agreement are underdeveloped and exist in a framework harmonising intellectual property law globally: any broader competition law framework is missing from the WTO *acquis*.² Thus, in a dispute settlement procedure the relevant provisions would likely be interpreted from the perspective of the substantive intellectual property TRIPS-standards and the broader trade-related framework of the WTO. Although the original function of the competition provisions may have been to relax some concerns of the developing countries by securing them the right to apply and develop their competition rules

1 See also *UNCTAD-ICTSD* (2005), p. 566.

2 More comprehensive competition law elements have been proposed for the WTO by the EU – and rejected by the others, notably the US. See about these developments e.g. the contributions in *Zäch* (1999), *passim*. *R. Anderson* (2008), *passim*, proposes the development of the competition rules regarding intellectual property rights in the TRIPS Agreement, possibly in the form of “guidelines”.

with regard to abuses of intellectual property law,³ the provisions as adopted also contain limits on the application of domestic competition laws, as will be discussed below in more detail. They may thus have an important function of directing the basic orientation of competition law authorities and courts: international law norms “with teeth” somehow seem to limit the application of competition law to intellectual property rights. Even if (or rather because) the demands of these norms are vague, it is always safer to refrain from the application of competition law to intellectual property, or limit its application to the extent possible.

The global, small scale operation of the TRIPS Agreement connotes that the competition provisions have to account for the application of domestic competition laws in a diversity of situations, ranging from access to affordable medication through the application of competition norms in the developing countries to addressing the actions of Microsoft Corporation in Europe. The purpose of the following is to analyse the possible effects of the TRIPS competition provisions, with the application of European competition law in mind.⁴ The positions adopted in European competition law may also affect the interpretations of the relevant TRIPS provisions. Fox has even proposed that European Union competition law might become the bellwether for defining the TRIPS competition law interface, as from the perspective of the US law, European Union competition law is “*relatively disrespectful*” of intellectual property rights at the interface, but on the other hand represents a major world model also affecting the direction of competition laws in many developing countries and transition economies.⁵ The relationship between European Union competition law and the TRIPS competition norms may thus be two-directional: the European Union competition norms may also affect the emerging WTO-standard.

7.2.2 Context and Contents of TRIPS Competition Norms

Before proceeding to the substantive discussion and analysis of the developments on a more general level, it is appropriate to put the relevant TRIPS Articles in their systematic context and to cite them in full. Article 8 is under Part I of the TRIPS Agreement (“*General Provisions and Basic Principles*”) and is titled “*Principles*”. Article 40 is under Section 8 of Part II of the Agreement. Part II is named “*Standards Concerning the Availability, Scope and Use of Intellectual Property Rights*”. Its section 8 is titled “*Control of Anti-Competitive Practices in Contractual Licences*”. Article 40 is the only provision under that Section.

Article 8(2) of the TRIPS Agreement reads as follows:

3 See e.g. UNCTAD-ICTSD (2005), p. 543 and Ullrich (2005b), p. 752 and 755.

4 The discussion about their effects on the developing countries will thus be omitted. Individual TRIPS norms concerning compulsory licensing and the three-step test, in particular, have been discussed previously in chapter 5. The discussion will also omit the discussion about the exhaustion of rights. I have discussed this topic in the context of European trade mark law. See T. Mylly (2000a), *passim*.

5 Fox (1996), p. 497.

“Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology.”

Article 40(1)-(2) of the TRIPS Agreement states the following:

“1. Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology.

2. Nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member may adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices, which may include for example exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member.”

Article 40(1)-(2) is applicable to all intellectual property rights covered by the TRIPS Agreement and covers unilateral action, bilateral agreements, and multilateral arrangements like patent pools alike. Yet, it seems to exclude assignments, mergers and acquisitions from its scope.⁶ Moreover, the competition provisions of the TRIPS Agreement could not be used to challenge the restriction of intellectual property rights not covered by the TRIPS Agreement, such as the *sui generis* database right in Europe. Neither could they be used to address extraterritorial effects of domestic competition law, as the TRIPS Agreement only obliges Members to provide adequate protection in their territories for the nationals and domiciliaries of other Members.⁷

In addition to these provisions, Article 31(k) enables the use of a patent without authorisation of the right holder to remedy a practice determined after judicial or administrative process to be anti-competitive, and subjects this cause of compulsory licensing to more lenient treatment compared to other causes. The more lenient treatment concerns the obligation to conduct prior negotiations, the obligation to restrict the supply to the domestic market alone, and the determination of the amount of remuneration.⁸

By treating compulsory licensing based on competitive grounds more favourably than the other grounds, the TRIPS Agreement in effect creates a hierarchy among the possible grounds of compulsory licensing, placing competition related grounds on the top.⁹ This could contribute to channelling other causes under the more favourable competition law ground, whenever useful and feasible. Also Article 40(3)-(4) of the Agreement will be touched upon subsequently. It establishes a consultation procedure between Members for individual instances where competition law is being applied to

6 See also UNCTAD-ICTSD (2005), p. 547 and 556, and Ullrich (2005b), p. 731.

7 Ullrich (2005b), p. 737-738.

8 See more closely the discussion of compulsory licensing in chapter 5. See also e.g. Heinemann (1996), p. 244.

9 See also Heinemann (1996), p. 244.

intellectual property rights of a national or domiciliary of another Member. Finally, it should be noted that the national treatment and the most-favoured-nation principles also apply to intellectual property -related competition law application.¹⁰

7.2.3 Possible Implications of the TRIPS Competition Norms

Ullrich argues that the competition provisions of the TRIPS Agreement reserve intellectual property -related competition policy to sovereign national determination but, somewhat paradoxically, at the same time recognises that the competition provisions require the consistency of the domestic competition measures with the other provisions of the TRIPS Agreement.¹¹ The consistency requirement, which appeared in the proposal for the TRIPS Agreement during the final stages of the Uruguay Round negotiations,¹² may be seen as a surprising obligation in provisions otherwise seeming to provide a *prima facie* right for Members to apply domestic competition laws within the areas covered by the TRIPS Agreement.¹³

Along with other requirements of the TRIPS competition provisions, it is hardly possible to talk of full sovereign national determination in this context. Yet, the precise meaning of the TRIPS competition norms is open and subject to different readings. Below, the predominant focus will be on the consistency requirement, as it is likely to be the most important part of the competition provisions in the TRIPS Agreement, potentially assuming constitutional significance.

The strictest interpretation of the consistency requirement allows no competition law -based derogation from the substantive TRIPS standards even on the level of individual cases. Accordingly, any use of a patent without the authorisation of the right holder for competition policy reasons would only be possible subject to the conditions set out in Article 31 of the TRIPS Agreement. On the other hand, compulsory licensing

10 Note 3 of the TRIPS Agreement confirms that Articles 3 (national treatment) and 4 (most-favoured-nation treatment) apply also to *matters affecting the use of intellectual property rights specifically addressed in the TRIPS Agreement*. Articles 8 and 40 of TRIPS regulate the use of intellectual property rights. Thus, the domestic intellectual property -related competition norms may not discriminate against the nationals or domiciliaries of other Members. Nor may the Members restrict any advantage, favour, privilege or immunity granted to the nationals of any other country to that country only, but must accord immediately and unconditionally the advantage, favour, privilege or immunity in question to the nationals of all other Members. See also *Ricolfi* (2006), p. 313 and *Nguyen* (2008), p. 564.

11 *Ullrich* (2005b), at p. 731, says that the reservation of intellectual property -related competition policy to sovereign national determination and a requirement of consistency between national intellectual property -related competition policy and the TRIPS Agreement's principles of intellectual property protection are two out of three guiding principles of the competition rules set out in the TRIPS Agreement. Also *Nguyen* (2008), p. 562-563, does not see a problem in stating that the TRIPS competition rules on one hand “*just provide WTO members with substantial discretion and leeway to enact and enforce national competition legislations*” and that the same rules on the other hand “*require that measures adopted to control IPR-related anti-competitive practices be ‘consistent’ with the TRIPS Agreement and ‘appropriate’*”.

12 See *Gervais* (1998), p. 68 and *UNCTAD-ICTSD* (2005), p. 544.

13 See *Heinemann* (1996), p. 242.

of a trademark for the same reason would be barred by Article 21 of the TRIPS Agreement. In other words, the minimum level of intellectual property protection intended by the TRIPS Agreement could under no circumstances be overridden by the application of competition law.

Gervais seems to represent such a position by stating that the consistency requirement in Article 8(2) implies that “*it would be difficult to justify an exception not foreseen under the [TRIPS] Agreement, unless it is an exception to a right not protected under other provisions of the TRIPS Agreement or those of other international instruments incorporated in TRIPS*”.¹⁴ On the other hand, Article 8 would be “*essentially a policy statement*” explaining the rationale for measures taken under other Articles of TRIPS.¹⁵ Article 40(2) would be the operative provision for the purpose of defining the respective limits of competition law application. The consistency requirement in Article 40(2), in turn, would according to *Gervais* mean “*that a measure affecting contractual abusive anticompetitive practices may not be taken if it is incompatible with another provision of the Agreement, in particular of previous Sections of Part II*”.¹⁶ Accordingly, the application of competition law should under no circumstances lead to a restriction of the material intellectual property standards as defined in the TRIPS Agreement.

This would mean that the TRIPS Agreement takes hold of and controls intellectual property -related competition law application. The substantive intellectual property standards required by the TRIPS Agreement and the economic and informational power thus produced would be immunised against the application of competition laws. In effect, the minimum level of protection required by the TRIPS Agreement would be declared *ius non dispositivum* with regard to the application of competition law. The Agreement would only enable application of competition law to the extent it does not interfere with the substantive TRIPS-standards, *and* provided that the licensing practices or conditions under scrutiny constitute an abuse of intellectual property rights, *and* provided that they have an adverse effect on competition.¹⁷

The competition provisions of TRIPS would thus *strengthen* factual intellectual property protection by sheltering licensing practices from competition law interference also when the interference would not frustrate the substantive TRIPS-standards.¹⁸ When an intellectual property right protected by TRIPS is licensed, there could be no recourse to the control of abusive practices in the absence of an adverse effect on competition in the relevant markets and, conversely, there could be no recourse

14 *Gervais* (1998), p. 68-69.

15 Namely Articles 30, 31 and 40 of the TRIPS Agreement. See *Gervais* (1998), p. 68. See also *Janis* (2005), at p. 777. Cf. with *UNCTAD-ICTSD* (2005), p. 546.

16 *Gervais* (1998), p. 192.

17 *Ibid.*, at p. 191, argues (based on the negotiation history and the ultimate wording adopted) that there has to be both abuse of intellectual property rights *and* adverse effect on competition for Article 40(2) to apply, and thus for the application of competition law to be permissible.

18 Cf. with *Nguyen* (2008), at p. 562, stating that the competition provisions in the TRIPS Agreement are an exception or reservation with regard to intellectual property protection.

to the control of anticompetitive effects in the absence of abusive use of intellectual property. Furthermore, the application of competition law should be restricted to *particular cases* in the *relevant markets*, and the competition law measure should be *appropriate* with regard to the infringement in question. The examples given in Article 40(2) – exclusive grantback conditions, terms preventing challenges to validity and coercive package licensing – would constitute a threshold level for competition law interference regarding licensing practices typically being both anticompetitive and abusive, but not directly related to the substantive minimum requirements of the TRIPS Agreement. Article 40(2) would thus establish cumulative criteria for the domestic competition law application to conform with the TRIPS Agreement. Finally, the *consistency* requirement would ensure that the substantive TRIPS-standards of intellectual property protection are not jeopardised even if all the other elements of the cumulative criteria were satisfied.

On the other hand, Article 8(2) has more often been given independent operational relevance, thus also expressly permitting the control of abuse of intellectual property rights in the absence of dominance and anticompetitive effects, subject to the measure being “*appropriate*” and consistent with the other provisions of the TRIPS Agreement.¹⁹ In such a reading, Article 40 would constitute a *lex specialis* in relation to Article 8(2) by concentrating on the permissibility of licensing practices or conditions under competition law only.²⁰

Some scholars also seem to propose that the consistency requirement does not immunise the TRIPS-standard of intellectual property protection from all competition law interference, but rather protects the *core*, the *basic principles* or the *constitutive elements* of intellectual property protection from competition law intervention. Accordingly, *Heinemann* explains that the consistency requirement clarifies that the application of competition law should not lead to the intrusion of the *basic principles* of intellectual property protection.²¹ *Ullrich* sees that the requirement establishes a safety zone for the *core of intellectual property protection*.²² The Members could thus not outlaw uses and forms of intellectual property that the TRIPS Agreement seeks to safeguard: the competition rules of Members should respect the “*constitutive elements of intellectual property protection*”. More specifically, “*modes of exploitation that the TRIPS Agreement expressly allows may not be prohibited as such*”.²³

Such views seek to accommodate the strict language of the consistency requirement with the fact that the majority of the WTO Members, including the US and the European Union, restrict exercises of intellectual property through their competition

19 UNCTAD-ICTSD (2005), p. 548 and 554; *Ullrich* (2005b), p. 731-733 and *Janis* (2005), p. 776-778.

20 See e.g. UNCTAD-ICTSD (2005), p. 554 and *Nguyen* (2008), p. 560.

21 *Heinemann* (1996), p. 245.

22 *Ullrich* (2005b), p. 736.

23 *Ibid.*, p. 736-737. See also *Ricolfi* (2006), p. 349-354, emphasising that the TRIPS Agreement does not allow a *per se* condemnation of a refusal to license under competition or other norms, even if the offer for a license were based on “*reasonable commercial terms and conditions*”. A finding of “*economic dominance*” and the presence of a behavioral element would also be required (*ibid.*, at p. 352).

norms. Yet, the TRIPS competition norms should not establish an immunised core of intellectual property rights either, defined in the abstract. In individual instances, also the invocation of the *prima facie* core rights, for example the right to refuse from licensing copyright, may have negative effects to the extent that these clearly prevail over the interest to enforce the intellectual property right in question. The TRIPS competition norms and the consistency requirement should rather be seen as expressing a principle that competition laws should not be used abusively for the purposes of frustrating the agreed-upon TRIPS-standards of protection. Instead, they should be used for good-faith -advancement of competitive interests, as defined in more detail by the Member in question.

In line with this view, the consistency requirement has been interpreted to connote that Members may not generally prohibit certain licensing practices or conditions, but rather must define the particular instances where a given practice amounts to an abuse. Provided anticompetitive effects are the primary concern of the competition rules, the consistency requirement would not set additional restrictions.²⁴ Similarly, the use of the words “*in particular cases*” and “*in the relevant market*” in Article 40(2) would require some degree of individual assessment characterising most competition law application, but could not prevent *per se* prohibitions or black lists of clauses typically infringing competition law.²⁵

The consistency requirement would thus only preclude an excessive application of national competition rules, having the effect of bringing the regular exercise and exploitation of intellectual property rights as protected by the TRIPS minimum standards, systematically and without considering anticompetitive effects, under the competition law prohibitions. Thus, as the harmonisation and development of competition law remains outside the TRIPS Agreement, the consistency requirement should be perceived as a negative limitation inhibiting application of domestic competition norms leading to a permanent, universal restriction of generally accepted methods of exploiting the TRIPS-secured intellectual property rights.²⁶ In other words, the consistency requirement would merely have the effect of controlling the abusive use or abusive development of competition norms, aiming at the limitation of the TRIPS-secured intellectual property standards instead of controlling practices having anticompetitive effects.

Article 40(3)-(4) establishes a consultation procedure for instances where an intellectual property right owner, being a national or domiciliary of a WTO Member,

24 Roffe (1998), p. 288-289. Also Ullrich recognises that the consistency requirement expresses the principle that Members may not use competition law as a pretext to undermine the protection of intellectual property rights as guaranteed by the TRIPS Agreement. However, for Ullrich this seems to be only one function of the principle. See Ullrich (2005b), p.736.

25 Roffe (1998), p. 288-289; UNCTAD-ICTSD (2005), p. 559; Janis (2005), p. 779. Such a competition law strategy was prevailing in the EU at the time of the Uruguay Round negotiations and continues to be a competition law regulation strategy in several Members (also still partially in the EU). It is unlikely that the TRIPS Agreement would have been intended to repeal such strategies.

26 UNCTAD-ICTSD (2005), p. 551-552. The consistency requirement relates both to the nature of the competition law remedy and the substance of the relevant competition norms (*ibid.*, at p. 560).

is accused of intellectual property -related competition law violation in another Member country. Both countries may request the consultations, and the other country has an obligation to enter the consultations which are without prejudice to any action under the law and to the full freedom of an ultimate decision of either Member. The Member addressed has a duty to good faith consultations and, at least as regards the request under Article 40(3), a duty to cooperation through the supply of relevant publicly available non-confidential information *and* other information available to the Member, subject to domestic law and to the conclusion of mutually satisfactory agreements concerning the safeguarding of its confidentiality by the requesting Member.²⁷

The consultation procedure establishes a duty of assistance in competition law enforcement for the first time on the international level. Yet, at the same time, it is very limited in its scope.²⁸ As such, it may be seen as an attempt to elicit more far-going bilateral cooperation agreements or, at the least, *ad hoc* administrative solutions, coordination and decision-making of cases involving the nationals or domiciliaries of other Members. Should such consultations become commonplace, it could also facilitate the gradual convergence of the substantive standards applied in intellectual property -related application of competition norms.

The procedure also enables escalating individual instances of intellectual property -related competition law application onto the political level of diplomatic negotiations between Members. Although the consultations do not formally affect the competition law decision-maker's authority under domestic competition laws, they may in practice be seen to jeopardise the independence of judicial and administrative decision-making. This is the case, in particular, when the Member country of the intellectual property owner requests consultations after judicial or administrative proceedings have been opened against that intellectual property owner in another Member.

In a sense, a high-level political supervisory and coordination function is established for certain types of competition law cases only, for the protection of proprietary interests. In the absence of substantive competition law framework on the international level binding both Members, the normative perspective of consultations necessarily reflects the international intellectual property standards established by the TRIPS Agreement.

²⁷ See more closely *UNCTAD-ICTSD* (2005), p. 564, expressing the position that Article 40(4) probably only obliges the country applying competition law to enter into consultations upon request, not to cooperation or exchange of information.

²⁸ *UNCTAD-ICTSD* (2005), p. 561.

7.2.4 Conclusions on the TRIPS Competition Norms

The TRIPS-standards may be exceeded by the internal regulation of Members and by using bilateral agreements requiring stricter protection of intellectual property from other Members. On the other hand, the competition provisions of the TRIPS Agreement may be seen to constitutionalise the TRIPS-standards as the absolute minimum also against the application of the Members' competition rules. By partially internalising competition law, the TRIPS Agreement seeks to determine the limits of inter-systemic interaction between intellectual property and competition law from the perspective of global intellectual property protection. The provisions may be seen to constitutionalise *every* substantive TRIPS-standard. They *seek control over competition law*, subject to the threat of dispute settlement procedure and the potential of sanctions being imposed. Thus, the norms could be seen to impose an obligation to justify *every* competition law-based limitation of the TRIPS-standards by having recourse to the TRIPS Agreement itself. Should this be the case, the original intended function of these provisions would have made a *volte-face*: from securing the continued authority of states to apply and develop their competition norms to taking control of and imposing limits on the application of any competition laws involving the TRIPS-protected intellectual property rights.

On a more general level, this implies that proposals aimed at introducing individual additional provisions to the TRIPS Agreement, having the purpose of protecting competitive or even fundamental rights-related interests could, despite their good intentions, prove to be counterproductive. As the existing competition provisions in the TRIPS Agreement demonstrate, any enablement of something is in practice also its limitation.

Provided any new proposals go far enough in their detail and rigour to affect the proprietary bias underlying the TRIPS Agreement and the corresponding patterns of interpretation, there could be no shared understanding on the global level of the exact ways fundamental rights or competitive interests should be perceived and pursued generally or with regard to their relation to intellectual property rights, in particular. On the other hand, statements of abstract-level principles and vague enabling clauses would confer on the WTO-organs competence to pronounce on these matters, thus strengthening their control over phenomena and norm interactions previously beyond the TRIPS Agreement. Moreover, as demonstrated by the TRIPS competition norms, the good-intending proposals easily turn into their travesty in the course of the negotiation process.

A proposal to internalise new values and interests may also be seen as part of the contest between expert communities and interest groups over the definition of the interaction between intellectual property, competition and fundamental rights law, among others. The context of TRIPS and the broader WTO *acquis* connotes that such provisions would likely be interpreted narrowly in the context of a regime concentrating on the protection of global intellectual property and trade. National and regional courts would likely avoid open conflicts with the interpretations emanating from the WTO: fundamental rights and other norms

would be interpreted accordingly. Balancing clauses and recognitions of new values could well be introduced in TRIPS. However, their introduction entails several practical and more theoretical objections which should be carefully analysed before proceeding to the level of concrete actions.

Yet, there are various alternative or complementary strategies for using the existing competition norms in TRIPS for progressive ends. First, it should be noted that the WTO organs do not have a monopoly in interpreting the existing TRIPS competition norms. Thus, the competition provisions of TRIPS, in particular Articles 8(2) and 40(2) thereof, could be seen as recognising on the level of international law that intellectual property rights may create competitive problems and that competition law may function as a legitimate and often necessary remedy.

Article 8 is the only provision under the title “*Principles*” in TRIPS, and it recognises the need to balance intellectual property protection with instruments expressing concerns over abuses of rights, trade restrictions and adverse effects on the international transfer of technology.²⁹ As the sole recognised principle under the TRIPS Agreement, Article 8 should guide the interpretations of the substantive TRIPS standards, as well. Furthermore, Article 40 of TRIPS starts by recognising the concern over restrictive licensing practices or conditions which have the capacity to restrain competition, trade, or transfer and dissemination of technology. Next, it reserves for the Members the right to specify in their laws licensing practices and conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. It is only after this that the consistency requirement is introduced, as a limitation on the *measures* to prevent or control such practices only.

These TRIPS-norms could thus also be seen as an encouragement to introduce competition laws aimed at *bona fide* regulation of abusive and anticompetitive practices, including practices related to intellectual property rights.³⁰ As long as such a competition policy does not constitute an outright attempt to circumvent the protection afforded by the TRIPS Agreement for non-competition policy-related reasons, but has the objective of controlling anticompetitive conduct generally or the anticompetitive exercise of intellectual property rights in specific circumstances, the TRIPS Agreement could be seen to warmly welcome such regulation.

Second, as *Ghidini* has done, it is possible to use the substantive intellectual property standards of TRIPS as arguments for an obligation to license under certain

²⁹ *Ricolfi* (2006), p. 321-332, emphasises the need to interpret the TRIPS competition norms in the light of the general principles of the TRIPS Agreement, especially Recitals 5 and 6 and Articles 7 and 8(1) of the TRIPS Agreement. He maintains that “it is possible to reserve adequate consideration both to the pro-competitive concerns these incorporate and to the claims to access to IP from current users and subsequent generations of innovators as recognised under Article 7 of TRIPS” (*ibid.*, at p. 330).

³⁰ See also UNCTAD-ICTSD (2005), p.555-556 and 572 and *Ullrich* (2005b), p. 733-735, where the possibility of an *obligation* based on the TRIPS Agreement to enact and apply related competition norms is discussed.

circumstances. He argues that the compulsory licensing mechanism under Article 31(1) of TRIPS for dependency patents would demonstrate that a patent's function would *a fortiori* not be curtailed if competition norms are applied to provide access on reasonable terms in cases whereby the otherwise normal exercise of the patent would frustrate the competition scenario on a whole *sector* of the market.³¹ The substantive standards established by the TRIPS Agreement could thus be used – in the spirit of principled coherence – as expressions of weight required for the application of competition law to intellectual property rights. To an extent the competitive concern at hand would be heavier than an interest recognised in the TRIPS Agreement and enabling an exemption from exclusivity, the TRIPS Agreement as a whole would constitute an argument *in favour* of applying competition law so as to restrict the intellectual property exclusivity in question.

Third, as regards European Union competition law, its position as a major world model implies that the Union and its member states may affect the interpretations of the TRIPS competition provisions by simply developing and applying their competition laws in the desired direction. Considered from the perspective of the underdeveloped nature of the TRIPS competition provisions, it is unlikely that the mainstream trends thus developed in Europe could be successfully challenged in the framework of the WTO.³² Rather, the TRIPS provisions would likely bend and enable such a development of competition law on the part of one of the leading industrialised Members of the WTO. Flexibility could thus be introduced into the TRIPS Agreement through the practices of competition law legislators, courts and authorities in Europe.

Fourth and finally, should the interpretations of the TRIPS competition provision within the WTO context develop into an unacceptable direction from the perspective of the European Union, ultimately conflicting with the interpretations of European competition laws, the European courts have yet another strategy at their disposal: continue the practice of not granting direct effect to the demands of the WTO and TRIPS norms, and also refuse according them *decisive* interpretative effect *on substantive grounds* over primary Community law, in particular. Such substantive grounds could be better formulated – without the structural proprietary bias underlying the TRIPS Agreement – among the competing expert communities of competition, fundamental rights and Community law, among others.

31 Ghidini (2006), p. 109.

32 Practically all scholarly work on the topic presume that at least the standard competition law interpretations of the US and the European Union are TRIPS-compliant.

Depending on the context of application, also other international measures could be utilised in the interpretation, such as the conventions concluded under the WHO³³ or UNESCO³⁴ or more general human rights law. Such additional international legal sources could importantly set limits on the interpretations of intellectual property rights as protected by TRIPS and even establish an obligation to actively protect fundamental rights through the interpretation and application of competition law so as to limit the exclusive rights inherent to an intellectual property right.

Thus, as a preliminary conclusion concerning the competition provisions of the TRIPS Agreement, it may be stated that they ultimately could leave considerable scope for European competition law to develop its own doctrines purporting to regulate the interaction between intellectual property and competition law. The focus will now shift to the development of these doctrines in the framework of European Union law.

7.3 Early Evolution of Intellectual Property – Competition Law Doctrines in European Competition Law

7.3.1 Introduction

The doctrines and principles developed by the Community Courts for the application of competition law to intellectual property rights, rather than determining their interaction in Europe like believed by a legal dogmatist, merely participate in the constitution of this interaction. The relevant doctrines, principles and underlying ideals are abstract and inconsistent enough to enable alternative reconstructions or progressive proposals utilising them, but concrete enough to permit the evaluation of at least some trends, changing ideologies and presumptions, as well as the identification of underlying problems and deficits in argumentation.

As the Community harmonisation of intellectual property began relatively late, free movement of goods and competition law initially became the primary instruments through which the domestically defined intellectual property rights were *de facto*

33 For example, access to HIV/AIDS medication became a question of intellectual property and competition law in the *Hazel Tau v GlaxoSmithKline and Boehringer Ingelheim* -case, where the South African Competition Commission found in favour of the complainants, arguing that the firms in question had breached Article 8(a) of the South African Competition Act of year 1998. The pharmaceutical firms had abused their dominant positions in their respective anti-retroviral (ARV) markets by denying a competitor access to an essential facility, by excessive pricing and by engagement in an exclusionary act. The case was finally settled with favourable terms to the complainants. The substantive arguments of the complaint were largely based on fundamental rights, including WHO law. The case as a whole concerned more access to medicines capable of saving lives at the time of an AIDS catastrophe, than competitive interests. See South African Competition Commission, Media Release No. 29 of 2003, 16 October 2003. See also *Tebner* (2006), p. 327-328.

34 See, in particular, the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions. See generally about the Convention *Burri-Nenova* (2008), p. 18 and 55-58 and also *passim*.

made compatible with the integration objectives. The evolution of the Community's competition law approach towards intellectual property rights could be characterised as an interplay between the Commission and the European Court of Justice on one hand, and between developments based on different parts of the Treaty, on the other hand. The path followed is hardly consistent. *Maher* has described it as a series of U-turns and evolving formalism.³⁵

Commentaries on the evolution of European competition law's position to technology licensing are ample.³⁶ The same applies for analysis of individual clauses in licensing agreements.³⁷ The purpose of the following is to address the major policy changes and doctrinal development. The doctrines developed for the perceived conflict between prohibition of abusing a dominant position and intellectual property rights merits closer scrutiny. Yet, even here the focus will be on the underlying ideologies, doctrinal developments and argumentation patterns rather than in the details of case law. The most recent case law will be analysed subsequently under the essential facilities doctrine. The developments in the area of the cartel prohibition will be addressed directly below. These developments reflect general competition law thinking related to intellectual property -enabled market power.

7.3.2 Licensing Practices and the Evolution of the Cartel Prohibition

The early years of the Commission represent a benevolent approach towards licensing agreements in general and patent licensing agreements, in particular.³⁸ The famous Notice of the year 1962 known as the *Christmas Message* demonstrates this policy.³⁹ It exempted several patent licensing clauses, including exclusive territorial protection, from the notification requirement. The Christmas Message was influenced by the German *Inhaltstheorie* which, in turn, was based on the US *inherency doctrine*.⁴⁰ This doctrine connotes that the patent license merely permits the licensee to do what would otherwise be unlawful. As a corollary, contractual restrictions limited to the patent rights should be permitted, but not restrictions beyond the patent rights. However, as *Maher* has stated, the Notice was perhaps more motivated by the Commission's

35 See *Maher* (1999), *passim*. See also *Govaere* (1996), p. 115.

36 See *Maher* (1999); *Gutterman* (1997) and *Anderman* (1998), all *passim*.

37 See e.g. *Korah* (1996); *Pagenberg & Geissler* (1997) and *Anderman & Kallaughner* (2006), all *passim*.

38 See e.g. *Keeling* (2003), p. 309-325 and *Korah* (1985), p. 1.

39 OJ 2922/62, 24 December 1962.

40 *Korah* (1996), p. 72. See more closely *Heinemann* (2002), p. 43 and 56 (concerning the US doctrine, which was rejected relatively early in the USA) and p. 145-153 (concerning the German doctrine). The US Supreme Court rejected in *Motion Picture Patents Co. v Universal Film Manufacturing Co.*, 243 U.S. 502 (1917), the theory that since the patent owner "may withhold his patent altogether from public use, he must logically and necessarily be permitted to impose any conditions which he chooses upon any use which he may allow of it". See also *DOJ & FTC* (2007), p. 30-31.

general lack of resources and the more particular lack of expertise in intellectual property matters than any theoretical underlying justification.⁴¹

The approach started to change as a result of both the European Court of Justice case law as well as the increased interest of the Commission in intellectual property matters in the early 1970s. *Consten and Grundig* was a landmark decision of the European Court of Justice, establishing the applicability of the basic prohibition of cartels to vertical agreements involving intellectual property licensing, and emphasising the integration objective in the interpretation of competition law.⁴² The increased interest of the Commission's Competition Directorate in intellectual property issues was demonstrated in its review of over 500 patent licensing agreements in the late 1960s, as well as in the establishment in 1973 of a new division in the Commission's Competition Directorate responsible for intellectual property rights.⁴³

The new approach regarded territorial exclusivity as something falling under the cartel prohibition, but capable of being exempted. It also demonstrated a sharpened position towards several other licensing clauses, such as non challenge clauses. The Commission's approach of the early 1970s has been criticised as being dogmatic, formalistic, devoid of any form of economic analysis and coming close to threatening the existence of intellectual property rights.⁴⁴

The Commission's approach towards licensing started to become more lenient towards the end of the 1970s. The change was affected by several factors. First, the Commission was largely criticised.⁴⁵ Second, the concerns of the patent intensive industry were heard in the negotiations between the Commission and the member states, finally leading to a group exemption regulation for patent licensing agreements.⁴⁶ Finally, the European Court of Justice adopted a more relaxed approach to territorial protection in the *Nungesser*-case which involved plant breeders' rights, but was deemed relevant to patent and know-how licensing, as well.⁴⁷ The significant distinction made by the Court between open exclusive licenses and licenses granting absolute territorial protection, as well as the contextual interpretation of the basic prohibition of cartels, affected the Commission's approach and the negotiations leading to the block exemption regulation for patent licensing agreements, as well.

41 See *Maher* (1999), p. 606.

42 Joined cases 56 and 58/64, *Etablissements Consten SA & Grundig-Verkaufs GmbH v Commission* [1966] ECR 299.

43 See *Maher* (1999), p. 607-608.

44 See e.g. *Keeling* (2003), p. 326.

45 See *Keeling* (2003), p. 327.

46 Commission Regulation (EC) No. 2349/84, OJ 1984 L 219, p. 15. See *Korah* (1985), *passim* for an early and influential commentary on the block exemption regulation.

47 Case 258/78, *L.C. Nungesser KG and Kurt Eisele v Commission* [1982] ECR 2015. *Korah* (1996), p. 48-49, discusses *Nungesser's* applicability to other intellectual property rights and concludes that it may apply to all technology licenses, even if the investment is not very great.

The Court's more contextual interpretation of the basic prohibition of cartels continued in the *Erauw-Jacquéry* and *Coditel II* -cases.⁴⁸ In the latter case the particular characteristics of the cinematographic industry and of its markets in the Community (relating to dubbing and subtitling for the benefit of different language groups, in particular) justified agreeing on absolute territorial protection for the performing rights in a film. Also these cases affected the Commission's position, although the Commission's interpretation of these cases was relatively narrow. The Court emphasised contextual interpretation in the *Bayer and Hennecke* -case, too.⁴⁹ The case concerned a no-challenge clause. Its purpose was to put an end to litigation. The Court emphasised the need to consider the legal and economic context in the situation at hand.

Yet, the case law of the Court was not consistent in its approach. The *Windsurfing* -case can be seen as one of the most formalistic applications of the specific subject-matter doctrine: whether a clause contained in the licensing agreement was within the specific subject-matter of the patent right seemed to determine its compatibility with competition law.⁵⁰ In this case, the effects of the clauses seemed to be of no interest. Provided a clause fell outside the specific subject-matter and somehow restricted the freedom of the licensee, the basic prohibition of cartels applied. Such an abstract analysis neglects considerations related to market power and competitive effects. Determining the exact scope of the patent becomes of crucial importance as this decides which clauses could be considered in the light of the specific subject-matter test in the first place. Such a determination is ill-suited for competition authorities.

The separate block exemption regulations for patent and know-how licensing agreements were replaced by the block exemption regulation of 1996 for technology transfer agreements.⁵¹ The regulation was actively lobbied.⁵² The end-result referred to market share thresholds only in the withdrawal of the exemption, reflected a relatively favourable approach towards exclusive territorial licensing, grant back, non-challenge and many other clauses used in technology licensing. The possibility to use many of these clauses is often a precondition for licensing to take place in the first place, and thus also for the dissemination of technology. Territorial protection, in particular, safeguards both the licensee's investments and efforts in creating a market as well as the licensor's investments in innovation.⁵³

48 Case 27/87, *Lois Erauw-Jacquéry Sprl v Société La Hesbignonne* [1988] ECR 1919 and case 262/81, *Coditel SA v Ciné Vog Films SA* [1982] ECR 3381.

49 Case 65/86, *Bayer AG and Maschinenfabrik Hennecke GmbH v Heinz Süllhöfer* [1988] ECR 5249, at paragraphs 16-21. See also *Keeling* (2003), p. 349 (noting the flexibility in the European Court of Justice's interpretation).

50 Case 193/83, *Windsurfing International Inc. v Commission* [1986] ECR 611, at paragraphs 45, 72, 85 and 92. See also *Keeling* (2003), p. 349, who considers the reasoning of the Court "exceptionally formalistic".

51 Commission Regulation (EC) No. 240/96, OJ 1996 L 31, p. 2. See *Anderman* (1998), p. 27-143, for a commentary on the block exemption regulation.

52 See e.g. *Maher* (1999), p. 618

53 See e.g. *Korah* (1996), p. 10-18 and 138-157 and *Keeling* (2003), p. 326.

The choice is thus not often between the integration objective and the incentive of the right owner, but between licensing and non-licensing. Non-licensing as an end-result could hardly be justified by the integration objective, as this could lead to either encapsulation of the technology within one territory, or vertical integration of the patent owner in question to the other territories. For these reasons, the regulation enabled territorial restrictions, even absolute territorial protection between the licensor and licensee, to a certain extent.⁵⁴

The 1996 regulation was replaced by a new one in 2004.⁵⁵ The new block exemption regulation is accompanied with Guidelines for the assessment of technology transfer agreements (henceforth also *Commission Guidelines*).⁵⁶ The distinction between horizontal and vertical restraints is now closer to the US antitrust model due to the redefinition of the concept of competitor in the new block exemption regulation.⁵⁷ It also introduces a “safe harbour” rule, intended to correspond with the equivalent US antitrust concept, but in the end establishes a more lenient approach by validating agreements falling under it also before the competition authorities and courts with respect to administrative and civil action alike.⁵⁸ By introducing a very broad group exemption also enabling territorial market divisions, it continues the shift from the emphasis on integration objectives towards a consumer welfare standard.⁵⁹

Although the new regulation finally abolished the “white” and “grey” lists of permitted and potentially permitted licensing clauses and thus enabled increasing flexibility in the competition law evaluation of licensing, it simultaneously introduced rigid market share thresholds making the applicability of the block exemption regulation uncertain in many instances.⁶⁰ A major proportion of the more complex technology licensing transactions must in any case be analysed independently under the guidance of the Guidelines only, as the regulation does not cover multi-party licensing, among other things.⁶¹

The combination of market share thresholds and a shortened black list of prohibited clauses implies the demise of *per se* rules and the strengthening of economic analysis: a licensing clause may be problematic in a given context only, typically involving

54 See recitals 10 and 12 and Articles 1(1)(1)-(6) of the regulation. See also *Korah* (1996), p. 138-157.

55 Commission Regulation (EC) No 772/2004 of 27 April 2004, OJ L 123, 27.04.2004, p. 11-17. For a commentary, see *Anderman & Kallaugh* (2006), *passim*. See also *Ullrich* (2007), p. xlv-lx.

56 *Commission Notice - Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements* (2004).

57 For criticism of the old definition see e.g. *Korah* (1996), p. 21-24.

58 See Article 3 of the Regulation and *Ullrich* (2007), at p. xlvi, noting that in US antitrust law “safe harbour” rule “means administrative abstention from control, and nothing more”.

59 See also *Ullrich* (2007), p. xlv-xlv.

60 The regulation applies neither to licensing between competing firms having a combined market share of more than 20% on the affected technology and product market, nor to licensing between non-competitors either one having a market share exceeding 30% on the affected technology and product market. See Article 3 of the new block exemption regulation.

61 See Article 2(1) of the new block exemption regulation. There is no recent case law from the Community Courts in this field. Thus, the *Commission’s Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements* (2004) assume a major role.

the presence of market power. Hence, relatively low market shares lead to the non-applicability of the block exemption regulation, and thus to the need for individual assessment. As the economic analysis of licensing under the prohibition of cartels likely affects the interpretation of the prohibition of abusing a dominant position in licensing contexts and also reflects a more general approach to the interaction between intellectual property and competition law, two licensing clauses will be discussed as examples in the following: license-back clauses and non-challenge clauses.

Grant- or license-back clauses, too, may be needed for licensing to take place. The licensor is typically not willing to create a competitor capable of making improvements to the licensed technology and keeping even the non-severable improvements to itself only. Hence, for licensing to take place, some license-back clauses should be permitted.⁶² This was reflected already in the previous regulation.⁶³ The treatment of license-back clauses under the new regulation became even more lenient.⁶⁴ However, far-going grant-back obligations may put the licensee at a competitive disadvantage and abolish its incentive to innovate.⁶⁵ Sharing the technological advances on a royalty-free basis with the option for the licensor to further license the improvements to other licensees may considerably diminish the incentive of the licensee to improve the licensed technology. Requiring an exclusive license on improvements to the licensor may have the same effect, in particular if the improvement may be practiced without infringing the licensed technology (in other words if it is a severable improvement).⁶⁶

Should the licensed technology be essential for competition on some markets, the licensor could try to sustain its strong market position through extensive grant-back obligations and thus at the expense of licensees' possibilities to compete and incentive to innovate. This is a concrete example of competition law protecting innovation from privately imposed restrictions and disincentives. Yet, often the licensor may be a smaller unit without manufacturing facilities and the licensed technology is typically non-essential in nature. The position taken should be different in such instances due to the absence of market power on the part of the licensor. The example thus demonstrates the need to analyse the circumstances prevailing in each case before the conformity of a license-back clause with competition law can be confirmed.

62 See e.g. *Korah* (1996), p. 167; *Keeling* (2003), p. 342-343 and *Anderman & Kallaughner* (2006), p. 207. See also e.g. the Commission's decision in *Boussois/Interpane*, OJ 1987, L 50/30.

63 See Article 2(1)(4) of the Commission Regulation (EC) No. 240/96, OJ 1996 L 31

64 See recital 14 and Article 5 (1)(a) of Commission Regulation (EC) No 772/2004 of 27 April 2004, OJ L 123, 27.04.2004, p. 11-17. In recital 14 the protection of the incentives to innovate and the appropriate application of intellectual property rights are mentioned as reasons to exclude some grant back obligations from the block exemption in Article 5 (1)(a). The latter excludes exclusive grant back obligations for severable improvements from the block exemption regulation. Where such a restriction is included in a licence agreement only the restriction in question is excluded from the benefit of the block exemption regulation.

65 See recital 24 and Article 3(6) of the Commission Regulation (EC) No. 240/96, OJ 1996 L 31 and Commission decisions in *Rich Products/Jusrol* [1988] OJ L69/21 and *Delta Chemie* [1988] OJ L309/34. See also *Anderman & Kallaughner* (2006), p. 208.

66 See *Anderman & Kallaughner* (2006), p. 208-209.

Also *non-challenge clauses* may be necessary to enable licensing in the first place. A small licensor may be deterred from licensing due to the threat of expensive patent litigation.⁶⁷ The licensee typically acquires detailed knowledge of the licensed technology and may be able to initiate an invalidation process.⁶⁸ Also the initiation of long-term cooperation could be jeopardised by the threat of legal action challenging the validity of the underlying rights.⁶⁹ Therefore, European competition law has tolerated non-challenge clauses to a certain extent.⁷⁰ This seems to correspond to some extent with the current position in the US.⁷¹

On the other hand, non-challenge clauses may enable the maintenance of intellectual property -based market power in a contractual relationship in circumstances where the justifications for protection are not present.⁷² The probabilistic nature of intellectual property and its *erga omnes* effects on market conduct and market access speak against tolerating non-challenge clauses. In the majority of cases, the right to terminate the license agreement once the licensee challenges the validity of the underlying rights is sufficient. Interpreting the applicable competition norms in conformity with the rationale of intellectual property protection, thus preventing the maintenance of intellectual property -like protection in the absence of the grounds of justification for establishing it in the first place is a welcome approach.⁷³

Moreover, the licensor may be in a position where all or most market participants of a certain sector must acquire a license in order to compete. In such contexts the systematic use of non-challenge clauses could lead to a situation where the validity of the patents or other rights being licensed could hardly be challenged. Such an end-result would not only place the competitors at a competitive disadvantage, but could also function as a disincentive for both the licensor and the licensees to innovate: instead of being encouraged to innovate due to competitive pressure, the licensor

67 See e.g. *Korah* (1996), p. 183. See also the Commission's decision in *AOIP/Beyrard* [1976] OJ L 6/8 and *Keeling* (2003), p. 347-348.

68 See e.g. *Keeling* (2003), p. 346.

69 *Anderman & Kallaughner* (2006), p. 201.

70 See case 65/86, *Bayer AG and Maschinenfabrik Hennecke GmbH v Heinz Süllhöfer* [1988] ECR 5249, at paragraphs 16-21; Commission Regulation (EC) No 772/2004 of 27 April 2004, OJ L 123, 27.04.2004, p. 11-17, at Article 4(2)(b) (applying the opposition procedure); Commission Regulation (EC) No 772/2004 of 27 April 2004, OJ L 123, 27.04.2004, p. 11-17, at Article 5(1)(c) (non-challenge black-listed, but termination of the technology transfer agreement in the event that the licensee challenges the validity of one or more of the licensed intellectual property rights permitted); *Commission Notice - Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements*, OJ C 101, 27.04.2004, p. 2-42.

71 See *MedImmune, Inc. v Genentech, Inc., et al.* 05-608 U.S. (2007), Decided 9 January 2007. In the case the US Supreme Court narrowed the licensee estoppel doctrine, but noted that a non-challenge clause would probably be permitted under the US antitrust laws.

72 See Case 193/83, *Windsurfing International Inc. v Commission* [1986] ECR 611, at paragraph 92. See also *Ørstavik* (2005), p. 86. *Govaere* (1996), at p. 126-127, argues against tolerating non-challenge clauses.

73 Cf., however with *Anderman & Kallaughner* (2006), p. 201-202, arguing that the current strict approach towards non-challenge clauses in EU competition law is not based on "genuine competitive harm", but instead "focuses on harm to competitors and reflects a formalistic concern for the interests of undistorted competition and a desire to achieve conformity with the principles underlying the protection of intellectual property".

could rely on its potentially invalid patents as a source of non-challengeable market power. For the licensees the duty to pay for potentially invalid rights would keep the resources away from own research and development.

Thus, there is a clear interest in disallowing competition and innovation to be restricted by invalid intellectual property rights especially when the licensor has market power. In such a situation it is clear that the block exemption regulations do not apply, but the prohibition of abusing a dominant position would likely be applicable. Like with the license-back clauses, the treatment of non-challenge clauses is dependent on the market power of the parties involved, the rights being licensed, and the economic context of licensing in general.

The approach under the cartel prohibition, now increasingly based on economic efficiency analysis, seems to spread into the area of monopoly control in the form of rejection of most *per se* abuses in favour of contextual interpretation, introduction of the efficiency defence, as well as the increasing tendency to discuss incentives to investment and innovation. The innovation incentives -analysis discussed in the context of license-back clauses above may have provided a practical model for the innovation incentives test as formulated by the Commission in the *Microsoft*-case,⁷⁴ to be discussed subsequently. Increasing recourse to economic, effects-based analysis could thus provide one common denominator for a somewhat coherent application of European competition law to intellectual property rights.

Yet, also the recognition that market power brings with it a special responsibility requiring special competition law treatment is discernible within the application areas of both central competition law norms, thus enabling alternative constructions of local, competition law -specific coherence. Moreover, as the examples of grant-back and non-challenge clauses show, competition law may be interpreted in conformity with the justifications underlying intellectual property: competition law should seek to abolish harmful privately imposed restrictions of innovation or unfair takings of intellectual property “reward” by powerful entities not to be credited for the related inventive efforts (control of grantback clauses). Similarly, it should seek to guarantee that enterprises with market power, in particular, could not maintain intellectual property -like protection through contractual clauses in the absence of conditions needed for the grant of intellectual property protection (control of non-challenge clauses).

On a more general level, competition law should seek to ensure that competition needed for the realisation of the functions of intellectual property protection will not be frustrated by privately imposed contractual limitations. There should be a constant threat of substitutable technologies, innovations or products entering the market.

74 Case COMP/C-3/37, 792 *Microsoft*.

7.3.3 Abuse of Dominant Position and Intellectual Property: Early Developments

Introduction

The following will analyse developments of the doctrines concerning the interaction between intellectual property and abuse of a dominant position. The early doctrines comprised the *existence/exercise* -dichotomy, as well as the doctrines of *essential function* and *specific subject-matter* of intellectual property. These had the function of protecting the *nationally defined* rights from too extensive encroachments of the EC Treaty free movement and competition provisions alike. Their core contents derived from the system of intellectual property protection and its underlying justifications, as perceived by the European Court of Justice.

Accordingly, the falling of the restrictive measure taken by a dominant firm within the core content of the right, referred to as the specific subject-matter as defined by the Court, functioned as a general justification for the measure from the otherwise broad prohibition regarding abuses of dominant positions. Competitive effects or market power played a marginal role in the formation of these early doctrines.

It became later obvious in the *Magill*-case,⁷⁵ that the doctrines based on intellectual property protection alone are not sufficient: the weighing of the interests in protecting intellectual property and competition may in some circumstances imply that there are reasons to limit even the core rights of the intellectual property in question. The essential facilities -doctrine provides an alternative reconstruction of the intellectual property – competition law interaction, centrally based on the analysis of the stranglehold position possessed by the intellectual property owner and the likely competitive effects caused by the refusal to license. Immediately below, the early case law development of the basic doctrines and the general ethos underlying the decisions will be discussed, followed by a more concrete discussion of the substantial outcomes of the decisions. The most recent case law will be analysed later under the essential facilities doctrine.

Evolution of the Basic Methodology Used

The Court had to deal with intellectual property issues in the very first cases concerning the prohibition of abusing a dominant position. In *Parke Davis, Sirena v Eda* and *Deutsche Grammophon* the Court was, among other things, asked to judge on the price levels of products protected by intellectual property rights.⁷⁶ All three cases were preliminary rulings. The Court was asked not only about what may constitute an abuse of a dominant position in case of intellectual property rights. It was also asked about the application of the free movement provisions of the EC Treaty to intellectual property

75 Joined Cases C-241/91 P and C-242/91 P, *RTE and ITP v Commission* [1995] ECR I-743.

76 See case 24/67, *Parke, Davis and Co. v Probel, Reese, Beintema-Interpharm and Centrafarm* [1968] ECR 55; case 40/70, *Sirena Srl v Eda Srl and others* [1971] ECR 69 and case 78/70, *Deutsche Grammophon Gesellschaft mbH v Metro-SB-Großmärkte GmbH & Co. KG.* [1971] ECR 487.

rights, and about the interpretation of the prohibition of cartels. The questions thus invited the Court to develop comprehensive, overarching principles for the treatment of nationally determined intellectual property rights in Community law, embracing the basic freedoms and the central competition law provisions alike.

In the first of these cases, *Parke Davis*, the transitional period concerning the free movement provisions had not yet ended, connoting that the case could not be decided under the free movement provisions. However, the Court used them in its interpretation of the prohibition of abusing a dominant position. The distinction between the existence and exercise of intellectual property seemed to refer to the weighing between nationally defined intellectual property protection on one hand and the preservation of competition through Community competition norms on the other hand.⁷⁷ The same search for coherence among the free movement and competition law norms and the conception of intellectual property rights as justifiable, nationally defined trade barriers continued in *Sirena v Eda* and *Deutsche Grammophon*.⁷⁸ In the last mentioned landmark ruling the transitional period had expired and the Court interpreted the relationship between the free movement of goods provisions and intellectual property protection, leading to the principle of Community-wide exhaustion of intellectual property rights. It also used the notion of specific subject-matter of intellectual property for the first time.⁷⁹

The Community Courts have also subsequently used the distinction between the existence and exercise of rights and the concept of specific subject-matter when interpreting the extent of the prohibition of abusing a dominant position. In the *Volvo*-case the European Court of Justice held that the right of the proprietor of a protected design to prohibit others “*from manufacturing and selling or importing products incorporating the design constitutes the very subject-matter of his exclusive right*”.⁸⁰ In the Court’s view, it followed from this that a refusal to license, even in return for a reasonable royalty, cannot *in itself* constitute an abuse of a dominant position.⁸¹ Otherwise the proprietor would be deprived of the substance of its exclusive right. The Court’s argumentation is understandable: the design right in spare parts inevitably

77 See case 24/67, *Parke, Davis and Co. v Probel, Reese, Beintema-Interpharm and Centrafarm* [1968] ECR 55.

78 See, in particular, case 40/70, *Sirena Srl v Eda Srl and others* [1971] ECR 69, at paragraph s 5 and 7 and case 78/70, *Deutsche Grammophon Gesellschaft mbH v Metro-SB-Großmärkte GmbH & Co. KG*. [1971] ECR 487, at paragraphs 5, 7 and 11.

79 case 78/70, *Deutsche Grammophon Gesellschaft mbH v Metro-SB-Großmärkte GmbH & Co. KG*. [1971] ECR 487, at paragraphs 11-13.

80 Case 238/87, *Volvo AB v Erik Veng* [1988] ECR 6211, at paragraph 8. Very similar case is case 53/87, *Concorzio Italiano Componentistica di Ricambio per Autoveicoli and Maxicar v Regie Nationale de usines Renault* [1988] ECR 6039.

81 The *Volvo*-case can be contrasted to the U.S. Supreme Court’s decision in *Eastman Kodak Co. v Image Technical Services Inc.*, 112 S.Ct. 2072 (1992), where the Supreme Court held that Kodak’s change in policy to stop selling parts to independent service organisations for repair of Kodak copiers and alleged pressure by Kodak on parts brokers and other intermediaries not to sell Kodak parts to the independents could be the basis of an antitrust claim.

results in the right to block competition in the aftermarket.⁸² Treating any refusal to license protected spare parts to independent repairers would thus have transformed the exclusive property right in spare parts intended by the national legislator into a liability rule. The Court avoided such a result by maintaining the property rule -nature of design right in spares, but by simultaneously referring – *obiter dicta* – to specific instances where such a refusal could nevertheless in the Court’s view constitute an abuse of a dominant position. These instances will be discussed subsequently.

Similar argumentation patterns were deployed by the Court of First Instance (now the General Court) in the *Magill*-case.⁸³ It maintained that the exclusive right to reproduce the protected work *is within the scope of protected specific subject-matter* of copyright. However, it went on to state that the specific subject-matter did not protect the copyright holder if the right is exercised in such ways and circumstances as in fact to pursue an aim manifestly contrary to the objectives of the prohibition of abusing a dominant position. In that event, the Court of First Instance continued, the copyright is no longer exercised in a manner which corresponds to its *essential function* as developed in the free movement case law involving intellectual property rights. In the Court’s formulation, the essential function of copyright referred to the moral rights in the work and to ensuring a reward for the creative effort, while respecting the aims of, in particular, the prohibition of abusing a dominant position. Provided the essential function is not fulfilled, the Court ended, “*the primacy of Community law, particularly as regards principles as fundamental as those of free movement of goods and freedom of competition, prevails over any use of a rule of national intellectual property law in a manner contrary to those principles.*”

The Court of First Instance’s further reference to the distinction between the *legitimate exercise* of intellectual property rights and *improper exercise thereof* is even less helpful when addressing the compatibility of conduct with the prohibition of abusing a dominant position.⁸⁴ The characterisation of certain conduct by the intellectual property owner as legitimate or improper exercise is a label attached afterwards to a certain conduct.⁸⁵ To hold that a conduct otherwise falling under the essential function and specific subject-matter of the right in question is nevertheless abuse when exercised “*in such ways and circumstances as in fact to apparently pursue an aim manifestly contrary to the objectives of [the prohibition of abusing a dominant position]*” is circular: exercise of an intellectual property right is abuse when it is abusive and contrary to a teleological interpretation of the prohibition of abusing a dominant position. Further reference to the primacy of Community law, and the free movement

82 See *Kur* (2008), p. 328.

83 Case T-76/89, *Independent Television Publications Ltd v Commission* [1991] ECR II-575, at paragraph 56.

84 Case T-69/89, *Radio Telefis Eireann v Commission* [1991] ECR II- 485, at paragraph 67; case T-70/89, *British Broadcasting Corporation and BBC Enterprises Ltd v Commission* [1991] ECR II-535, at paragraph 54 and case T-76/89, *Independent Television Publications Ltd v Commission* [1991] ECR II-575, at paragraph 52.

85 See also *Govaere* (1996), p. 154-155 and *Keeling* (2003), p. 73-74.

and competition provisions in particular, over national intellectual property law does not elevate the intellectual level of the Court of First Instance's argumentation.⁸⁶

The case was appealed to the European Court of Justice. Advocate General *Gulmann* based his opinion predominantly on the concepts of specific subject-matter and essential function.⁸⁷ However, the European Court of Justice, albeit confirming the Court of First Instance's ruling, used different argumentation. Instead of resorting to specific subject-matter and essential function, it stated that the exercise of an exclusive right may, *in exceptional circumstances*, involve abusive conduct.⁸⁸ In the given circumstances such exceptional conditions were present as 1) there was a *de facto* monopoly; 2) the refusal to provide basic information by relying on national copyright provisions prevented the appearance of a *new product*, a comprehensive weekly guide to television programmes which the appellants did not offer and for which there was a *potential consumer demand*; 3) there was *no justification* for such refusal either in the activity of television broadcasting or in that of publishing television magazines; and 4) the appellants, by their conduct, *reserved to themselves the secondary market* of weekly television guides *by excluding all competition* in the market since they denied access to the basic information which is the raw material *indispensable* for the compilation of such a guide.

The particular features of the case caused uncertainty whether the judgement signified a landmark ruling and a paradigmatic turn in the line of reasoning, or whether it would remain an exceptional decision tailored for the unusual circumstances of the case.⁸⁹ Subsequent case law demonstrates that *Magill* was not to have the role of a mere footnote in scholarly literature. Evaluated from the hindsight of today, *it marked the beginning of an effects-based argumentation model*. Instead of insulating the core of intellectual property protection from most competition law application in the abstract, the likely competitive effects caused by the refusal and the analysis of the stranglehold position of the intellectual property owner became the decisive considerations. As the specific subject-matter no more provided a limitation on the application of the prohibition of abusing a dominant position,

86 Case T-69/89, *Radio Telefis Eireann v Commission* [1991] ECR II- 485, at paragraph 71; case T-70/89, *British Broadcasting Corporation and BBC Enterprises Ltd v Commission* [1991] ECR II-535, at paragraph 58 and case T-76/89, *Independent Television Publications Ltd v Commission* [1991] ECR II-575, at paragraph 56.

87 The fact that it is not necessarily relevant to apply the specific subject-matter doctrine for an analysis under the prohibition of abusing a dominant position was noted by Advocate General *Gulmann* in his opinion (at footnote 17). Nevertheless, he used the principles of specific subject-matter and essential function in his analysis.

88 Joined Cases C-241-242/91 P, *RTE and ITP v Commission* [1995] ECR I-743, at paragraph 50.

89 For example, *Tillberg* (1995), p. 654 and *Bruun* (1996), p. 50, have argued that the specific nature of copyright protection was probably an important factor in the European Court of Justice's ruling, thus limiting its significance. On the other hand, *Vinje* (1995), at p. 162, argued that the Court adopted a circumstances-based methodology in the case. *Venit* (2007), at p. 622, says with the benefit of ten years' hindsight, that despite the weakness of the underlying right, the Court's approach "was strongly protective of the right, something that suggests that the outcomes of the EU cases to date have not depended on the nature of the IP right and that one cannot therefore necessarily expect a different and more deferential approach from the Courts where patent rights are concerned".

the Court had to limit the extent of the prohibition itself on the basis of considerations related to competitive effects.

Yet, paradigmatic change does not take place overnight. In *Grüne Punkt* the President of the Court of First Instance analysed the compatibility of a trade mark licensing scheme with the prohibition of abusing a dominant position on the basis of the specific subject-matter of that right.⁹⁰ The argumentation resonated with *Inhaltstheorie*: only if it was proven that the provisions of the licensing scheme in question went beyond what was necessary to preserve the essential function of the trade mark right could there have been abuse. In other words, the compatibility of the licensing scheme with the prohibition of abusing a dominant position seemed to depend on the definition of the specific subject-matter and essential function of trademarks. More recent case law demonstrates that *Grüne Punkt* was to remain an exception to the effects-based argumentation model first developed in the European Court of Justice's *Magill*-judgement. However, before proceeding to the analysis of the most recent doctrinal developments under the discussion of the essential facilities doctrine subsequently, the other premises emanating from the early case law will be discussed below.

Evolution of Substantive Premises

In addition to formulating the abstract decision-making doctrines discussed above – the simplified conceptual devices or “tests” intended to enable the identification of the relevant features of the cases at hand in a consistent manner and intended to structure argumentation accordingly – certain other significant premises were developed in the early case law of the Community Courts for the application of the prohibition of abusing a dominant position to intellectual property rights. These include the impact of intellectual property protection on the finding of a dominant position, and the concrete conditions under which the Courts have treated a refusal to license or other intellectual property -related conduct as abusive.

Although the basic doctrines identified above played an important role in the argumentation of the Community Courts, the discussion of the substantive outcomes and identification of the concrete circumstances where a refusal to license could be deemed abusive complements the picture of the overall doctrine as developed in the early case law. The discussion also enables an alternative reading of the relevant case law, or the construction of a model based rather on contextual analysis, objectives and values, than abstract decision-making doctrines. The older case law may thus be interpreted from the perspective of the exceptional circumstances. Hence, circumstances other than those emphasised by the Community Courts or scholarly literature at the time of the decisions may prove relevant.

⁹⁰ Case T-151/01 R, *Der Grüne Punkt — Duales System Deutschland AG* [2001] ECR II 3295, at paragraphs 179-185. The President of the Court also referred to Article 345 FEU, ex. 295 EC (which ensures the protection of the member states' systems of property ownership) despite Community harmonisation of trade mark law.

The Community Courts have adopted the basic premise that intellectual property right as such does not constitute a dominant position. The question of dominance depends on substitutes, as in the definition of the relevant markets generally.⁹¹ The Community Courts have argued so thereafter: the mere ownership of an intellectual property right cannot, in itself, confer a dominant position.⁹² Yet, as the case law indicates, intellectual property protection may contribute towards establishing such a position, as it may reserve a resource to the exclusive use of its owner, like the copyright in TV-listings in *Magill*. Similarly, patent protection contributed to the finding of a dominant position in the *Hilti*-case in Hilti's own brand-specific markets for nail gun cartridges.⁹³ However, in *Volvo*⁹⁴ the European Court of Justice sidestepped the preliminary ruling question concerning Volvo's dominance on the brand-specific spare parts market protected by design-rights, and only answered the question regarding abuse, as this enabled the national court to decide the case at issue.⁹⁵

Keeling argues that in the circumstances of the *Volvo*-case there was a strong argument "for saying that the intellectual property right at issue automatically conferred a dominant position on its proprietor".⁹⁶ Should brand-specific secondary markets constitute their own relevant markets irrespective of the position and conduct of the firm on the market for the main product, intellectual property rights could in practice lead to a dominant position in an increasing number of situations where it is possible – and common practice – to protect the adjacent markets for spare parts, accessories or services through intellectual property rights and technical protection measures. The Commission has subsequently stated that when assessing dominance in secondary, brand-specific markets, it will take into account factors such as: 1) price and life-time of the primary product; 2) transparency of prices of secondary products; 3) prices of secondary products as a proportion of the primary product; 4) information costs

91 The Court followed its Advocate General in case 40/70, *Sirena Srl v Eda Srl and others* [1971] ECR 69, at paragraphs 5 and 16.

92 Joined cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* [1995] ECR I-743, at paragraph 46.

93 Case T-30/89, *Hilti AG v Commission* [1991] ECR II-1439, at paragraph 93. The case was appealed to the European Court of Justice. See case C-53/92 P, *Hilti AG v Commission* [1994] I-667. The Court confirmed the Court of First Instance's ruling, but however did not discuss the intellectual property aspects of the case.

94 Case 238/87, *Volvo AB v Erik Veng* [1988] ECR 6211. Almost identical case is 53/87, *Concorzio Italiano Componentistica di Ricambio per Autoveicoli and Maxicar v Regie Nationale de usines Renault* [1988] ECR 6039.

95 Although the Court did not rule on the issue of dominance, it could be argued that competition between distinct system products (i.e. cars) reduced Volvo's market power with regard to its own spare parts to an acceptable level. The competitive pressure as a car producer limits its actions as a producer of spares: non-availability or excessive prices of spares affects Volvo's reputation and thus its competitive position as a manufacturer of cars. The control over its spares did not confer it any power or strategic instruments with regard to other car manufacturers.

96 See *Keeling* (2003), at p. 372-373 and 380.

and; 5) other issues.⁹⁷ This approach reflects increasing recourse to economic analysis and evaluation of effects. The Commission refers to the US Supreme Court' *Kodak*-decision⁹⁸ as model for such an approach.

Keeling's argument that the question of dominant position as such should not be controversial, as only abuses of that position are prohibited, is a simplification. In his analysis, the Court has been "*strangely reluctant to admit that an intellectual property right can by itself create a dominant position.*"⁹⁹ However, just like there should be no presumption for the absence of market power or dominant position in the presence of intellectual property rights, there should be no presumption for market power or dominance either. Evidently, when a firm has been found dominant and subject to a licensing obligation, contrafactual analysis in the absence of intellectual property protection likely eliminates that position, as the barrier for the competitors' entry could no more be based on the exclusivity created by intellectual property protection. Yet, this contrafactual analysis does not signify that the intellectual property by itself created the dominant position. It was merely one necessary element for the finding of such a position.

The notion that dominant firms, irrespective of the reasons establishing their dominance, have a *special responsibility* not to allow their conduct to impair genuine undistorted competition on the common market effectively refutes the idea that dominance as such is an insignificant question.¹⁰⁰ The definition of the relevant markets and the finding of dominance may at times anticipate abuse. This is very usual in essential facility cases, where the indispensability of the resource anticipates both dominance and abuse.

For example, in the circumstances of the *Magill*-case there were obvious links between the definition of dominance and abuse, since both findings were based on the identification of a secondary market from which competition was excluded. The relevant product market was defined very narrowly: it was identical with the scope of each broadcasting company's copyright protection, although the European Court of Justice stated that the mere ownership of copyright protection cannot confer a dominant position. The relevant market and copyright thus overlapped, connoting that each firm had a dominant position with a hundred per cent market share on the relevant market. On the other hand, in case on intellectual property rights a small market share of the relevant technology market could easily satisfy the entire demand by licensing all potential licensees. Due to its non-rivalrous nature intellectual property

97 XXVth Report on Competition Policy, COM(96) 126 final, at p. 41. See also *Church & Ware* (1998), at p. 272-275, for an economists discussion of market power in the markets for complementary products.

98 Case *Eastman Kodak Co. v Image Technical Services Inc*, 112 S.Ct. 2072 (1992).

99 *Keeling* (2003), p. 371. See also *ibid.*, at p. 374 and 376.

100 See case 322/81, *NV Nederlandsche Banden Industrie Michelin v Commission* [1983] ECR 3461, at paragraph 10. For example, *Ullrich* (2007), at p. lxvii, states that "*in situations of market dominance, the assumptions upon which intellectual property protection is based, namely its use as an instrument of competition and the valuation of its subject matter according to competitive prices, are by definition lacking, either totally or in large part.*"

differs from other property. Even if the intellectual property owner occupies a very high market share on the relevant technology markets, its refusal to license would not prevent market access provided the owner of the substitute technology with a smaller market share licenses and satisfies the entire demand. In addition to having significance for the definition of the markets and the finding of dominance, this is significant in the finding of abuse.

The Commission's stated in the *Tetra Pak (I)*¹⁰¹ decision that access to technology and know-how to build machines for packaging fresh milk did not permit entry into the UHT milk packaging machine market since the technology in the latter market was particularly difficult to master and *partially covered by patents*. Hence, intellectual property rights can have an influence already on the definition of the relevant market – not only as an additional factor indicating dominance. Normally, however, the question whether a patentee enjoys a dominant position depends on the absence of close technological substitutes.¹⁰²

The substantive premises indicated by the Community Courts are relevant also for the analysis of abuse. In the *Volvo*-case the Court qualified its position that Volvo's refusal to license to supply the car body panels did not constitute an abuse by stating that there could nevertheless be an infringement of the prohibition of abusing a dominant position where "[the] *exercise of the exclusive right by the proprietor involves certain abusive conduct such as arbitrary refusal to supply spare parts to independent repairers, the fixing of prices for spare parts at an unfair level or a decision no longer to produce spare parts for a particular model even though many cars of that model are in circulation, provided that such conduct is liable to affect trade between Member States*".¹⁰³ Although it may be difficult to determine what comprises an *arbitrary* refusal to supply, or what constitutes the fixing of prices *at an unfair level* in the absence of a competitive market,¹⁰⁴ the Court indicated that both may form an abuse. Yet, only the third example would likely involve compulsory licensing. The other examples would merely involve an obligation to supply the protected products with a fairly fixed price level.

The Court's *obiter dicta* reasoning of potential abuses seemed to be based on the notions of fairness and non-working of intellectual property rather than essential function, specific subject-matter or economic evaluation of the competitive effects. The prohibition of abuse of a dominant position was thus constructed *as a general behavioural norm* requiring the intellectual property owner's conduct to be fair

101 *Tetra Pak I* (BTG licence) [1988] OJ L272/27.

102 See, e.g., cases 24/67, *Parke Davis v Probel* [1968] ECR 55 and case 78/70, *Deutsche Grammophon v Metro* [1971] ECR 487.

103 Case 238/87, *Volvo AB v Erik Veng* [1988] ECR 6211, at paragraph 9.

104 See *Korah* (1988), p. 383.

and equitable. Moreover, condemning non-working as an abuse may have sought coherence with the principles of compulsory licensing as known in patent laws.¹⁰⁵

The members of the Court may have reasoned that in return for the intellectual property monopoly the proprietor is expected to benefit the society by either producing the protected goods itself or by licensing third parties. Furthermore, the concrete interest to protect consumers from becoming captive by the decisions of an intellectual property owner appeared as predominant. The Court thus pursued a comprehensive interpretation not restricted to the specialised competition law discourse. A moral element was perhaps involved in its reasoning: the prohibition of abusing a dominant position was seen to guard against frustrating the Court's idealisation of an economic culture where intellectual property rights exist with the functions to reward creation and invention, but are not to be used unfairly, arbitrarily or so as to frustrate the *quid pro quo* of intellectual property protection.

The Court thus treated the potential intellectual property abuses as categories largely unconnected with market power and the related potential effects on the markets. The judgement comes close to establishing an abuse of rights doctrine, discussed in chapter 5, through the interpretation of the prohibition of abusing a dominant position.

Similar argumentation patterns were discernible in the *Hilti*-judgement.¹⁰⁶ Hilti tied, among other practices, the sale of its nails to the purchase of its cartridge strips. Moreover, it had demanded an allegedly unreasonable royalty for its patent protecting the cartridge strip, with the alleged intention of delaying the grant of licenses of right as regulated in the United Kingdom patent legislation at the time of the proceedings.

The Court of First Instance was satisfied with noting that Hilti was not prepared to grant licenses on a voluntary basis and that during the proceedings for the grant of licences of right it demanded a fee approximately six times higher than the figure ultimately appointed by the relevant authority. The only substantive argument given by the Court for the finding of an abuse was that *a reasonable trader* should have realised that by demanding such a large fee it was needlessly protracting the proceedings for the grant of licenses of right. In the words of the Court, such behaviour “*undeniably constitutes an abuse*”.¹⁰⁷

The notion of a reasonable trader seems to reflect a behavioural standard deriving its contents from the moral evaluation of enterprises' conduct. It seems to be based on an ideal of an economic culture populated by morally and equitably acting market operators. Like in *Volvo*, there is effectively no economic, effects-based evaluation

105 For example *Venit* (2007), at p. 619, argues that non-exploitation is not consistent with the scope of the intellectual property right and would be condemned under intellectual property principles which authorise granting of licenses of a right where the right holder fails to exploit the invention. Accordingly, he argues that granting a compulsory license on the basis of competition law would not involve a conflict between competition law and intellectual property law principles.

106 Case T-30/89, *Hilti AG v Commission* [1991] ECR II-1439. See also case C-53/92 P, *Hilti AG v Commission* [1994] I-667. The European Court of Justice confirmed the Court of First Instance's ruling, but however did not discuss the intellectual property aspects of the case as these aspects were not appealed.

107 Case T-30/89, *Hilti AG v Commission* [1991] ECR II-1439, at paragraph 99.

of the allegedly dominant firm's conduct. Moreover, the standard for the royalties as defined by the United Kingdom patent legislation and the public authority, the Comptroller of Patents, affected the competition law evaluation of the reasonableness of the royalties asked. Hence, like in *Volvo*, there is also an element of comprehensive interpretation involved in *Hilti*: an implicit pursuit for coherence between intellectual property and competition law.

The Court of First Instance's *Tetra Pak I* -judgement¹⁰⁸ reflects the flexibility of the prohibition of abusing a dominant position by making it clear that an acquisition of an intellectual property right may constitute an abuse. Tetrapak's acquisition of its competitor left only one other minor competitor with an inferior technology on the relevant market. The acquisition gave Tetrapak an exclusive patent license that belonged to its main potential competitor endeavouring to break into that market. The effect of the acquisition was that the alternative technology protected by the acquired patent was taken out of reach not only from the acquired entity, but all competitors.

The Court treated this as an abuse. It distinguished the situation from *Parke Davies* and *Volvo* in that in these cases the technologies in question were developed by the companies themselves. Tetrapak, in turn, acquired technology developed by another undertaking. The argumentation of the Court thus implies that intellectual property may be protected more intensively in competition law when it is in the hands of its original developer. Whether the acquisition of intellectual property rights from others and thus the aggregation of market power through commercial transactions lessens the moral case for protection or the function of intellectual property rights as incentives remains unanswered in the Court's judgement.

Magill may also be interpreted from perspectives not restricted to the often repeated abstract test based on it. The circumstances of *Magill*, too, contain an element of condemnable non-working, even though the broadcasters could have created the product intended by *Magill* through cooperation and mutual licensing arrangements only. Moreover, the specific spin-off nature of the object of copyright,¹⁰⁹ the questionable legitimacy of protecting TV-listings and thus basic information with copyright,¹¹⁰ and the fact that the fixed term of copyright protection did not have its intended impact in the circumstances of the case affected the argumentation of the Commission and the Court of First Instance. Although the European Court of Justice did not discuss the merits of copyright in TV-listings or the incentive needed for their creation, such considerations likely affected its judgement.¹¹¹

108 Case T-51/89, *Tetra Pak Rausing v Commission* [1990] ECR II-309.

109 The object of protection was a spin-off product of broadcasting activities and did not need copyright as an incentive for its production. See e.g. *Frischmann & Waller* (2008), p. 33.

110 Listings were then protected similarly only in the Netherlands. See *van der Wal* (1994), p. 232.

111 See also *Poulsen* (1995), p. 357 and *Keeling* (2003), p. 387. *Drexel* (2008), at p. 47, goes as far as to state that "[n]ot having the power to harmonize domestic copyright law, the only option the ECJ had in *Magill* was to confirm a duty to license under Article 82 EC".

Hence, whereas the competition-related and consumer interest in opening the markets for comprehensive weekly TV-guides may not have been particularly strong,¹¹² the countervailing interest in upholding the copyright in the particular circumstances was even less deserving of protection.¹¹³ Thus, even though the test established in *Magill* is essentially based on the analysis of competitive effects only, the case may also be interpreted as lending some support for the interpretation and application of competition law so that the failures of intellectual property protection are taken into account in the overall weighing of interests.

7.3.4 Preliminary Evaluation of Early Doctrinal Development

The *Consten and Grundig* -judgement connected competition law to the free movement of goods -doctrine. In the absence of specific Treaty provisions addressing the relationship between intellectual property rights and competition law, the Court was left with the Treaty reference to industrial and commercial property in Article 36 FEU, ex. 30 EC, as a potential justification for impediments on the free movement of goods, and to Article 345 FEU, ex. 295 EC, assuring the member states that their systems of property ownership will not be affected by the Treaty.

Subsequently, the Court adopted the same approach with regard to the prohibition of abusing a dominant position. The duty not to interfere with the national systems of property ownership resulted in the problematic distinction between the *existence and exercise* of intellectual property rights. The reference to free movement law resulted in the relevance of the concepts *specific subject-matter* and *essential function* in the interpretations of competition law. In addition to the integration objective as a unifying telos underlying both free movement and competition law, the German *Inhaltstheorie* provided some institutional and intellectual support for the path chosen. It was based on the US *inherency* doctrine, subsequently rejected in US antitrust law.¹¹⁴

The notions of *essential function* and *specific subject-matter* are connected, and become relevant when applying the free movement provisions of the Treaty to nationally defined intellectual property rights. If a right conferred by a certain intellectual property is necessary in order to fulfil the essential function of the intellectual property at hand, that right forms part of the specific subject-matter of the intellectual property in question. This, in turn, indicates that the right owner may *prima facie* enforce the right – at the expense of free movement of goods or competition.

112 See also *Skinner* (1995), at p. 91-92, asking why is the satisfaction of consumer interests that relate more to consumer conveniences than to the prejudice of consumers sufficient to warrant compulsory licensing of copyright material and pointing out that the intended product added value in the sense of incorporating independently obtained components only.

113 See also e.g. *Tillberg* (1995), p. 654; *Bruun* (1996), p. 50 and *Govaere* (1996), p. 305, all stressing the particular nature of the object of copyright protection, likely affecting the significance of the *Magill*-judgement in future.

114 See about the *Inhaltstheorie* more closely *Heinemann* (2002), p. 43, 56-58 and 145-153.

The protected core of an intellectual property is thus defined by resorting to the policy aims justifying the intellectual property in question. The specific subject-matter of a right is hence indistinguishable from the essential function of an intellectual property, as also illustrated by the French term for specific subject-matter, *objet spécifique*, which expresses this double meaning of the specific subject-matter in a single concept.¹¹⁵

The *Windsurfing*, *Volvo*, the Court of First Instance's *Magill*- and *Grüne Punkt*-cases constitute the most illustrative – and formalistic – applications of the specific subject-matter doctrine in the area of competition law. In these cases the use of the specific subject-matter doctrine seems to partially correspond with the *Inhaltstheorie*. The *Windsurfing*-case, for example, has similarities in its approach with the *International Salt Company v United States of America*, decided by the US Supreme Court in 1947.¹¹⁶ However, the specific subject-matter does not wholly overlap with *Inhaltstheorie*, as even a right within the specific subject-matter has not enabled reliance in all circumstances.¹¹⁷ Furthermore, the Court also seems to redefine both the essential function and the specific subject-matter of each intellectual property right on a regular basis to fit the particular problem under consideration.¹¹⁸ Finally, it has not necessarily been very consistent in its approach with regard to different intellectual property rights.¹¹⁹

To avoid frustrating the national systems of intellectual property ownership the Court adopted the other much criticised doctrinal innovation: *the distinction between the existence and exercise of rights*, implying that restricting the exercise of a right would leave its existence intact. Yet, the definition of ownership rights is inherently connected to the dynamics of their life in the stream of commerce. One cannot in a logically enduring manner separate the existence of a right from its exercise.¹²⁰ It is also debatable whether the function of Article 345 FEU, ex. 295 EC, was to affect either the position of movables and intangibles, or the typical application of

115 The linguistic point is made by *Keeling* (2003), at p. 63.

116 In that case the conformity of the tying arrangement with the Sherman Act was decided on the basis of the scope of the patent: as the tied salt was not covered by the patent, tying was *per se* illegal. See *International Salt Company v United States of America*, 332 U.S. 392 (1947). See also *Heinemann* (2002), p. 44 for a brief case description.

117 This can be concluded from the expression “*may justify derogation*” used in e.g. joined cases C-71-73/94, *Eurim-Pharm Arzneimittel GmbH v Beiersdorf AG and others* [1996] ECR I-3603, at paragraph 35 and joined cases C-427, 429 and 436/93, *Bristol-Myers Squibb v Paranova A/S and others* [1996] ECR I-3457, at paragraph 48. See also the case law analysed in the opinion of Advocate General *Gulmann* in the *Magill* case, at paragraphs 46-51 and *Drexel* (2004), p. 792-793, who states that the *Volvo*-case “*may easily be misinterpreted in the sense of the inherency doctrine, according to which the intellectual property law defines the scope of protection and competition law must not interfere*”.

118 See also *Marengo & Banks* (1990), p. 230.

119 See also *Keeling* (2003), p. 65.

120 See with respect to property in general *Caruso* (2004), p. 758. With regard to intellectual property, see *Heinemann* (2002), p. 196-197 and the sources referred there.

competition law and the basic freedoms to property rights in general.¹²¹ Although the existence/exercise -dichotomy has disappeared from the case-law since *Hag II*-case,¹²² the Community Courts may still otherwise give disproportionate weight to the idea of non-interference of the Treaty with the national systems of (intellectual) property ownership. This typically leads to relative insulation of the core of intellectual property rights from the application of competition law and hence also to the neutralisation of the informational power enabled by it.¹²³

It is now apparent that Union law both creates and redefines property rights in intangible recourses. As a corollary, the reference to non-interference with national rules regarding the systems of property ownership has become increasingly artificial. Principles governing the relation between competition law and intellectual property *should be legitimate from a substantive perspective* rather than depend on the contingent issue whether the intellectual property in question happens to be based on member state or Community rules. The requirement of substantive argumentation could imply addressing the property aspect from the perspective of fundamental rights protection and other consequential, effects-based argumentation. More generally, property rights do not have a fixed structure and content, but are subject to controversial political and moral judgement. Conflicts between competing property rights and between property rights and other fundamental protected interests internalise the political and moral evaluation also inside the property system itself. Thus, what constitutes interference in property rights in the first place is anything but obvious. As the preceding fundamental rights discussion indicates, this applies to intellectual property, in particular.

The early doctrines reflect the division of competencies between the Community and the member states, the integration of the free movement doctrine with competition law, and the imposition of limits on the application of competition law on the basis

121 Cf. *Caruso* (2004), p. 755-757 (arguing that intangible property was probably intended to remain outside Article 345 FEU, ex. 295 EC) and *Heinemann* (2002), p. 195 (arguing that the telos of Article 345 FEU, ex. 295 EC covers intellectual as well as other property). On the scope of Article 345 FEU, ex. 295 EC generally see also cases C-452/01, *Margarethe Ospelt and Schlössle Weissenberg Familienstiftung* [2003] ECR I-9743, at paragraph 24; C-463/00, *Commission v Spain* [2003] ECR I-4581, at paragraph 67 (Article 345 FEU, ex. 295 EC "does not have the effect of exempting the Member States' systems of property ownership from the fundamental rules of the Treaty"); C-491/01, *The Queen and Secretary of State for Health, ex parte: British American Tobacco (Investments) Ltd and Imperial Tobacco Ltd* [2002] I-11453, at paragraph 147 (Article 345 FEU, ex. 295 EC "merely recognises the power of Member States to define the rules governing the system of property ownership and does not exclude any influence whatever of Community law on the exercise of national property rights"); C-350/92, *Spain v Council* [1995] ECR I-1985, at paragraph 22 ("It follows that neither Article [295] nor Article [30] of the Treaty reserves a power to regulate substantive patent law to the national legislature, to the exclusion of any Community action in the matter").

122 Case C -10/89, *SA CNL -Sucal NV v HAG GF AG* [1990] ECR I -3711. The absence of the distinction between existence and exercise in *Hag II* is stressed by *Joliet* (1991), at p. 314.

123 See e.g. case T-184/01 R, *IMS Health Inc. v Commission* [2001] II-2349, at paragraph 91 (concluding that "a judge hearing an application for interim relief should normally treat with circumspection a Commission decision imposing, by way of interim measures taken in the course of a pending investigation under Article 3 of Regulation No 17 and based upon a provisional interpretation of Article 82 EC, an obligation upon the proprietor of an intellectual property right recognised and protected by national law to licence the use of that property right").

of what is considered to form the core substance of each intellectual property right. As the European Court of Justice interpreted the scope of the basic competition law prohibitions broadly, the system of intellectual property protection with its underlying justifications had to provide the practical limits for competition law application. These intellectual property -derived doctrines included the ones discussed above: the distinction between the existence and exercise of rights as well as the doctrines of essential function and specific subject-matter of intellectual property rights.

The idea that the intellectual property institution and its underlying justifications determine the instances where the application of competition law is grounded reflects neglect of competitive effects and intellectual property -based power. Innovation, dynamic competition, protection of property as an individual fundamental right, and the protection of contractual freedom were similarly secondary or even non-existing concerns. Rather, the doctrines were designed to protect the *nationally defined* rights from the inappropriate encroachments of Community free movement and competition provisions alike. Abusive exercise of an intellectual property right was seen as a measure essentially enabled by the nationally defined intellectual property protection, but being against the true function of the right as defined by the Community Court. Prohibiting the measure on the basis of competition law was thus seen to restrict the practical scope of the intellectual property right *as guaranteed by national law*.

The specific subject-matter or the *function of intellectual property rights* as a criterion for the application of competition law has been endorsed by Govaere, who has suggested that the vague distinctions between existence and exercise or normal and abusive exercise should be replaced by a functionality test, whereby “*the use of the exclusive right in conformity with the function for which it was granted*” would become the critical criterion when answering what constitutes an abusive exercise of intellectual property under Community competition law. Accordingly, the exercise of an exclusive right would not be limited by the Community competition norms, provided the exclusive right is used in conformity with the function for which it was granted, as defined on the Community-level. The test was also intended to control the relationship between intellectual property and the basic freedoms of the Community, thus also implying a pursuit for coherence in the interpretations of the Community basic freedoms and competition law.¹²⁴

Govaere thus preferred the intellectual property -derived functionality test to the notions of exceptional circumstances and essential facilities doctrine alike. Yet, the reasons she gave for the rejection of the essential facilities doctrine may be questioned. She maintained that the relationship between restraints on competition and access to intellectual property by third parties is already part of the system of intellectual property protection. Hence, the logical conclusion for her was: “*No additional restraints on intellectual property owners need to be introduced in order to safeguard competition; it suffices to reinforce the restrictions inherent in the different types of*

124 Govaere (1996), p. 67-70.

intellectual property rights.¹²⁵ The reasoning implies subordination of competition law under intellectual property law in that competition law's function becomes reduced to that of mending the imperfections of intellectual property rights: competition law is permitted to limit the exercises of exclusive rights on the basis of the true goals and objectives of intellectual property laws only, as defined on the Union-level by the Community Courts.

This approach is problematic for several reasons. First, it does not enable independent role for the objectives of competition law in the intellectual property – competition law interaction. Second, it idealises the system of intellectual property protection, as demonstrated by the more recent intellectual property discussion, in particular.¹²⁶ Third, it ignores the extent to which intellectual property-enabled market and informational power may emerge on the basis of market-developments, such as network effects and standardisation, being beyond any instruments of intellectual property laws. The exclusive right may have been granted in conformity with its function and it may be exercised so as to exclude the entry of competitors to the same product market, thus likely being in conformity with the function of the exclusive right in question. Yet, both dynamic and static competition could be wholly excluded by factors unrelated with the intellectual property right, such as standardisation, network effects and lock in. Fourth, the approach proposed by Govaere reinforces a formalistic model whereby any exercise construed to lie within the function of the intellectual property right becomes insulated from the norms of competition, the basic Community freedoms and other interests, values and principles capable of being internalised in the application of the relevant laws.

However, these deficiencies do not connote that the societal functions of exclusive rights would be irrelevant in the interpretation and application of competition law. The function test – like the specific subject-matter and essential function tests – may enable principled discussion of the societal justifications of intellectual property rights in the application of competition law. In a sense, the test could enable the discussion of what constitutes economic constitutional law from the perspective of the intellectual property discourse. Yet the function-test could not legitimately function as the sole criterion when applying competition law to intellectual property rights.

Subsequently, the Community Courts and the Commission have recognised that the doctrines based on intellectual property protection alone are not adequate, as the weighing of the interest in protecting intellectual property on one hand and competition on the other hand may imply that there are reasons to limit even the core rights of the intellectual property in question. The *Magill*-case may be seen to demonstrate the changing of the paradigm. Whereas the Commission, the Court of First Instance and the Advocate General resorted to the concepts of specific subject-matter and essential function, the European Court of Justice avoided this and has done

125 *Ibid.*, p. 304-305.

126 See more closely chapter 5 and the sources referred to there.

so ever since.¹²⁷ Instead, it analysed the competitive effects of the refusal to license and stated that in *exceptional circumstances*, such as those prevailing in *Magill*, a refusal to license may constitute an abuse of a dominant position. The subsequent case law of the European Court of Justice has followed this basic approach, whereas the Court of First Instance (now the General Court) has referred to the specific subject-matter and essential function doctrines in some of its cases, as discussed earlier. The paradigmatic implications of the final *Magill*-judgement thus remained relatively ambiguous for the Court of First Instance and many commentators alike.¹²⁸

The essential facilities doctrine provides an alternative construction of the intellectual property – competition law interaction based on the evaluation of the stranglehold position possessed by the intellectual property owner and the analysis of the competitive effects caused by a refusal to license. The more recent case law regarding intellectual property – competition law interaction will be analysed below under this general competition law doctrine.

The blind spots of the essential facilities doctrine have been dynamic effects and thus also the features particular to intellectual property cases, as well as the evaluation of demand-side effects. The central focus has been on the supply-side and indispensability of the resource in terms of substitution. Even though the doctrines of essential function and specific subject-matter may seem formalistic, but yet indeterminate in practice, they brought the societal justification of each intellectual property into play with the basic European Union freedoms and competition law. The doctrines thus connected the definition of the limits of intellectual property rights to their justification as part of the judicial decision-making process. With regard to the essential facilities doctrine such considerations do not form part of its core orientation. Yet provided introducing such considerations under it is possible, the essential facilities doctrine may enable the analysis of competitive effects and market power, as well as the dynamic effects and the functions and justifications of intellectual property law.

127 Although *Keeling* (2003), at p. 67, is right in that the European Court of Justice referred to the Court of First Instance's discussion of the specific subject-matter in its own decision (at paragraph 28), this does not show – contrary to Keeling's interpretation – that the European Court of Justice *approved* the tribunal's argumentation concerning the specific subject-matter. Keeling seemed to presume that the specific subject-matter test is still part of the application of the prohibition of abusing a dominant position in instances involving intellectual property rights. See *ibid.*, at p. 385.

128 See e.g. *Keeling* (2003), p. 385, who declared that neither copyright in literary, artistic and musical works, nor patents and design rights will be threatened by this development. Yet, at the same time he pronounced that the *Magill*-doctrine “*is likely to be applied in the field of information technology and telecommunications*”, which however are areas dense with patents and blocking patent -situations. See also the subsequent treatment of standardisation under sub-chapter 7.7.

7.4 From Essential Function to Essential Facilities?

7.4.1 Introduction

What is generally known as the essential facilities doctrine has become one of the most hotly debated doctrines in European competition law, as well as in the US antitrust law, where the doctrine has its roots. For example, according to *Hawk*, a known US antitrust commentator, one important exception to the protection of competition over protection of competitors is dominant firm behaviour, and the application of the essential facilities doctrine, in particular. He maintains that “populist” or distributive concerns underlie the application of the doctrine.¹²⁹

Similar Chicago School sentiments echo in the European discussion, as well.¹³⁰ On the other hand, recent economic and legal theory has questioned the adequacy of the traditional microeconomic critique of the doctrine by discussing the multiple, but often hardly measurable “positive externalities” of open access regimes for the economy and society at large.¹³¹

The essential facilities doctrine reflects an idea that some privately controlled resources are hardly or impracticably duplicable, but so important for competition and dependent activities on adjacent markets that they must be offered for the use of competitors on terms enabling effective competition, yet providing a reasonable return on the investments made. In other words, refusal to provide access to certain facilities on reasonable terms may in some circumstances constitute an infringement of competition law. The cases typically concern vertically integrated firms operating on upstream and downstream markets.

Rather than constituting an independent judge-created doctrine capable of being applied as such, *the essential facilities doctrine should be seen as a description of a category of situations where it may be grounded to apply the basic competition law norms.*¹³² As a label capable of being attached afterwards to certain cases with similar characteristics, it is somewhat unproductive to debate on a general level whether the doctrine “really exists”,¹³³ or whether an intellectual property right could constitute an essential facility.¹³⁴ As existing case law demonstrates, a refusal to deal with physical facilities or intellectual property rights necessary for competition may constitute an infringement of competition law under certain conditions, irrespective of the labels attached to such situations.

129 *Hawk* (1998), p. 354-355. See also *Hovenkamp* (1998), p. 422-423.

130 See e.g. *Müller & Rodenhausen* (2008), *passim*.

131 See *Frischmann* (2005), *passim* (infrastructure theory) and *Frischmann & Waller* (2008) and *Waller* (2008), both *passim* (application of the infrastructure theory to the essential facilities doctrine). Infrastructure theory will be discussed in more detail subsequently under sub-chapter 7.6.2.

132 See also *Stratakis* (2006), p. 436.

133 See e.g. *Müller & Rodenhausen* (2008), *passim*.

134 See e.g. *Venit & Kallaughner* (1994), p. 337, who opine that intellectual property should be excluded from the category of essential facilities altogether.

Yet the doctrine brings forth some of the basic tensions underlying competition law: the protection and limits of property and contractual freedom, on one hand, and access to markets, freedom of infrastructural resources essential for competition, control of monopolistic positions and freedom to conduct business, on the other hand. It also involves decision-making between short and long term, or static and dynamic competition. The doctrine thus facilitates a principle-oriented discussion of the basic tenets underlying competition law.

It also enables discussion of intellectual property rights from the perspective of a competition law doctrine first developed in the context of tangible resources, such as railroad and harbour facilities. As such, it allows distancing from the specific intellectual property discourse in favour of a more general competition law analysis relating intellectual property to, and where necessary distinguishing it from, traditional objects of property ownership. In the following, the genesis of the essential facilities doctrine in US antitrust law will be first described, followed by a discussion of the relevant European case law. Perspectives relating the doctrine to intellectual property rights will continue the discussion.

7.4.2 The Genesis of the Essential Facilities Doctrine in US Antitrust Law

The genesis of the essential facilities doctrine is in the early US antitrust case law. The first case generally connected to the doctrine is *Terminal Railroad Association of St. Louis*, decided by the US Supreme Court in 1912.¹³⁵ The case will be briefly explained in the following.

The control of the three previously independent terminal facilities operating the railroad traffic through St. Louis over the Mississippi river had fallen into the hands of a single entity, the Terminal Railroad Association of St. Louis. At the time, St. Louis constituted a major east-west junction for rail traffic. Although the railroad bridges themselves were indiscriminatorily open for all, the lines connecting railroad termini with the bridges dominated the situation, as entering the bridge necessitated complying with the terms of the owner of the facilities. Importantly, the geographical and topographical situation connoted that it was practically impossible for any railroad company to pass through, or enter St. Louis and its industries and commerce, without using the facilities entirely controlled by the Association. In other words, there were no other reasonable means of entering the city or passing through. As a remedy to the Association's discriminatory practices, it was ordered to provide admission "of any existing or future railroad to joint ownership and control of the combined terminal properties upon just and reasonable terms placing such applying company upon a plane of equality in respect of benefits and burdens with the present proprietary companies". Moreover, it was ordered to provide definitively for the use of the terminal facilities by any other railroad not electing to become a joint owner, upon "just and reasonable terms and regulations" which have the effect of placing every such entity "upon as nearly an equal plane as may be with respect to expenses and charges as that occupied by the proprietary companies" (both citations at p. 411).

This seminal case explicates the central features of the essential facilities doctrine as developed in subsequent case law and scholarly literature: an entity or entities

135 *United States v Terminal Railroad Association of St. Louis et al.*, 224 U.S. 383 (1912).

controlling a non-duplicable facility or input necessary for competition in adjacent markets must provide non-discriminatory access to the facility or input in question. *Epstein* has connected the essential facilities doctrine to common law rules of non-discrimination concerning common carriers.¹³⁶ The public interest in securing the openness of a central transportation facility enabling diverse activities downstream is indeed high. In subsequent case law the relevant principles have been extended to intangible information resources and communications and power networks, in particular.¹³⁷

Another important case generally connected to the doctrine is *Associated Press v US*, decided by the Supreme Court in 1945.¹³⁸ The case will be discussed below in more detail due to its specific relevance for the argumentation advanced in this research.

Associated Press was a cooperative association having publishers of more than 1.200 newspapers as its members. Its by-laws prohibited all members from selling news controlled by Associated Press to non-members. Each member also had powers to block its non-member competitors from membership. Competing non-members were thus effectively excluded from the news services and individual news of Associated Press, the largest news agency at that time. The Supreme Court stated that this may have most serious effects on the publication of competitive newspapers, both those currently published and those which but for these restrictions, might be published in the future. A newspaper without the service of the Associated Press was thus seen to be at a serious competitive disadvantage.

Moreover, the combination created through the by-laws was seen as an extra-governmental agency, which set rules for the regulation and restraint of interstate-commerce. It also provided extra-judicial tribunals for the determination and punishment of violations. Because of this, it was seen to trench upon the power of the national legislature and to violate the Sherman Act. The Court also rejected the contention that the application of the Sherman Act would be an abridgement of the freedom of the press as guaranteed by the First Amendment. Importantly, the Supreme Court rather saw that protecting the freedom of the press spoke strongly in favour of applying the Sherman Act. It stated (at paragraph 20 of the decision):

“The First Amendment, far from providing an argument against application of the Sherman Act, here provides powerful reasons to the contrary. That Amendment rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public, that a free press is a condition of a free society.”

The Court also held the following regarding freedom of the press:

“Freedom to publish means freedom for all and not for some. Freedom to publish is guaranteed by the Constitution, but freedom to combine to keep others from publishing is not. Freedom of the press from governmental interference under the First Amendment does not sanction repression of that freedom by private interests.”

The case is significant, as it demonstrates the capacity of the antitrust and competition laws to function as instruments enabling partial control of private regulation constraining the collective good -aspects of fundamental rights, in this instance the

¹³⁶ *Epstein* (1998), p. 302-303. Similarly *Bavasso* (2002), p. 68-69. *Ghidini* (2006), p. 110 and *Ghidini & Arezzo* (2007), p. 116, say that the doctrine of easements or servitudes is the substantive ancestor of the essential facilities doctrine.

¹³⁷ Case *Otter Tail Power Co. v United States*, 410 U.S. 366 (1973) concerned power grid as an essential facility. Cases regarding information and communications facilities will be discussed below.

¹³⁸ *Associated Press et al. v United States*, 326 U.S. 1 (1945). See *Frischmann & Waller* (2008), p. 52-54 for a discussion of the case from the perspective of infrastructure theory.

freedom of the press interpreted as the maxim of “widest possible dissemination of information from diverse and antagonistic sources”.¹³⁹ The control of informational power may thus be an antitrust concern.

By the time of *MCI Communications Corporation v AT&T*¹⁴⁰, decided by the 7th Circuit in 1983, the essential facilities doctrine had developed in the case law of lower courts.¹⁴¹ Thus, the 7th Circuit could expressly invoke the notion of the essential facilities doctrine and, partially based on pre-existing case law, formulate four cumulative conditions for its application. The control over railroad facilities had now been substituted by the AT&T’s control over telecommunications facilities, the so called last mile.

The Court explained that a refusal to deal may be unlawful because a monopolist’s control of an essential facility can extend monopoly power from one stage of production to another, and from one market into another. Firms controlling such essential facilities have the obligation to make the facility available on non-discriminatory terms, provided the following four conditions are present: 1) a monopolist controls the facility; 2) a competitor is not able to practically or reasonably to duplicate it; 3) the monopolist denies the use of the facility; and 4) it is feasible to provide the facility.

These conditions were seen to be satisfied in the case at hand, as AT&T had complete control over the local distribution facilities MCI Communications Corporation (MCI) required. Furthermore, the interconnections were essential for MCI to offer services related to foreign exchange lines (FX) and common control switching arrangements (CCSA). The facilities met the criteria in that MCI could not duplicate the local lines. Given the technology at the time of the decision, local telephone service was generally regarded as a natural monopoly and was regulated as such. It was not economically feasible for MCI to duplicate the local distribution facilities involving millions of miles of cable and line to homes and businesses. Moreover, regulatory authorisation could not be obtained for such an uneconomical duplication. There was also evidence that AT&T denied the interconnections for FX and CCSA services, when they could have been feasibly provided. Finally, there was no legitimate business- or technical reason for AT&T’s denial of the requested interconnections.

The four-prong criteria of essentiality explicated in the case developed into a frequently cited test for the application of the essential facilities doctrine in subsequent case law and legal literature alike. However, in 2004 the US Supreme Court took a very restrictive approach towards the essential facilities doctrine in *Trinko*.¹⁴² It limited the availability of the essential facilities doctrine and the related antitrust principles

139 In this direction see also *Bavasso* (2002), at p. 71, stating that the *Associated Press* –case “linked the notion of essentiality to that of utility of the public and to constitutional values pursued in the public interest”. However, he ultimately holds that such an approach “would confuse rather than clarify the situation”, *ibid.*, at p. 72. Cf. with *Frischmann & Waller* (2008), p. 52-54, who treat the *Associated Press* as a very strong case for the application of the essential facilities doctrine, mostly due to the shareable nature of the resource and the multiple spillover effects (freedom of speech, education etc.) compulsory access would have. See also the discussion of the *infrastructure theory* subsequently.

140 *MCI Communications Corporation and MCI Telecommunications Corporation v American Telephone and Telegraph Company*, 708 F.2d 1081 (7th Cir. 1983).

141 See about this case law e.g. *Piropato* (2000), under heading IV and *Taylor* (2001), *passim*.

142 *Verizon Communications Inc v Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 407 (2004). For example, *Stratakis* (2006), at p. 435, holds that it is difficult to resolve the different approaches in the previous *Aspen Skiing Co. v Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985) and *Eastman Kodak Co. v Image Technical Services Inc*, 112 S.Ct. 2072 (1992) on one hand and *Trinko*, on the other hand.

within regulated industries, where specific laws address the question of access to infrastructures like the telecommunications facilities. Nevertheless, the pre-existing case law had already affected the development of European competition law, where the doctrine assumed an important role. However, the European Court of Justice has not explicitly referred to this doctrine. The contents and evolution of the doctrine in Europe will be discussed in the following.

7.4.3 Essential Facilities Doctrine in European Competition Law

Evolution of the Doctrine in Case Law

The essential facilities doctrine originally developed in Community competition law through the decisions of the Commission. Reflecting the US-origin of the doctrine, the early cases concerned access to non-duplicable transportation facilities, especially harbours, controlled by one or several dominant firms. In *Sealink/B&I Holyhead* the Commission formulated the contents of the essential facilities doctrine as follows.

”A dominant undertaking which both owns or controls and itself uses an essential facility, i.e. a facility or infrastructure without access to which competitors cannot provide services to their customers, and which refuses its competitors access to that facility, or grants access to competitors only on terms less favourable than those which it gives its own services, thereby placing the competitors at a competitive disadvantage, infringes Article 86 [now 102 FEU], if the other conditions of that Article are met. A company in a dominant position may not discriminate in favour of its own activities in a related market. The owner of an essential facility which uses its power in one market in order to strengthen his position in another related market, in particular, by granting its competitor access to that related market on less favourable terms than those of its own services, infringes Article 86 [now 102 FEU] where a competitive disadvantage is imposed upon its competitor without objective justification.”¹⁴³

The Commission has also applied the doctrine in case of collective dominance,¹⁴⁴ thus indicating the potential applicability of the related principles with regard to patent pools and other contractual arrangements whereby access to the essential resources is controlled jointly by several firms.¹⁴⁵ Furthermore, it has applied the same principles also when the party requesting access seeks to enter the adjacent markets for the first time.¹⁴⁶

Thus, in *British Midland /Aer Lingus* the Commission stated that a refusal to provide access to the dominating airline reservation system constitutes an abuse if such a refusal has “a significant impact on the airline’s ability to start a new service or

143 See *XXII Report on Competition Policy* (1992), at paragraph 219.

144 *Port of Rødby*, Commission’s decision 94/119/EC, OJ L 55, 1994.

145 See also *Stratakis* (2006), p. 439-440. The essential facilities situations may also be decided on the basis of the prohibition of cartels under Article 101 FEU, ex. 81 EC. After establishing collusion, it may be relatively easier to condemn a refusal under the prohibition of cartels than in a situation where only one firm controls the facility, as an anticompetitive intent may be obvious and there may be a benchmark available for addressing the conditions of access. However, the indispensability analysis and the evaluation of the competitive and demand-side effects is largely similar.

146 *Sea Containers v Stena Sealink*, Commission decision 94/19/EC, OJ L 15, 1994 p. 8-19 and *British Midland /Aer Lingus*, Commission decision 92/213/EC, OJ L 96, 1992.

sustain an existing service on account of its effects on the other airline's cost and revenue in respect of the service in question, and when the dominant airline cannot give any objective commercial reason for its refusal." The decision also demonstrates, together with other practice,¹⁴⁷ that the principles underlying the essential facilities doctrine have been applied to information services and information of various kinds.

The *IBM Undertaking*¹⁴⁸ extended the principles to information and intellectual property rights.

In the Undertaking, IBM committed itself to sharing interface information in a timely manner concerning its new releases of System/370 product, which had become an important industry standard. It also committed to disclosing the modifications of any interfaces at the time the change was announced. The announcements were to be made sufficiently in advance of general availability to permit competing firms to make the necessary adjustments in products interoperating with System/370. The Undertaking covered hardware-to-hardware, hardware-to-software and software-to-software interfaces. In addition to information not protected by intellectual property, the Undertaking also covered proprietary information. For non-proprietary information IBM reserved the right to make a reasonable and non-discriminatory charge to cover the costs of reproduction and dissemination of information. For proprietary information it was allowed to charge a reasonable and non-discriminatory royalty.

The Community Courts have also evaluated the conditions under which a firm has an obligation to provide access to facilities or inputs considered necessary for competition. *Oscar Bronner* constitutes a landmark ruling.¹⁴⁹ Other important decisions are *Magill*¹⁵⁰ and *IMS Health*¹⁵¹ of the European Court of Justice, as well as the *Tiercé Ladbroke*¹⁵² and *Microsoft*¹⁵³ -judgements of the Court of First Instance. Importantly, all four last mentioned cases involve considerations related to intellectual property rights. For this reason, *Oscar Bronner* will be analysed first and the four other cases subsequently and, to avoid repetition, only to the extent they may be seen to concern the essential facilities doctrine in general.

Oscar Bronner concerned a refusal on the part of Mediaprint GmbH to include Oscar Bronner GmbH's daily newspaper, Der Standard, in its nationwide newspaper home-delivery scheme in Austria. Mediaprint held a very large share of the daily newspaper market in Austria and the newspaper home-delivery scheme operated by it was the only nationwide in Austria. The Court adopted a

147 See for example *Decca Navigator Systems*, Commission Decision 89/113, OJ L 43/27, 1989. Rcal Decca's navigation signal constituted in practice a *de facto* industry standard and an essential facility for the manufacturers of devices utilising the signal.

148 See about the *IBM-undertaking* *XIVth Report on Competition Policy* (1984), p. 77 and *XXIst Report on Competition Policy* (1991), p. 81. The undertaking is also discussed in the Commission's *Microsoft*-decision (Case COMP/C-3/37, 792 *Microsoft*), at paragraphs 736-742.

149 Case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECR I-7791.

150 Joined Cases C-241/91 P and C-242/91 P *RTE and ITP v Commission* [1995] ECR I-743.

151 Case C-418/01, *IMS Health GmbH v NDC Health GmbH* [2004] ECR I-5039.

152 Case T-504/93, *Tiercé Ladbroke SA v Commission* [1997] ECR II-923.

153 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601.

relatively restrictive approach towards the essential facilities doctrine. It noted that for there to be abuse the refusal should 1) eliminate all competition on the part of the firm requesting access; 2) be incapable of being objectively justified and; 3) the service in itself should be indispensable to carrying on that person's business, inasmuch as there is no actual or potential substitute in existence for it. The criteria was not satisfied in the conditions of the *Bronner*-case, as there were other methods of delivering newspapers to the readers, such as through sale in shops and at kiosks. The fact that these other methods may be less advantageous for the competitors to distribute certain newspapers did not transform Mediaprint's home delivery scheme into an indispensable service. In addition to this, there were neither technical or legal, nor economic obstacles capable of making it impossible, or even unreasonably difficult, for a competitor to establish, alone or in cooperation, its own nationwide home-delivery scheme and use it to distribute its own daily newspapers.

The logic of these cumulative criteria is not entirely clear. Although in *Bronner* the Court seemed to treat the elimination of all competition as a separate criterion from the indispensability requirement, in earlier case law¹⁵⁴ the elimination of all competition was part of the indispensability analysis.¹⁵⁵ Subsequent case law indicates a return to the pre-existing case law: the elimination of all competition and the indispensability requirement ultimately merge into one criterion: if a resource is indispensable, it by definition eliminates all competition on the part of the firm requesting access, and *vice versa*.¹⁵⁶ The indispensability requirement is thus decisive.

Dimensions of Indispensability

The indispensability requirement has several dimensions. As these dimensions are relevant also with regard to intellectual property, they will be discussed here thoroughly. According to Advocate General *Jacobs* in *Bronner*, absolute indispensability is not required.¹⁵⁷ If a significant number of firms may operate without access to the resource under dispute, it is not indispensable.¹⁵⁸ As the judgement of the Court demonstrates, access to less advantageous resources may abolish the indispensability of a resource under dispute.¹⁵⁹

154 Joined cases 6/73 ja 7/73, *Commercial Solvents v Commission* [1974] ECR 229, at paragraph 25; case C-311/84, *Télémarketing (CBEM) v Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité (IPB)* [1985] ECR 3261, at paragraph 26; and joined cases C-241/91 P ja C-242/91 P, *RTE and ITP v Commission* [1995] ECR I-416, at paragraph 56.

155 See also *Le* (2005), *passim* and *Evrard* (2004), p. 507-508 ja 512.

156 See case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* [2004] ECR I-5039, at paragraphs 40-47. In the *Microsoft*-judgement, the Court of First Instance analysed network effects under the elimination of competition. It concluded (at paragraph 562) that there were good grounds for the Commission to act as network effects would make it difficult to subsequently reverse the situation.

157 Case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECR I-7791, at paragraph 46 of the Advocate General's Opinion. Cf. case T-158/00, *Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland (ARD) v Commission* [2003] II-3825, at paragraph 225.

158 See also *Le* (2005), p. 7-8.

159 See also case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* [2004] ECR I-5039, at paragraph 28 and a decision from France: *Nouvelles Messageries de Presse Parisienne v Messageries Lyonnaises de Presse*, Decision of the Supreme Court (Cour de cassation), 12 July 2005.

This approach was confirmed in *Microsoft*, where the Court of First Instance held that if the existing degree of interoperability does not enable developers of non-Microsoft work group server operating systems to remain viably on the market for those operating systems, it follows that the maintenance of effective competition on that market is being hindered.¹⁶⁰

Although in the circumstances of the *Microsoft*-case this implied the need for the competing operating systems to be able to interoperate with the Windows domain architecture on an equal footing with Windows work group server operating systems, this conclusion was based on the more general idea that access to resources enabling viable competition on the relevant market and thus the maintenance of effective competition, must generally suffice.¹⁶¹ These resources may be alternative existing resources, less advantageous resources provided for by the dominant firm, or less advantageous resources capable of being produced by the competitors individually or in cooperation. However, the *Microsoft*-judgement also makes it clear that there is no need to wait for the concrete elimination of all competition before a resource may be deemed indispensable.¹⁶² The elimination of competition -criterion would thus mean that if the refusal applied *erga omnes*, virtually no competition could prevail on the affected markets.¹⁶³

Indispensability must be evaluated from several perspectives.¹⁶⁴ *First*, it must be established whether there exists viable substitutes for the resource in question from the perspective of competitors operating on the downstream markets.¹⁶⁵ Access to an alternative resource abolishes the essentiality of the resource under dispute even if it would be somewhat more advantageous to use the latter. A firm requesting access may thus have to modify its operations or production so as to comply with the requirements of the already available resource. Similarly, it must contend with an existing resource enabling viable competition: the essential facilities doctrine does not have the function of permitting regular access to the latest art if other resources are available.

Second, the requested resource should constitute a strict complement in the production process or operation of the firm requesting access. It is thus possible that the requested resource is the only of its kind (that is there are no substitutes for it), but it is nevertheless not indispensable for the intended production or operation in

160 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, at paragraphs 228-229, 421 and 563.

161 *Ibid.*, at paragraph 230.

162 *Ibid.*, at paragraph 561.

163 See also Villarejo (2006), p. 546.

164 See also Crocioni & Veljanovski (2003), *passim*.

165 Case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECR I-7791, at paragraph 46 of the Advocate General's Opinion and at paragraph 43 of the European Court of Justice's judgement; case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* [2004] ECR I-5039, at paragraph 28 and case T-5/97, *Industrie des poudres sphériques SA* [2000] ECR II-3755, at paragraphs 50-58.

question. In *Tiercé Ladbroke*¹⁶⁶ the Court of First Instance rejected Tiercé Ladbroke's request for the license to copyrighted broadcasting content on this basis: even though there were no substitutes for the broadcasting signals of the horse races in question, utilising them was not indispensable on the adjacent markets for betting where Tiercé Ladbroke's operated. In other words, if the resource is merely convenient or useful for the operation or production activities of the firm in question, but not an inescapable part of such activities, the resource is not indispensable.

Third, it seems that indispensability must also be evaluated from the viewpoint of consumers: if from their perspective there are close enough substitutes on the adjacent markets not utilising the requested resource, it may be argued that the requested resource is indispensable only for some competitors, not for competition in general.¹⁶⁷ However, the dominant firm's market power in the downstream market seems not to be an essential element of the analysis, but merely one relevant consideration in the overall evaluation. The interpretation seems to differ in this respect from the US antitrust case law where market power on the downstream market is required after the Supreme Court's *Trinko*-judgement.¹⁶⁸

Fourth, the resource must be indispensable in the sense that the competitors could not, alone or in cooperation, construct a substitute resource enabling competition.¹⁶⁹ As already mentioned, the eventual substitute resource need not be equally advantageous to the existing one in every respect. To an extent the construction of a somewhat inferior resource is feasible and would enable viable competition on the relevant markets, it should typically be prioritised over compulsory access to the existing resource.¹⁷⁰ When analysing the economic feasibility of constructing an alternative resource, it is necessary to establish that it is not economically realistic to create a second resource for activities with a scale comparable to that utilising the existing scheme. The function of the essential facilities doctrine would thus be restricted to natural or inevitable monopolies and to instances where substitution is *de facto* or *de jure* precluded.¹⁷¹ Also heavy public subsidisation of the existing facility's construction could imply that expecting the competitors to finance a new facility privately would not enable viable competition with the owner of the existing facility.

166 Case T-504/93, *Tiercé Ladbroke SA v Commission* [1997] ECR II-923, at paragraph 133.

167 Case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECR I-7791, at paragraphs 58 and 61 of the Advocate General's Opinion and at paragraph 38 of the European Court of Justice's judgement.

168 See also *Stratakis* (2006), p. 436.

169 Case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECR I-7791, at paragraphs 65 and 68 of the Advocate General's Opinion and at paragraphs 44-46 of the European Court of Justice's judgement and case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* [2004] ECR I-5039, at paragraph 28.

170 In addition to the case law cited previously, see also *Haracoglou* (2008), p. 136.

171 See also *Bavasso* (2002), p. 67 and 104 (discussing the doctrine with regard to telecommunications and noting that the doctrine now predominantly captures natural monopolies).

In the US antitrust doctrine *post Trinko*, recourse to antitrust law seems to be excluded also where a regulatory body could mandate and control the terms and conditions of entrance. In effect, the existence of competitive remedies elsewhere in legislation, such as the specific telecommunications laws, would be part of the indispensability analysis in that it would exclude successful reliance on antitrust principles regarding an obligation to supply.¹⁷²

The position under the Union competition law is unsettled. Whereas the Court of Justice and its Advocate Generals have expressed arguments similar to the US Supreme Court in *Trinko*,¹⁷³ the Court of First Instance and the Commission have applied competition law also in regulated markets where access-remedies have been available.¹⁷⁴ This may constitute a second major difference in the interpretations of the essential facilities doctrine in Europe and the US. The approach of the Court of First Instance and the Commission is preferable, unless regulation is all-encompassing and would also in practice provide adequate remedies for the correction of the problems. In fact, the essential facilities doctrine seems to have the most potential application in situations between fully competitive markets and fully regulated ones.¹⁷⁵

Although the principles defining the indispensability requirement are subject to modifications and reinterpretations as the appropriate cases emerge, indispensability is interpreted strictly, to the extent that very few resources satisfy the requirements established in case law. Yet, as the subsequent discussion demonstrates, intellectual property cases may relatively often fulfil the indispensability criteria. Much of information protected by copyright is not substitutable with any other information and may be a strict complement for the intended activities on the adjacent markets, as the *Magill*-case demonstrates.

Similarly, a patent within a standard specification or *de facto* standard may be *essential* in the sense that it is impossible to implement the standard without using the intellectual property right in question, as the *IMS-Health* and *Microsoft-*

172 See also *Stratakis* (2006), p. 435-436 (also referring to US case law *post Trinko*). For insightful criticism of the idea of excluding the application of the essential facilities doctrine within regulated sectors, see *Candeub* (2006), *passim* and *Frischmann & Waller* (2008), p. 22-24 (noting that “*Trinko* appears to reject the essential facilities doctrine where it is most needed”).

173 See case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECR I-7791, at paragraph 69 of the Advocate General’s opinion and case C-109/03, *KPN Telecom BV v Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)* [2004] ECR I-11273, point 41 of the Court’s judgement and point 58 of the Advocate General’s Opinion.

174 See e.g. case T-271/03, *Deutsche Telekom AG v Commission* [2008] ECR II-477 and COMP/38.784 - *Wanadoo España v Telefónica*, decided 4 July 2007. See also *Hatzopoulos* (2007), p. 350-351.

175 See *Frischmann & Waller* (2008), p. 22-26, 45 and 50 (noting, *ibid.*, at p. 45, that in many essential facilities cases the industries in question are too small to have established regulatory structure, or where the regulatory structure has failed to address a certain situation).

cases demonstrate.¹⁷⁶ However, before analysing resources protected by intellectual property rights as potential essential facilities, other factors affecting the outcomes in the relevant case law will be discussed.

Other Relevant Considerations in the Relevant Case Law

Although the positions of the Community Courts have led to a strict interpretation of the indispensability requirement, the requirement of the existence of two separate markets – that for the upstream resource and that for the downstream products or services – has been interpreted broadly in the case law after *IMS-Health*.

IMS-Health involved a situation where the competitors strove to enter the *same* market where the IMS-Health GmbH was making its profits: the market for providing sales data in Germany for the pharmaceutical industries. The competitors requested the right to utilise a database structure developed by IMS Health together with the pharmaceutical industries in Germany. The database structure had gained the position of a *de facto* standard. Providing the relevant information in another form would have connoted interoperability problems with the computer programs used by the pharmaceutical industries for analysing sales data from Germany. During the proceedings before the European Court of Justice it was presumed that the database structure enjoyed copyright protection also against the derivative structures created by the competitors.¹⁷⁷ However, IMS-Health had not licensed the database structure or its derivative alternatives to any entities. Thus, the presence of an existing upstream market for the input required by the competitors was uncertain.

The Court's position was that it is sufficient if one can identify a potential or even a hypothetical market for the upstream input. There is a potential or hypothetical market for an input where the products or services are indispensable to the conduct of a particular business activity and where there was an actual demand for them on the part of undertakings which sought to carry on that business.¹⁷⁸ One feasible rationale for such an interpretation is that the contrary conclusion would have fostered vertical integration and avoidance of any licensing.¹⁷⁹ The principle was confirmed subsequently in the *Microsoft*-judgement of the Court of First Instance.¹⁸⁰

In other words, any input indispensable for another stage of production or service provision easily satisfies the requirement. In practice, the condition of two identifiable markets has thus lost its significance or merged into the indispensability criterion.¹⁸¹ This greatly expands the potential scope of the essential facility doctrine's application, as any resource or input may qualify as an essential facility irrespective of whether

176 In the context of standards it would often be unreasonable or even impossible to require the establishment of a new standard or modification of the existing one. See more closely the subsequent treatment of standardisation.

177 See, however, Commission Decision of 13 August 2003 (2003/741/EC), where the Commission withdrew its earlier decision (COMP D3/38.044 – NDC Health/IMS Health: Interim measures), as the Appellate Court in Germany (Oberlandesgericht Frankfurt am Main) held that the competitors' alternative database structures constituted no infringement of IMS Health GmbH's copyright.

178 Paragraphs 42-44 of the European Court of Justice's *IMS-Health* –judgement (referred to above).

179 See *Conde Gallego* (2008), p. 225. See also *Drexel* (2004), p. 798-799.

180 Point 335 of the Court of First Instance's *Microsoft*-judgement (referred to above).

181 See also *Howarth & McMahon* (2008), p. 120.

it has been provided, licensed or sold previously to any external entities. It is thus possible to open for competition the primary market where the intellectual property is being exercised.¹⁸² Two-market leveraging is not required for the exercise of the intellectual property right to constitute an abuse of a dominant position.¹⁸³

On the other hand, the past behaviour and the intent of the firm controlling an essential facility do affect the competition law evaluation. For example, a change of strategy from openness to more limited interoperability or more restricted provision of indispensable information may reflect installed-base opportunism, a strategy whereby a firm controlling a systems technology first creates dependencies and trust on the continuity of the openness policy by inviting and nurturing a growing ecosystem based on the core technology. Where an enterprise has by its active, commercially motivated measures created opportunities for other economic entities and trust on the continuation of that policy, it is grounded to secure through competition law that this trust and dependencies will not be frustrated by a subsequent change of policy.¹⁸⁴

Hence, whether the essence of the case is an exclusionary or leveraging strategy and thus not a mere refusal to license, is a highly relevant consideration.¹⁸⁵ Such factors were relevant in the *Microsoft*-decision. Installed-base opportunism may reflect a strategy to exclude competitors, to artificially maintain a dominant position, or to leverage it into other markets.

More generally, a *disruption of previous levels of supply or licensing* is a relevant factor in the determination of an obligation to supply or license.¹⁸⁶ In addition to providing a benchmark for addressing the price and other terms of supply, the previous practice may have created legitimate expectations about the continuation of supplies in the future.¹⁸⁷

Moreover, if a refusal to supply or license would lead to the exclusion of firms from their existing markets, the effects on the legitimate expectations and rights of other market participants would be more serious than in a case where the firms requesting supplies or licenses would be willing to enter the markets in question for the first time. In the latter situation, the refusal would not jeopardise the existence or the existing

182 See also *Conde Gallego* (2008), p. 228.

183 See also *Venit* (2007), p. 626-627. In this respect, the situation differs from the US antitrust law.

184 See also *Pöyhönen* (2000), p. 179.

185 See also *Fox* (2007), p. 641.

186 See joined cases 6/73 ja 7/73, *Commercial Solvents v Commission* [1974] ECR 229, at paragraph 25; case 27/76, *United Brands and United Brands Continentaal v Commission* [1974] ECR 223, at paragraph 183; joined cases C-468/06-C-478/06, *Sot. Lélos kai Sia EE and others v GlaxoSmithKline AEVE Farmakftikon Proïonton* [2008] ECR I-7139, at paragraphs 34, 49 and 71. See also the Commission's Decision COMP/C-3/37.792 *Microsoft*, 24 March 2004, at paragraph 578 and the Opinions of Advocate Generals in case C-53/03, *Synetairismos Farmakopoion Aitolias & Akarnanias (Syfait) etc. v Glaxosmithkline AEVE* [2005] ECR I-4609, at paragraph 61 and case C-109/03, *KPN Telecom BV v Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)* [2004] ECR I-11273, at paragraph 40. Cf. with US-case *Data General Corporation v Grumman Systems Support Corporation*, 36 F.3d 1147, 1187-88 (1st Cir. 1994), where a change of strategy from liberal licensing and access to service tools into a restricted business model did not rebut the justification of the conduct based on the existence of copyright protection.

187 See also *Villarejo* (2006), p. 545. As said, there does not have to be a pre-existing relationship between the dominant firm and the firm requesting access, like in the US *post-Trinko*. See also *Stratakis* (2006), p. 436.

activities of the firms in question, but would merely restrict their freedom to enter new markets. If the firm controlling an essential facility would not have enticed others to enter such markets, the refusal to supply would not likely frustrate the legitimate expectations or a trust created by the dominant operator either.

Treating such a refusal more strictly is also in conformity with economic efficiency, as the investments already made by others would be frustrated by the subsequent refusal.¹⁸⁸

Furthermore, a *discriminatory discontinuation of supply or licensing* may place the discriminated firm in a competitive disadvantage in relation to the ones being supplied or licensed, and could be interpreted as an indication of an exclusionary purpose.¹⁸⁹ Even without discontinuation of licensing a *discriminatory refusal* to license may constitute an abuse more easily than a total refusal for two related reasons: a discriminatory refusal may already place the discriminated firms on a competitive disadvantage in comparison to the licensed ones, and there is a benchmark available for determining the level of royalties and other licensing terms.

Similarly, in case of a *qualified refusal to license*, the terms suggested by the licensor could establish competitive concerns not comparable with an unconditional refusal and may yet provide a benchmark for defining some licensing terms acceptable for the right owner. Thus, a discriminatory refusal to license, a refusal to continue licensing and a qualified refusal to license may constitute an abuse of a dominant position more easily than a total refusal.¹⁹⁰ Finally, if the refusal has had the intent or effect of restricting the realisation of the internal market, competition law intervention has been more likely.¹⁹¹

The dominant firm may also rely on an *objective justification* to defend its behaviour *prima facie* constituting an abuse of a dominant position. In addition to this, the Commission and at least one Advocate General have endorsed the possibility to justify the conduct through an *efficiency defence*.¹⁹² The latter would connote that to the extent the conduct of the dominant firm produces more efficiencies than competitive harms, it would be acceptable. The dominant firm bears the burden of proof regarding both the objective justification and the efficiency defence. According to the Court of First Instance in *Microsoft*, an objective justification may also relate to the need to protect

188 See e.g. *Farrell & Weiser* (2003), p. 117.

189 See *Aspen Skiing Co. v Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985) and *Lemley & Weiser* (2007), p. 816.

190 As stated earlier, in the US antitrust law finding an infringement of Section 2 of the Sherman Act seems to be restricted to discriminatory refusals to license and conduct going beyond a mere refusal. The antitrust agencies now state that “liability for mere unconditional, unilateral refusals to license will not play a meaningful part in the interface between patent rights and antitrust protections”. See DOJ & FTC (2007), p. 30 and 32.

191 Joined cases C-468/06-C-478/06, *Sot. Lélos kai Sia EE and others v GlaxoSmithKline A EVE Farmakftikon Proïonton* [2008] ECR I-7139.

192 See the discussion of this defence in the previous main chapter. See also Commission Decision COMP/38.784 - *Wanadoo España v Telefónica*, 4. July 2007, at paragraph 619 and Advocate General Colomer’s Opinion in joined cases C-468/06-C-478/06, *Sot. Lélos kai Sia EE and others v GlaxoSmithKline A EVE Farmakftikon Proïonton* [2008] ECR I-7139, at paragraphs 116-121 of the Opinion.

the innovation incentives of the dominant firm. This and other aspects of the case law will be discussed subsequently. Immediately below, the essential facilities doctrine will be connected to intellectual property right protection in more detail.

7.4.4 Intellectual Property and Essential Facilities

Introduction

The transition from the industrial to information society connotes, among other things, that informational services, information, and infrastructures enabling communication and innovation continue assuming the central position the physical resources like railroad and harbour facilities had during the industrial era.¹⁹³ Seen in the light of the expansion and intensification of intellectual property protection, it becomes apparent that many of these central facilities are protected by intellectual property rights. Furthermore, as already said, intellectual property protection may imply that the indispensability requirement is relatively easily satisfied in cases of unique information and technical standards, in particular.

Moreover, the non-rivalrous nature of intellectual resources like technical ideas connotes that there are no problems of congestion or limited capacity to share. Finally, the absence of natural limits for exclusivity comparable to the physicality of traditional objects of property ownership implies that an intangible input protected globally may confer market power and condition access to various activities on a world scale. Yet, one of the most hotly disputed issues concerning the essential facilities -doctrine continues to be whether the relevant principles could extend to intellectual property rights. Some authors have opined that the doctrine should not be extended to intellectual property protection.¹⁹⁴ On the other hand, the Commission has treated the *Magill*-ruling as an expression of the essential facilities doctrine.¹⁹⁵

Irrespective of whether one chooses to aggregate the relevant intellectual property case law under the banner of the essential facilities, intellectual property rights *have* functioned as indispensable inputs for the provision of services or manufacturing of goods. Compulsory licensing and mandated provision of protected information *have* been imposed as a remedy.

Furthermore, indispensability-analysis has been roughly similar to cases involving physical facilities or services not protected by intellectual property rights. Also the other factors relevant in the essential facility -cases, like the past actions of the dominant firm, have been relevant in the intellectual property cases, too. Thus, although the specific characteristics of intangibles protected by intellectual property rights should

193 Naturally, the physical facilities remain important not only in the context of the “old” infrastructures like railroads and harbours, but also in the context of newer infrastructures, like telecommunications and the Internet, where the physical layer remains an important facility conditioning competition on the related markets.

194 See e.g. *Venit & Kallaughner* (1994), p. 337.

195 See *European Commission* (1995), p. 26 at note 13.

be taken into account, the central competition law principles underlying the essential facilities doctrine may be applicable with regard to resources protected by intellectual property rights. Moreover, the multitude of potentially relevant considerations already based on existing case law attests to the uselessness of simplistic tests intended to address refusal to license situations in an all-encompassing way.

Dimensions of Indispensability Applied to Intellectual Property

Applying the indispensability standards developed in the relevant case law to intellectual property protection could indicate the following. *First*, the existence of viable substitutes abolishes the indispensability of the intellectual property in question. Access to an alternative intangible resource, which may also be less advantageous for the prospective licensee, abolishes the essentiality of the right under dispute. A firm requesting a license may thus have to modify its operations or production so as to adjust its processes to the already available resource.

Provided the available existing resource enables *remaining viably on the market*, the license sought for is not indispensable. As already a very small market share of the relevant technology market could satisfy the entire demand by licensing all potential licensees due to the non-rivalrous nature of intellectual property rights, even a very large market share (like 90-95%) of the relevant technology markets in itself does not automatically lead to the indispensability of the underlying technology. The alternative technology may still enable market access and the maintenance of viable competition on the markets. For example, provided there is a workable alternative to obtaining a license for a patented technology enabling the implementation of a technical standard, the patented technology should not be considered as indispensable even if it has a very large market share on the relevant technology markets.

The *second* dimension of indispensability discussed above would imply that as the resource protected by intellectual property rights should constitute a strict complement in the production process or operation of the firm requesting access, the requested right could be merely useful or convenient for the intended production or operation and thus not indispensable even if there are no substitutes for it in the above sense.

In addition to *Tiercé Ladbroke* discussed above, the French Conseil de la Concurrence's *Apple*-decision can be mentioned as another example.¹⁹⁶

One reason for finding Apple's proprietary DRM-technology *not* indispensable for competition in the music-downloads market was that only in a minority of cases downloaded music was transferred from a computer to an MP3-player or similar portable device. Thus, access to the proprietary DRM-technology was not considered an inescapable part of music downloading services. Furthermore, Conseil de la Concurrence argued that the end-users could avoid the lock-in related to DRMs by burning the music to CDs and thus legally circumventing the DRM. The decision reflects a strict approach towards requests for intellectual property licensing when the intellectual property in question would not necessarily enable the intended operation or product, but would merely make its provision or production more lucrative or convenient to the firm in question, or to the end-users.

196 *Apple Computer, Inc.*, decision of Conseil de la concurrence, dated 9 November 2004, Décision no 04-D-54. See about this decision also *Mazziotti* (2005), *passim*.

The *third* dimension of indispensability would connote that if from the consumers' perspective there are close enough substitutes on the markets not utilising the intellectual property in question, the requested license is indispensable only for some competitors, not for competition in general. This also seemed to be one of the relevant considerations in the *Apple*-decision, where the intensive dynamic competition on the market for music downloads implied that competition on that market was possible without access to Apple's DRM-technology. Even though the intellectual property owner need not have market power on the adjacent markets, its extent is nevertheless a relevant consideration in European competition law.

Fourth, provided all indispensability-criteria established in *Bronner* and other relevant case law equally apply to intellectual property and intangible resources, the intellectual property right sought for must also be indispensable in the sense that the competitors could not, alone or in cooperation, develop a substitute intangible resource enabling viable competition. As with other resources, the substitute would not have to be equally advantageous when compared to the resource protected by the intellectual property right in question. To an extent the development of a substitute is feasible and would enable viable competition on the relevant markets, this option should be prioritised over compulsory licensing.

Moreover, like with other resources, when analysing the economic feasibility of developing an alternative intangible resource, it should be established that it is not economically feasible to create a substitute for activities with a scale comparable to that utilising the existing intellectual property right. Merely being a smaller competitor with lesser financial resources would thus not be sufficient to transform the desired asset into an indispensable resource. *The impossibility of competing by substitution is thus already part of the indispensability test as defined in existing essential facilities case law.*¹⁹⁷

The doctrine thus provides operational principles enabling the basic analysis of the dynamism of the relevant markets. Whether the intellectual property right in question is exercised under the realistic threat of substitutes, or whether the competitive pressure normally based on potential substitution has been excluded by networks effects, standardisation, the unique nature of the resource protected, overly broad intellectual property protection or other circumstances, may be addressed under the notion of indispensability as interpreted under existing case law.

Nevertheless, the standard tests for indispensability have not been considered sufficient when deciding whether there is an obligation to license intellectual property. The Community Courts have developed additional requirements and tests to be considered when the resource to which access is sought for is protected by an intellectual property right.

These include, above all, the *new product -criterion* as introduced in the *Magill*-case and the *innovation incentives test* as introduced in the Commission's *Microsoft*-decision, and modified by the Court of First Instance. These additional tests also seek

197 Cf. with *Drexel et al.* (2006), p. 561-569 and *Conde Gallego* (2008), p. 235-237, all suggesting that the impossibility of competing by substitution is "*an alternative approach*" not based on existing case law.

to accommodate the interest to maintain effective competition with the function of intellectual property rights to incentivise new creation, invention and thus dynamic competition through the adopted strategy of enabling privately exercised restrictions on the level of production and pricing. Hence, the additional tests also reflect the truism now repeated by the Community Courts that a refusal to license may constitute an abuse *only in exceptional circumstances*. The new product -criterion will be treated immediately below. The innovation incentives test will be discussed thereafter.

New Product Fetishism?

The new product -criterion was first developed by the European Court of Justice in the *Magill*-case, decided in 1995. The facts and core outcome of this case are the following:

The TV-broadcasters active in Ireland and Northern Ireland, RTE, ITP and BBC, held a *de facto* monopoly on the basic information of their respective programme scheduling owing to peculiar national copyright law protecting the information in question at the time of the proceedings. The Court treated this information as indispensable raw material for compiling a weekly television guide. There were thus two separate markets: the market for the upstream input, licensed by the broadcasters only for daily publication in newspapers and the downstream market for comprehensive TV-guides.

The input in question was inevitably indispensable for the intended activities, as there were no substitutes for this unique information needed on the downstream markets. Furthermore, there was no objective justification for the refusal either in the activity of television broadcasting or in that of publishing television magazines. Finally, the broadcasters reserved to themselves the secondary market of weekly television guides by excluding all competition on that market. Yet, the Court also mentioned the prevention of the appearance of a new product as an additional reason for treating the refusal to license as an abuse of a dominant position. It is uncertain whether the Court ever intended this reason to become part of cumulative criteria required for any refusal to license intellectual property to constitute an abuse of a dominant position, as will be discussed below.

In *IMS-Health* the Court said that the new product -criterion as applied in *Magill* was part of a cumulative test for the broadcasters' refusal to have constituted an abuse of a dominant position.¹⁹⁸ The central facts of *IMS-Health* have been explained above. In the same factual matter the Commission had earlier been in favour of treating intellectual property like any other property, thus rejecting the new product -criterion.¹⁹⁹ Based on Court's judgement given in a separate action under the preliminary ruling procedure, one could perhaps easily conclude that a refusal to license may constitute an abuse only if it also prevents the emergence of a new product for which there is a potential consumer demand.²⁰⁰ Yet the formulation used by the Court also left scope for a more convincing argument that the cumulative *Magill*-conditions do not offer

198 Case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* [2004] ECR I-5039, at paragraph 38.

199 Case COMP D3/38.044 — *NDC Health/IMS Health*: Interim measures, at paragraphs 69-70.

200 See e.g. *Drexel* (2004), p. 789-790, who states that the *IMS-Health* -case clearly limits the possible scenarios of exceptional circumstances to the specific scenario present in *Magill*.

an exhaustive definition of the exceptional circumstances where compulsory licensing is possible.²⁰¹

This interpretation is also consistent with a comprehensive reading of the *Volvo*- and *Magill*-cases. Evidently, the spare parts for Volvo-cars intended by repairer Erik Veng could not be considered as new products in the meaning of *Magill*: they were mere duplicates. Provided *Magill* and *IMS-Health* did not overrule the *Volvo*-judgement,²⁰² the new product -criterion could not function as the necessary part of a test applied in *all* compulsory licensing situations. This interpretation has been strengthened by the *Microsoft*-judgement, to be discussed later. Moreover, the interpretation is also consistent with substantive reasons discussed subsequently: the new product -criterion could not adequately address all types of refusal to license -cases.

Seeing the new product -criterion as part of a cumulative test required for any refusal to license to constitute an abuse has led to broad criticism in scholarly literature of the new product -criterion and the cumulation of the criteria.²⁰³ The critiques are typically based on an additional presumption that the threshold established by the new product -criterion is high.

Heinemann has interpreted the new product -criterion so that leveraging a dominant market position to non-dominated markets through an exclusionary strategy based on the refusal to license could not be controlled by competition law, provided the dominant firm is itself already producing goods or providing services on the non-dominated markets. In his analysis, the new product -criterion could not be fulfilled in the circumstances of the *Microsoft*-case, as Microsoft was itself active on the markets for work group server operating systems and produced its own software there. Yet, this conclusion was based on a very strict interpretation of the new product -criterion – a merger of the new product -criterion with the test of relevant product markets – and an assumption that the cumulative *Magill*-criteria exhaustively enumerate the

201 See also *Anderman & Kallaugh* (2006), p. 286-287, arguing that the choice of words used by the European Court of Justice and the rationale of Article 82(b) – which is a broader category than the circumstances of the *Magill*-case – speak in favour of such an interpretation.

202 They do not in any sense indicate this would be the case.

203 See e.g. *Drexel* (2004), p. 801-802 and 806 and also *passim* (rejecting the new product -criterion entirely and suggesting that a compulsory license should follow whenever competition by substitution is excluded as a matter of the market conditions, thus also enabling imitation); *Drexel et al.* (2006), p. 565-567 (stating that neither the European Court of Justice nor the Commission in its discussion paper on exclusionary abuses “offers a consistent economic reason for the additional reason”, but on the other hand also saying that “the new-product criterion seems to reflect the concept of competition by substitution”); *Drexel* (2008), p. 38-39 (assuming that the new product -criterion has to be fulfilled in any compulsory licensing situation) and *Kur* (2008), p. 326 (stating that “the additional criterion of a ‘new product’ is an indication of an inherent weakness in the approach chosen rather than a relevant tool for resolution of critical cases”) and *Frischmann & Waller* (2008), p. (stating that the new product rule “is an inelegant surrogate for the presence of downstream spillovers that justifies a regime of open access in the first place”). Cf. with *Conde Gallego* (2008), p. 228 (noting that the cumulative approach makes sense against the backdrop of the relaxed “two markets”-requirement and noting that the requirement of non-duplication “seems perfectly in line with the rationale underlying the IP system”).

exceptional circumstances where a refusal to license intellectual property rights could constitute an abuse.²⁰⁴

Heinemann remained uncertain of the need to satisfy the new product -criterion in all compulsory licensing cases also after the *Microsoft*-judgement. He opined that a cumulative interpretation of the *Magill*-criteria would connote that if the dominant firm supplied the downstream markets sufficiently, the new product -criterion could not be fulfilled.²⁰⁵

Lévêque has critiqued the new product -criterion from an economist's perspective. He maintains that preferences of consumers are attached to bundles of product characteristics, not to products themselves. Hence, two products may be considered as clones when they share the same characteristics and the same level of performance on each of these. From a consumer welfare perspective the decisive factor is whether the different characteristics of the intended product are more valuable for the consumers in terms of their willingness to pay than the associated costs of improvement. The number of new characteristics and their changes in performance, as such, are not relevant for consumer welfare thus defined. As merely the intent to produce a new product is required, consumer preferences cannot be effectively tested.²⁰⁶ The exact characteristics of the intended goods or services are typically not known at the time of the proceedings.

Hence, consumer welfare as defined by *Lévêque*, and potential consumer demand as required by the Court, become impossible to measure. On a more general level, a competition law authority or court is not well equipped to make far-going qualitative assessments regarding the desirability of intended products or services or the level of inventiveness and creativity involved in their design as a condition for a compulsory license. Also *Lévêque*'s critique seems to assume that the new product -criterion inevitably involves far-going qualitative analysis of the intended products or services. Moreover, new features as such, even if there is potential consumer demand for a product incorporating them, are not an adequate meter for consumer welfare, defined as the consumers' willingness to pay minus the associated costs.

As will be argued in the following, a more reasonable interpretation of the new product -criterion is available. The test for a new product as established in the *Magill*-

204 See *Heinemann* (2005), p. 70-75.

205 *Heinemann* (2008), p. 68. The *Microsoft*-judgement will be discussed subsequently. As is evident from the judgement, the Court of First Instance considered the new product -criterion to be fulfilled in the circumstances present. *Heinemann* does not discuss the judgement or the new product -criterion from this perspective.

206 *Lévêque* (2005), p. 106-107. The critique led *Lévêque* to endorse the innovation incentives test, which will be discussed subsequently. Clearly, the new product test entails even more problems from the perspective of economic analysis. In addition to correlating the consumers' willingness to pay for the new features with the associated costs of development, the effect of compulsory licensing on the incentive for competitors to develop alternative ways to produce the same features or different but substitutable features affects the analysis, as well as the effects on the dominant firm's incentives to develop its own technology or substitutes for it (in the presence or absence of competitive pressure). See also the subsequent discussion of infrastructure theory.

case should not be intertwined with the test used in order to define the relevant product market.²⁰⁷ Hence, the cumulation of the criteria in the circumstances such as in *Magill* does not have to appear as overwhelmingly problematic. Moreover, the new product -criterion need not entail far-going qualitative analysis and relate to consumer welfare only. In *IMS-Health* the Court explained that the new product -criterion relates to the consideration that when balancing the interest in the protection of the intellectual property right and the economic freedom of its owner against the interest in the protection of free competition, the latter can prevail only where the refusal to grant a license prevents the development of the secondary market to the detriment of consumers.²⁰⁸ Accordingly, the Court stated the following:

“Therefore, the refusal by an undertaking in a dominant position to allow access to a product protected by an intellectual property right, where that product is indispensable for operating on a secondary market, may be regarded as abusive only where the undertaking which requested the licence does not intend to limit itself essentially to duplicating the goods or services already offered on the secondary market by the owner of the intellectual property right, but intends to produce new goods or services not offered by the owner of the right and for which there is a potential consumer demand.”²⁰⁹

Advocate General *Tizzano* demanded more of the new product -criterion by requiring intent to produce goods or services *of a different nature* which, although in competition with those of the owner of the right, *answer specific consumer requirements not satisfied by existing goods or services*.²¹⁰ The different formulation adopted by the Court is significant as it seems to indicate that the intended product or service does not have to answer specific unsatisfied consumer requirements. Instead, the criterion is tightly connected to the *non-duplication* of the intellectual property right owner's existing products or services in that not essentially duplicating seems to lead by definition to new goods or services.²¹¹

It is thus feasible that the competitor's *existing* goods or services would satisfy the criterion, provided they have not essentially duplicated the goods or services offered by the intellectual property owner. It could thus suffice that they *have been* new with regard to the goods or services of the intellectual property owner.²¹² This

207 Similarly *Skinner* (1995), p. 91.

208 At paragraph 48 of the *IMS-Health* judgement (referred to above). See also the Opinion of Advocate General *Tizzano* in the same case, at paragraph 62 of the Opinion. As pointed out by *Drexel et al.* (2006), at p. 562, the formulation unnecessarily characterises the interaction between intellectual property protection and competition law in conflictual terms.

209 At paragraph 63 of the *IMS-Health* judgement (referred to above).

210 Case C-418/01, *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* [2004] ECR I-5039, at paragraph 62 of the Opinion.

211 In this direction see also *Conde Gallego* (2008), p. 228. *Drexel*, in contrast, relates the new product -criterion to offering of innovative or better products. See *Drexel* (2004), p. 806 (innovation) and *Drexel* (2008), p. 48 (offering a better product).

212 Most existing products and services potentially subject to requests for licensing on the basis of competition law are subject to constant modifications and improvements. Such intended future products would in any event be new in the sense of the criterion in question.

interpretation would preclude the undesirable outcome that – even when cumulation of the *Magill*-criteria is required – an interruption of licensing or a discriminatory refusal for existing goods or services could escape all competition law supervision. The products and services offered by the competitors would fulfil the test provided they are not essentially duplicates, clones or slavishly imitated services of the ones offered by the intellectual property owner.

This would also be in line with the premise that the interruption of previous levels of supply aggravates the competition law evaluation, as it may undermine the specific dependency and trust created by the dominant firm on that policy's continuation. From the perspective of the dependent firms a refusal to continue licensing of a core technology could lead to their exclusion from their principal markets, and thus to a serious threat to their freedom to conduct business and protection of property in the form of investments made. The investments may have been made on the basis of legitimate trust on the continued availability of the dominant firm's core technology.

The fact that the Court did not limit the rationale of the new product -criterion to fostering invention, creativity or research and development, but more generally to the development of the secondary market to the benefit of consumers strengthens the interpretation that only competition essentially based on *cloning* of the goods or *slavishly imitating* the services offered on the secondary market by the owner of the intellectual property right would not qualify. Competition law authorities and courts are competent enough for analysing whether the intended activity would qualify as something more than essentially duplicating the intellectual property owner's existing goods or services.²¹³

Magill shows that the intended new product or service does not have to be inventive or novel as reflected in patent law,²¹⁴ or original as reflected in copyright law. The TV-guide intended by *Magill* competed with the narrower publications of the broadcasters, and there were similar comprehensive weekly TV-guides available in most other member states. *Magill*'s TV guide thus only added value in the sense of incorporating independently obtained components. After the publication of *Magill*'s guide, the consumer was able to buy one weekly guide instead of three.²¹⁵ There was thus nothing innovative or creative in the *Magill*'s intended product.

Another interpretation of the new product -criterion is provided for by the *Microsoft*-judgement. The Court of First Instance emphasised interpretation of the new product -criterion in the light of Article 82(b) EC [now 102(b) FEU], which

213 Analysing non-duplication does not involve analysis of innovativeness or desirability of the intended products. Thus, Lévêque's critique (see above) of the new product -criterion may partially be based on its interpretation not endorsed here.

214 See more closely the treatment of patent law in chapter 5. The requirement is thus even further from the requirement in Article 31(l) of the TRIPS Agreement for compulsory licensing in case of dependency patents. A compulsory patent license may on this basis be granted provided the new invention constitutes "an important technical advance of considerable economic significance in relation to the invention claimed in the first patent".

215 See also *Skinner* (1995), p. 91-92.

mentions as an example of abuse *limiting production, markets or technical development to the prejudice of consumers*.

According to the Court, the appearance of a new product cannot be the only parameter which determines whether a refusal to license is capable of causing prejudice to consumers within the meaning of Article 82(b) EC. Such prejudice could arise not only where the refusal to license causes a limitation of production or markets, but also of technical development. In the circumstances of the *Microsoft*-case, the last mentioned limitation was decisive, whereas the *Magill* and the *IMS-Health* cases were more about the limitation of production and markets to the prejudice of consumers.²¹⁶ Provided the refusal to license limits technical development to the prejudice of consumers, the Court considers the new product -criterion to be fulfilled.²¹⁷

The criterion then essentially becomes a test of innovation incentives.²¹⁸ Yet, problematically the Court evaluated the innovation incentives of the dominant firm separately under the notion of objective justification, as will be discussed subsequently. Only the innovation incentives of competitors became evaluated under the new product -criterion. Industry-wide analysis of innovation incentives was thereby divided into operationally distinct stages. The Court explicitly confirmed this by stating that in the examination of the new product -criterion the innovation incentives of Microsoft were irrelevant; only the impact of the refusal to license on the incentive for Microsoft's competitors to innovate became considered under the new product -criterion.²¹⁹

Thus, the mere presence of the dominant firm on the downstream markets does not exclude the satisfaction of the new product -criterion. As the *Microsoft*-case demonstrates, the analysis may also concentrate on the *incentives* of the competitors to develop products distinguished from those of the dominant intellectual property owner under the notion of a limitation of technical development to the prejudice of consumers. This abstracts the analysis considerably. Instead of concentrating on the concrete features and the desirability of the intended products or services, *the likely effects on the structure and technical development of the affected markets* become the central foci of analysis. The new product requirement could thus imply that to an extent the refusal to license would preclude or hinder the development of the affected markets on the basis of competition not based on mere duplication of the dominant intellectual property owner's existing products or services, but on the production of goods or provision of services having distinguishable parameters relevant for consumers, the criterion would be fulfilled.

In any case, the existing case law leaves room for different interpretations and underlying rationales. The Community Courts do not seem to base the criterion on

216 See paragraphs 643-648 of the Court of First Instance's *Microsoft*-judgement (referred to above).

217 See paragraph 665 of the Court of First Instance's *Microsoft*-judgement (referred to above).

218 Cf. with *Howarth & McMahon* (2008), at p. 123, holding that if abuse is defined as the prevention of technical development, "surely every refusal to license which is not mere reproduction or cloning will fulfil this criterion".

219 See paragraph 659 of the Court of First Instance's *Microsoft*-judgement (referred to above).

consumer welfare standard as proposed by Lévêque; it is clearly not based on the comparison between consumers' willingness to pay for the new features and the associated costs of developing them. The standards adopted by the Court in *IMS-Health* and the Court of First Instance in *Microsoft* rather seek to simultaneously secure the continued possibility to control intellectual property -based exclusion and leverage strategies, on one hand, and the core elements of intellectual property protection by disqualifying activities essentially based on duplication or slavish imitation from the benefit of compulsory licensing, on the other hand.

IMS-Health seems to base this on institutional deference towards intellectual property protection, and possibly on the notions of fair forms of competition: mere duplication or slavish imitation, even if capable of benefiting competition and consumers in the form of lower prices, interferes with the core rights and moral justification of intellectual property protection. Instead, when the firm requesting a license intends not to copy verbatim, but merely derives from the protected product of the intellectual property owner, combines it with other materials or uses some of its protected elements only, the moral case of the intellectual property owner is not equally obvious. The Court could also have reasoned that permitting compulsory licensing for mere duplication of existing products or services would not induce dynamic competition, but would damage the investments and incentives of the intellectual property owner.

The *IMS-Health* -formulation of the new product -criterion may fail when the intellectual property under dispute is a process patent. Provided the firm requesting a license would produce its own, distinctive products by utilising the patented process, the criterion would be easily satisfied, but could frustrate the core of process patent protection. For example, if the patent protects a research instrument, a method for analysing bacteria growth, a superior industrial process in terms of energy consumption, or a method for collecting carbon dioxide from an industrial process, the key question should not be whether the firm requesting a license intends to produce new products in terms of not being mere duplicates to those produced by the owner of the patent. The new product -criterion clearly is not designed to operate in such situations.

Second, the *IMS-Health* -rationale of the new product -criterion may fail when the products in question are by their nature very similar or even homogeneous. Spare parts, highly standardised products like empty memory cards or CDs, or produced basic raw materials and chemical substances may be mentioned as examples.²²⁰ In such instances, even not being essentially a duplicate of the intellectual property owner's existing product may be a high threshold to fulfil.

Yet, a single patent underlying a standard or enabling the production of a certain raw material or chemical substance could connote a global production monopoly. In

220 See *Standard-Spundfass*, Decision of 13 July 2004, KZR 40/02 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 36, issue 6/2005, pp. 741-754.

such instances the new product -criterion should not be unconditional. Moreover, the intellectual property owner may have licensed the rights before. Interruption of licensing may imply a strategy to exclude a competitor or to leverage dominance to other markets. Furthermore, the intellectual property owner may seek to license discriminatorily or may have promised to license in the course of standardisation negotiations, for example. In such instances, the new product -criterion as an unconditional requirement for an obligation to license could prove problematic.

The new product -criterion was first developed in the context of the *Magill*-case, where the TV-broadcasters did not offer a comprehensive TV-guide: the product intended by Magill was thus obviously new with regard to the products produced by the dominant intellectual property owners. In *IMS-Health*, however, the competitors intended to offer services directly competing with and being essentially similar to those provided by IMS-Health. The new product -criterion transformed into a test of *non-duplication* instead of relative novelty of the intended product.

The *Microsoft*-judgement, in turn, connects the criterion to incentive argumentation and dynamic competition: the incentive of competitors to innovate and independently create products or services competing with those of the intellectual property owner becomes the central consideration. The criterion is satisfied provided the refusal to license limits technical development to the prejudice of consumers. This redirects the criterion from evaluating the concrete novelty of the intended product in relation to the products produced by the intellectual property owner (*Magill*), and further from the test of non-duplication of the intellectual property owner's products or services (*IMS-Health*) towards more abstract incentive analysis. Instead of a concrete proposal for a novel or non-duplicative product or service, the new product or service becomes the *increased likelihood* of independent products being produced and services offered in the presence of licensing, based on contrafactual analysis.

The test seems to be a result of a combination of judicial path-dependency and casuistically determined circumstances rather than any theoretical perspective or comprehensive and analytical consideration of all feasible contexts of compulsory licensing. This may appear as problematic. On the other hand, it enables the flexibility and evolution of the new product -test.

Finally, even this transformed new product -criterion need not be satisfied for compulsory licensing to take place: the Court of First Instance accepted the Commission's premise that the pre-existing case law had not established *numerus clausus* conditions for compulsory licensing.²²¹ Thus, also other circumstances and considerations could lead to a refusal to license being an abuse of a dominant position. In this sense, the Court of First Instance's interpretation could avoid many of the pitfalls associated with the *IMS-Health* -formulation and rationale of the new product -criterion. For example, compulsory licensing of a process patent could be

221 See paragraph 336 of the Court of First Instance's *Microsoft*-judgement (referred to above). However, the Court of First Instance did not have to proceed to this analysis, as it deemed the tests as established in the *Magill* and the *IMS-Health* -cases to be fulfilled.

discussed in terms of the development of the technology market in question instead of concentrating on the products manufactured with the process.

Similarly, as the Court of First Instance accepted the relativisation of the new product -criterion in that also other circumstances could justify compulsory licensing, the criterion would not function as a formalistic impediment for contextual, all-things-considered application of competition law. Intellectual property protection would not confer an absolute production monopoly for highly standardised products. Discriminatory licensing and discontinuation of licensing could constitute an abuse in the absence of a new product. The criterion would thus function as a mere consideration among others when addressing the need for compulsory licensing on the basis of competition law.

Innovation Fetishism?

In its *Microsoft*-decision the Commission made bold interpretations of existing case law regarding abuse of a dominant position and an obligation to license. It pursued a strategy of reorienting the case law away from formalism and the idea of one strict, cumulative test controlling the respective application of the prohibition of abusing a dominant position in an all-encompassing way, irrespective of the characteristics of the case at hand. The exceptional facts of the *Microsoft*-case provided a window of opportunity for such moves. Accordingly, the Commission reasoned that the conditions present in pre-existing case law for an obligation to license should not be regarded as exhaustive criteria or checklist for such an obligation. Instead, the exceptional circumstances under which licensing may be mandated may be present in a variety of situations not necessarily discussed in pre-existing case law. The entirety of circumstances in each case affects the evaluation which must thus be comprehensive in nature. As already stated, the Court of First Instance accepted this Commission's premise.²²²

As part of such a comprehensive evaluation the Commission introduced what has been referred to as the *innovation incentives test*.²²³ The Commission's arguments were designed to counteract *Microsoft*'s allegation that its refusal to license is objectively justified by its intellectual property rights, which are “*meant to protect the outcome of billions of dollars R&D investments in software features, functions and technologies*”. In *Microsoft*'s contention this “*is the essence of intellectual property right protection*”. Mandated disclosure would “*negate that protection and eliminate future incentives to invest in the creation of more intellectual property*”.

The Commission rejected *Microsoft*'s arguments by holding that the mere presence of intellectual property protection may not function as an objective justification, as demonstrated by the pre-existing case law where a refusal to license *has* been treated

²²² Case COMP/C-3/37.792 *Microsoft*, at paragraphs 555-558 of the Decision.

²²³ See paragraphs 709-729 of the Commission's *Microsoft*-decision, cited above. See *Lévêque* (2005), *passim*, for an economist's treatment of the innovation incentives test as introduced in the Commission's *Microsoft*-decision.

as an abuse of a dominant position in exceptional circumstances.²²⁴ Intellectual property should, in the words used by the Commission, stimulate creativity “*for the general public good*”.

Accordingly, a refusal to license could be contrary to the general public good by constituting an abuse of a dominant position with harmful effects on innovation and consumers. As Microsoft’s refusal risked eliminating competition in the relevant markets in that the refused input was deemed indispensable for competing viably on the market and had a negative impact on technical development to the prejudice of consumers, the mere invocation of intellectual property protection could not objectively justify Microsoft’s refusal.

The Commission pursued its analysis considerably further. As the obligation to license sought by the Commission concerned the specifications needed for interoperability and not their particular implementations by Microsoft, the Commission rejected Microsoft’s contention that mandated licensing would lead to the cloning of its products. Furthermore, it did not accept Microsoft’s argument that the latter’s incentive to innovate with respect to the specifications underlying certain interfaces of its products would be frustrated either. According to the Commission, the relevant consideration rather relates to Microsoft’s incentives to innovate its products as a whole, not only in the design of its product interfaces.

Moreover, the Commission maintained that the analysis must be conducted in comparison to the alternative situation (contrafactual) where the anti-competitive conduct in question remains unfettered. This alternative scenario would have connoted potential elimination of all competition, ultimately leading to the loss of all competitive pressure on the part of Microsoft. The innovations of Microsoft’s competitors in the work group server operating system market were seen to be important incentives for Microsoft’s own efforts to innovate. Providing the competitors with the interoperability information needed would thus induce innovation both on the part of competitors and Microsoft.

Accordingly, in its final conclusion regarding the refusal to supply (paragraph 783), the Commission stated that “*on balance, the possible negative impact of an order to supply on Microsoft’s incentives to innovate is outweighed by its positive impact on the level of innovation of the whole industry (including Microsoft). As such, the need to protect Microsoft’s incentives to innovate cannot constitute an objective justification that would offset the exceptional circumstances identified*”.

224 Cf. with the US case *Data General Corporation v Grumman Systems Support Corporation*, 36 F.3d 1147, 1187-88 (1st Cir. 1994), where copyright in itself was considered a valid justification for a prima facie infringement of the Sherman Act, rebuttable by the anticompetitive intent on the part of the intellectual property owner.

Although the Commission pursued the innovation incentive -test under the banner of objective justification,²²⁵ it engaged in comprehensive discussion of both Microsoft's and its competitors' incentives to innovate, thus in practice adopting an optimisation approach. As the Commission's decision indicates that Microsoft could have justified its conduct by being able to demonstrate that its practices produce on balance more incentive efficiencies than harms, the test reflects more the ideas of efficiency defence than objective justification. Yet, it has not been entirely clear how the objective justification functions.

Prior to the Commission's decision, *G. Monti* had suggested that the prohibition of abusing a dominant position should contain an *innovation defence* as an additional objective justification. Monti, too, would have placed the burden of proof on the defendant who should accordingly prove that the conduct alleged to be abusive is necessary and proportionate to preserve incentives to innovate so as to outweigh the potential reduction in competition.²²⁶ The expressed rationale behind this suggestion is that the application of competition law should not destroy dynamic efficiency. According to Monti, the innovation defence would have failed in *Magill*,²²⁷ where the copyright protection of TV-programme listings did not function as an incentive, and hence an obligation based on competition law to license could not stifle innovation. Monti suggested that even though the evaluation of dynamic effects is imprecise in most cases, a qualitative analysis is a better option than drawing the lines between lawful and unlawful conduct arbitrarily.²²⁸

The judgement of the Court of First Instance separated the *prima facie* breach of the prohibition of abusing a dominant position from the objective justification. Thus, whereas the Commission balanced the incentive of Microsoft to innovate to the effects on the innovation by others, the Court stated that only the incentive of the competitors to innovate will be evaluated under the new product test and thus under the *prima facie* analysis of abuse. The effects on Microsoft's incentive to innovate will be considered subsequently under the objective justification, subject to the dominant firm's invocation and initial burden of proof regarding the existence of the objective justification in question (paragraphs 659 and 688). This sharp separation of the analysis to distinct phases connotes that the Court could not evaluate the respective effects on incentives to innovate comprehensively like the Commission did in its decision. Instead, it explicitly stated that the Commission did not establish any new balancing test in its decision. It explained (paragraph 710) that when rejecting the

225 It appears from the Commission's Decision that Microsoft itself introduced argumentation related to its innovation incentives under the objective justification. Moreover, the fact that the existence of relevant intellectual property protection was highly uncertain at the time of the proceedings may have led the Commission and subsequently the Court to rely on this notion in their analysis of Microsoft's innovation incentives. This enabled placing the burden of proof regarding the existence of intellectual property protection on Microsoft.

226 *Monti* (2004), p. 47-50.

227 Joined Cases C-241/91 P and C-242/91 P, *RTE and ITP v Commission* [1995] ECR I-743.

228 See *Monti* (2004), p. 49-50.

alleged frustration of Microsoft's incentive to innovate as an objective justification the Commission:

“came to a negative conclusion but not by balancing the negative impact which the imposition of a requirement to supply the information at issue might have on Microsoft's incentives to innovate against the positive impact of that obligation on innovation in the industry as a whole, but after refuting Microsoft's arguments relating to the fear that its products might be cloned -- establishing that the disclosure of interoperability was widespread in the industry concerned -- and showing that IBM's commitment to the Commission in 1984 was not substantially different from what Microsoft was ordered to do in the contested decision -- and that its approach is consistent with Directive 91/250 --”

The judgement also makes it clear that mere invocation of intellectual property protection will not suffice as this would frustrate the pre-existing case law where mandated licensing has been ordered in the presence of exceptional circumstances (paragraphs 690-691). The dominant firm must demonstrate a *significant negative impact* on its incentives to innovate (paragraphs 697 and 701). Moreover, as the Court regarded Microsoft's arguments as *vague, general* and *theoretical* in nature, the burden of proof regarding the existence of an objective justification never shifted to the Commission. Yet the Court was satisfied that the Commission in any event had managed to demonstrate that Microsoft's incentives to innovate would not be negatively affected by mandated licensing (paragraphs 697-703).

It is feasible that although the Commission and the Court proceeded on the assumption that the communication protocols might be protected by intellectual property rights in that the strictest and thus for Microsoft the most favourable abuse-test was applied, such favourable treatment did not extend to the analysis of innovation incentives. Clear proof of patents protecting the communication protocols would likely have increased Microsoft's odds of convincing the Court about the frustration of its innovation incentives. The Court could have established a standard according to which the dominant firm bears the initial burden of proof regarding the existence of relevant intellectual property protection only. The burden of proof would then shift to the competition authority or competitor to demonstrate that the intended compulsory licensing would not (significantly or on balance) affect the innovation incentives of the dominant firm. However, the Court went further and did not leave Microsoft any leeway to invoke intellectual property rights, current or future, justifying its refusal to license: irrespective of any intellectual property protection, its own innovation incentives could not justify the refusal.

The judgement is not satisfactory in its treatment of innovation incentives. Certainly, the Commission's decision provided the Court a starting point for its analysis: the Court evaluated the lawfulness of the Commission's decision, and thus could not easily introduce new kind of argumentation in its judgement, detached from the Commission's analysis. Yet, compared to the Commission's decision the judgement could make it very difficult for a dominant firm to avoid mandated licensing on the basis of intellectual property right protection, or on the basis of the decision's effects on innovation incentives.

Once the Court recognised that Microsoft's refusal to supply the interoperability information was abusive because it limited technical development to the detriment of consumers, it became unsatisfactory to exclude Microsoft's own innovation incentives from the analysis of this technical development. The Court namely could not even try to foresee the overall limitations on technical development without analysing the impact of the decision on Microsoft's own incentives and operations. After criticising the argumentation model deployed by the Court immediately below, an alternative argumentation model will be sketched.

Objective justification typically refers to casuistically determined circumstances and reasons like capacity constraints, inability to pay or interference with the service of other customers.²²⁹ It relates to legitimate business considerations in contradistinction to considerations which, in the circumstances of the particular case, merely represent anti-competitive behaviour.²³⁰ Such justifications are not typically measurable on the same scale with considerations leading to a *prima facie* finding of an abuse: if there is no capacity to share or if the firm requesting access is unable to pay for access there is typically no need to weigh this justification with the elimination of competition, the prevention of a new product, and other factors leading to a *prima facie* finding of abuse. Furthermore, it is natural that regarding the existence of such conditions the dominant firm bears the initial burden of proof: analysing such reasons or circumstances is dependent on the accused firm invoking them and informing about their nature in more detail.

However, when the reasons speaking in favour of not considering a refusal to supply or license an abuse of a dominant position are of a more general nature, at macro rather than micro level,²³¹ such as the need to take the specific market conditions and the legislative context into account, the need to protect the investments made or the need to protect intellectual property and the innovation incentives of dominant firms, it is necessary to consider such factors against the countervailing reasons. The invocation of the specific market conditions and the legislative context as an objective justification led Advocate General *Jacobs* in *Syfait* to argue that the whole distinction between abuse and its objective justification is artificial and, instead of a two-stage analysis, there should be one comprehensive analysis of the existence of an abuse.²³² Similarly, Advocate Generals *Jacobs* in *Bronner* and *Maduro* in *KPN-Telecom* treated the protection of investments and innovation not as something to be analysed separately under the objective justification, but as factors requiring weighing against

229 See e.g. *Haracoglou* (2008), p. 139.

230 See the Opinion of Advocate General in case C-95/04 P, *British Airways v Commission* [2007] ECR I-2331, at paragraph 114 of the Advocate General's Opinion.

231 See also *Bavasso* (2002), p. 99.

232 See Opinion of Advocate General in case C-53/03, *Syfait and Others v Glaxosmithkline AEEVE* [2005] ECR I-4609, at paragraph 72 of the Advocate General's Opinion.

the competitive harms imposed on the same level of analysis.²³³ The Court followed its Advocate Generals in both cases, yet without expressly elaborating on this question.

It would be inconsistent to consider investments made by the dominant firm for resources not protected by intellectual property under the *prima facie* analysis of abuse, but investments made for resources protected by intellectual property rights under objective justification. Furthermore, as intellectual property rights function as an incentive for both its owner and competitors to engage in innovation and dynamic competition, not being able to correlate these effects would preclude optimising them in the application of competition law.

In other words, adopting the Court's static standard for the negative incentive effects on the part of the dominant firm based on *a significant negative impact* on the dominant firm's incentives to innovate irrespective of the competitive harms imposed would prevent comprehensive evaluation and could thus lead to problematic outcomes. *The judgement indicates that if mandated licensing connoted a significant negative impact on the dominant firm's incentives to innovate, there would always be an objective justification for the refusal to license.*

On the other hand, the Court's evaluation of the innovation incentives under the objective justification test seems to place a disproportionate burden on the dominant firms. After all, intellectual property rights are supposed to function as incentives for investing in creative or innovative activities. They do not always fulfil this function in practice, but it may be more legitimate to adopt a presumption in favour of the intellectual property owner, rebuttable by the competition authority or competitors requesting licensing, than placing the burden of proof regarding innovation incentives directly on the intellectual property owner. Creating resources protected by intellectual property rights should require risky investments, and intellectual property rights have the function of incentivising such investments. As the traditional core right ensuing from intellectual property rights is the right to exclude others from the utilisation of the protected resource, mandated licensing may jeopardise the incentive function of the right.

However, if the competition authority or competitors would have to demonstrate that mandated licensing would not frustrate the incentives as intended by the applicable

233 See point 62 of the Advocate General's Opinion in case C-7/97, *Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG* [1998] ECR I-7791 ("In assessing such conflicting interests particular care is required where the goods or services or facilities to which access is demanded represent the fruit of substantial investment. That may be true in particular in relation to refusal to license intellectual property rights. Where such exclusive rights are granted for a limited period, that in itself involves a balancing of the interest in free competition with that of providing an incentive for research and development and for creativity.") and point 53 of the Advocate General's Opinion in case C-109/03, *KPN Telecom BV v Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)* [2004] ECR I-11273 ("Yet, a duty under Article 82 EC for a dominant undertaking to aid its competitors should not be assumed too lightly and refusal to supply a competitor is not automatically considered abusive just because the inputs in question are necessary to compete on a secondary market. A balance should be kept between the interest in preserving or creating free competition in a particular market and the interest in not deterring investment and innovation by demanding that the fruits of commercial success be shared with competitors.").

intellectual property laws, or that the potential negative effects are insignificant enough in relation to the positive effects on the innovation incentives of others, the test could not in practice operate under the current interpretations of the objective justification. Yet, as indicated earlier, the problem in the *Microsoft*-case was the existence of any relevant intellectual property protection as regards the interface specifications: in the absence of proof either way the Court presumed that there are relevant intellectual property rights protecting the communication protocols. This presumption led it to apply the strictest criteria for an abuse.

A more suitable approach would constitute of a systematic inclusion of dynamic efficiency and innovation analysis in the application of the prohibition of abusing a dominant position. Such an approach is also possible in cases dealing with the interaction between intellectual property and the prohibition of abusing a dominant position.²³⁴ The application of competition law on one hand should not unduly frustrate the existing incentives of firms to innovate, created through the markets or elsewhere in legislation. This could be called a negative aspect of innovation analysis in competition law: competition law should abstain from frustrating the longer-term innovation related objectives created elsewhere for short-term increases in competition. On the other hand, competition law could also actively foster innovation by protecting the incentives of firms to invest and innovate from abusive restrictions imposed by dominant firms. This could take place, for example, by controlling one-sided grant-back terms in license agreements, as such terms have the likely impact of restricting the licensees' incentive to innovate without a corresponding impact on the licensors' incentive to innovate.²³⁵

7.5 Conclusions on the Evolution of the Competition Law Doctrine

The focus of the doctrines was originally on the respective competencies of the Community and the member states. The existence/exercise -dichotomy, the essential function and specific subject-matter doctrines sought to find limits on the application of the broadly construed Treaty prohibitions regarding the basic freedoms and competition law alike in the functions of nationally legislated intellectual property rights as interpreted by the Community Courts.

The comprehensive application of these doctrines in the areas of basic Treaty freedoms and competition law alike also reflected a pursuit for coherence extending over free movement and competition law. Advancing market integration and weighing this end against the reasons underlying nationally determined intellectual property

234 See e.g. the opinion of Advocate General in case C-53/03, *Syfait and Others v Glaxosmithkline AEVE* [2005] ECR I-4609 and case C-109/03, *KPN Telecom BV v Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)* [2004] ECR I-11273.

235 See also case T-83/91, *Tetra Pak International SA v Commission* [1994] ECR II-755 and the preceding discussion of grant-back clauses under the cartel prohibition in sub-chapter 7.3.2.

ownership were the two major concerns behind the early doctrines developed in case law, as well as the core contents of the relevant group exemption regulations. In a sense, when the Community Courts were confronted with this norm conflict, they weighed the underlying justifications of the literal norm expressions and established doctrines according to which the function underlying the nationally defined intellectual property in question largely determines the ultimate right to rely on it at the expense of the basic Treaty freedoms or competition law.

Subsequently, these doctrines were rejected at the expense of the essential facilities -type argumentation models. Since the European Court of Justice's *Magill*-judgement general competition law doctrine has predominated over the function test and the related concepts tied to intellectual property rights. In addition to practical reasons related to the limitations on the Court of First Instance's competence to rule on the conformity of nationally determined intellectual property rights with Community Law,²³⁶ the questionable object of protection in *Magill*, and the obvious need to reconsider the merits of the specific subject-matter doctrine in a case where compulsory licensing is to take place, the change of the doctrine can also be connected to deeper-level transformations of Community competition law, and perhaps European law in general.²³⁷

The general relativisation of the integration objective underlying Community competition law connoted that the relevance of the free movement doctrines in the application of competition law became less obvious, as the once common underlying teleology of the free movement and competition norms separated.²³⁸ Instead, increasing demands for effects-based evaluation of competitive constraints were heard. Competition law emerged as a specialised discipline increasingly detached from free movement and intellectual property doctrines alike. The transnationalisation of competition law discourse, affected by the globalisation of the economy and the pursuit of interpretive harmony with US antitrust law, necessitated conceptual separation of competition law from the doctrines specific to Community Law.

The new product -test as introduced in *Magill* was intended to function as a dynamic consideration inherent to competition law. Although theoretically underdeveloped, the notion of dynamic competition had become part of standard competition law phraseology. This implied that innovation incentives were no more the exclusive domain of intellectual property law: competition law could develop its inherent criteria for deciding about the duty to license intellectual property rights.

Moreover, the Community itself had started to emerge as the predominant legislator of intellectual property rights in Europe. No more were competition law -based restrictions of intellectual property limitations of national laws only, but to an important extent, limitations of rights established and guaranteed by Community secondary law. Hence, there were good reasons for rejecting the doctrines essentially

236 See e.g. *Reindl* (1993), p. 68.

237 See also chapter 7.8 for the discussion of this transformation in the context of Community Law in general.

238 However, as pointed out by *Rognstad* (2008), *passim*, there may still be a need to interpret resale and import restrictions consistently under the free movement and competition rules.

based on the division of competencies between national and Community law and free movement case law.

Finally, although the pressure for relaxation of the broad prohibitions inherent to Community competition law on the basis of an effects-based model provided for by the US antitrust law may have largely derived from the demands and strategies of powerful firms, the Court may also have been increasingly aware that intellectual property rights may signify considerable market power and could function as effective barriers to entry to markets now considered important, such as the software markets. The process leading to the Software Copyright Directive²³⁹ and the *IBM Undertaking*²⁴⁰ may have highlighted the need to reconsider a doctrine potentially immunising the core right of intellectual property – the right to refuse from licensing – from the application of competition law. It turned out that the competitive effects and intellectual property -based market power need to be analysed as well.

The notion of exceptional circumstances introduced in *Magill* is based on the idea that a refusal to license as such is normally not prohibited. Yet, the specific circumstances of a case may justify a contrary conclusion. The notion of exceptional circumstances could hence be seen to encourage contextual, all-things-considered argumentation instead of resorting to the earlier doctrines. It thus potentially opens argumentation beyond the tests introduced in *Magill* and subsequent case law which were likely intended for the specific circumstances present in these cases.²⁴¹ However, as an abstract category, the notion of exceptional circumstances may be and has been used as a substantive delineation of the extent of competition law.

Anderman and *Kallaugher* have argued that the whole “*purpose of the ‘exceptional circumstances’ test in the first place was to ensure that the category was narrow and confined to those cases where the owner of the intellectual property right was engaging in conduct that was so clearly anticompetitive under the Treaty that competition law had to limit the exercise of the intellectual property right*”. In their interpretation this could even prevent relying on the entirety or the totality of circumstances as a basis for identifying the exceptional circumstances needed for a refusal to license to constitute an abuse of a dominant position.²⁴²

239 Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, OJ L 122, 17 May 1991, p. 42-46.

240 See about the *IBM-undertaking XIVth Report on Competition Policy* (1984), p. 77 and *XXIst Report on Competition Policy* (1991), p. 81. The undertaking is also discussed in the Commission’s *Microsoft*-decision (Case COMP/C-3/37, 792 *Microsoft*), at paragraphs 736-742.

241 As already stated, in the *Magill*-case, the Court was careful in its words when constructing the exceptional circumstances as a generic category (at paragraph 50) and the three conditions leading to compulsory licensing as relevant and sufficient in the present case (at paragraph 51). This interpretation is confirmed by the case C-418/01, *IMS Health GmbH v NDC Health GmbH* [2004] ECR I-5039, at paragraphs 35-36 of the judgement.

242 *Anderman & Kallaugher* (2006), p. 288. See also *ibid.*, at p. 8, where the authors state that “*the exceptional circumstances test represents an important acceptance by competition law that intellectual property rights are not the same as all other forms of property rights even while maintaining that the exercise of intellectual property rights must be subject to the regulatory limits of competition policy*”.

Thus, like the mere notion of intellectual property seems to be capable of justifying most fundamental rights restrictions without a need for any proportionality analysis,²⁴³ it seems capable of justifying most restrictions of competition, too. Such views of the exceptional circumstances reflect faith in liberty of contract and (intellectual) property rights as sufficient guarantors of competition.²⁴⁴ These would provide the basic mechanism through which liberty and competition are guaranteed, save in very exceptional circumstances. From this perspective, the notion of exceptional circumstances protects the market participants and free market transactions against governmental interference. The need to protect liberty against market power and the asymmetrical exercises of property rights are seen as minor and exceptional problems.

On the other hand, the notion of exceptional circumstances may be connected to the more concrete consideration that intellectual property rights by definition grant temporary exclusivities in the furtherance of creativity and innovation. The temporary exclusivities imply in most instances at least some degree of market power,²⁴⁵ further implying relative pricing freedom and the fact that a refusal to license may have competitively significant effects. However, this is the intended effect of intellectual property rights in the pursuance of their objectives, and should in most instances be accepted in the application of competition law. Only if competition by substitution is prevented and there are enough substantive reasons for granting access, does the need for compulsory licensing arise.

Stripped-off from the operational and ideological connotations discussed above, the notion of exceptional circumstances could thus be interpreted as an expression of sensitivity to the legislative environment of application: the intended effects and rights created by intellectual property right legislation should not be categorically frustrated by the application of competition law. This interpretation of the notion enables contextual sensitivity and openness to an extent not enabled by Anderman's and Kallaugher's reading. It can be seen to further institutional interaction between intellectual property and competition laws: the objectives of intellectual property protection affect the application of competition law without formal subsumption

243 See the previous analysis – and critique – of case C-479/04, *Laserdisken* in chapter 4.

244 The notion of exceptional circumstances may be connected to liberty of contract as the general rule of both US and British common-law reasoning: only exceptional circumstances could justify a competition law intervention, interference with contractual relations. See about the common-law background and the requirement of exceptional circumstances in common-law competition law reasoning *Peritz* (2006), p. 20-21. Similarly, it can be seen as an expression of general non-interference with property ownership as defined by specific property laws: should an exercise of economic power reflect an important property right, it is generally justified despite its anticompetitive effects. See also *Peritz* (2000), p. 174 and 254-258 (the force of the property argument started to lose its weight during the later New Deal years, but reappeared in the 1970s). The same idea has been endorsed in the context of antitrust limitations of intellectual property protection in the *Xerox*-case, decided in the US. See *In re Independent Service Organizations Antitrust Litigation (CSU v Xerox)*, 203 F.3d 1322 (Fed. Cir. 2000), concluding that “*absent exceptional circumstances, a patent may confer the right to exclude competition altogether in more than one antitrust market*”.

245 See *Katz* (2007), *passim* and the preceding treatments of market power in this chapter and chapter 6.

of either. The notion of exceptional circumstances should not be considered a test, merely an abstract intellectual premise or orientation.

Since *Bronner*, the essential facilities doctrine has been in retreat in Europe.²⁴⁶ In the US, the *Trinko*-judgement has been said to represent the near extinction of the doctrine in the Supreme Court.²⁴⁷ These developments may be connected to the impact of the Chicago School on both sides of the Atlantic on the underlying ideological premises of competition law and antitrust, respectively. Chicago School competition literature insists that firms controlling various infrastructural facilities *will internalise the complementary efficiencies*, that is, they will benefit from new applications and complementary innovations produced by other firms, as these will increase the price of the whole platform.²⁴⁸ Thus, the policy recommendation is to abstain from competition law intervention as the platform owner will act rationally and open its platform whenever it is economically efficient and deny access only when it is inefficient.

However, the post-Chicago School adds important exceptions to this basic logic. The basic logic does not necessarily hold in any of the following circumstances:²⁴⁹ the platform price is regulated, the platform owner has motivation to enable price discrimination, it has motivation to enable the prevention of potential competition on the market for the platform, it has motivation to enable subsequent strategy changes or motivation to avoid transaction costs related to bargaining, the platform owner is incompetent and does not realise its true business interest, or complements could have value independent of the platform in question. However, the post-Chicago School literature still treats these instances as exceptions and maintains that the basic logic should apply unless proven that the case is within one of the exceptions and that a workable remedy is available. Accordingly, in the presence of *uncertainty* the recommendation is to avoid error costs and to abstain from competition law intervention. This typically leads to non-intervention in most of the cases analysed, as some uncertainty is always present.

On the other hand, the narrowing of the essential facilities doctrine could also be connected to an increasing concern for dynamic competition. The recent case law exhibits an attempt to balance price competition and static efficiency with the protection of investments and innovation incentives and thus dynamic efficiency.²⁵⁰

246 See also e.g. *Bavasso* (2002), p. 103. See also *Evrard* (2004), p. 520 (concluding that “the case law pre-*Bronner* has lost some of its relevance, at least as regards the criteria to apply a duty to deal” and “It no longer suffices to be in a dominant position to have a duty to deal, as it was pre-*Bronner*”).

247 See e.g. *Frischmann & Waller* (2008), p. 9.

248 See e.g. *Posner* (1976), p. 173.

249 See e.g. *Farrell & Weiser* (2003), *passim*. The internalisation argument will be effectively challenged by the *infrastructure theory* discussed subsequently. It provides a more fundamental critique of the internalisation thesis than the post-Chicago School literature.

250 The analysis of incentives and investment can also be seen as part of the indispensability analysis. For example, where the facility has been built with public funds, its owner’s incentives to invest would not be destroyed by compulsory access. On the other hand, the competitors typically lack the commercial incentive to build a second facility with private funding.

Such considerations have contributed to the strict interpretation of essentiality and to the diverse dimensions required of indispensability. When applied to intellectual property, it appears that an intangible resource protected by intellectual property may be deemed an essential *input* only when competition by substitution is prevented.

The new product -criterion seeks to secure that the licensee will not restrict itself to merely duplicating the products or services already offered by the proprietor, but that it would produce a different *output* for which there is potential consumer demand. The new product -criterion may be seen to advance both dynamic and static efficiency. In line with the functions of intellectual property protection it enables compulsory licenses only for non-duplicative purposes and thus may advance competition by substitution and dynamic competition.²⁵¹ But it could also advance allocative efficiency by preventing non-efficient business stealing, a situation whereby a less efficient competitor enters the exact market of the intellectual property owner.²⁵²

Provided the Court of First Instance's interpretation of the new product-criterion in *Microsoft* holds, it is a relatively flexible criterion in that it has a double function of 1) preventing mere duplication provided there are no other exceptional circumstances speaking in favour of compulsory licensing; and 2) testing the effects of the refusal to license on the development of the related markets. If the refusal limits technical development to the prejudice of consumers, the criterion becomes satisfied. The new product-criterion could hence enable many-sided evaluation of the effects of the refusal to license on competition and the integration of these effects on judicial decision-making. Still, even in the absence of a limitation on technical development or production of new products or services other circumstances could justify compulsory licensing as the *Volvo*-case, among others, demonstrates.

The objective justification related to innovation incentives is in many ways more problematic than the much criticised new product -criterion,²⁵³ as in the Court of First Instance's interpretation it does not enable weighing of the respective effects on innovation, but on the other hand functions as an absolute justification for a *prima facie* abuse, irrespective of its effects. It manages to be simultaneously too limited and too far going with regard to intellectual property. Its basic presumption is that intellectual property rights do not incentivise their owners, as the intellectual property owner must invoke this justification and demonstrate that the duty to license would have a significant negative impact on its incentives to innovate. On the other hand, provided the threshold becomes fulfilled, the *prima facie* abuse is justified – in conformity with the logic of objective justification and as explicitly confirmed by the Court of First Instance – irrespective of the market power present and anticompetitive effects caused.

251 See also *Conde Gallego* (2008), at p. 237, noting that if the license merely facilitates imitation, the intellectual property owners could become reluctant to make the initial investments to create it.

252 See about the potential of inefficient business stealing *Gilbert & Shapiro* (1996), p. 12752, and with regard to the telecommunications sector, in particular, *Laffont & Tirole* (2000), p. 107-109.

253 *Drexel* (2008), at p. 37, states that “the new-product rule is not consistent with any economic rationale”.

7.6 Elements for an Alternative Effects-Based Approach

7.6.1 Introduction

The analysis of the relevant doctrines as developed in case law and scholarly literature interpreting and commenting them provided a necessary perspective about the prevailing argumentation patterns and the possibilities and limitations these set for future developments. Compared to typical critiques of the doctrines found in legal literature,²⁵⁴ important flexibilities capable of being utilised and further developed were identified, for example in the notion of exceptional circumstances, which does not require the cumulation of the *Magill*- and *IMS-Health*-criteria. Similarly, the new product -criterion was seen to be a relatively flexible notion, enabling considerations related to the functions of intellectual property protection, morally acceptable forms of competition, as well as dynamic efficiency considerations on the micro- and macro-levels of technological development like in the *Microsoft*-case. Instead, the objective justification related to innovation incentives, as formulated by the Court of First Instance, appears to be an inflexible and problematic doctrine. On the other hand, nothing prevents the Community Courts from realising its inadequacies and modifying it accordingly.

In the following, the focus will be on the *effects* of a refusal to license. It is argued that in addition to considering the indispensability of a resource protected by intellectual property right as an input, more attention should be directed at various consequences of refusals to license. It is further argued that such analysis should extend beyond commercial production and innovation when the circumstances of the case so suggest. When the resources protected by intellectual property enable large scale social production or regulate cultural or communicative activities producing no appropriable benefits, such effects should be internalised in the analysis. As the following argumentation seeks to demonstrate, this may be supported by economic analysis and substantive reasons related to democracy and constitutional values alike. The proposal, which will not be formulated as an abstract-level simplistic test, could also enable some control of the informational power produced by intellectual property rights.

7.6.2 Social Costs of a Refusal to License and Infrastructure Theory

Kaplow has pointed out that it is inadequate to focus on the aggregate reward to the patentee without simultaneously considering the social costs of the competition restriction to the society.²⁵⁵ A single-sided focus on the optimal reward does not

254 For example *Drexel* (2008), at p. 39, states as his conclusion that “the case law of the ECJ does not contribute anything to developing a consistent economic approach to intellectual property and competition law”.

255 See *Kaplow* (1984), p. 1817-1820. Cf. with *Bowman* (1973), *passim*.

differentiate between different methods with which to reach the optimum.²⁵⁶ For Kaplow, the core question is in which manner the society can purchase a given level of inventive output by providing incentives for the least social costs caused by the incentive restriction. Various practices produce differing rewards and social costs. Kaplow argues that their permissibility should be analysed by using a *Patentee Reward/Monopoly Loss* -ratio test.²⁵⁷ Yet, the test has its shortcomings and its direct application in practical situations seems to be limited for various reasons, addressed in the following.

Kaplow emphasises the need to assess patent length and the application of competition law simultaneously as factors affecting the reward and incentive of the patentee. However, there are also other important factors affecting the reward to be considered simultaneously, such as the scope and interpretation of the patent claims, the doctrine of equivalents, and even factors like the burden of proof in infringement cases, the amount of compensation and possible damages, the costs of processing, and so forth. Kaplow selected patent term merely because of its relative simplicity in calculating the effect on reward.²⁵⁸ Furthermore, the structure of the market and the overall position of the patentee complicate the competition law analysis. Even if an individual decision applying competition law to intellectual property would not seem to be optimal, two or more decisions concerning other aspects of intellectual property – competition law interaction taken together may have that impact because of their mutual trade-offs. Similarly, a decision that seems to be optimal individually may not be that when assessing the totality of competition law decisions affecting intellectual property, because only the totality of the decisions defines the amount of reward accruing to the proprietor.²⁵⁹

Kaplow thus noted that even if it were possible to define the optimal reward to the patentee, the courts and authorities applying competition law should be aware and analyse the effects of all decisions affecting the aggregate reward of patentees. The globalisation of intellectual property protection, cultural and industrial production and thus also the globalisation of the incentive-function ultimately renders the reward-theory and *ex ante* efficiency-analysis impracticable. As pointed out by Kaplow, even in a domestic setting it is impossible for a court or a competition authority to foresee the totality of decisions affecting the aggregate level of reward received by the intellectual property holder. After the incentive function has largely shifted to the global level the aggregate level of reward is defined by the world-level totality of decisions related to the protected resource in question.

From this perspective, *Drexl's* proposal to concentrate on factors facilitating dynamic competition as a process instead of dynamic efficiency in individual *ex ante* instances of competition law application is understandable.²⁶⁰ However, when substantiating the

256 *Kaplow* (1984), p. 1817-1823.

257 *Ibid.*, p. 1821-1845 and also *passim*.

258 *Ibid.*, at p. 1820.

259 *Ibid.*, at p. 1834 and 1845.

260 *Drexl* (2008), p. 40.

argument, Drexl concentrates on the individual instance and the characteristics and potential innovativeness of the product or service proposed. He further maintains that the exceptional circumstances required for compulsory licensing to take place would be at hand *whenever competition by substitution is excluded as a matter of the market conditions*. In such instances, Drexl argues, also imitation should be allowed on the basis of the prohibition of abusing a dominant position, thus even if the competitor would not offer new products to consumers.²⁶¹ Finally, Drexl states that the potential negative effect of licensing on the incentive of the intellectual property owner should be taken into account *in the amount of royalties to be paid for the license*.²⁶²

These views would greatly expand compulsory licensing based on competition law from what it is under existing case law. Although the restriction of competition by substitution should be one of the central factors when addressing the need to apply competition law to a refusal to license, it is neither new nor sufficient. As discussed under the essential facilities doctrine above, the indispensability test as applied to intellectual property rights already connotes that a resource protected by an intellectual property right may be deemed essential only if there are no actual *or potential* substitutes enabling the competitors to remain viably on the markets.

In addition to this, restricting the exclusive rights inherent to intellectual property through competition law should require the identification of substantive anticompetitive effects and their weighing against countervailing protection interests. Competition by substitution may be prevented by the mere formulation of an intended product or service so that only a single protected input enables such an activity, like in *Magill*. However, there is nothing in Drexl's and his colleagues' proposal capable of distinguishing such cases from the ones with significant competitive effects. The proposed model thus misses the broader social costs imposed, including restrictions on innovation and the production of market, non-market and public goods within various frameworks. As such, the model also excludes considerations related to

261 See Drexl (2004), at p. 806 and 807 explicitly. See also Drexl *et al.* (2006), at p. 568: "In general terms, a license would be justified whenever it would enable substitution by a different, potentially more innovative product"; Drexl (2007), p. 664: "Imitation should be allowed under a duty to license based on Article 82 EC in situations where external market failures exclude substitution of the protected subject matter by a new product" and (2008), at p. 37: "the new-product rule is not consistent with any economic rationale". See also Conde Gallego (2008), at p. 237: "In general terms, a duty to license would be justified whenever it would enable substitution by a different and more innovative product". Cf. with Kur (2008), at p. 326: "even a license to imitate may be an appropriate remedy, if imitation is the only way an alternative can be offered to consumers, and provided that the denial of exclusivity will not have detrimental effects on investments in innovation in the relevant market". Ghidini (2006), at p. 109 and Ghidini & Arezzo (2007), at p. 114-115, see that the function of an intellectual property right is not jeopardised by the application of competition law provided the "micro-monopoly" related to the protected specific technological solution remains intact. They argue that the function of intellectual property rights is not to protect the "macro-monopoly" on the industrial sector to which that solution belongs.

262 Drexl *et al.* (2006), p. 568-569 and Drexl (2004), at p. 806: "The amount of such fees must be assessed carefully so as to balance the need to maintain necessary incentives for innovation by the right holder and avoid monopoly pricing vis-à-vis competitors". Similarly Conde Gallego (2008), p. 237.

societally harmful informational power capable of impeding communicative, inventive and entrepreneurial diversity and freedom of action emphasised in this research.

Infrastructure theory as formulated by *Frischmann* addresses this deficiency typical of access regulation.²⁶³ *Frischmann* and *Waller* have further applied infrastructure theory to the essential facilities doctrine, including discussion of resources protected by intellectual property rights.²⁶⁴ The key element addressed in infrastructure theory is how and to what extent infrastructure resources generate value for society. The focus is thus on the demand-side, outputs capable of being produced, instead of supply-side, the indispensability of the input needed. From this perspective, distinctions could and should be made among resources or inputs that are in themselves indispensable in the sense that there are no existing or potential substitutes for them. In other words, the mere indispensability of a resource does not have to lead to the need to open the resource for use by others with competition law or other regulation.

Hence, as the focus is on the potential of the resource to generate value for society in general, the inconvenience suffered by the plaintiff, or the indispensable nature of the input to the plaintiff only, does not qualify the resource as an infrastructure to which access must be provided indiscriminatorily even if the plaintiff intends to produce a different, or more innovative product.²⁶⁵ This also connotes that the function of competition law would be distinguished from unfair competition law, contract law and relational market power, in that the protection of individual competitors from both unfairness or contractual wrongs would be beyond its concerns.

What instead becomes decisive is the *non-rivalrous nature* of the resource, its *capacity to function as an input in the production of a wide variety of outputs*, as well as the *particular context and the mix of outputs* it generates. *Frischmann* identifies three qualities of infrastructure: 1) the resource may be consumed non-rivalrously; 2) social demand for the resource is driven primarily by downstream productive activity that requires the resource as an input; and 3) the resource may be used as an input into a wide range of goods and services, including private goods, public goods, and non-market goods.²⁶⁶

The more clearly a given resource satisfies the above criteria, the stronger the case for managing the resource in an openly accessible manner, without discrimination on the basis of the identity of the end-user or the end-use. In contradistinction to products consumed directly by end-users, intermediate goods or inputs capable of being used non-rivalrously in multiple downstream activities present a stronger case for open

263 *Frischmann* (2005), *passim*.

264 *Frischmann & Waller* (2008), *passim* and *Waller* (2008), *passim*. For a discussion of infrastructure theory in the context of intellectual property rights, in particular, see *Frischmann & Lemley* (2007), *passim*.

265 *Frischmann & Waller* (2008), 48.

266 *Frischmann* (2005), p. 956 and also *passim*. Public and non-market goods differ from each others through the way they create value for society. The value of public goods is realised upon consumption, whereas non-market goods modify the societal conditions and social interdependencies so as to increase social welfare. These can relate to facilitating an open public sphere, education or freedom to experiment with new ideas and solutions, thus also benefiting non-participants in these processes. See *ibid.*, at p. 964-967 and *Frischmann & Waller* (2008), p. 16.

access. Infrastructure resources are thus essentially “enabling platforms” upon which others may build.²⁶⁷ They facilitate downstream competition, inventive activities and experimentation with new uses, typically resulting in positive externalities and large social gains.²⁶⁸

There are specific reasons for an open access regime for inputs enabling the production of public and non-market goods, in particular.²⁶⁹ In such instances the social value generated by permitting additional users to utilise the resource may be substantial, but very difficult or even impossible to quantify. *The infrastructure owners typically cannot internalise the complementary externalities when these are public or non-market goods.* Such outputs may be produced without the motivation or ability to appropriate the value created, still generating considerable value for the society as a whole. Members of the society who do not directly use the infrastructure in question may also benefit from the outputs produced, thus making the internalisation of all benefits unlikely. Such spillovers, when pervasive, should become part of the welfare analysis.

For example, in the frameworks of small-scale but extremely widespread production of diverse content, critical commentary and debate, social networks and peer-to-peer communication taking place in the Internet, the multiple individual users of this enabling infrastructure produce non-market goods benefiting not only themselves, but also non-participants in these processes. The latter benefit from the creation of culture, accessible and critical public sphere, education and freely accessible, widely used information products and social media like computer program operating systems, reference works like Wikipedia, or blogs and social networking platforms.

Similarly, participants in a collaborative on-line project like open source -development of computer programs create value without the participants directly appropriating the value thus created. Yet, the owners of the infrastructures enabling such activities may have a commercial motivation to favour uses of the infrastructure generating appropriable benefits only, at the cost of uses of the resource generating large scale non-appropriable benefits in the form of public and non-market goods, in particular. The fact that the social costs of restricting access to infrastructure potentially generating various public and non-market goods may be significant, but at the same time likely escape observation or consideration within conventional economic analysis, speaks in favour of managing the resource on open access basis.

The implications of infrastructure theory extend wider than the post-Chicago discoveries related to the numerous exceptions to the logic according to which the owner of the resource or infrastructure internalises the complementary efficiencies of downstream activities and thus effectively shares the resource in the absence of any of

267 Frischmann (2005), at p. 949-951 and 957 and also *passim*.

268 *Ibid.*, *passim*; Frischmann & Waller (2008), p. 12 and Frischmann & Lemley (2007), p. 279-281.

269 Frischmann divides infrastructures to commercial, public and social infrastructure, depending on the downstream activities produced. Commercial infrastructure enables the production of commercial goods, public infrastructure the production of public goods and social infrastructure the production of non-market goods. However, *many important infrastructures (like the Internet) are mixed in the sense that they enable the production of all these goods.* See Frischmann (2005), p. 959-969.

the exceptions.²⁷⁰ Infrastructure theory draws our attention to the non-rivalrous nature of the resource, as well as to its function as a potential input for myriad commercial, public and non-market goods. In such instances internalisation through exclusive property rights is inefficient.

The theory thus provides important insights also for the analysis of the interaction between intellectual property and competition law: the non-rivalrous nature of resources protected by intellectual property rights connotes that they satisfy the first condition of an infrastructure.²⁷¹ The second and third conditions depend on the nature of the protected resource as an input for diverse activities. When broadening the analysis of social costs to public and non-market goods, the impossibility of *ex ante* efficiency calculus becomes obvious. It is simply often impossible to foresee all the productive activities and benefits created downstream. Even if it were, one could not measure their value on any useful scale, practically or conceptually: spillover-effects on individual autonomy, democratic participation or education cannot be quantified on the same scale as the effects on the production commercial goods. Yet, the broadened focus should lead to additional considerations on top of the indispensability tests as formulated in the essential facilities case law and the proposals by Drexler and his colleagues alike.

As said, Frischmann and Waller have further developed infrastructure theory in the context of the essential facilities doctrine. They seek to revitalise the doctrine, but emphasise that infrastructure theory does not necessarily imply its wider or looser application. To the contrary, it would provide more precision and additional tests when analysing which facilities need to be opened for competition.²⁷² It would emphasise another dimension of the cases in addition to the currently prevailing supply-side substitutability and the protection of the investments and innovation incentives of the owner of the resource: the scope and nature of the downstream activities dependent on the resource in question. Compulsory access or compulsory licensing would be grounded in case of infrastructures supporting significant downstream positive externalities.²⁷³ However, the downstream spillovers resulting from access to the infrastructure should be weighed against any negative effects on investments and innovation incentives.²⁷⁴

If the infrastructural resources have resulted from public funding or are the spin-off result of other activities, for example, there may be reasons to treat also commercial infrastructures as essential facilities to which non-discriminatory access must be

270 See e.g. Farrell & Weiser (2003), *passim*.

271 Also Lemley & Weiser (2007), at p. 813, note that as intellectual property can be shared without degrading it, the case for the superiority of a property rule is not compelling.

272 Frischmann & Waller (2008), p. 19.

273 *Ibid.*, p. 20.

274 *Ibid.*, p. 35. In the context of intellectual property in general, see Frischmann & Lemley (2007), p. 282-284 and also *passim*.

guaranteed.²⁷⁵ In other instances, downstream producers of private goods typically manage to accurately manifest demand for the resource in question, as consumers realise the full value of the benefits and are willing to pay for them. In such instances there are thus usually less reasons for competition law intervention.²⁷⁶ With regard to inputs used for the production of commercial goods only, the obligation to provide access also depends on the scope and importance of the downstream activities, the extent of competition on the downstream output markets in question, and the possible anticompetitive behaviour affecting supply.²⁷⁷ The indispensability test should be strictly applied. The presence of any exception to the logic of internalising the complementary efficiencies – and thus the presence of market failure – could speak in favour of compulsory access.²⁷⁸

For example, network effects combined with strong intellectual property protection could imply that supply-side substitution is not a feasible alternative.²⁷⁹ Hence, the resource could condition access to voluminous markets and the owner of the infrastructure could have motivation to prevent potential competition on the market for the infrastructure in question. In such circumstances, compulsory access would appear to be grounded.

For infrastructure (also) enabling the production of public and non-market goods, the threshold for imposing compulsory access would be lower, as the demand for the input could not reflect – in the presence of information, valuation and appropriation problems – the positive externalities enjoyed by the society as a whole. Important infrastructures producing public and non-market goods “*are critical to the fabric of our society*”.²⁸⁰ Thus, depending on the quality and scope of the potential outputs, there may be a strong public interest in providing access to them. Communications networks, computer program operating systems, power grids, transportation and news-service networks, in particular, could constitute such infrastructures.

Frischmann and Waller argue that access to such resources should be granted on non-discriminatory terms, without distinctions between classes of customers and users. For example, an owner of rights in a computer program operating system could not know which users would use that platform for societally beneficial purposes. The absence of such knowledge implies that there is no way to price the right to utilise the platform so as to maximise the downstream spillovers. Without compulsory access on

275 Importantly, Frischmann and Waller would enable the owner of commercial infrastructure to distinguish between classes of customers and uses. *Frischmann & Waller* (2008), p. 37.

276 *Ibid.*, p. 17.

277 *Ibid.*, p. 19-20.

278 See e.g. *Farrell & Weiser* (2003), *passim*, about these exceptions.

279 As explained by *Frischmann & Waller* (2008), at p. 16, in contrast with *network* effects, *infrastructure* effects do not often increase users' willingness to pay for the right to utilise the infrastructure resource, as the user's willingness to pay for the right to use is restricted to the benefits that can be obtained directly by the user. Moreover, network effects often relate to supply-side and indispensability, infrastructure effects to demand-side and potential spillovers. Existence of both phenomena speak in favour of compulsory access, but do not alone determine it.

280 *Frischmann & Waller* (2008), p. 16-20.

true non-discriminatory terms, the infrastructure owners could favour applications most likely generating appropriate and observable benefits, at the expense of applications generating spillovers. True non-discriminatory access could thus foster diversity of downstream activities, experimentation and unexpected uses.²⁸¹

The effect of the refusal to license on the demand-side has likely functioned as a relevant consideration in the case law of the Community Courts, although the related argumentation has been minimal. As mentioned above, the new product -criterion may introduce some demand-side considerations to the evaluation. However, in *Magill* and *IMS-Health* it related to the individual request for a license, instead of being a general consideration related to the input in question.²⁸² Moreover, in *IMS-Health* the compulsory license would only have increased price competition on the market for sales data in Germany.²⁸³ As the related costs of aggregating the data in Germany would in any case have represented only a fraction of the total global expenditure of developing drugs, the compulsory license would have had a negligible effect on the price of the pharmaceuticals and thus on the interest of final consumers. The right to use the copyrighted brick-structure in the conditions of *IMS-Health* would not have led to any downstream activities or spillovers.²⁸⁴ On the other hand, the market in Germany was clearly non-dynamic in that the standard had abolished practically all competition by substitution. Similarly, the functional criteria used when designing the database structure spoke in favour of refusing protection.

The *Microsoft*-case, in contrast, represented strong demand-side considerations. The Windows-operating system is a vital input for commercial, public and non-market goods alike. The downstream spillovers for software developers and individual users are immense and incalculable. Hence, Frischmann and Waller argue that, at a minimum, a regime of open access to interface information should be secured to guarantee the interoperability of applications with Windows.²⁸⁵ As discussed earlier, the judgement concentrated on the incentives of competitors to develop products distinguished from those of Microsoft under the notion of a limitation of technical development to the prejudice of consumers. The judgement thus shifted the focus from the individual applicant to the potential of the platform to generate value more generally.

This is a rational approach and broadens considerably the utility of the new product -criterion. Yet, the judgement does not distinguish the downstream commercial, public and non-market goods. The leveraging of market power to work group server

281 *Ibid.*, p. 18 and 30-38.

282 As already noted, Frischmann and Waller argue that the new product -criterion as introduced in the *Magill*-case is a poor substitute for the presence of downstream spillovers. The effects of the compulsory license in programming information facilitated viewing of the TV-programmes. The copyright thus functioned as an intermediate good, but to a very limited extent only. See *Ibid.*, p. 18.

283 See also *Drexel* (2004), p. 805, arguing that allocative efficiency should have led to compulsory licensing in the conditions of the *IMS-Health*-case.

284 See also *Frischmann & Waller* (2008), p. 63.

285 *Ibid.*, p. 55.

operating systems and streaming media players with further effects on several markets and new leverages affected the gravity of the competition law infringement and thus the amount of the fines imposed, but did not constitute an integral part of the analysis of abuse, as it should have.

7.6.3 Asking (Some of the Right) Questions

Based on the analysis of the doctrines developed in case law and models proposed by legal scholars alike, it seems obvious that any three- or four-prong test intended to apply generally to the interaction between intellectual property rights and the prohibition on the abuses of a dominant position need to be rejected or modified as new cases or contexts of application emerge. My intention has not been to develop yet another simplistic test intended for general applicability. Asking a series of questions directing attention and broadening the issues considered, as proposed by Fox, would appear to be a preferable approach.²⁸⁶

This would enable the maintenance of a plurality of objectives, concerns and underlying theoretical perspectives. It would also avoid the formalism of doctrines like the objective justification related to innovation incentives, as interpreted in the *Microsoft*-case, whereby comprehensive evaluation of the situation and weighing of the countervailing arguments may become precluded. Competition law has an important potential in enabling the contestation, negotiation and redefinition of aspects of property rights and in case of intellectual property rights, of enabling the control of economic and informational power produced with them. Rigid tests intended for universal application or single-sided doctrines would effectively frustrate this function. My purpose here is to summarise some of the perspectives and questions considered potentially relevant in the competition law evaluation of a duty to license.

As an economic theory, infrastructure theory provides terminology familiar for competition law experts for discussing the effects of competition law application on issues like communication, democratic participation and self-expression. As such, it could enable critique and re-evaluation of some of competition law's concepts and currently underlying presumptions on competition law's own territory and specialised discourse. It thus also enables challenging the propositions of the Chicago School-dominated competition law discourse, which participates in the constitution of the interaction between intellectual property and competition law from the perspective of its own constitutional supernorms, market simulation and wealth maximisation.

Yet, although with infrastructure theory the effects of open access on issues like democratic participation and non-commercially motivated development projects can be expressed in terms of wealth maximisation and allocative efficiency,²⁸⁷ competition law has so far been occupied with commercial producers and products, as well as

286 See Fox (2007), p. 640-642 and also *passim*.

287 See e.g. Frischmann & Waller (2008), p. 4.

consumer interest interpreted as consumer surplus at best: lower prices and better products reaching the consumer-level in the form of products and services delivered by the commercial operators. *Already the term consumer welfare implies a concern over the interests of purchasers of commercial products and services.*²⁸⁸

Moreover, although the infrastructure theory manages to demonstrate the value of open access from the perspective of consumer welfare it could not answer – practically or theoretically – where to draw the line between incentivising the creation of infrastructures (including resources protected by intellectual property) and enabling the production of public and non-market goods based on their use. Finally, it merely presents one alternative economic perspective among others the competition law courts, authorities and scholars could embrace. Hence, its proposals obviously could not penetrate the doctrine by design. Instead, some of its insights should be complemented with other theoretical premises and perspectives outside the economic discourses.

The basic implication of the infrastructure theory is simple and often emphasised in democratic theory: price signals and market forces alone do not guide the commercially motivated owners and developers of technological resources towards democratic design maximising public and non-market values, but to design maximising private commercial benefit and hence private goods.²⁸⁹ Like merger control in the media sector and individual competition law -decisions like *Associated Press* demonstrate, constitutional values have not been wholly beyond competition law even in the absence of a coherent competition law theory accommodating such interests.

To an extent threats at such values overlap with competitive constraints imposed, competition law may assume the role of channelling freedom of speech and other fundamental rights -related concerns to the relations among firms and other private entities, such as associations established by firms. At least to an extent a private entity could regulate fundamental rights or the related collective goods in a collective manner, like in *Associated Press*, there are good grounds to interpret and apply the competition norms so as to simultaneously satisfy the demands of the fundamental rights norm.²⁹⁰ The interpretation of competition law may thus advance fundamental rights and the related collective goods. This may fulfil the government's obligation to actively *protect* such ends, like in the case of workable markets, communicative diversity and entrepreneurial freedom. Recognising and elaborating the connections

288 Still, it should be asked whether the competition law decision-maker could restrict its analysis to consumer welfare narrowly understood, and blind its eyes of the likely benefits accruing to the society and individuals at large. Even the term *user welfare* would be too narrow here, as the benefits may accrue to the non-users of the infrastructural resources as well, as discussed above.

289 From the perspective of democratic theory see e.g. *Habermas* (2001), p. 95; *Barber* (2002), p. 10 and *Iversen, Vedel & Werle* (2004), p. 109. From the perspective of philosophy of economics, see *Hausman* (1992), p. 98-110. See also the previous discussion in sub-chapter 1.2.2.

290 With respect to EU law, in particular, see more closely the discussion of the European Court of Justice's *Walrave*- (Case 36/74, *Walrave and Koch v Association Union Cycliste Internationale* [1974] ECR 1405) and *Bosman* (Case C-415/93, *Union royale belge des sociétés de football association ASBL v Jean Marc Bosman* [1995] ECR I-4921) -cases in chapter 4.

of competition law to the realisation of such collective goods would contribute to the realisation of such objectives. It would also further contextual application of competition law.

Far from proposing that wealth maximisation or other mainstream goals of competition law should be rejected, it is argued that considerations related to them should be complemented with questions resonating on the level of constitutionalism whenever necessary. For example, in *Microsoft* the attempt to leverage the near monopoly position of Microsoft on the markets for operating systems for personal computers to other markets equally central for the global Internet-based communications appeared as a threat to democratic values and fundamental rights-related interests. Asking whether the market power and alleged abusive practices extending it to new markets could pose a threat to such values and interests is thus highly relevant as a potential challenge for the straightforward application of the mainstream doctrines and propositions emanating from microeconomic-oriented competition law discourses.

If Microsoft could have demonstrated that the obligation to provide the interface information would have had a significant negative impact on its incentives to innovate, the doctrine as developed in the Court of First Instance's judgement would have allowed Microsoft's refusal irrespective of the competitive harms imposed. Similarly, typical law and economics analysis would have been content with a net increase of innovation incentives at the expense of Microsoft leveraging its market power to new markets of Internet-based communication. Asking whether significant negative impact on the dominant firm's innovation incentives or even net increase of industry-wide innovation incentives could justify a strategic extension of a monopolistic position to markets central for Internet-based communication and expression, would challenge these propositions. Facing this question, the legal scholar and judge alike should either answer why it is irrelevant in the first place or, alternatively, why the protection of innovation incentives should weigh more or less than the countervailing concerns raised in the question.

The application of competition law could also bring in sector-specific flexibility to an extent not possible by applying intellectual property laws, which typically lack both instruments capable of distinguishing diverse sectors of application and controlling the power positions created. The intellectual property norm may also be entrenched at the expense of its justifications.²⁹¹ Competition law could open up the entrenched intellectual property norm formulation towards its underlying justifications: it could pursue argumentation patterns based on consequential, effects-based evaluation to a far greater extent than intellectual property law.

291 See more closely the discussion in chapter 3.2.2. Cf. however with *Ullrich* (2001), at p. 378-379, arguing from ordoliberal premises that the only function of competition law is to *maintain*, but not arrange or interfere with competition. "It may not alter or 'improve' the general conditions of competition that the intellectual property system establishes" (*ibid.*, at p. 379).

Dynamic competition could be introduced through the application of competition law in a situation where intellectual property protection has – contrary to its underlying justifications – enabled the intellectual property owner’s control of competition by substitution. Similarly, should the object of protection be a spin-off product of other activities or the result of public funding so that intellectual property protection was not needed as an incentive, competition law could internalise such considerations in its application.²⁹²

Furthermore, intellectual property’s territoriality principle could be complemented with a more realistic analysis of the proprietor’s incentives on a global level, where competition and in practice also exclusive rights now increasingly operate. Hence, it is considered relevant to ask to which extent competition law -based compulsory licensing would jeopardise the underlying justification(s) of the intellectual property norm in question. Provided the application of competition law would not frustrate the underlying objectives and justifications of intellectual property protection, but could even advance them in the course of its application, there is no conflict on the level of the underlying justifications.

However, there are limits to such an approach in that the market power enabled by the intellectual property may in some instances be considered an automatic result of the legislator’s choice. Design right in spares constitutes such an example, as *Kur* points out.²⁹³ Treating mere refusal to license the design right in spares for repair markets abusive would effectively convert the exclusive right in spares intended by the legislator into a liability rule. In the absence of additional abusive elements, such an outcome would appear as problematic from the perspective of both coherence traditionally conceived, in the sense that the government should speak with one voice, and democracy, in the sense of *de facto* enabling judicial review of intellectual property legislation on the basis of competition law.²⁹⁴

Obviously, answering what is the intended result of the legislator is always a matter of argument. The analysis must be comprehensive and not restricted to single laws. Yet, to an extent the interpretation of competition law would frustrate a whole category or subcategory of exclusive rights, the competition law court should consider the constitutional limits of its competence. It should ask itself whether the imposition of compulsory licensing would limit – when the argumentation is generalised to cover all similar instances – a whole category or subcategory of exclusive rights intended by the legislator, or merely particular instances of application characterised by additional

292 See for such an approach *Standard-Spundfass*, Decision of 13 July 2004, KZR 40/02 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 36, issue 6/2005, pp. 741-754. Cf. however with *Gallini & Trebilcock* (1998), p. 25-26 (arguing that such considerations should be left for the intellectual property institution).

293 See also *Kur* (2008), p. 328.

294 *Kur* (2008), p. 327, refers to the division of competencies between legislative, executive and judicial functions and reminds that in a democratic society, competition law courts and authorities should be cautious not to override too easily deliberate decisions made by the legislature.

market power, abusive behaviour, or both. Competition law should not re-design categories of intellectual property laws based on its own standards.

It is sometimes emphasised that the specific concerns of copyright law as regards artistic freedom and cultural policy should be taken into account in the application of competition law, thus distinguishing copyright from patent law, in particular.²⁹⁵ Especially moral rights of authors and artists should not be jeopardised through the application of competition law.²⁹⁶ The arguments are highly relevant, but the logic behind them should be generalised.

Intellectual property laws in general operate within the domains of art, science, technology, health and media, among others. With the emergence of the networked information society and the centrality of the Internet for all cultural expression, intellectual property must increasingly be involved with all culture, information, self-expression and communication. The interaction of intellectual property norms with such spheres and environments of application becomes manifested in *polycontexturality*, the presence of diverse spheres of action following their own logic and rationalities. This implies predominantly, not that the diverse facts and industry-sectors should lead to fine-tuning the interpretations of intellectual property and competition laws accordingly, but the more fundamental need to contextualise their interpretations to diverse rationalities of relevant spheres of action. With regard to the application of competition law to intellectual property rights this typically becomes concretised as the need to accommodate the dominating economic rationality underlying intellectual property and competition law to the diverse non-economic sphere-logics of the particular sectors of application. These rationalities and sphere logics characterising diverse areas of intellectual property law's operation thus cannot be ignored, but should constitute an integral part of its reflexive and contextual application.

This implies the need to consider norms and inherent constitutionalisation of these spheres of action. These reflect the particular logic and core values of the sphere of action in question. Such interests are also often recognised in general fundamental rights law, for example in the form of protecting freedom of the art, science and expression, as well as rights related to health. The broadening of the applicable norms and constitutional perspectives present in decision-making hence also implies the increasing presence in the interpretation of norms emanating from distinct spheres of law and norm-producing centres. To an extent competition law is not construed as an instrument of expansive economic logic in neoliberal spirit, with which diverse rationalities in society become transformed into economic ends, such reflexivity and consideration of norms and constitutional perspectives emanating from other spheres of action is unavoidable.

295 See e.g. *Drexl et al.* (2006), p. 562-563; *Drexl* (2008), p. 52 and *Heinemann* (2008), at p.71.

296 *Heinemann* (2008), at p.71, states that if an author “does not desire the cinematographic adaptation of his book, competition law has to accept his decision. This cannot be qualified as a ‘limitation of production’ in the sense of Article 82 lit. b) EC”.

In the application of competition law to intellectual property rights this suggests that the decision-maker should enquire whether the case at hand could be interpreted as involving interaction and the need to accommodate the rationalities, norms and constitutional perspectives of diverse spheres of action, typically in the sense of limiting the economic demands underlying competition law application against other rationalities like in the example of art and copyright. In some circumstances, such an approach may be seen to be *required* by the relevant fundamental rights norms which protect the non-economic rationalities in question. Such an abstention from the expansionist application of competition law at the expense of fundamental rights-protected interests implies the traditional obligation to *respect* fundamental rights.

It should be obvious that the approach favoured here does not imply a generalised bias in favour of more application of competition law to refusals to license or other intellectual property-related actions. Perhaps even the contrary: some of the democratic concerns and the fundamental right-related non-economic rationalities connote that there may be a need to *abstain* from or *limit* the application of competition law to intellectual property rights.

Similarly, the interpretation of competition law through the government's duty to protect fundamental rights, such as communicative diversity and entrepreneurial freedom, could be seen to emphasise the societal significance of some cases only. The related considerations, like the infrastructure theory, could thus be seen to provide additional perspectives to the doctrines now used by the competition law courts and authorities. Nevertheless, this is not to deny that there will likely be more rather than less application of competition law to intellectual property in the foreseeable future. From the perspective of structural proprietary bias and the simultaneous rise of the networked information society, with intellectual property-enabled power operating at its core, there emerges the need to construct the related functions of competition law anew. It is surprising that the discussions of intellectual property and its relation to democracy and constitutionalism have not been extended to the interaction between competition law and intellectual property. Intellectual property co-creates the power over technologies underlying communications and individual expression. Competition law, for its part, functions as a potential limitation of excessive intellectual property based power.

These long-term, global phenomena and on-going transformations could be seen to call for recognising competition law as a complement to intellectual property law in the sense that it enables the control of the informational power exercised as techno-economic action, which is enabled or facilitated, but not controlled, by the intellectual property institution. On a more concrete policy level, the European Commission's explicit policy based on strong protection of intellectual property and "*rigorous application of competition rules*" would also speak in favour of seeing competition law as a necessary complement with regard to the informational power produced by intellectual property protection. Obviously, instead of being content with such a policy statement alone, it is necessary to analyse the extent to which intellectual property laws, in combination with other laws like fundamental rights norms or specialised communication laws, produce problematic substantive outcomes in need

of correction and capable of being addressed with competition norms. Thus, the concrete functioning or dysfunctioning of the substantive norms and their underlying justifications need to be analysed.

On the level of individual cases the foregoing tendencies imply the need for preparedness and ability of the doctrines to accommodate the constitutional concerns in the argumentation patterns when required by the circumstances of the case at hand. This requires flexibility from the doctrines and argumentation patterns, as well as the capacity to broaden the typical competition law horizon towards fundamental rights law, economic constitutional law and democratic theory.

Instead of calling for a systematic restriction of expanded intellectual property protection, these developments rather seem to suggest that in the application of competition and intellectual property laws the non-economic rationalities must increasingly be protected against the totalising tendencies of the economy and the money-medium. With regard to the application of competition law to intellectual property rights this could connote either more or less expansive application. The expanded possibilities to privately regulate through technological design of dominating platforms, or refusals to license or provide related interoperability information, should be realised in its application. Where such intellectual property -enabled restrictions of competition threaten to decrease communicative plurality or entrepreneurial freedom and diversity, competition law should be applied with rigor, but sensitivity towards the spheres of action and non-economic rationalities involved. Hence, rather than expanding the application of competition law to correspond with the expansion of intellectual property law, both should be embedded in economic constitutional law and interpreted and applied from such premises.

7.6.4 Typical Objections for a Duty to License and Counterarguments

Before proceeding to concretisation involving competition law treatment of patented standards, it is necessary to address some typical objections to the application of competition law in the area of high technology industries. These involve practical and more theoretical considerations relating to the ability of competition law courts to establish the exact conditions for licensing, on one hand, and their capacity to evaluate technological design choices, on the other hand.

The most usual critique against a liability-rule established by competition norms is that courts cannot and should not define the royalty-level applicable, as this would generally result in competition law courts and authorities acting as “central planners”, or under-compensation, and hence to undermining of the investment incentives.²⁹⁷ Accordingly, the antitrust agencies in the US have stated that they will not generally assess the reasonableness of royalties set by a patent pool, but will focus on the pool’s

²⁹⁷ See e.g. *Epstein* (1997), p. 2093; *Verizon Communications Inc v Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 407 (2004) and *DOJ & FTC* (2007), p. 22.

formation and whether its structure would likely enable pool participants to impair competition.²⁹⁸

As Lemley and Weiser note, the challenge of setting the terms of access in the face of uncertainty is the Achilles' heel of the case for liability rules.²⁹⁹ However, as the same authors argue, the mere fact that a regime based on liability rules may in this respect be imperfect does not necessarily imply that it should be rejected: the parties may be able to negotiate in the shadow of that imperfect result. This opportunity could be seen as a critical advantage of a liability rule -based regime. The parties may "contract into" a private liability rule also against the threat of such rules being defined by a competition law court.

This threat may contribute to a more reasonable bargaining position by reducing the market power enabled by the intellectual property hold-up and the connected threat of an interim relief. The latter may be seen as disproportionate where the scope of property rights is not well defined or where the scope of an injunction cannot be limited to the scope of those rights, like in the case of complex products protected by multiple patents.³⁰⁰ It should also be noted that where the need for a license is caused by the deceitful acts of the intellectual property owner itself, the competition law courts or authorities may legitimately impose a royalty-free license.³⁰¹ Should this be the case, there is logically no problem of setting the royalty-level correctly.

Moreover, there are instruments and methodologies available for a competition law court or authority to enable the setting of royalties. The pre-existing licensing practice may provide an available benchmark to be utilised when determining the royalty level and other licensing terms. In case of a discriminatory refusal to license the licensed firms provide a benchmark.³⁰² The same applies to discontinuation of licensing. Furthermore, in case of a qualified refusal to license the qualified refusal may provide information about possible licensing terms, such as the level of royalties acceptable for the licensor. Should some other proposed licensing terms constitute an infringement of competition law, the remainder of the licensing offer could be utilised for the purpose of determining the level of royalties and other licensing terms.³⁰³

Another way to avoid the competition law court or authority imposing a royalty level and other licensing conditions arbitrarily is to entrust this task to a specialised regulatory body.³⁰⁴ Such regulatory bodies exist in the area of telecommunications, in particular. Compared to general competition law courts or authorities, they may have a more realistic

298 *DOJ & FTC* (2007), p. 9.

299 *Lemley & Weiser* (2007), p. 820.

300 *Ibid.*, p. 795 and 832-836. See also *Lemley* (1996), p. 1071-1072, noting that the threat of antitrust actions may be sufficient to deter anticompetitive conduct.

301 See more closely the treatment of misrepresentation in the context of standardisation subsequently.

302 See *Villarejo* (2006), p. 545 and *Lemley & Weiser* (2007), p. 815-816.

303 In such a situation the proposed terms only provide information capable of being utilised by the competition law court or authority. They may nonetheless help in the determination of the appropriate royalty level and other licensing terms.

304 See also *Lemley & Weiser* (2007), p. 817.

picture of the dynamics of the regulated sectors and the terms with which access to certain facilities should be granted so as to guarantee effective competition without frustrating the investment incentives of the intellectual property owners. Yet, utilising such bodies in the determination of royalty-level and other licensing terms as well as their supervision would require institutional arrangements and probably the modification of the procedural rules of European competition law.³⁰⁵

The third possibility is to utilise commitment decisions. Commitment decisions are a relatively new instrument in European Union competition law.³⁰⁶ They are an alternative for a final Commission decision in matters where the Commission intends to adopt a decision requiring that an infringement be brought to an end, but where it does not intend to impose fines. The firms concerned may offer commitments to meet the concerns expressed to them by the Commission in its preliminary assessment. The Commission may by decision make the commitments binding on the firms. The decision may also be adopted for a specified period.³⁰⁷

The previous practice of the Commission to close an investigation subject to an undertaking from the firm(s) under investigation implies that the commitment decisions will likely be used in high technology contexts. The most important instances of this previous practice involved *IBM* and *Digital*.³⁰⁸ The Commission's more recent closure of investigations concerning *Philips'* licensing practices, and the alleged abuse of a dominant position on the part of *Rambus* in the context of standardisation process strengthens this conclusion.³⁰⁹ Philips exerted control over the CD-R standard. As part of the closure of the investigations it undertook to retroactively reduce the level of its royalties from 4,5 US cents to 2,5 US cents per CD-R disc. It also undertook to make available on its website summary reports of independent experts regarding those Philips patents that are essential to produce the discs.³¹⁰

In the light of this practice, commitment decisions could develop into a workable instrument when determining the appropriate level of royalties and other licensing terms in high technology contexts which otherwise pose problems for competition

305 Notably the revision of Regulation 1/2003/EC.

306 Commitment decisions resemble the consent decrees used in US antitrust law, but also differ from them. Unlike consent decrees, commitment decisions are not subject to regular judicial oversight, for example. See more closely *Sousa Ferro* (2005), p. 451 and *Furse* (2004), p. 5-10.

307 See Article 9 of Regulation 1/2003.

308 See about the *IBM*-case XIVth Report on Competition Policy (1984), p. 77 and XXIst Report on Competition Policy (1991), p. 81 and about the *Digital*-case Commission Press Release IP/97/868: *The European Commission accepts an undertaking from Digital concerning its supply and pricing practices in the field of computer maintenance services*.

309 Commission MEMO/09/273: *Commission Market Tests Commitments Proposed by Rambus Concerning Memory Chips*. The *Rambus*-case will be treated subsequently under heading 7.7.6.

310 See Commission Press Release IP/06/139: *Competition: Commission closes investigation following changes to Philips CD-Recordable Disc Patent Licensing*. See also the *Commission Decision in Joint selling of the media rights to the German Bundesliga*, COMP/C-2/37.214.

law courts and authorities.³¹¹ They enable reflexive modification of the measures in rapidly changing markets, when necessary. Thus, innovation and investment incentives, access to essential technologies and patents, as well as the practicability of the measures committed to could be analysed while the commitments are in place. The market test established by Article 27(4) of Regulation 1/2003 ideally manages to protect the interests of all parties concerned.

For example, the royalty level and other licensing terms committed to by a patent pool or an owner of an essential patent within a standard could be subjected to supervision by an independent expert or specialised authorities.³¹² The commitment decision could be adopted for a short period of time, enabling its testing on the markets and later modification.³¹³ The latter may be required for example by a phenomenon known as royalty stacking, the emergence of multiple royalty claims related to the production of a complex (standardised) product.³¹⁴

Through the use of renewable and modifiable commitment decisions, the royalty-level per patent could be adjusted to the (increasing) total number of essential or pooled patents needed for the production of such goods. The commitment decision could also originally be based on such a step-down royalty scheme to determine the level of royalties.³¹⁵ The market test and the hearing of the complainants enable aggregation of relevant data and consideration of all relevant interests. Ultimately, commitment decisions could lead to bargaining in the shadow of a liability rule. The threat of a final Commission decision may legitimately level the bargaining positions of the parties. Their asymmetry may have been caused by the adoption and solidification of a standard or the expressed threat of an injunction based on one out of multiple patents needed for the production of a complex or standardised product. In conclusion, the claim that competition law courts and authorities could not reasonably impose a duty to license as they could not set the level of royalties and other conditions correctly is not an argument which could not be overcome.

Another typical allegation related to the practical competence of competition law courts and authorities is that they could not and should not interfere with the *technological design choices* made by enterprises. The argument goes that courts and authorities lack the practical knowledge required in such evaluations, or alternatively, such decisions should remain within the exclusive domain of private enterprise: governmental interference would interfere with technological neutrality and endanger dynamic technological development.³¹⁶

311 The main emphasis will probably be on abuse of dominant position cases under Article 102 FEU, ex. 82 EC and complex instances under the prohibition of cartels, involving some degree of market power, such as licensing schemes. See also *Temple Lang* (2003), p. 352 and *T. Mylly* (2006), p. 380-381.

312 Cf. with *DOJ & FTC* (2007), p. 9, according to which the US antitrust agencies will not generally evaluate the reasonableness of royalties set by a pool.

313 See also *Virtanen & Kyläheiko* (2004), p. 204.

314 See more closely *Lemley & Weiser* (2007), *passim*.

315 See *Lemley & Shapiro* (2007), p. 2043, for an elaboration of a step-down royalty-scheme.

316 See for an advanced argumentation in this direction e.g. *Hovenkamp, Janis & Lemley* (2005), §12.3e3.

The design choices as such may exclude competition or facilitate the dominant enterprise's artificial maintenance of dominance or leverage of that position onto other markets. It is also possible, and in the case of software likely, that such design choices are protected with intellectual property. The question may thus be under what conditions technological design could as such constitute an infringement of competition law. Although freedom to innovate and the protection of intellectual property are the 21st century paradigmatic expressions of economic liberty and property ownership, an innovation “*may not always be a ‘step beyond’, but a carefully designed manoeuvre aimed to thwart competition*”.³¹⁷ The competition law courts and authorities have hence sought to accommodate the countervailing objectives of not interfering too lightly with the dynamic development of technologies and freedom of innovation and design on one hand, and the need to control the design practices which are on balance more harmful for competition, on the other hand. The Commission's *Decca Navigator Systems* decision³¹⁸ illustrates the possibility that modifying a *de facto* standard with the purpose of excluding competitors may constitute an abuse of a dominant position.

Decca Navigator System (DNS) was an international radio navigation system controlled by Racal Decca through its patents and transmitted by its land-based stations. It had become a *de facto* standard on the navigation signals markets. In addition to Racal Decca's patents, the barriers to entry to that market were mainly government licensing requirements, planning regulations and governmental control of frequencies for the transmission of radio signals. Compatibility with Decca's navigation signal had in effect become an essential facility for the manufacturers of receivers. The Commission found that to delay market entry after the expiry of its relevant patents, Decca had deliberately and without warning altered its emission signals so that the receivers produced by its competitors could not receive the new signal properly, or at all. It took two months to adapt the competitors' software to make them fully compatible with the altered signals. Decca's exclusionary behaviour denied users of non-Decca receivers proper access to Decca's navigation signals and was not technically or commercially motivated. It would have been in practice impossible for the competitors to create competing navigation signal systems. Consequently, Decca's measures constituted a breach of the prohibition of abusing a dominant position and Decca was requested not to alter the signal.

The Court of First Instance also considered in *Microsoft* the anticompetitive effects and potential efficiency gains resulting from the bundling of the media player to the Windows operating system. The Court, like the Commission in its decision, rejected Microsoft's invocation of an objective justification based on efficiencies of product integration and allegedly useful standardisation created through the bundling.³¹⁹ In addition to case law, the Commission's notice on the application of the competition

317 *Acuña-Quiroga* (2001), p. 7. See also *Montagnani* (2006), p. 307.

318 *Decca Navigator Systems* [1989] OJ L 43/27.

319 Case T-201/04, *Microsoft Corp. v Commission* [2007] ECR II-3601, at paragraphs 1144-1161. In case of bundling, a finding of any possible improvement should not automatically lead to the conclusion that the practice is acceptable. A finding of two separate products should be based on the evaluation of consumer demand for the tied product both before and after the product integration is made available to the users, as otherwise the possibility of a new demand structure emerging from the product integration would be neglected. See *Villarejo* (2006), p. 533.

rules to access agreements in the telecommunications sector recognises that network configuration by a dominant network operator which makes access objectively more difficult for service providers could constitute an abuse unless it were objectively justifiable. According to the notice, one objective justification would be where the network configuration improves the efficiency of the network generally.³²⁰

Also under US antitrust law design changes have been found capable of being predatory and infringing the Sherman Act.³²¹ In one of the US *Microsoft*-cases Microsoft had licensed Java technologies from Sun Microsystems to develop an internet browser (Internet Explorer), capable of competing with Netscape Navigator. However, Microsoft altered the Java technology shipped with Internet Explorer and Windows so that the Windows-Java version could not run on other operating systems, thus destroying the value of Java as a multiplatform technology, middleware being a potential threat to the Windows operating system. Microsoft maintained that the change was to improve performance. However, its arguments were rejected by the district court judge hearing the case. Hence, Microsoft was enjoined from shipping altered versions of Java.³²² An appellate court subsequently took a different position, stating that in order to violate the antitrust laws, “*the incompatible product must have an anticompetitive effect that outweighs any procompetitive justification for the design*”.³²³ As Microsoft’s version of Java operated faster on the Windows-platform, the product design as such did not infringe antitrust law.

Without going to the details of case law or scholarly literature,³²⁴ it appears that design choices made by dominant enterprises are not insulated from the application of competition law. In conformity with the four modalities of regulation,³²⁵ competitive restraints may be implemented through alternative means, by resorting to contractual and pricing practices, social coercion and threats, or technological design choices. Although the latter practices may be more difficult for the competition law courts and authorities to handle, the means chosen by the dominant enterprise to exclude competitors or to leverage or artificially prolong its dominance should not shield it from the reach of competition law. The artificiality of the communicative environment built

320 Commission’s notice on the application of the competition rules to access agreements in the telecommunications sector, OJ 98/C 265/02, at paragraph 102. See also paragraph 96.

321 See as an introduction to the topic *Hovenkamp, Janis & Lemley* (2005), §12-1-12.4 and *Acuña-Quiroga* (2001), *passim*. The leading cases are *C.R. Bard v M3 Systems Inc*, 157 F.3d 1340 (Fed. Cir. 1998) and the US *Microsoft*-cases referred to below. See also *Hovenkamp* (2007), p. 102-103.

322 *Sun Microsystems, Inc. v Microsoft Corp.*, 999 F.Supp. 1301 (D.C.N.D. Cal 1998). See also *Peritz* (2000), p. 325. Cf. *United States v Microsoft Corp.*, 147 F.3d 935 (D.C. Cir. 1998), where it was held that a plausible claim that the technological design brings some advantage is sufficient to constitute a justification for the design choice (at paragraph 64 of the judgement). See also *Hovenkamp, Janis & Lemley* (2005), §12.3e3.

323 *United States v Microsoft Corp.*, 87 F. Supp. 2d (D.D.C. 2000), *re’d in part, aff’d in part*, 253 F.3d 34 (D.C. Cir.), *cert. denied*, 122 S. Ct. 350 (2001), at paragraph 140.

324 In addition to the literature referred to above, see also *Ordovery & Willig* (1999), *passim* and *Church & Ware* (1998), p. 265-268 and 272-275.

325 See more closely the discussion in chapter 2.4.

around the Internet together with private ownership of the underlying infrastructures and platforms implies expanded possibilities to regulate the conditions of competition through design choices. Also the development of authentication technologies and technological protection measures facilitates private regulation of technological (in) compatibility. Hence, the standards and doctrines applied to distinguish abusive design choices from non-abusive ones are critical for the application of competition law in the foreseeable future.

The extent to which freedom to innovate is equated with strong protection of intellectual property and contractual liberty, or alternatively with equality of access to the basic resources needed for innovative activities and the absence of economic coercion, corresponds with the basic tensions underlying competition law. In both views, however, innovation seems to function as a largely uncontested policy objective. The notion of predatory innovation is thus understandably a troubling one. When connected to determinist views of technological development, the notion becomes even more problematic, as it would question the idealisation of technological progress taking place through an internal, technology-specific dynamic free of economic power.

Yet, design choices capable of being characterised as innovation and protectable with intellectual property may produce reductions of competition and alter the technological structures, having repercussions for diversity of communication or other effects with democratic significance. In addition to being problematic from the perspective of democratic values, an inflexible competition law doctrine insulating any such practices from the reach of competition law without the possibility to weigh such consequences against the associated risks of application would constitute a form of innovation fetishism, paradoxically capable of producing greater barriers for the innovation of others.

7.7 Concretisation: Patented Standards and Competition Law

7.7.1 Introduction

The foregoing will be concretised with the example of patents underlying standards. It is typical to discuss this question in terms of abstract microeconomic analysis.³²⁶ Relatedly, standardisation is often implicitly seen to assume the same general functions under European and US laws.³²⁷ This is clearly not the case, as the below discussion seeks to demonstrate. The specific role of standardisation under European Union law connotes that also in the application of the prohibition of abusing a dominant position

326 See e.g. *Geradin & Rato* (2007), *passim*.

327 For example *Dolmans* (2002), *Geradin & Rato* (2007) and *Koelman* (2006), all *passim*, do not consider any specific functions standardisation assumes under European law in their competition law treatments of standards.

to patents underlying standards there are additional reasons to reject simplistic tests intended to apply generally.

In addition to connecting standardisation to the general European Union law framework, the informational and market power conferred by intellectual property rights underlying standards will be discussed. It will also be argued that *European competition law related to standardisation already integrates considerations related to democratic values*. This development could form one of the elements upon which competition law could build its approach towards private informational power enable by intellectual property rights in general.

Standards³²⁸ and standardisation also provide an area where during the last decades the interaction between competition law and intellectual property protection has been particularly intense in Europe, the US and elsewhere. Moreover, standardisation constitutes an area traditionally important for communication. The Internet as a global technological environment used for diverse forms of communication and economic activities has further emphasised its significance as an increasingly important area of information society regulation.

Internet-related standardisation has been discussed in terms of the democratic quality of the standardisation processes.³²⁹ Yet, such discourses have largely excluded intellectual property rights from their scope. As patents often underlie standards and confer power over the standard's implementation on their owners, competition law assumes the role of controlling such market power with often broader implications. The purpose of the following is to embed intellectual property and competition law in the processes whereby the core technological environments of the information society now become constituted.

Standards may be divided to interoperability and quality standards.³³⁰ The former relate to interfaces and compatibility in network markets. The latter specify safety,

328 Standard is defined in Annex VI of Directive 2004/18/EC of the European Parliament and of the Council on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (OJ L 134, 30.4.2004, p. 114) as "a technical specification approved by a recognised standardising body for repeated or continuous application, compliance with which is not compulsory and which falls into one of the following categories:

international standard: a standard adapted by an international standards organisation and made available to the general public,

European standard: a standard adopted by a European standards organisation and made available to the general public,

national standard: a standard adopted by a national standards organisation and made available to the general public".

329 See *Froomkin* (2003), *Iversen, Vedel & Werle* (2004) and *Schepel* (2005), all *passim*. However, Schepel treats standardisation in general and by excluding interoperability standards from his analysis also largely excludes standards affecting the Internet.

330 The third type of standards is quality management standards describing procedures to be followed in the production process. See *Schepel* (2005), p. 4.

environmental and other quality characteristics of products.³³¹ The below discussion relates predominantly to interoperability standards within information technology sector as they are the most important form of standards within the information and communication -related contexts addressed in this research. Intellectual property conflicts also predominantly relate to them. Being able to design around intellectual property related to quality standards is more likely.³³²

After describing general characteristics and current developments of standardisation directly below, standards will be embedded in general European Union law. This enables addressing the intricate relationship between intellectual property and market power in standards, and how this market power should be approached in European competition law.

7.7.2 Central Characteristics of Standardisation

Standards regulate markets by enabling or favouring some goods, services or practices and disabling or disfavouring others. They define safety issues, production processes, interoperability and many other features of products and services offered on the markets. Standards affect technological trajectories, may empower particular firms and favour or disfavour other firms, countries or trading blocks. In the networked information society some standards importantly participate in constituting the democratic character of communicative environments based on the Internet.³³³ Both the processes whereby standards are formed and the ensuing standards may be evaluated from the perspective of democratic values. The democratic nature of the processes leading to standards is also likely to be reflected to some extent in the democratic potential of the resulting standards and ultimately also on the broader technological environments typically affected by several complementary standards, like in the case of the Internet.³³⁴

Standards emerge via four main routes: direct government measures (*governmental standards*), standardisation work of publicly recognised standards bodies (*formal standards*), agreements on technical specifications among firms cooperating in the form of private consortia and fora, combined with the anticipated spread of the agreed upon specifications on the markets (*consortia standards*), and the market selection processes leading to one out of several existing technological solutions conquering the

331 See e.g. Lemley (2002), p. 1897-1898 and Cunningham (2005), p. 344. Interoperability standards may further be divided to *base standards* (issued in pairs and consisting of a concrete protocol definition and an abstract service definition), *functional standards* or *standards profiles* (also identify options and parameters necessary to accomplish a function or a set of functions) and *framework references* or *reference models* (describe the implementation-independent, logical structure of a system). See Egyedi (1996), p. 176.

332 Lemley (2002), p. 1898. Interoperability standards are by their nature technically more detailed than quality standards as the former must enable practical interoperation of all implementations of the standard.

333 See also Vesting (2004), p. 645 (standardisation “takes on functions which structure technological developments, functions that may be compared with or even qualified as normative functions”).

334 See also Iversen, Vedel & Werle (2004), p. 107.

markets for the related products and/or services (*de facto product-standards*).³³⁵ Each category of standardisation will be briefly discussed below.

In practice, classifying a particular standard under only one of these categories may be artificial as a consortium may adopt a technological solution already becoming a *de facto* product-standard on the markets. It may further be recognised or adopted by a formal standards body. Feeding the agreed upon specification to a formal standards body may solidify its status. By consenting to such cooperation the formal standards bodies may endeavour to preserve their own position otherwise being questioned by consortia and *de facto* product standardisation.³³⁶ The standard may finally become referred to in public procurement or in some sectors even made compulsory by the Commission.³³⁷

Furthermore, private firms and governments are involved in formal standardisation.³³⁸ The Union and the member states support and officially recognise the formal standards bodies, mandate standardisation, participate in their work and refer to their outcomes in legislation as well as public procurement. The involvement of firms in formal standards bodies is yet central for their functioning. The Commission may promote standardisation within private consortia and fora.³³⁹

Finally, also civil society groups and associations may be involved in some standardisation fora. Especially Internet-related standards may be the combination of practical knowledge pools of different corporate cultures and Internet-communities.³⁴⁰ The public authorities and regulatory bodies lack the practical knowledge required. At best, they cooperate with private entities in these processes and regulate standardisation on a secondary level.³⁴¹

Thus, standards are often outcomes of several types of standardisation processes. The different forms of standardisation mix with each others and form a cooperative

335 Standards based on wide market adoption only are often called *de facto* or *market standards*. See e.g. Salter (1999), p. 106. Egyedi (1996), *passim*, calls consortium and fora standards *grey standards* and standards based on market acceptance alone *de facto* standards. In this research a distinction is also made between standards based on the wide adoption of a product or service on the markets (*de facto product-standards*) and standards based on the adoption on the markets of technical specifications agreed upon between firms in private consortia or standardisation fora (*consortia standards*).

336 See more closely about this cooperative relationship between consortia and formal standardisation e.g. Egyedi (1996), p. 161-166. Salter (1999), at p. 113, states that it "is widely believed that formal organizations should represent mainly only the final stage in the standards process, the official approval and dissemination stage". According to Eltzroth (2007), p. 12, majority of DVB project's specifications are delivered to ETSI (European Telecommunications Standards Institute) for formal standardisation.

337 See the discussion under the next heading. The DVB-standard will be discussed subsequently.

338 Private firms may be either directly involved in the standardisation process (possible e.g. within ETSI) and/or by affecting the positions taken by the national standards bodies.

339 See also Eltzroth (2007), p. 6-7 on the relationship between the DVB project with the Commission, as well as with ETSI and CENELEC (European Committee for Electro-Technical Standardisation).

340 See Froomkin (2003), *passim*, who analyses especially the IETF which according to Froomkin conforms well to the requirements of Habermas's ideal discourse being a requirement for the production of morally acceptable norms.

341 See also Vesting (2004), p. 659-660.

and mutually dependent network of regulation. It consists of governments and private actors, as well as bodies being something in-between, the formal standards bodies and standardisation fora functioning on a lasting basis and following many administrative principles akin to formal standards bodies.

As a result, standards are rarely purely private or public in nature. They can rather be seen as aggregations of individual and collective market-interests, public-interests and interests of diverse communities or groups of the civil society. They are increasingly based on industry self-regulation, however being partly conditioned and regulated by public interest objectives related to open, inclusive and transparent procedure on one hand and openness and accessibility of the resulting standards, on the other hand. As will be discussed later in more detail, competition law has assumed an important role in advancing these objectives.

Governments and formal standards bodies have traditionally been the engines of standardisation. However, governmental standards are now exceptional. The legislative technique in the European Union preceding the *New Approach to harmonisation*,³⁴² entailed detailed technical directives and regulations and formed a type of governmental standardisation. In the New Approach the formal European standards bodies define the standards. Within the framework of electronic communications networks and services the Commission may, in order to foster the interoperability of services, oblige the member states to encourage the use of certain standards or even make them compulsory. Such direct government involvement is now a rarity, however.³⁴³ In European law the formal (European) standards bodies have been the main instruments used to address the tensions created by private and public demands in standards.

The formal standards bodies operating on international level are ITU (International Telecommunications Union), IEC (International Electrotechnical Commission) and ISO (International Organisation for Standardisation). They share what has been called a *traditional standardisation ideology*. Although there are some differences among the international standards bodies and friction between ideology and praxis due to market and political demands for more rapid standardisation and involvement of international trade politics (in ITU, in particular), their standardisation procedures have been seen to share the following traditional elements.³⁴⁴

- impartial, politically and financially independent organisation and procedures;
- national members (national standards bodies) – not direct membership for interest parties and enterprises;
- striving for widely applied, international standards;

342 See the subsequent discussion of the New Approach harmonisation.

343 See more closely Article 17 of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L 108, 24.4.2002, p. 33-50) and the discussion under the next heading.

344 See more closely *Egyedi* (1996), p. 92-118. See also *Schepel* (2005), p. 6, in particular.

- elaboration of draft standards in technical committees with a balance of represented interests, emphasis on rational and impartial technical discussion and the technical quality of standards;
- in ISO and IEC a consensus requirement on the committee before the draft standard goes to a round of public notice and comment – the committee has an obligation to take the received comments into account;
- consensus requirement in the approval of the standard (ITU, IEC, ISO);
- procedures which promote fair competition and fair trade (ISO and IEC, in particular) incorporated in intellectual property policies in the form of explicitness about the intellectual property claims involved in contributions to the standards process, as well as reasonable conditions for their use³⁴⁵; and
- voluntary application of standards.

The European counterparts of ITU, IEC and ISO are ETSI (European Telecommunications Standards Institute), CENELEC (European Committee for Electro-Technical Standardisation) and CEN (European Committee for Standardisation). They are the three officially recognised standards bodies operating on the European level.³⁴⁶ ETSI has a special status as a formal European standards body in that it employs weighted voting (traditionally consensus-based) and its membership is open: it is not based on national presentation and balancing of interests on the domestic level. The weighted voting implies that a minority could not block the adoption of a standard as easily as in CEN and CENELEC. This may make the decision-making of ETSI more rapid. It could introduce standards with fewer compromises. ETSI is also characterised by the strong influence of the Commission in its actions and priorities.³⁴⁷

The national standards bodies, such as DIN (Deutscher Institut für Normung), AFNOR (Association Française de Normalisation), BSI (the British Standards Institution) and SFS (Finnish Standards Association) implement and publish the European and international standards and draw up domestic ones. According to the internal rules of the formal European standards bodies, European standards must be transposed at national level: the European standards must be made available as national standards in an identical manner. All conflicting national standards must be abolished within a given time frame. It is the nationally transposed European standards which must be referred to in public procurement, for example. The national standards

³⁴⁵ See *Egyedi* (2005), p. 115 and *Cunningham* (2005), p. 362 (explaining the ISO and IEC IPR policies). Intellectual property policies of standards organisations will be treated subsequently in more detail.

³⁴⁶ See Annex I of Council Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations (OJ L 204/37, 21.7.1998, p. 37-48).

³⁴⁷ See about ETSI e.g. *Egyedi* (1996), p. 143-145 and *Cunningham* (2005), p. 364-366 (explaining the previous ETSI IPR Policy, in particular).

bodies also participate in the processes of the formal European and international standards bodies.³⁴⁸

The wide interest representation and complexity of the formal standardisation processes connotes that the participants may be locked-in to the standard subsequent to its adoption. The costs of switching the standard may become prohibitive even if the royalty level asked for the intellectual property rights needed for the implementation of the standard becomes excessive.³⁴⁹ On the other hand, as the formal standards are typically open in that their implementation is possible for everyone, consumers are not locked-in to one firm's technology.

The formal standards, especially if *de facto* or *de jure* obligatory, shift the locus of competition from technology competition to competition within the standardised technology markets. Detailed formal standards (near product level) may further shift competition from product features towards price.³⁵⁰ Thus, there may be reasons to treat formal standards more rigorously in competition law than consortia standards. However, as the subsequent discussion reveals, this is not the case: consortia standards are placed under stricter competition law supervision.

In consortia standardisation implementation and timely availability of standards are emphasised at the expense of formal process.³⁵¹ The rapid development of the global communication networks, information technology markets and their convergence with telecommunications has favoured consortia standardisation. Especially the shift from hardware to software has implied a shift away from formal standards towards *de facto* product-standards and consortia standards. Private consortia and fora have been the preferred solution in most instances involving information technology.³⁵²

This has led to concerns over openness, transparency and inclusiveness of standardisation. Private consortia standards do not enable public interest considerations in the formation of the standards to the extent formal standards do. Also the openness of the resulting standards may be reduced.³⁵³ Consortia standardisation may further undermine

348 For a lists of officially recognised national standards bodies, see Annex II of Council Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations (OJ L 204/37, 21.7.1998, p. 37-48).

349 See also *Ohana, Hansen & Shah* (2003), p. 649.

350 See *Shapiro & Varian* (1999), p. 230-231.

351 See *Egyedi* (1996), p. 166.

352 *Final Report on the specific policy needs for ICT standardisation* (2007), p. 17 ("Consortia and fora currently constitute the base for around 60% of the standards produced today in the ICT area"). Within formal standardisation the ISO-IEC Joint Technical Committee (JTC 1) was established for information technology standardisation. See e.g. *Egyedi* (1996), p. 101.

353 See *Communication from the Commission* (2004a), p. 5; *Commission Staff Working Document* (2004), p. 4 and 14-17, as well as *Final Report on the specific policy needs for ICT standardisation* (2007), p. 16-18.

public interest considerations in the contents of the resulting standards.³⁵⁴ For example, competing consortia standardisation could lead to the fragmentation of the markets and reductions of interoperability.³⁵⁵ Alternatively, a consortium standard may reflect values incompatible with public policies pursued or values intrinsic to them.

For example, the TCP/IP and CCITT's X.25 datacommunication protocols reflect different views of internetworking (distinct heterogeneous networks and a single homogeneous network), different ideas about control in networking (decentralised and centralised), different expectations about future demands on networks, different assumptions about the telecommunication market and different concepts of network architecture (symmetrical and hierarchical). The technical features of the protocols thus reflect perceptions about the desired distribution of social and economic control within and between networks.³⁵⁶ The TCP/IP protocol was initially developed under a governmental (DARPA) project establishing the predecessor of the Internet, ARPANET, the first packet switching network designed to survive a nuclear attack. The TCP/IP protocol has been subsequently standardised by the IETF which is now a private standardisation forum.³⁵⁷ As argued before, despite its historical background the TCP/IP protocol can now be connected to the furtherance of public policies and values related to decentralising control over information networks and democratising the possibilities of innovation and expression in the Internet.

The formal standards bodies, such as ETSI, have established procedures to formalise consortia standards.³⁵⁸ However, this does not necessarily improve the legitimacy of consortia standardisation: formalising consortia standards can be seen as providing them a "democratic blessing".³⁵⁹ The role of formal standardisation may, due to the increasing importance and pervasive position of the information technology sector, shift from standards development to formalisation and promulgation of standards. This could imply a shift from prioritising democratic process in standardisation to prioritising timely delivery and implementation of standards.³⁶⁰ Hence, there is a

354 On the other hand, the technological paradigm of a particular sector may be relatively persistent and thus affect the contents of the resulting standards despite changes in the standards fora: general priorities and expectations about future developments within the standardised field, assumptions about the future use of products and services and ideas of control and openness may affect the direction of standardisation. For example, the technological paradigm has been different in the now converging fields of telecommunications and computers, thus affecting the nature of the standards. Hierarchical network design, network integrity and central network control have been instrumental to universal service provision in telecommunications. Decentralised network control, symmetrical network design have characterised the datacommunication / computer technology paradigm. According to Egyedi, interest negotiations in standards committees could be partly understood as a means to preserve the operational trajectory which supports the paradigm-based technological trajectory. See Egyedi (1996), p. 200.

355 See the DVB-H standard example explained subsequently.

356 See Egyedi (1996), p. 66-67.

357 See Froomkin (2003), *passim* for an extensive discussion of the IETF.

358 ETSI has entered into various cooperation agreements with non-formal standardisation organisations. See more closely *Final Report on the specific policy needs for ICT standardisation* (2007), p. 58-59.

359 See Egyedi (1996), p. 165.

360 See also *Ibid.*, p. 61 and 263-267.

tension developing between democratic demands for open and inclusive deliberation of standards and the market demands for timely standards.

However, it should be noted that consortia standardisation may also be based on maximum openness of the resulting standards by avoiding the inclusion of intellectual property within them or contracting them out through royalty free license terms. Consortia standards may also advance public policies or reflect non-commercial values. The standardisation ideology of a standards forum may favour open source solutions, fragmented social and economic control and advancement of democratic participation.³⁶¹ Some standards fora may be dominated by users of the standards to the detriment of potential intellectual property owners.³⁶² It is also usually in the economic interest of most participants that hold-up based on patents is prevented.³⁶³ The consortium members typically have a strong interest in creating a market for the standardised products. Provided there is competition between different consortia, failure to license the ensuing specifications on reasonable terms will likely disfavour the consortium in question.³⁶⁴

The openness and transparency of consortia and fora standardisation varies considerably.³⁶⁵ Less open and transparent standardisation is restricted in participation and may involve a handful of firms. It is usually *ad hoc* cooperation concentrating on a single technology. More open and transparent standardisation is in principle open for all interested parties to join. It most often involves permanent structures, such as the 3GPP and 3GPP2 on mobile phone networks³⁶⁶, IETF on Internet network technologies,³⁶⁷ IEEE on Local Area Networks,³⁶⁸ W3C on web-related technologies³⁶⁹ and DVB on digital TV.³⁷⁰ They are examples of private, globally oriented standardisation fora functioning on a lasting basis. Some standardisation

361 IETF can be mentioned as one example. See *Schoechle* (2003), p. 238.

362 See also *Teece & Sherry* (2003), p. 1930-1931, who note that standards bodies tend to be dominated by the demand side of the technology market, thus making it likely that procedural and substantive rules favouring the users of intellectual property are adopted in the standardisation process.

363 See *Lemley* (2002), *passim*; *Teece & Sherry* (2003), *passim* and *Lemley & Shapiro* (2007), p. 2044.

364 See also *Ohana, Hansen & Shah* (2003), p. 649.

365 See e.g. *Rahnasto* (2003), p. 186-187. Rahnasto divides consortia and fora standardisation on this basis to semi-private and semi-public standardisation.

366 The 3rd Generation Partnership Project and the 3rd Generation Partnership Project 2. See <http://www.3gpp.org/> and <http://www.3gpp2.org/> respectively.

367 The Internet Engineering Task Force. See <http://www.ietf.org/>. See also *Froomkin* (2003), *passim*.

368 The Institute of Electrical and Electronics Engineers, Inc. See <http://www.ieee.org/portal/site>.

369 The World Wide Web Consortium. See <http://www.w3.org/>.

370 Digital Video Broadcasting project. See <http://www.dvb.org/>. See also *Eltzroth* (2007), *passim* and *Llorens-Maluquer* (1998), p. 560-563 for background information.

fora are predominantly regional, such as ECMA International functioning mainly on the European level.³⁷¹

It would thus be a serious mistake to equate (all) consortia and fora standards with the advancement of narrowly defined private interests or the uninhibited creation of proprietary standards. They are drawn up by a heterogeneous group of entities drawn up by a heterogeneous group of participants. The fora and consortia have different structures, duration, standardisation ideologies, aggregation of interests represented, procedures and intellectual property policies. They may be connected to formal standards bodies, governments, particular powerful firms or non-profit organisations to different degrees. All this affects the legal and socio-economic status of the specifications produced and the legal analysis of the consortium or forum in question.

Finally, standards may be based on the wide adoption of a product or service on the market. They are called here *de facto product-standards*. Microsoft's Windows operating system provides an example of such a standard. It is privately controlled and developed. The standard is modified every time the operating system is modified so as to affect its application programming interfaces (APIs). *De facto* product-standards are likely to emerge in areas with strong network effects (and economies of scale), making it likely that the markets tip towards a single standard.³⁷² Also *de facto* product-standards can be fed into the formal standards bodies. This solidifies their status and enables reference to them in public procurement, in particular.

Microsoft's effort to have its Office Open XML (OOXML) accepted as an ISO-standard³⁷³ through a fast-track procedure provides one example. The ECMA International approved the OOXML and submitted the proposal to ISO. The decision-making procedures before the national standards bodies which preceded the decision-making at ISO were thorny. For example, the Swedish Standards Institute SIS annulled its acceptance of using the ISO fast-track procedure on technical grounds.³⁷⁴ This was preceded, however, by the late-stage participation of several (reportedly 23) Microsoft's business partners in the ballot. The firms were reportedly offered monetary compensation for voting in favour of the OOXML document format's approval. According to the SIS rules, voting in the OOXML ballot required paying a yearly fee of 2000-4000 Swedish crowns and a one-time fee of 15.000 Swedish crowns.³⁷⁵

371 European association for standardizing information and communication systems. See <http://www.ecma-international.org/>. Before 1994 known as European Computer Manufacturers Association. ECMA international is A-liaison member of ISO/IEC JTC 1. A considerable number of ISO/IEC JTC 1 standards are based on ECTA's contributions. See about ECMA *Egyedi* (1996), p. 68, 134-135 and 161 (ECMA carries out much preparatory work for formal standards bodies).

372 See *Teece & Sherry* (2003), p. 1918. Generally about network effects see *Shapiro & Varian* (1999), chapter 7, in particular. For a more formal treatment of network effects see *Shy* (2001), *passim*.

373 ISO/IEC DIS 29500. The standard defines Office Open XML's vocabularies and document representation and packaging. It also specifies requirements for consumers and producers of Office Open XML.

374 *SIS* (2007). One of the participants was reported to have voted twice.

375 See more closely the newspaper articles *Lai & Montalbano* (2007), *passim*; *Goldberg & Larsson* (2007) and *Svahn* (2007), *passim*.

As the example of Microsoft's attempt to integrate the Java standard in its dominant operating system in a modified form discusses previously and its similar attempt to integrate *Kerberos*, an IETF-approved standard for network security using encryption, in its dominant operating system for personal computers demonstrate, dominant enterprises may also seek to embrace and extend open (source) standards and thus privatise them.³⁷⁶ Open standards may thus need particular protection under competition law against such attempts having the capacity to jeopardise both traditional competition law objectives and democratic and constitutional values.

As *de facto* product-standards typically develop inside single firms and become standards without any formal agreements on specifications, it is clear that they provide the least open, transparent and inclusive model for standards to emerge. The standard is usually proprietary and controlled by a single firm. By maintaining strategic incompatibility with competitors a dominant firm may protect itself for a relatively long period. From the perspective of competitors, on the other hand, achieving interoperability with the technology of the dominant network may be a condition for replacing the dominant firm.³⁷⁷

On the other hand, the absence of formal procedure may imply timely and efficient development of the standard. It is also often argued that it is desirable to let the market – instead of the government – decide which standard should be selected. Avoiding formal standardisation preserves competition between different technologies (or systems) as long as the markets have not tipped in favour of one solution. It has even been argued that *de facto* product-standards favour smaller firms more than government-led standardisation, where large firms may affect the priorities of governments on non-technical grounds.³⁷⁸ It is also usually in the controlling firm's interest to enable easy implementation and development of the dependent markets.³⁷⁹

Moreover, and more fundamentally, markets may also tip in favour of a solution developed openly, such as the Linux operating system.³⁸⁰ The product design embedded in the standard is a monopoly: if the standard is not proprietary or the design is open to imitators, the design could be provided by several independent suppliers.³⁸¹ Open source can actually be seen as a form of standardisation: it may create platforms upon

376 See more closely about the Kerberos-example *Froomkin* (2003), p. 837-838.

377 See e.g. *Hovenkamp* (2007), p. 100.

378 See e.g. *Shapiro & Varian* (1999), p. 267, stating as their conclusion that “a decentralized, market-oriented approach may be slower, but it also gives smaller players a chance to succeed with revolutionary technology”. They continue that “picking new technology through a more political process tends to favor larger, established players, even if they are not as imaginative and do not take the same risks”.

379 See *Farrell & Weiser* (2003), *passim*, and the sources referred there.

380 See about the potential of open source licensing in the context of standardisation e.g. *Vetter* (2007), *passim* (making an interesting analogy between the effects of open source licensing and standards bodies in clearing the intellectual property right to the extent possible to enable the broad proliferation of the technologies concerned).

381 *Geroski* (2002), p. 66.

which new markets can be built.³⁸² In analogy with consortia standards it would thus also be a mistake to consider all *de facto* product-standards as generally opposed to public interest or democratic values.

7.7.3 Embedding Standardisation in General European Union Law

Introduction

The relationship between intellectual property and competition law in standards cannot be properly understood without embedding standards in general European Union law. Standards assume a particular position in European law. National standards and technical regulations may constitute an effective barrier to free movement of goods. However, outside public procurement or other member state measures the applicability of the free movement of goods provisions to national standards is uncertain. Hence, European standardisation developed into an instrument of market integration. Standardisation also constitutes an essential part of the legislative process in the New Approach to harmonisation.

Standardisation has also assumed autonomous value in the integration project: the idea of European-wide industry self-regulation provides a bottom-up integration model transcending the sensitive issues of competence delegation between the Union and the member states, and the tension between negative and positive integration.³⁸³ National technical regulations and new national standards are also controlled on the European level through a notification and approval procedure. Standardisation – and the use of open standards in particular – has also been used by the Commission as a means to strengthen Europe's information technology industry *vis-à-vis* US dominance.³⁸⁴ European standardisation may thus abolish internal barriers to trade *and* erect them on the outer borders, protecting the European markets from outside competition.³⁸⁵

The enhanced role of the European standards bodies in the Union legislative processes caused concerns over delegation of regulatory powers to private bodies.³⁸⁶ This led to an emphasis on procedural and democratic aspects of standards bodies'

382 Schoechle (2003), p. 238.

383 See *Communication from the Commission* (1995), p. 3-4 and *Schepel* (2005), p. 72-73.

384 See *Egyedi* (1996), p. 129.

385 See e.g. about the setting of the mobile telecommunications standards *Cunningham* (2005), at p. 358-361 and *Hjelm* (2000), *passim*. The setting of the so called 3G standard for mobile phones, in particular, developed into a heated trade dispute between the EU and US and EU-based and US-based firms, respectively. See *Schepel* (2005), at p. 178-182 and *Final Report on the specific policy needs for ICT standardisation* (2007), p. 23-24, about the Agreement on Technical Barriers to Trade (under the WTO). The international standardisation process also favours the European standards bodies: CEN members dominate the ISO voting process as they have each one vote in contrast to one vote of ANSI representing the whole of the USA. See more closely *Schepel* (2005), p. 192.

386 See more closely about these discourses *Schepel* (2005), p. 225-246.

decision-making.³⁸⁷ Moreover, European or international interoperability standards are seen not only to further market integration and economies of scale, but also to contribute towards free flow of information, media pluralism and cultural diversity.³⁸⁸ Interoperability standards will be discussed below from this perspective.

Importantly, the emphasis on procedural and democratic aspects of standardisation is also visible as part of its acceptability under competition law. For this reason, *Schepel* has called the related competition law application *private administrative law of standardisation*.³⁸⁹ In the competition law treatment of standards, certain procedural aspects of traditional standardisation ideology become emphasised. It is argued here that competition law treatment of patents within standards constitutes part of this broader approach.

Free Movement of Goods and Standards

National standards may constitute an effective non-tariff barrier to trade.³⁹⁰ Hence, governmental standards-setting or delegation of that power to a public firm may infringe basic freedoms, Articles 34 and 36 FEU, ex. 28 and 30 EC, in particular.³⁹¹ National technical regulations are subject to the same Articles. Conversely, it is usually recognised that absent state measures (such as discriminatory reference to national standards in public procurement or giving a public undertaking the power to lay down technical standards),³⁹² Article 34 FEU does not apply to privately set, non-binding standards even if they have discriminatory purpose and effect.³⁹³

However, it could be argued on the basis of *Walrave* and *Bosman* -cases that also Article 34 FEU should reach to bodies *capable of regulating the markets in a collective*

387 *Communication from the Commission* (1995), p. 5-7; *Schepel* (2005), p. 254-258 and 412-413.

388 See e.g. Recital 31 of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L 108, 24.4.2002, p. 33-50).

389 See more closely the insightful analysis by *Schepel* (2005), p. 285-338. *Schepel* has excluded interoperability standards and intellectual property questions – core issues in this research – from his analysis of standardisation.

390 See generally *Egyedi* (1996), p. 131-132 and *Salter* (1999), p. 114. See also *Bickerstaff* (1994), p. 154-155, describing the relationship between free movement of goods Articles of the Treaty and national standards in public procurement.

391 See cases C-202/88, *France v Commission* [1991] ECR I-1223 and C-18/88, *Régie des télégraphes et des téléphones v GB-Inno-BM SA* [1991] ECR I-5941. In the latter case (at paragraphs 35 and 36) the Court concluded that the absence of a possibility to challenge type-approval before courts, combined with the absence of hearing of any interested parties in the procedures for obtaining type-approval and for laying down the technical specifications increased the probability of an attitude arbitrary or systematically unfavourable to imported equipment. The national measures were thus precluded by Article 28 EC [now 34 FEU].

392 See case 45/87, *Commission v Ireland* [1988] ECR 4929 (concerning discrimination in public procurement) and cases C-202/88, *France v Commission* [1991] ECR I-1223 and C-18/88, *Régie des télégraphes et des téléphones v GB-Inno-BM SA* [1991] ECR I-5941 (concerning giving the power in domestic legislation for a public monopoly undertaking to lay down technical standards and checking the compliance with the standard).

393 See *Schepel* (2005), p. 38-50.

manner.³⁹⁴ Even though national standards bodies are regulated and controlled by the member states to a varying extent,³⁹⁵ their status in European-level standardisation procedures and notification of new national standards is identical. As their obligations and tasks are increasingly defined on the European level, it would be logical to treat them consistently under the free movement provisions. Should this be the case, activities of non-public standards bodies could be caught by the prohibition laid down in Article 34 FEU. In analogy with *Bosman*, the standards body could try to justify the measure otherwise contrary to Article 34 FEU by relying on the grounds of justification applicable for member states (i.e. grounds mentioned in Article 36 FEU and the mandatory requirements developed in case law).

In the absence of a case establishing such liability, European-wide standards drawn up by CEN, CENELEC and ETSI became the preferred solution to address the problem of technical barriers to internal market represented by national standards. In addition to fostering free movement of goods in Europe, they enable economies of scale and advance European-wide provision of services. European standards constitute the core of the New Approach to harmonisation. The establishment of national technical regulations and new national standards is also subject to European-level control through a notification and approval procedure. Both instruments are discussed below. The references to standards are also regulated in the public procurement directives. This aspect of standards is discussed under a separate heading below.

The New Approach and the Notification System

European standards have assumed a particular function in positive harmonisation: they have become the core of the New Approach to harmonisation.³⁹⁶ Using formal European standards bodies as part of the regulatory technique has bolstered their position and made the European Union dependant on their effective functioning.³⁹⁷ The New Approach to harmonisation purports to simultaneously protect the free movement of goods and establish effective technical regulation on Community level. In the New Approach harmonisation the previous practice of detailed technical harmonisation is delegated from the European Union legislators to the formal European standards bodies. The New Approach has been successful: 17% of intra-Community trade consists of products following the New Approach standardisation.³⁹⁸ Key aspects of the New Approach harmonisation are explained below.

394 Cases 36/74, *Walrave and Koch v Association Union Cycliste Internationale* [1974] ECR 1405 and C-415/93, *Union royale belge des sociétés de football association ASBL v Jean Marc Bosman* [1995] ECR I-4921. The cases have been discussed in chapter 4. *Schepel* (2005), at p. 49-50, suggests that instead of demarcating between public and private actors, distinction could be made between public and private activities. Regulative activity in public interest could thus be subject to Article 34 FEU, ex. 28 EC even if carried out by a private entity.

395 See *Schepel* (2005), p. 111-144.

396 The New Approach is based on Council Resolution 85/C136/02 (OJ C136, 4.7.1985). See generally about the New Approach *European Commission* (2000), *passim*.

397 See *Schepel* (2005), p. 38-39.

398 See *Ibid.*, p. 66-67.

In essence, the European Union legislator establishes essential health, safety or environmental requirements covering a whole sector, or at least a wide range of products, in the relevant New Approach directives. The European standards bodies, CEN, CENELEC and ETSI, are asked to draw up, under a mandate from the Commission, the relevant technical standards intended as a means of providing a presumption of conformity with the New Approach directives. The technical contents of the standards are under the responsibility of the respective standards bodies. However, draft standards are subjected to a public enquiry the results of which are considered by the technical committee of the respective standards body. Standards adopted are published in the Official Journal by the Commission and are called *harmonised standards*. Finally, national standards bodies transpose them into identical domestic ones.

Products implementing the harmonised standards are entitled to CE-marking and are presumed to comply with the essential requirements stipulated in the relevant directive. This prevents the member states, subject to safeguard procedure commonly used, from invoking the mandatory requirements otherwise enabling derogations from the free movement of goods. In other words, the member states must allow such products to enter their markets. Harmonised standards create a safe harbour for the industries implementing them – a presumption of compliance with the New Approach directive in question, and thus market access throughout the European Union.³⁹⁹

In principle, the New Approach standards remain voluntary for the manufacturers, as they are free to provide the member states with other proof of their compliance with the essential requirements of the relevant directive. Yet, the member states may impose tests, checks and certification procedures for products not implementing the harmonised standards. Implementing a harmonised standard may thus become a commercial necessity: taking the risk of exclusion from markets and subjecting oneself to costly, possibly heterogeneous and time-consuming tests and certification procedures imposed by the member states may place a non-implementing firm on a serious competitive disadvantage to the extent that there is no more a level playing field.

There are several aspects in the harmonised standards which contribute to their status under competition law. They are based on mandated standardisation initiated and coordinated by the Commission. They constitute an essential part of the New Approach legislative process and become publicised in the Official Journal. The presumption of conformity solidifies and strengthens their position and may make their implementation a commercial or factual necessity. To the extent non-implementation of a harmonised standard would place a firm in a serious enough competitive disadvantage, the harmonised standard may become an essential facility-like reference technology. If such a standard includes intellectual property rights without which the implementation of the standard is not possible, such intellectual

399 See more closely *European Commission* (2000), *passim*. See also *Schepel* (2005), p. 63-67 and 227-234; *Egyedi* (1996), p. 136-139; *Craig & de Búrca* (2008), p. 620-627, and *Final Report on the specific policy needs for ICT standardisation* (2007), p. 24-26.

property rights could also become evaluated as essential facility -type technologies under competition analysis.

The establishment of national technical regulations and new national standards is subject to a notification and approval procedure. The objective of the notification system is – in addition to preventive monitoring of potentially discriminatory national technical regulations and standards leading to impediments on the free movement of goods – to enable European standardisation whenever deemed beneficial: the Directive gives the Commission the possibility of inviting, after consultation with the member states, the European standards bodies to draw up European standards.⁴⁰⁰ The notification and approval procedure can thus be seen as part of the broader regulatory technique based on European standardisation.

According to the case-law of the European Court of Justice, failure to observe the notification obligation constitutes a substantial procedural defect such as to render the national technical regulations in question inapplicable and therefore unenforceable against individuals.⁴⁰¹ This provides an additional incentive for the member states to notify their technical regulations in accordance with the Directive. The unenforceability of the technical regulation effectively abolishes any market power otherwise enabled by the potential control of intellectual property rights needed for complying with the technical regulation in question. Due notification and approval of the technical regulation, in turn, solidify the status of the national technical regulation: the approval indicates that the Commission does not intend to act on the European level within the subject-matter notified. This may to a certain extent solidify market power enabled by the potential control of an intellectual property right needed for complying with the national technical regulation in question.

Standards in Public Procurement

European standards are also preferred in public procurement over international and national standards. This strengthens the penetration and effects of European standardisation: if there are competing standards on European, international and national levels, the member states' contracting authorities must refer to the European

400 See more closely Schepel (2005), p. 51-63 and Directive 98/34/EC.

401 See Council Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations. About the effects of a failure to notify see e.g. case C-194/94, *CIA Security International SA v Signalson SA and Securitel SPRL* [1996] ECR I-2201; case C-303/04, *Lidl Italia Srl v Comune di Stradella* [2005] ECR I-7865 (the European Court of Justice stated at paragraph 22 that "it is settled case-law that Directive 98/34 is designed to protect, by means of preventive monitoring, the free movement of goods, which is one of the foundations of the Community and that this control serves a useful purpose in that technical regulations falling within the scope of that directive may constitute obstacles to trade in goods between Member States, such obstacles being permissible only if they are necessary to satisfy compelling requirements relating to the public interest").

standard in public procurement procedures.⁴⁰² However, tenders based on equivalent arrangements must be considered: the contracting authority cannot reject a tender solely on the basis that the products and services tendered for do not comply with the specifications to which it has referred. The tenderer is entitled to prove in its tender that the solutions which it proposes satisfy in an equivalent manner the requirements defined by the technical specifications. Enabling this alternative route has the objective to ensure flexibility and technological progress. If the contracting authority uses performance or functional requirements when formulating the technical specifications it may not reject a tender for works, products or services which comply with a European or international standard if it addresses the performance or functional requirements which the contracting authority has laid down.⁴⁰³

In other words, reference to standards in public procurement does not abolish their voluntary nature as the tenderer may use alternative arrangements and prove their equivalence. Such reference, however, solidifies the standard to a certain extent and may make its use a commercial necessity: not complying with the standard referred to exposes the tenderer to a risk of exclusion in the public procurement process and at the least causes additional costs.⁴⁰⁴ Conversely, when performance or functional requirements are deployed, complying with a European or international standard addressing the used requirements protects the tenderer.

Thus, like harmonised standards through their presumption of conformity and other features, also reference to a standard in public procurement may contribute to the use of the standard becoming a commercial or factual necessity, thus affecting analysis of the standard under competition law. Should non-implementation in individual instances entail a serious enough risk of market exclusion or place the non-implementing firm in a serious enough competitive disadvantage, the right to implement the referred standard in *fair, reasonable and non-discriminatory* terms

402 More specifically, the reference must be made to national standards transposing European standards. After this, and in order of preference, the technical specifications used in public procurement must refer to, "European technical approvals, common technical specifications, international standards, other technical reference systems established by the European standardisation bodies or – when these do not exist – to national standards, national technical approvals or national technical specifications relating to the design, calculation and execution of the works and use of the products". Each reference must be accompanied by the words "or equivalent". See Article 23(3) a) of Directive 2004/18/EC of the European Parliament and of the Council on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (OJ L 134, 30.4.2004, p. 114). See also *Schepel* (2005), p. 200-201 (also stating that giving priority to European standards turns standards into a discriminating device and produces potential inconsistencies with the GATT Agreement on Government Procurement, which imposes international standards as the first preference).

403 See in more detail Recital 29 and Article 23(4) and (5) of Directive 2004/18/EC of the European Parliament and of the Council on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts (OJ L 134, 30.4.2004, p. 114).

404 In practice, standards and specifications can and are used as instruments of non-tariff barriers in public procurement. This applies in particular to the utilities sector, where the relevant procurement requirements are complex and cannot be defined by reference to formal standards only. See *Bovis* (2005), p. 136-137.

may become grounded.⁴⁰⁵ However, the evaluation should be case by case analysis. Additional costs, delays and risks caused by non-implementation should be carefully evaluated.

Interoperability as an Objective of the European Union

Whereas in the 1980s and 1990s the emphasis in European standardisation policy shifted from developing sound and democratic standards to internal market objectives⁴⁰⁶ and standardisation becoming part of the legislative technique and a form of self-regulation having value on its own,⁴⁰⁷ by the end of the 1990s interoperability started to become an independent goal in the information society and standardisation policies of the Union. This diversifies discussion of standards and their relationship to intellectual property and European competition law.

The Commission has emphasised the importance of interoperability and the related standards several policy documents. For example, in its Communication “i2010 – A European Information Society for growth and employment” it stated: “Digital convergence requires devices, platforms and services to interoperate. The Commission intends to use all its instruments to foster technologies that communicate, through research, promotion of open standards, support for stakeholder dialogue and, where needed, mandatory instruments”.⁴⁰⁸

It acknowledged that interoperability standards may also relate to the achievement of public policy objectives, possibly leading to the requirement to use open standards.⁴⁰⁹ It furthermore recognised that interoperability: “has many facets: for network operators, it means to be able to interconnect with other networks; for content or service providers, it means being able to run a service over any suitable platform. For consumers, it means the ability to purchase a device and use it to access services and download content from different sources”.⁴¹⁰

Interoperability can be connected to several objectives of the Union. It reduces barriers to entry and thus fosters competition and economies of scale within the network in question.⁴¹¹ On European scale it furthers market integration objectives by enabling European-wide circulation of interoperable goods and provision of services. Interoperability standards are a foundation for global communication. It is often desirable that there is only one unified network as its users benefit from the existence of a single network covering the biggest number of other users possible.⁴¹² This direct network effect emphasises the importance of interoperability: the more

405 See the more detailed treatment of licensing under such terms subsequently.

406 See e.g. *Egyedi* (1996), p. 137.

407 See *Schepel* (2005), 72-73.

408 *Communication from the Commission* (2005), p. 6.

409 *Communication from the Commission* (2004b), p. 9; *Communication from the Commission* (1995), p. 20-21, recognising that interoperability may be an essential part of the objective to establish trans-European networks, as well as part of consumer protection objectives.

410 *Communication from the Commission* (2004b), p. 9.

411 See e.g. *Shapiro & Varian* (1999), p. 231; *Dolmans* (2002), p. 166 and *Weiser* (2003), 591-592.

412 See e.g. *Lemley* (1996), p. 1045-1046.

there is interoperability the broader the reach of the network and the more it benefits the users.⁴¹³

Interoperability standards related to the Internet and other global communication networks are thus particular in that the desirability of one unified network is a fact distinguishing them from consumer products: in distinction to consumer products it would be pointless to insist on having several parallel but non-interoperable internets or other global communication networks. This also leads to the desirability of one interoperability standard dominating the global markets. For example, for the Internet to function there has to be a single set of transmission protocols which is now the TCP/IP. Even if competing standards initially exist, path dependency, lock-in and applications barrier may connote that the markets tip to one solution.⁴¹⁴ Such standards may become relatively durable and outlast the technological superiority of competitors.⁴¹⁵

In the field of electronic communications networks and services the Commission has in its possession instruments enabling it to recommend or require compliance with specified standards or specifications to ensure interoperability in the single market.⁴¹⁶ The Commission draws up and publishes in the Official Journal a list of such standards to serve as a basis for encouraging the harmonised provision of electronic communications networks, electronic communications services and associated facilities and services. member states have an obligation to encourage their use.⁴¹⁷ If such standards or specifications have not been adequately implemented so that interoperability of services cannot be ensured, the implementation of such standards may be made compulsory by the Commission, preceded by public consultation of all parties concerned, and to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users. The DVB-H standard provides an illustrative example.

In March 2006 the Commission had encouraged setting up a European Mobile Broadcasting Council (EMBC) to promote mobile TV in Europe. EBMC gathered industry players from the telecommunications, hardware manufacturing and software, broadcasting and content industries. However, it failed to agree on a mobile

413 The increasing requirement for transnational telecommunications instigated the modern telecommunications standards process leading to advances in the interconnection of national telecommunications networks. See *Cunningham* (2005), p. 348-349.

414 See generally about these phenomena *Shapiro & Varian* (1999), p. 103-259.

415 See also e.g. *Lemley* (1996), p. 1045-1058 and *Church & Ware* (1998), p. 229-260. Microsoft's Windows operating system is an example of such a standard.

416 Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L 108, 24.4.2002, p. 33-50), Article 17 and Recital 30.

417 As long as standards and/or specifications have not been published following this procedure, member states are under an obligation to encourage the implementation of standards adopted by the European standards organisations. The Commission may also request the European standards bodies CEN, CENELEC and ETSI to draw up standards. In the absence of such standards, member states must encourage the implementation of international standards adopted by the ITU, ISO or IEC.

TV standard. In July 2007 the Commission urged the member states and industry to favour DVB-H as the single European standard for mobile TV by starting to prepare the inclusion of DVB-H standard in the list of standards published in the Official Journal. The Commission also indicated that depending on the market developments it could make the use of DVB-H standard compulsory. According to the Commission, the failure of the EBMC, coupled with the risk of market fragmentation, was the reason it decided to intervene by (at first stage) recommending the use of DVB-H standard to member states and industry.⁴¹⁸

The existence of one dominating interoperable network makes it often a commercial necessity to be interoperable with that network: without interoperability access to the markets would require two-level entry in the areas characterised by strong network effects and complementarities (for example applications barrier in the PC operating system markets). In many instances insisting on such an entry would be unrealistic. In areas where the existence of one unified network is desirable, such as the Internet and the telecommunications network, establishing another parallel non-interoperable network would be both unlikely and detrimental from the general welfare perspective, as the users benefit the most from one unified network. Hence, using an interoperability standard which conditions access to or operation on such basic networks is necessary for any related economic activities: such standards become bottlenecks for a broad range of activities. Therefore, the right to use such standards becomes important.

Making a standard compulsory in the field of electronic communications networks and services implies that there are initially several competing standards on the European markets. Without the Commission interference, such a situation could lead to the fragmentation of the markets and reductions in interoperability, ultimately excluding economies of scale and market integration. Making one standard compulsory in such a situation makes its implementation also *de facto* compulsory for firms willing to operate on the related markets. In such a situation suggesting under competition law analysis that an alternative standard could be used would be inconsistent. Even if it were technically possible to provide services or manufacture goods by implementing an alternative standard, it would not be legally possible. The compulsory standard becomes an essential facility -like reference technology because of this.

Hence, access to it should be possible on acceptable terms. The factual position of the standard may not be very different in the stage preceding making it compulsory: after the Commission has encouraged the use of a particular standard by publishing it in the Official Journal the member states have a legal obligation to encourage its use. It is plausible to argue that such acts indicate a legally recognised commitment to the chosen standard. In the legal scheme established for electronic communications networks and services its market penetration would be ultimately guaranteed by making the standard compulsory. When the Commission encouraged the DVB-H standard to become accepted as the single European standard for mobile TV and

418 See *Commission MEMO/07/298* (Brussels, 18 July 2007). See also the speech of Commissioner Reding (2007).

indicated that it could make the standard compulsory, if necessary, it also stated that its support for the standard is subject to the condition that the established licensing terms are complied with.⁴¹⁹

Finally, interoperability standards do not only further market integration and economies of scale. They also contribute towards free flow of information, media pluralism and cultural diversity.⁴²⁰ For example, interoperable and unified digital TV standards facilitate the simplification of the variety of products offered by the manufacturers. This decreases prices and facilitates access to a wide range of services, thus contributing to media diversity.⁴²¹ On the other hand, control enabled by proprietary standards related to the digital TV bottlenecks could be detrimental for the public's choice and access to diversified content.⁴²²

The problem is not restricted to digital TV, but is generic in all communicative contexts. Due to the convergence of information and communications technologies, also many information technology standards may become points of control and potential impediments for diversified communication. Vertical integration of media and content industries to digital distribution technologies and conduits connotes that a vertically integrated firm may have a business incentive to block access to a standard or discriminate in favour of its own content. When connected to intensive concentration within these sectors,⁴²³ the danger of interoperability standards -related abuses leading to serious reductions in media pluralism and communicative diversity is anything but hypothetical. Hence, communicative diversity and thus democratic and constitutional discourses enter the competition analysis of interoperability standards.

Competition Law Analysis of Standardisation

The foregoing implies that formal standardisation is directly connected to the achievement of the single market objectives, constitutes the core of the New Approach to harmonisation and a model of top-down self-regulation operating on European and global levels. It is utilised in public procurement and in the field of electronic communications networks and services. It relates to competitiveness and economic efficiency, as well as to free flow of information, media pluralism and cultural diversity in case of interoperability standards related to communications, in particular. Hence, also competition law analysis of standardisation is legitimately affected.

419 *Ibid.* The intellectual property policies of DVB and ETSI can be found from their www-pages. See also the subsequent discussion of their policies.

420 See Recital 31 of Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (OJ L 108, 24.4.2002, p. 33-50).

421 Council of Europe Directorate General of Human Rights, Media Division (2002), p. 16.

422 Council of Europe, Steering Committee on the Mass Media (2000), at paragraph 35.

423 See generally about these developments in Europe e.g. Council of Europe Directorate General of Human Rights, Media Division (2002), *passim*.

The benevolent approach towards standardisation cooperation in general,⁴²⁴ and the operative distinction made between formal European standards bodies on one hand and consortia and fora consisting of private firms on the other hand,⁴²⁵ may be explained by reference to this background, among other reasons. The formal standards bodies act as agents of various Community objectives and policies. They follow well-established, recognised procedures reflecting (to various degrees) the traditional standardisation ideology. Without such formalised collusion the single-market objectives would be detrimentally affected, the New Approach would not work, European-wide interoperability could not be achieved and other Community objectives relating to competitiveness and economic efficiency, in particular, could not be attained.

Hence, even though agreements on specifications limit product differentiation and entail risks of other collusion, competition law courts and authorities in Europe have generally been reluctant to interfere in the activities of the formal standards bodies and have seen them as largely falling outside the scope of competition law application. They have been treated as bodies closely tied to public authorities and public interest rather than market players.⁴²⁶ In the end, the maintenance of competition and transparency may *require* that standardisation activities be carried out by a body which is independent of public or private undertakings.⁴²⁷

The Commission states in its Notice on horizontal co-operation agreements that the standards bodies listed in Annexes to Directive 98/34/EC (the formal European and national standards bodies) are entrusted with the operation of services of general economic interest.⁴²⁸ Such entities are exempted from the competition rules to the extent their application would obstruct the performance of the particular tasks

424 See Communication from the Commission (1992), *passim* and *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), Chapter 6. However, as standardisation reduces technological variety, too far-going (product- or design-level) standardisation may reduce competition in an unacceptable manner. See *ibid.* at paragraph 22. See also *Commission Communication* (1995), p. 28 (standardisation "must not limit the development of innovative products by setting out in excessive detail the technical solution to be adopted for particular products, but instead should wherever possible be based on test methods and specifications of performance"); Dolmans (2002), p. 174-175 and Hovenkamp (2007), p. 94-95.

425 *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), at paragraphs 162-163.

426 See Schepel (2005), p. 285 and 312-313. According to him, the US constitutes the exact opposite (*ibid.*, at p. 286). For example, DIN in Germany and AFNOR in France have been treated as immune from national competition law application. DIN on the basis of voluntary application of standards and wide interest representation and AFNOR on the basis of being entrusted with a mission of service public. See *ibid.*, at p. 313 and 112-122 (DIN) and 130-134 (AFNOR).

427 See case C-18/88, *Régie des télégraphes et des téléphones v GB-Inno-BM SA* [1991] ECR I-5941 (entrusting an undertaking operating the public telecommunications network and marketing terminal equipment the task of drawing up the specifications for such equipment, monitoring their application and granting type-approval in respect thereof was seen by the European Court of Justice to infringe Articles 81 and 86 EC, now 101 and 102 FEU).

428 See *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), at paragraph 162.

assigned to them.⁴²⁹ Even if such a benevolent interpretation is doubtful with regard to many national standards bodies,⁴³⁰ the Commission considers most formal standards to fall outside the scope of the basic prohibition of cartels in the first place:

“Where participation in standard setting is unrestricted and transparent, standardisation agreements as defined above which set no obligation to comply with the standard or which are parts of a wider agreement to ensure compatibility of products, do not restrict competition. This normally applies to standards adopted by the recognised standards bodies which are based on non-discriminatory, open and transparent procedures.”⁴³¹

Schepel argues that the Commission endeavours to establish competition law immunity on the basis of procedural public interest guarantees. The Commission applies a procedural public interest test to determine which standardisation activities are outside the reach of the basic prohibition of cartels: unrestricted participation, transparency and voluntary nature of standards set the activity outside the scope of the basic prohibition of cartels. Formal standards bodies are presumed to fulfil these criteria.⁴³² Furthermore, interoperability standards seem to merit special treatment as they may lie outside the scope of the basic prohibition of cartels even if compliance with them is made obligatory, provided they are “parts of a wider agreement to ensure compatibility of products”. What this could mean in practical terms remains uncertain, however.

Moreover, the combined application of the principle of loyalty and the cartel prohibition seems to lead to similar considerations: according to the relevant case law the legislative requirement imposed on a committee consisting of financially interested traders to adhere to principles of good governance and public interest is sufficient to immunise the committee actions, to be later made official by the state, from the reach of the basic prohibition of cartels.⁴³³

As Schepel maintains, these process requirements transform European Union competition law into a kind of administrative law for private regulation: it begins to protect democratic governance instead of a competitive market. The relevant public interest is located in *procedures* that ensure democratic governance, not in traditional public institutions. Wide interest representation, consultation of affected outside

429 See current Article 106(2) FEU, ex. 86(2) EC.

430 See more closely Schepel (2005), p. 316-317.

431 *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), at paragraph 163. See also paragraph 172, where the following is said under indispensability analysis related to Article 101(3) FEU, ex. 81(3) EC: “All competitors in the market(s) affected by the standard should have the possibility of being involved in discussions. Therefore, participation in standard setting should be open to all, unless the parties demonstrate important inefficiencies in such participation or unless recognised procedures are foreseen for the collective representation of interests, as in formal standards bodies”.

432 Schepel (2005), p. 320-321. See also *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), at paragraphs 162-163.

433 Cases C-185/91, *Bundesanstalt für den Güterfernverkehr v Gebrüder Reiff GmbH & Co. KG*. [1993] ECR I-5801 and C-38/97, *Autotrasporti Librandi Snc di Librandi F. & C. v Cuttica spedizioni e servizi internazionali Srl*. [1998] I-5955.

interests and endeavours to avoid economic interest enter the competition law analysis as elements of the public interest test.⁴³⁴

Yet, the case law may lead to inconsistent treatment of various standards bodies: private unregulated standardisation, even if following the principles of democratic governance, would find no protection under the *effet utile* doctrine as developed under the principle of loyalty and the cartel prohibition. Thus, standards made mandatory by state measures would be subject to less stringent competition law analysis.⁴³⁵ Such an outcome would also contradict with the proposed treatment of standards made compulsory or otherwise more binding by Community measures, in particular through public procurement, New Approach harmonisation or the legal framework for electronic communications networks and services.

The Commission also emphasises the need to keep the standards open as a condition for the acceptability of standardisation under the prohibition of cartels. The accessibility of the standard is first analysed under the basic prohibition of cartels. According to the Commission, “standards that are not accessible to third parties may discriminate or foreclose third parties or segment markets according to their geographic scope of application”. This is a particular concern when the parties to the standardisation have significant market power. According to the Commission, the extent to which such barriers to entry are likely to be overcome forms the central part of the standardisation agreement’s competition law analysis.⁴³⁶

Although the Commission does not directly refer to *intellectual property policies* of standards bodies, it is obvious that a commitment included in the standards body’s internal rules obligating the participants to license indispensable intellectual property rights to third parties on *fair, reasonable and non-discriminatory* (so called “FRAND or RAND”) terms reduces the likelihood of the standard becoming a barrier to entry. The Commission’s 1995 Communication on Standardisation seems to strengthen this interpretation. It is stated there that standards “should not be misused to preserve or create a dominant market position to the detriment of free competition by formalising in an officially recognised document the solution adopted by a single major supplier unless appropriate measures are taken to make the relevant technology available to other interested suppliers”.⁴³⁷ The intellectual property policies of many standards bodies, as well as the contractual terms used by many private consortia, request the participating owners of *essential intellectual property rights* to license on FRAND-terms.⁴³⁸

434 Schepel (2005), p. 331-335. See also *Communication from the Commission* (1995), p. 5-7, where democratic governance aspects of standardisation are emphasised.

435 This would, however, be contrary to what the Commission stated in *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), at paragraph 163. See also Schepel (2005), p. 336-337.

436 *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), at paragraph 168.

437 *Communication from the Commission* (1995), p. 6.

438 Essential intellectual property typically refers to rights which are technically indispensable for the implementation of the standard. See also the subsequent discussion.

As the Commission immunises formal standards from the reach of the prohibition of cartels, it seems to implicitly presume that formal standards bodies have intellectual property policies capable of adequately guaranteeing the openness of the standard. However, this may not always be the case as the intellectual property policy of ETSI demonstrates: there is no obligation to conduct patent searches; the members are only obliged to use their reasonable endeavours to inform ETSI of essential intellectual property rights in a timely fashion.⁴³⁹ Furthermore, essential intellectual property rights are narrowly defined so as to cover only technical necessity to the exclusion of any commercial grounds which may have the potential to place competitors on a serious competitive disadvantage. Finally, the ETSI policy does not mandate licensing of essential intellectual property, but only provides a mechanism for requesting a licensing commitment. It is feasible under the ETSI policy that essential intellectual property be included within the standard without a related licensing obligation.⁴⁴⁰ Thus, FRAND-terms do not necessarily apply even to members having made a declaration of an essential patent.

The openness and accessibility of the standards is also, and in particular, analysed under Article 101(3) FEU, ex. 81(3) EC. As non-formal standardisation does not benefit from the immunity under the basic prohibition of cartels as suggested by the Commission, the acceptability of the standardisation activities of private fora and consortia capable of leading to *de facto* industry standards will be largely dependent on the openness of the standards and their non-discriminatory application. According to the Commission, access to such standards “*must be possible for third parties on fair, reasonable and non-discriminatory terms*”.⁴⁴¹

This reference to licensing terms is in practice an explicit requirement relating to intellectual property policies of private standard setters. In addition to the general commitment to allow the implementation of the standard for all interested parties, there must be an adequate mechanism in place intended to secure licensing of essential intellectual property rights on FRAND- or similar terms. The Commission further clarifies that when private organisations or groups of companies set a standard or their proprietary technology becomes a *de facto* standard, then competition will be eliminated to the exclusion of the exemption for the prohibition of cartels if third parties are foreclosed from access to this standard.⁴⁴²

Thus, to guarantee the compatibility of consortia and fora standardisation with the exemption for the prohibition of cartels, access to and openness of the standards

439 However, the Commission seems to be satisfied with the ETSI disclosure rules, which were modified in 2005 due to Commission investigations. See *Commission Press Release IP/05/1565: Competition: Commission welcomes changes in ETSI IPR rules to prevent ‘patent ambush’*.

440 *ETSI Rules of Procedure*, Annex 6, §4(1)-(2) cover the disclosure obligation and §6(1) and 15(6) the licensing obligation of essential intellectual property rights. § 8.1 covers the mechanism for addressing non-availability of licenses prior to the publication of a standard. For a discussion and background of the current disclosure obligation and licensing regime of ETSI, see *Eltzroth* (2007), p. 13-14.

441 *Commission Notice - Guidelines on the applicability of Article 81 to horizontal co-operation agreements* (2001), at paragraph 174.

442 *Ibid.*, at paragraph 175.

should be secured *ex ante* through adequate intellectual property policies. In European Union competition law intellectual property policies of standards bodies are thus not only seen as private bargaining reacting to the fragmentation of intellectual property rights in standards.⁴⁴³ Rather, *adequate intellectual property policies are also a means connected with democratic governance of standardisation and required for the standardisation activities of most private standardisation fora and consortia to be legitimate under the prohibition of cartels. The existence of such policies reduces explicit economic interest in the formation of standards and supports keeping the standards as open and as accessible as possible.*

As the standards define technical specifications and interoperability used and needed widely on the markets, the terms agreed or consented to governing their use become important regulation of the markets. The conditions governing the use of a standard – its legal specification – are its central feature and may decisively affect the success of the standard on the markets.⁴⁴⁴ The technical specification and the legal specification together regulate the standard's nature and determine the relative costs and benefits of implementing the standard. For example, the openness of an interoperability standard which technically enables broad systemic interconnection may be narrowed down by the standard's legal specification which limits its potential implementations, enables refusals to license essential intellectual property rights or the charging of high royalties, thus also increasing the costs of its implementation.

Moreover, fair, reasonable and non-discriminatory access to interoperability standards fosters the diversity of economic operators and the interests of small and medium-sized enterprises, in particular.⁴⁴⁵ The latter generally have no capacity to participate in extensive cross-licensing arrangements possible for major patent owners and could thus risk being excluded from the standardised markets.⁴⁴⁶ It is feasible that the Commission's emphasis on the openness of and access to standards on fair, reasonable and non-discriminatory terms reflects also such a concern.

Finally and perhaps most importantly for the theme of this research, access to the core interoperability standards, such as the TCP/IP protocol, HTML-language or digital TV standards should also be seen to advance freedom of communications and communicative diversity. Although these values are not referred to in the official competition law instruments related to standardisation, the Commission's statements for example in the context of the DVB-H standard could be seen to demonstrate such concerns, too.

443 Cf. Lemley (2002), *passim*, who analyses intellectual property policies from this US antitrust law perspective.

444 See Eltzroth (2007), p. 3-4, who argues that one of the reasons for the success of the DVB-standards has been the adopted intellectual property right policy.

445 See also Petrusson (1999), p. 261 and 263.

446 See e.g. Barton (1997), p. 445, for noting that cross-licensing can be used to prevent entry by new firms into the business.

These perspectives are important additions to the efficiency-based entry barrier analysis of standardisation. It seems that such public interest considerations are possible when applying Article 101 FEU, ex. 81 EC.⁴⁴⁷ This is not to suggest that economic analysis of standardisation should be rejected. Quite the contrary, economic analysis of network effects, market power of the firms involved, essentiality of a patent within a particular standard, the control of the standard as a competitive advantage and other economic analysis is also needed when substantiating the potential threats of closed standardisation, standard hold-up or when taking critical distance from the positions taken by the European Commission.

However, the diverse values, interests and policies related to standards and standardisation should not and have not been rejected from the European Union competition law analysis of standards. Below, this approach will be further connected to analysis of standards under the prohibition of abusing a dominant position.

7.7.4 Intellectual Property and Market Power in Standards

Patents as a Source of Market Power in Standards

Before analysing intellectual property exercises under Article 102 FEU, ex. 82 EC, it is necessary to characterise market power produced by patents within consortia and formal standards on a general level and to concretise the argument by discussing certain practical examples. ETSI and the third-generation (3G) standards for mobile phones are selected for these concretisation purposes. The self-regulating potential and the existing practices of the standards bodies or the firms participating in them to deal with the fragmentation of the rights, potential intellectual property hold-ups and excessive intellectual property -related market power will also be discussed. This may affect the overall need to apply Article 102 FEU, ex. 82 EC. Intellectual property policies of standards bodies and patent pools will be discussed from this perspective.

It should be recognised at the outset that it is possible to implement many standards without any intellectual property licenses. This may be due to the nature of the standard. For example, standards based on performance characteristics and testing methods do not typically require intellectual property licensing for their implementation.⁴⁴⁸

447 See e.g. joined cases T-528/93, T-542/93, T-543/93 and T-546/93, *Metropole télévision SA and Reti Televisive Italiane SpA and Gestevisión Telecinco SA and Antena 3 de Televisión v Commission* [1996] ECR II-649. The Court of First Instance stated at paragraph 118 that "in the context of an overall assessment, the Commission is entitled to base itself on considerations connected with the pursuit of the public interest in order to grant exemption under Article 85(3) of the Treaty". See also *Schepel* (2005), p. 317-318 and *Wesseling* (2000), p. 94-109.

448 Standards based on performance characteristics and testing methods leave more scope for variation than technical specifications for products. This has led the Commission to generally prefer the former standards over technical specifications for products. See *Commission Communication* (1995), p. 29.

Furthermore, the standardisation ideology of a particular standards body may be based on the avoidance of intellectual property. The traditional standardisation ideology, shared by most formal standards bodies, reflects such an approach. Also private consortia and fora may share this ideology.

For example, the TCP/IP protocol, standardised by the IETF, as well as most open source standards, are not covered by (known) intellectual property rights, or the power potential of intellectual property has been contracted away through extensive licensing obligations, as will be discussed subsequently in the context of W3C- and IETF-standards. Such standards are unlikely to directly convey market power on any firm. However, they may obviously favour certain firms by affecting the technological trajectories on the markets and thus indirectly influence different firms' relative positions and the extent of their market power.

Other standards, such as the Windows operating system constituting an example of a *de facto* product standard, are proprietary and controlled by a single firm. Hence, they directly confer market power on a single firm. In comparison to *de facto* product-standards based merely on a broad adoption of a product, service or technological platform on the markets, consortia standards and formal standards are the achievements of negotiations within private consortia consisting of cooperating firms or standardisation bodies. As both types of standards typically incorporate technologies from several sources, their control is shared by several firms. Should the implementation of the standard necessitate using several essential intellectual property rights, all their owners are in the position to veto the use of the standard, thus enabling the exercise of control over the economic activities and technological trajectories based on it.

The problem is real. The number of notified intellectual property rights within standards has increased dramatically during the last 30 years. The following figure depicts the total intellectual property disclosures of nine standards bodies.⁴⁴⁹

449 The standards bodies are ANSI, ATM Forum, ATIS, ETSI, IEEE, IETF, ITU, OMA and TIA. *Simcoe* (2005), *passim* also discussed the potential explanations for this dramatic increase.

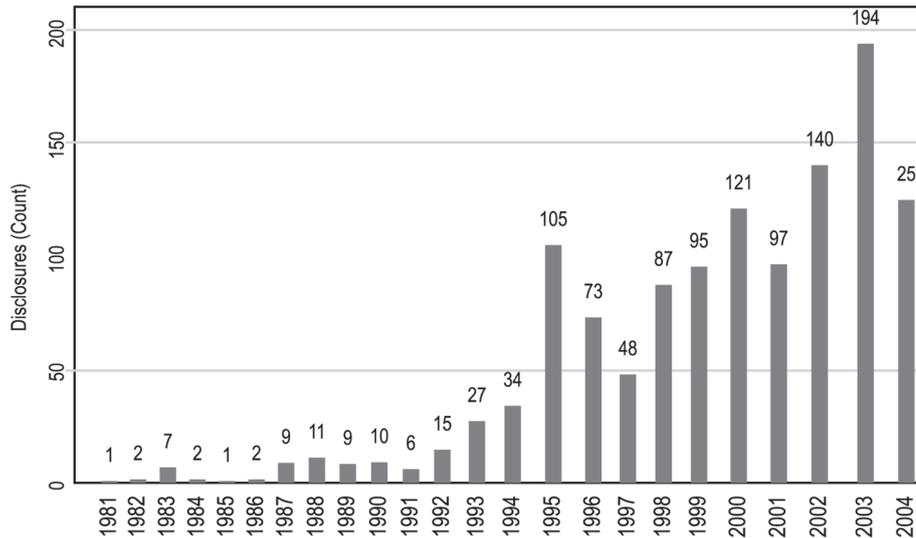


Figure 3: Total IPR Disclosures of nine standards bodies. Source: Simcoe (2005), *passim*.

The increasing inclusion of intellectual property in standards and the simultaneous rise of the private consortia have led to extensive privatisation of standardisation and the generation of private market and informational power over standards.⁴⁵⁰ The durability of a standard may connote the durability of related market power. Its key source is the control of intellectual property rights needed for the implementation of the standard in question.

When compared to *de facto* product-standards controlled by a single firm, the fragmentation of the essential intellectual property rights implies that several firms may hold up the implementation of the standard. This has been addressed in terms of *anticommons* caused by the fragmented rights.⁴⁵¹ Further in comparison to product or service platforms constituting *de facto* standards, utilising a technical standard does not typically necessitate interconnection with or utilisation of another firm's proprietary product or service. An implementation of a technical standard must merely be compatible with the standard specification – a technical standard is typically defined on an abstract level without explicit reference to any particular firm's products or services. Standard-compliant implementation as such ensures interoperability.

450 See also Schoechele (2003), *passim*, who uses the term digital enclosure in this context.

451 See more closely e.g. Shapiro (2001), *passim*; Rahnasto (2003), p. 175-199 and Goodman & Myers (2005), p. 1. For the concept of anticommons generally, see Heller & Eisenberg (1998), *passim*.

In case of proprietary product or service platforms the bottleneck-nature of intellectual property rights is the function of the product or service platform's success on the marketplace. The dominant firm controlling the *de facto* product-standard may exercise its market power by modifying the product or concealing information, thus regulating interoperability. A patent underlying a technical standard produces market power independent of its owner's position on the related markets.⁴⁵² The patent owner may exercise its market power only by licensing practices: refusals and conditional refusals to license. As the market power is only based on intellectual property protection, it may be easily relieved, abolished or transferred to other firms.

As already said, intellectual property rights needed for the implementation of standards are called *essential* intellectual property rights. Their ownership forms the most important control-potential of standard-related activities. Most of the formal standards bodies, consortia and standardisation fora have their own definitions of what constitutes an essential intellectual property right. The term is typically defined in the intellectual property policy of the standards body in question.

Possible disclosure and licensing obligations are typically attached to essential intellectual property rights only. Hence, what constitutes an essential intellectual property right is of paramount importance. Yet, there is no single agreed definition. For example, the extent to which essentiality may be considered on commercial, as contrasted to technical terms, vary. Typically intellectual property rights are considered essential when one cannot, due to technical reasons, utilise equipment or methods complying with a given standard without infringing that intellectual property right. In other words, essentiality is usually considered on technical grounds only. ETSI defines essential intellectual property rights in the following manner:

*“ESSENTIAL” as applied to IPR means that it is not possible on technical (but not commercial) grounds, taking into account normal technical practice and the state of the art generally available at the time of standardization, to make, sell, lease, otherwise dispose of, repair, use or operate EQUIPMENT or METHODS which comply with a STANDARD without infringing that IPR. For the avoidance of doubt in exceptional cases where a STANDARD can only be implemented by technical solutions, all of which are infringements of IPRs, all such IPRs shall be considered ESSENTIAL.”*⁴⁵³

The market power produced by an essential intellectual property right depends on several factors. These include the stage, geographical spread, solidification and the general importance of the standard, any governmental measures affecting the status of the standard, the total number of essential intellectual property rights relating to the standard, the strength and scope of the essential intellectual property rights and any binding licensing obligations relating to them.

Not only intellectual property defined as essential in the standards body's intellectual property policy are capable of producing market power. A technically

452 A high market share in the implementing product or service markets could rather be an indication of a particular vulnerability in terms of essential patent claims of others.

453 ETSI Rules of Procedure (2006), Annex 6, §15(6).

available alternative may not be commercially viable. As argued below, the standard bodies' definition of essentiality should not limit the potential reach of the prohibition of abusing a dominant position. It could be applied to patents deemed non-essential under the relevant standards body's definitions.

The confirmation of a standard implies that the patent owners can demand not only a royalty that reflects that intrinsic value of their technologies within the standard, but also the value of the infringing firms' standard-specific investments. The royalties must be added together to verify the total royalty burden of implementing the standard (royalty stacking).⁴⁵⁴ The fact that complex products integrate several standards means that the royalty stacking problem is multiplied.⁴⁵⁵ The cumulative royalty costs could lead to the unprofitability of many businesses based on the use of the standard(s), the potential exception being the businesses of the biggest patent owners. They usually benefit from mutual cross-licensing and non-assertion arrangements, which considerably lower the level of payable royalties, as will be discussed in more detail subsequently.

The behaviour of an individual patent owner can be explained by reference to two well-known pricing problems in industrial organisation: *the Cournot complements effect* and the *double marginalisation effect*. The former means that if complementary patent licenses from different firms are needed for using a standard, each patent owner will behave like a monopolist, charging a higher price than the one that maximises the collective gain. When a single patent owner raises its price, this has a direct positive effect on its profit and a minor, insignificant negative effect on the demand, as this firm represents only a minor part of the market. However, as all patent owners follow the same logic, the resulting set of prices will be so high as to reduce demand and reduce all patent owners' profits. The resulting price-level is higher than would arise if a single firm controlled access to the standard.⁴⁵⁶ Double marginalisation arises when input suppliers with market power sell to a downstream firm that also has some power over price.⁴⁵⁷

On the other hand, far-going fragmentation of rights simultaneously implies that each intellectual property owner can expect fewer royalties than in a situation where the control is in few hands. This may partially reduce the claims for royalties and thus alleviate the hold-up problem.⁴⁵⁸ Yet, the individual intellectual property owners may inefficiently benefit from hold-up even if the royalty level achievable for each of them is not very high: they cannot internalise the complementary efficiencies of their competitors the way possible in case of *de facto* product standards. In the latter situations the platform owner typically benefits from efficient access to the platform standard through complementary commercial products and services which also

454 See Lemley & Shapiro (2007), p. 1993.

455 *Ibid.*, p. 2029.

456 See Shapiro (2001), p. 122-124; Guellec, van Pottelsberghe & van Zeebroeck (2007), p. 102; Lemley & Shapiro (2007), p. 2013.

457 Lemley & Shapiro (2007), p. 2013-2014.

458 See Lichtman (2006), p. 10. See also Rahnasto (2003), p. 180-181.

increase the value of the platform. In contrast, one out of many owners of fragmented intellectual property rights underlying a standard does not necessarily benefit more from efficient access to the standard than from charging high royalties. It could even be that the intellectual property owner does not itself implement the standard in its products or services.⁴⁵⁹

The following figures show the number of patents declared as essential to the relevant standards bodies related to 3G-standards for mobile phones, as well as their ownership.⁴⁶⁰ 3GPP refers to the wideband code division multiple access (WCDMA) standard prevailing in Europe, whereas 3GPP2 refers to the CDMA2000 standard prevailing in the US. Early 2004 there were 6.872 patents declared essential to WCDMA and 924 patents and patent applications declared essential to CDMA2000. These constituted 732 patent families for WCDMA and 527 patent families for CDMA2000.⁴⁶¹ There was an overlap in the declarations for the two technologies: 372 inventions were declared essential to both technologies.

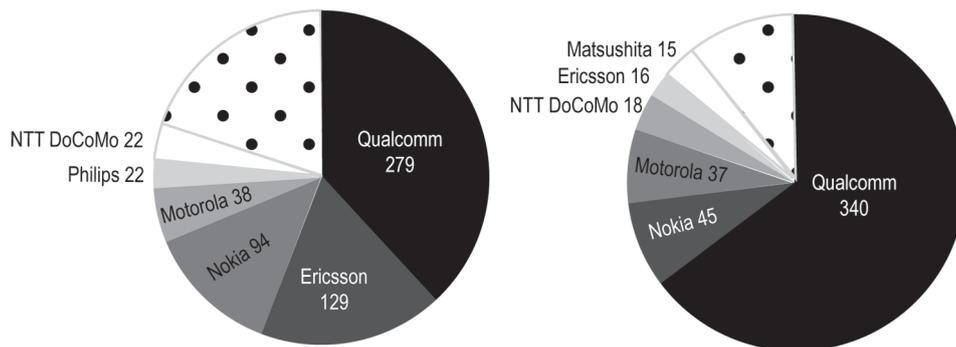


Figure 4: 3GPP (on the left) and 3GPP2 (on the right) ownership of declared patents.
Source: Goodman & Myers (2005), *passim*.

459 Cf. with U.S. Department of Justice and the Federal Trade Commission (2007), at p. 41 (pointing out that it may be in the interest of an intellectual property owner to offer attractive licensing terms in order to promote the adoption of its product using the standard).

460 The figures and information related to 3G patents discussed below are based on Goodman & Myers (2005), *passim*. For more updated information on 3G patents, see the Internet pages of the relevant standards bodies. For example, ETSI's internet pages are available at <http://webapp.etsi.org/ipr/>.

461 One patent family comprises a single invention, but is protected with multiple patents.

The following figures show the number of patents *deemed essential* in the study conducted.⁴⁶² Approximately 80% of the declared patents were *not* deemed essential.⁴⁶³ Whereas the number of firms having declared essential patents in both technologies was 41, the number of firms with patents deemed essential was only 20. There were 19 firms with patents deemed essential for WCDMA and 13 firms for CDMA2000. There were 12 firms owning patents deemed essential for both technologies. It should be noted that there may be firms which have not declared their essential patents in both technologies. The total number of essential patents is thus probably somewhat bigger than the figures show.

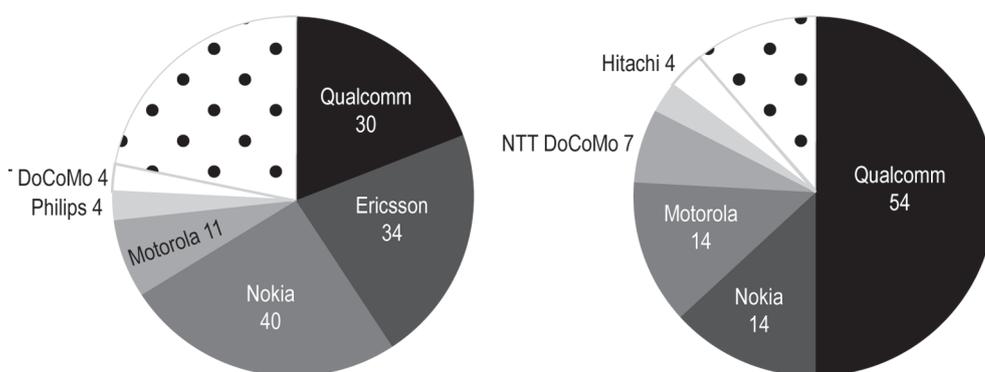


Figure 5: 3GPP (on the left) and 3GPP2 (on the right) patents judged essential.
Source: Goodman & Myers (2005), *passim*.

The strikingly small proportion of declared patents deemed essential (only 20 per cent of declared patents) calls into question the adequacy of the disclosure obligations in the intellectual property policies of the standards bodies. As the standards bodies, like ETSI, typically carry no investigation of the notified intellectual property rights, the implementers of the standards could have to pay 80% extra for the licenses actually needed. However, as not all essential intellectual property rights are declared, the implementers are not protected even if paying royalties to all owners of declared patents related to a particular standard. Should the figures correspond with reality and reflect a more general trend, it is obvious that the competition law authorities may

⁴⁶² Goodman & Myers (2005), *passim*. The study was conducted by Fairfield Resources International, an intellectual property and licensing group. It assembled a panel of technical experts in several countries. Each patent was assigned to one panelist according to the technical area of the patent. The panelists compared the patent claims with the relevant parts of the standard and spent on average one hour with the comparison. The criteria for essentiality was ETSI's definition quoted above. It is obvious that the results of the study are uncertain and should be taken as merely indicative, as Goodman and Myers also recognise in their article.

⁴⁶³ In case of 3GPP 21.4% of the declared patents were deemed essential and in case of 3GPP2 20.5%.

only react to individual instances and have no means to correct the general distortion of competition on the relevant technology markets.⁴⁶⁴

Moreover, the small number of firms with patents deemed essential suggests that the biggest multinational firms – the key players of the industries in question – control the standards. They are largely protected against each others through cross-licensing and non-assertion arrangements. *Provided the proportion of declared patents and patents deemed essential is approximately the same for each of the key players, it is only the outsiders who must bear the costs of declared non-essential patents.* The bigger the total number of patents declared, the higher the barriers to entry into the core businesses of the key players. As long as the key players do not challenge the essentiality of each others' patents, the patent thicket created through over-extensive declarations remains insurmountable for outsiders not protected by cross-licensing arrangements.

Although it is usually in the interest of the key players to enable the implementation of the standard to guarantee its market penetration, this may not be so with regard to the core activities of the key players: *the key players in control of the standard may have a collective interest in creating a patent thicket protecting them from direct competition and challenge from below.* This may be achieved by over-extensive essential patent declarations, cross-licensing between the key players, non-challenge of essentiality and the charging of high royalties for the patents needed for access to the core markets of the key players.

Accordingly, litigation between the key players over essential patents has been relatively rare. Outright refusals to license essential patents have been an exception. However, the intellectual property owner may have a strategic reason to refuse licensing should it wish to change or modify the standard in a manner beneficial to its interests.⁴⁶⁵

This is what took place in the setting of the third-generation (3G) standard for mobile phones.

ITU had commenced standardisation work on the third generation mobile systems in 1985 with the purpose of establishing a global standard under the IMT-2000 initiative. ETSI selected the basic technology for the UMTS terrestrial radio access (UTRA) system in January 1998. It was based on backward compatibility with the second-generation technology used in Europe and other parts of the world except the USA. The US-based Telecommunications Industry Association (TIA), in turn,

464 See, as an example of an individual reaction the Commission's actions with regard to Sun Microsystems Inc. with regard to the GSM standard. According to the information available from ETSI internet pages (available at <http://webapp.etsi.org/ipr/>, visited 13 August 2007), the IPR declarations related to GSM 03.19 (TS 101 476) from Sun Microsystems Inc. were removed from the ETSI IPR database at the request of the European Commission. DG Competition's argument for such a removal, based on evidence they had gathered, was that the presence of the relevant IPR declarations in the IPR database and SR 000 314 amounted to a measurable distortion of competition in the relevant market. The technical evidence as provided by DG Competition which challenges the essential nature of SUN Microsystems Inc.'s patents is available on request from the ETSI Legal Advisor. See also *Eltzroth* (2007), p. 13 for a short discussion and background of the case.

465 See generally *Lemley* (1996), p. 1054; *Dolmans* (2002), p. 190 and *Rahnasto* (2003), p.192.

adopted in March 1998 a framework (CDMA2000) backward compatible with IS-95 systems used in the US and supported by Qualcomm. Qualcomm argued that the WCDMA standard proposed by ETSI was specifically designed to exclude Qualcomm technology from the proposed standard.

In October 1988 Qualcomm informed that it owned essential intellectual property to five WCDMA standard proposals and that it would refuse licensing under ITU terms unless a converged and IS-95-compatible standard resulted from the IMT-2000 initiative. As a result of these actions, standardisation was delayed. Operators globally joined their forces and decided to support one standard compatible to all second-generation mobile systems. Finally a single flexible standard was adopted meeting the many different mobile operational environments around the world, including IS-95. Its key characteristics did not constitute an implementable specification, but established the features and design parameters enabling the development of more detailed specifications.⁴⁶⁶

The disputes over essential patents in the 3G technology continued between Qualcomm and Ericsson,⁴⁶⁷ and between Qualcomm and several firms, including Nokia. In the latter proceedings, Qualcomm was charged of failing to meet its commitments made to international standards bodies around the world that it would license its technology on fair, reasonable and non-discriminatory terms. According to the complaint, Qualcomm, in addition to other claimed abuses, imposed the same royalty rate on WCDMA 3G handsets as it did for CDMA2000 3G handsets despite the fact that Qualcomm had contributed far less technology to the WCDMA 3G standard than it had to the CDMA2000 standard. It was further stated in the complaint that without Qualcomm's commitments to the standards bodies the WCDMA 3G standard would not have been adopted.⁴⁶⁸

What the Qualcomm-saga might teach us is that essential patents and refusals to license them may be successfully used to affect the direction of the standardisation process and hence the constitution of the technological environments affecting communications.

This possibility is facilitated by the standards bodies' policies, which usually require the standards body to seek for different technological solutions in such a situation. For example, the intellectual property policy of ETSI mandates looking for viable alternative technologies should the essential intellectual property owner refuse to commit to licensing on FRAND-terms.⁴⁶⁹ After the standard is published and its implementation has commenced, it can be practically impossible to modify the standard so that the intellectual property is no longer essential in nature. Provided negotiations and consultations do not offer a solution, ETSI has in such a case no other option than to request the European Commission to see what further action may be appropriate.⁴⁷⁰

Similar considerations apply to other standards bodies. Should the owner of the essential intellectual property be content with the proposed standard, late declaration may enable exorbitant royalty claims not necessarily available if the essential intellectual property rights were declared in a timely fashion in the process. Ownership of potentially essential patents thus enables a range of strategic options for firms willing to optimise their future financial prospects based on standards. On the other hand, licensing commitments made to the standards bodies may be ineffective as a means to prevent hold-ups. The risk of breaching a vaguely defined contractual obligation

466 See Hjelm (2000), *passim*. See also Cunningham (2005), p. 359-360.

467 The dispute was settled in 1999. See Dumortier & Hyland (1999), *passim* and Hjelm (2000), p. 6-8.

468 See Broadcom *et al* (2005). *Conference Call Script* (2005).

469 ETSI Rules of Procedure, Annex 6 (2006), § 8(1).

470 *Ibid.*, § 8(2).

with no predetermined consequences may weigh little compared to the potential profits available through invoking the patents and succeeding in either modifying the standard in a desired direction or enabling its partial control through several essential patents declared so late that the modification of the standard is no more possible.

Thus, although an important form of self-regulation, the intellectual property policies of standards bodies do not substitute for competition law application. The same applies for patent pools, which are typically arrangements resorted to after the standard has been established. Both institutional solutions may lessen intellectual property hold-ups and transaction costs related to the fragmentation of rights. However, they may also entail competition law problems on their own and facilitate abuses based on the exercise of intellectual property rights, as already the above discussion suggests. Private regulation in this area in the form of intellectual property policies of standards bodies and patent pools, often celebrated as the top-down solution to the problems identified, will be discussed in more detail in the following.

7.7.5 Limits of Private Regulation: Intellectual Property Policies of Standards Bodies and Patent Pools

Intellectual Property Policies of Standards Bodies

Although intellectual property policies and the related practices of standards bodies may also raise competition law concerns, the disclosure and licensing obligations they generally set may be seen as procompetitive. They typically serve the function of clearing the patent thicket. The intellectual property policies of many standardisation bodies, as well as the contractual terms used by many private consortia, request owners of essential intellectual property rights a commitment to license on FRAND-terms. Hence, as a form of private regulation intellectual property policies have been treated as an important factor diminishing the need for direct governmental interference. The participants operate under a veil of ignorance: when committing to an intellectual property policy and the related obligations, they do not typically know whether the policy committed to will help or harm them.⁴⁷¹

Similarly, patent pools can constitute an effective way of avoiding transaction costs related to fragmented intellectual property rights underlying standards.⁴⁷² They also offer a solution to the Cournot complements effect by allowing the patent owners to agree on a collectively rationale strategy, capable of maximising their total profit while ensuring that the total cost for licensees will not be so high that demand would be depressed. Hence, patent pools may reduce the cost of licenses and foster the dissemination of technologies.⁴⁷³

471 See Lemley (2002), p. 1938-1954 and also *passim*. See also Patterson (2002), p. 1056.

472 See Merges (1996), *passim*. See also Rahnasto (2003), p. 194-195 and Vuorinen (2005), p. 324-330.

473 See Guellec, van Pottelsberghe & van Zeebroeck (2007), p. 102 and 105-106.

Yet, neither intellectual property policies of standards bodies nor patent pools are capable of adequately addressing many of the problems created by patents within standards. They may also lead to additional competitive problems as the examples discussed below demonstrate. The handling of ETSI's draft intellectual property policy ("IPR Undertaking") demonstrates that intellectual property policies of standards bodies as such may be problematic from the perspective of competition law, should they for example force members to make licenses involuntarily without adequate *ex ante* opt-out possibilities.

ETSI's draft IPR Undertaking required its members to license an identified intellectual property right within 180 days from the date the standard development had begun. Acceptance of the IPR Undertaking would have been compulsory for all members to ETSI. Membership, in turn, enabled the participating firms to affect the standards development and gave them an advantage in obtaining advance information and experience. The Commission considered that ETSI's draft IPR Undertaking "amounts to a mutual renunciation of gaining competitive advantages thanks to technical efforts and thereby deprives the participants of the incentive to develop new technologies[...]".⁴⁷⁴ Finally, ETSI abolished the IPR Undertaking and started preparing a new one.⁴⁷⁵

Similarly, concerns have been expressed about intellectual property policies which require royalty free licensing or which do not permit the inclusions of patented technologies within standards.⁴⁷⁶ It has been argued that such policies could discourage innovation or lead to the inclusion of second-class technologies within standards. The threat of a collective boycott could pressure technology developers to non-patenting of patentable inventions or to royalty free licensing. This could discourage innovation and technology competition during the standardisation procedure. Referring to the ETSI IPR Undertaking as a precedent, *Dolmans* maintains that royalty free -policies could be generally problematic under competition law. He argues that to benefit from the exemption for the prohibition of cartels, royalty free licensing policies should be proportionate to the objectives pursued with them. In particular, they should permit royalties for certain end-uses as far as this does not curtail the open-source development protected with the royalty free licensing policy.⁴⁷⁷

However, royalty free licensing or the policy of avoiding patents within standards should be possible under reflexive competition law application. Such policies reflect the traditional standardisation ideology and also facilitate open-source standards, thus promoting diversity in modes of innovation, the development of technologies

474 Open letter from the EC Commission to ETSI and CBEMA (Feb. 1994), not published, quoted in *Dolmans* (2002), p. 181.

475 See more closely *Schiessl & Prins* (1993), *passim* and *Dolmans* (2002), p. 181-182.

476 Intellectual property policies requiring the licensing of intellectual property rights could be seen as a licensee cartel. See e.g. *Patterson* (2002), p. 1055-1056, and in the European context *Dolmans* (2002), p. 176-185.

477 *Dolmans* (2002), p. 183-184. *Lemley* (2002), p. 1943-1947, and (2007), p. 156, considers them acceptable for a standards body in limited circumstances. These would exist where a software consortium is working on open source basis, as there may be no other way to avoid patents covering the resulting open source software.

and preparation of standards. The results of open-source development question the argument according to which avoidance of patents leads to the adoption of second-class technologies.

Like with FRAND-terms, the participants to standardisation under royalty free or patent avoidance policies operate under a veil of ignorance: when committing to the intellectual property policy they do not typically know whether the policy committed to will help or harm them.⁴⁷⁸ Both policies foster diversified and unencumbered implementation and utilisation of the resulting standards. This is crucial with regard to Internet-related standards, in particular. Charging any royalty for the implementation of the core Internet-related standards could become excessive due to the global and pervasive nature of the Internet. It could also problematically enable informational power over others and technological trajectories in the Internet environment. The pro-competitive benefits of such policies should be recognised: there would be no need for subsequent coordination between competitors through patent pools. There would be no market power based on underlying rights enabling hold-up and other competitively problematic actions on the part of the patent owners.

Furthermore, not actively contributing technology, making explicit reservations or exiting from the standards body typically protect the members from forced royalty free licensing. Competition between different forms of standardisation as well as between various standards bodies implies that a single standards body is rarely dominant to an extent a patent owner could not refrain from contributing or could not exit the standards body to avoid a royalty free licensing commitment.

Even when the standards body comprises the majority of the firms operating within the relevant markets, the royalty free licensing obligation or the policy of avoiding patents within standards applies equally to all of them. Certainly, collusion among them to pressure a single firm to share its advanced proprietary technology on royalty free basis would likely infringe competition law. Formal standards bodies' royalty free licensing policies could prove more problematic, as their standards may be referred to in legislation or public procurement and even made obligatory. The treatment of ETSI IPR Undertaking may thus not provide a benchmark applicable for consortia's and standardisation fora's intellectual property policies.

However, also the meaning of FRAND-terms remains indeterminate, as they are typically not defined in the intellectual property policies and are to be shaped and given meaning in the concrete circumstances of each particular case.⁴⁷⁹ Their interpretation may vary in accordance with the applicable contract laws and the variety of possible starting points,⁴⁸⁰ while still others consider "reasonable" to exclude the aggregation

478 See also *An Industrial Property Rights Strategy for Europe* (2008), at p. 10, where the Commission adopts a positive approach towards the possibility of royalty free licensing obligations and states that they can be effective in promoting wide take-up of standards in areas where strong network effects apply.

479 Ohana, Hansen & Shah (2003), p. 648, state that "the expression 'FRAND terms' is so indeterminate as to be devoid of any meaning in practice".

480 See Rahnasto (2003), p. 196-199.

of any additional value generated by the lock-in of competitors to the standard once established and solidified on the markets.⁴⁸¹

When such terms have been committed to, many authors consider injunctive relief disabled as a remedy.⁴⁸² In the context of European law, *Dolmans* argues that the patent owner should abstain from requesting injunctive relief against implementers who question the validity, essential nature or royalties asked for the patents, as the patent owner is estopped from demanding an injunction against an implementer willing to pay FRAND-royalties. A request for injunctive relief would thus be inconsistent with their promise to license.⁴⁸³

Others propose that barring injunctive relief could lead to an “*inverse patent hold-up*” whereby the standard adopters could utilise the standard without seriously engaging in royalty negotiations reflecting FRAND-terms. The only material consequence of FRAND-commitment would accordingly be that the right owner waives its right to refuse to engage in good faith negotiations to license and to grant an exclusive license.⁴⁸⁴

Hence, the interpretation of FRAND- and similar terms is subject to interpretation and controversy among the patent owners and potential licensees. Most often the patent owner does not refuse a license, but is willing to obtain more than the potential licensee is willing to pay. Thus, in spite of contractual obligations concerning licensing, a patent needed for the implementation of a standard may confer considerable market power on its owner.

Moreover, even if such licensing obligations bind the participating firms, they do not bind the outsiders. Similarly, non-members to the standards body needing a license likely do not benefit from a contractual obligation binding the intellectual property owner in its relations with other members. Furthermore, the intellectual property policies of private consortia and standardisation fora may be non-existent or less developed than in formal standardisation. This may increase the risk of standard hold-up as both the disclosure of the essential intellectual property rights during the consortia work and binding licensing obligations may be inadequate.

Formal standards bodies, too, have to deal increasingly with the questions of hold-up as the technologies standardised become ever more complex and as the patenting in the information technology fields accelerates.⁴⁸⁵ However, some private consortia and standardisation fora may also apply more far-going licensing obligations than the formal standards bodies. For example, the DVB-project applies a negative disclosure

481 See *Shapiro & Varian* (1999), p. 241 and *Patterson* (2002), *passim* (“*The proposed approach puts an emphasis on distinguishing between demand for the invention and demand for the standard, and it would allocate to the patentee only those revenues derived from its own innovative contribution*”, *ibid.*, at p. 1083).

482 See e.g. *Lemley* (2002), p. 1902-1906 and (2007), p. 166-167 and *Miller* (2007), p. 374-378.

483 *Dolmans* (2002), p. 191-192.

484 *Geradin & Rato* (2007), p. 12-17.

485 The distinction often made between proprietary and non-proprietary standards has thus become relative as it becomes increasingly utopian to be able to standardise information or communications technologies not covered by patents. See also *Salter* (1999), p. 107.

rule and FRAND-licensing, connoting that disclosure is not required unless the holder cannot grant licenses on FRAND-terms.⁴⁸⁶ W3C, in turn, allows only technology which is licensed royalty-free.⁴⁸⁷

There are also several other factors limiting the capacity of intellectual property policies of standards bodies to adequately address the problems created by intellectual property -enabled market power related to standards. First and foremost, not all potential patent owners participate in the process. Second, the participating firms may have thousands of patents. The specifications may be extensive and complex. Hence, even a conducted patent search may not reveal a patent within a suggested standard specification.⁴⁸⁸ Third, the scope of a patent is always a matter of interpretation and involves considerable uncertainty. It could be defined and modified in several court proceedings, for example.⁴⁸⁹

Fourth, a participating firm may not be willing to reveal its patent or a pending patent. It may take a legal risk in order to achieve a strategic stranglehold position by including its patent in a standard specification. A pending patent application, in turn, is prior to its publication strategic information typically kept secret from competitors. Furthermore, the application may be modified or rejected in the course of the patent prosecution.⁴⁹⁰ Fifth, not all standards bodies require intellectual property searches, but may have more lenient notification obligations.⁴⁹¹ Thus, all technical standards, despite any banners of openness, may turn out to be subject to several patent claims of either the participants to the standardisation process or outsiders.

Negotiation of licensing terms prior to the adoption of a standard has been suggested, especially in the US discourses, as a possible way out from some of the hold-out problems in particular for the purposes of formal standardisation.⁴⁹² The current concern of US antitrust law seems to be more the collective negotiation power

486 See Article 14 of DVB's Memorandum of Understanding, available at http://www.dvb.org/membership/ipr_policy/ (visited 8 August 2007). See also *Eltzroth* (2007), *passim*; *Dolmans* (2002), p. 180 and *Ohana, Hansen & Shah* (2003), p. 652, about the DVB project's IPR policy.

487 See the Patent Policy of W3C, available at <http://www.w3.org/Consortium/Patent-Policy-20040205/>. However, membership in W3C alone does not give rise to the royalty free terms licensing obligation. Only the affirmative act of joining a W3C working group, or otherwise agreeing to the licensing terms, will obligate an W3C member to the royalty free terms licensing commitments. See also *Dolmans* (2002), p. 182-183 and *DOJ & FTC* (2007), p. 47.

488 See also *Teece & Sherry* (2003), p. 1946.

489 See e.g. *ETSI* (2007), p. 13, where Qualcomm Inc. withdrew several essential patent notifications as a result of patent litigation defining the scope of the relevant patents.

490 See e.g. *Watts & Baigent* (2002), p. 841.

491 As already mentioned, ETSI members are not obliged to conduct intellectual property searches, but are only obliged to make reasonable efforts to inform ETSI of any essential intellectual property rights of which they become aware. For a more general overview see *Lemley* (2002), p. 1905, in particular.

492 See e.g. *Ohana, Hansen & Shah* (2003), *passim* and *DOJ & FTC* (2007), p. 49-56.

of the potential licensees than the possibility of the participants to *ex ante* agree on non-competitive level of royalties.⁴⁹³

Ex ante licensing negotiations could better than *ex post* bilateral negotiations coordinate the aggregated level of royalties consisting of all (known) essential intellectual property rights. The problem of royalty stacking could be addressed collectively, prior to the adoption of the standard. Similarly, the additional market power generated by the adoption and solidification of the standard would not ideally affect the level of royalties agreed upon in the negotiations preceding the adoption of the standard. The level of aggregated royalties could thus be lower. Compared to a general FRAND-commitment, the prior negotiation of licensing terms and royalty level would leave less leeway for strategic action after the adoption of the standard. The prior agreement would set a clear obligation to license on certain terms, as a “lock-in” provision would likely be used.⁴⁹⁴ The agreed-upon royalty level would also function as a benchmark for essential intellectual property disclosed after the standard has been adopted.

On the other hand, prior negotiations of licensing terms could not save the standardisation procedures from intentional misrepresentation or from the royalty claims of third-party intellectual property owners. Prior negotiations of licensing terms would also complicate the standardisation procedure considerably, introduce the corporate lawyers and business owners in the standardisation committees traditionally occupied by engineers and technical experts. This would likely make standardisation less rapid and timely and emphasise the commercial terms offered, possibly at the expense of technological considerations. Moreover, the late publication of patent applications and the probabilistic nature of patents connote that the licensing conditions could in practice be never ultimately settled prior to the adoption of the standard, in particular in case of formal standards bodies or consortia with several participating firms.

By simultaneously encouraging prior negotiation of licensing terms and discouraging direct competition law intervention after a hold-up has occurred the US antitrust law is making a full turn. Agreeing on prices of technology inputs between competitors has been introduced as a recommended solution to a market power problem resulting from the expansion of patents and patenting, accelerating standardisation of information and communications technologies and the resulting patent thickets and hold-up possibilities in the related sectors.

The over-exaggerated fear of competition law courts and authorities acting as “central planners” leads to the glorification of private *ex ante* negotiations between competitors, at the expense of ensuing transaction costs and asymmetrical possession of information and power. As a corollary, competition law would accept and accelerate the transformation of standardisation from a technically-oriented, consensus-driven

493 See *DOJ & FTC* (2007), p. 53. See also *An Industrial Property Rights Strategy for Europe* (2008), at p. 9, where the Commission says that rules requiring *ex ante* disclosure of maximum royalty rates are not, in themselves, anti-competitive.

494 See about such lock-in provisions *Ohana, Hansen & Shah* (2003), p. 654-655.

process still exemplifying some democratic features into a business-oriented strategic game, openly controlled and orchestrated by the exercise of intellectual property rights. As the effective participation in such standardisation would require the direct involvement of lawyers and business-owners, smaller firms would be disadvantaged or even dissuaded from participating in the process. As a result, standardisation could further develop into an oligopolistic and increasingly burdensome negotiation process orchestrated by intellectual property bargaining between the biggest industry players.

Patent Pools

Pooling of essential patents needed for the implementation of a standard subsequent to the adoption of the standard can be seen as another possible way out from some of the problems caused by the fragmentation of intellectual property ownership underlying standards.⁴⁹⁵ *Merges* has recommended the governments to encourage firms to contract around their patents to form patent pools as an alternative to more forceful governmental intervention, for example in the form of compulsory licensing based on antitrust or competition law.⁴⁹⁶ Although there is no automatic link between patent pools and standards, some standardisation fora actively encourage pooling of essential intellectual property rights.⁴⁹⁷ Most competition law cases related to patent pools have involved standardised technologies.

However, also patent pools also pose several competition law risks.⁴⁹⁸ Should the pool comprise substitute technologies, there is a risk of the pool becoming a price-fixing mechanism leading to reduction of technology competition or the level of royalties becoming an effective barrier to entry. If non-essential but complementary patents are included, the single license could amount to bundling or tying. Hence, the Commission has accepted pooling arrangements subject to the condition that the

495 Pools are arrangements whereby two or more parties assemble a package of technology which is licensed not only to contributors to the pool but also to third parties. The pool typically allows licensees to operate on the market on the basis of a single licence, thus offering one-stop licensing of complementary technologies. See *Commission Notice - Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements* (2004), at paragraph 210.

496 *Merges* (2001), p. 131 and 146, treating patent pools as "private liability rule organizations", *ibid.*, at p. 132.

497 See about the DVB-project's encouragement of pooling *Eltzroth* (2007), p. 32-39.

498 Cf. with *An Industrial Property Rights Strategy for Europe* (2008), at p. 3, where the Commission uncritically holds that "An example of the pro-competitive effects of industrial property is the formation of technology pools in patents--" (footnote omitted).

pool only integrates complementary essential patents. Furthermore, the patents must be available on individual basis, as well.⁴⁹⁹

For example, the Commission approved the 3G patent pooling arrangement under the 3G Patent Platform Partnership (3G3P) subject to the parties modifying the initial structure of the agreements. The Commission maintained that as the flexible IMT-2000 3G -standard comprised five different and competing technologies, each of which could be used to produce 3G equipment, the essential patents relating to each of them competed with each others and must be licensed under separate regimes. This was designed to ensure that competition between the technologies and the essential patents relating to each of them is maintained. Combining all essential patents in one single platform was thus seen to restrict competition. Clearance also required each licensing agreement to be limited to essential patents only and that licensing be carried out under non-discriminatory terms, and that there is no exchange of competitively sensitive information. Finally, 3G manufacturers should not be forced to pay for patents rights other than those that they really need. It should be noted that major owners of 3G patents were outside the arrangements, including Ericsson, Nokia, Motorola and Qualcomm. This affected the assessment of the patent pool arrangement.⁵⁰⁰

Although patent pools may enhance the dissemination of standardised technologies by reducing transaction costs and alleviating the Cournot complements and double marginalisation effects, they suffer from similar problems intellectual property policies of standards bodies do. As a matter of fact, patent pools are inherently more risky than intellectual property policies of standards bodies. The latter is *ex ante* regulation: as discussed above, the participating firms in a standards body operate under a veil of ignorance – at the time they join the standards body they do not typically know how many rights they will need from others and how many they will contribute. In patent pooling the technology is already settled and (the majority of) intellectual property rights and their owners are known. This increases the likelihood of the patent pool becoming a front for a cartel.⁵⁰¹ Mechanisms designed to ensure that complementary

499 See *Commission Press Release IP/00/1135: Commission approves a patent licensing programme to implement the DVD standard*; *Commission Press Release IP/98/1155: Commission approves a patent licensing programme to implement the MPEG-2 standard* and *Commission Press Release IP/03/1152: Commission clears Philips/Sony CD Licensing program* and *Commission Press Release IP/06/139: Competition: Commission closes investigation following changes to Philips CD-Recordable Disc Patent Licensing*. Cf. with *US Philips Corp. v International Trade Commission*, 424 F3d 1179 (3d Cir. 2005), where the Federal Circuit Court of Appeals overruled an International Trade Commission decision condemning Philips' patent pool arrangements as illegal due to absence of individual patent licensing and inclusion of non-essential patents in the pooled patents. See *van Etten* (2007), *passim*, for a case commentary (concluding that the case heavily favors the creation of, participation in, and enforcement of package licenses). See also *DOJ & FTC* (2007), p. 9, concluding that including substitute patents in a pool does not make the pool presumptively anticompetitive.

500 See *Commission Press Release IP/02/1651: Antitrust clearance for licensing of patents for third generation mobile services*. See also *Dolmans* (2002), p. 176 and *Guellec, van Pottelsberghe & van Zeebroeck* (2007), p. 103.

501 See also *Lemley* (2002), p. 1952.

essential patents only are included in the pool remain indeterminate due to the probabilistic nature of patents, the often flexible or vague nature of standards, thus leaving room for the interpretation of both patents and the standard specifications and ultimately also for strategic action.⁵⁰² Thus, it is feasible that licensees often pay for non-essential patents as part of the package license.

Moreover, after the standard has solidified on the markets, there are no inherent impediments for the patent pool turning into a collective price-setting mechanism for the benefit of the key players, enabling the collection of supra-competitive profits and erecting barriers to entry for potential newcomers into the core or strategically important businesses of the patent owners.⁵⁰³ Rational patent owners price the package license on the level producing the maximum aggregated profits from both the patent royalties *and* their core businesses based on the implementation of the standard. *Provided that the key industry players have an approximately equal share of the patents declared as being essential, the patent royalties payable between them neutralise each others irrespective of the total number of the essential patents needed.*⁵⁰⁴

Thus, four industry players each having a 25% share of the patents declared essential do not suffer from the fragmented ownership of rights, as the royalties between them neutralise each others' effects. However, the greater the total number of the essential patents needed, the greater the barrier to entry for newcomers. Four patents declared as essential do not erect an entry barrier comparable to 400 patents declared as essential, as the royalty per essential patent does not typically decrease in relation to the total number of the patents needed: there is typically no total royalty cap or a step-down royalty scheme, implying the possibility of total royalties exceeding 100%.⁵⁰⁵ Such a situation would be a total entry barrier to the markets dependent on the implementation of the standard(s). The key industry players may thus have a joint interest to include as many patents as possible in the standard(s) and to charge as much as possible for them without challenging the essentiality of each others essential patent declarations, their later inclusion in a patent pool or the level of royalties charged from outsiders.⁵⁰⁶

502 See Lemley & Shapiro (2005), *passim*, about the probabilistic nature of patents.

503 See also the Commission's decision in *Salora/IGR Stereo Television*, commented in *European Commission* (1982), at paragraph 94. See also *XI:th Report on Competition Policy* (1981), p. 63.

504 Quite often the neutralisation takes place through mutual cross-licensing arrangements between the key industry players. However, even without such arrangements the mutual royalties payable may neutralise each others' effects. What the cross-license does is to reduce the risk of interim relief.

505 See Lemley & Shapiro (2007), at p. 2017-2025, about the tendency of courts to overprice the level of individual royalties in the presence of multiple patents needed for the production of a complex product. The authors suggest different routes to alleviate this problem. The authors also state (*ibid.*, at p. 2043), that they are not aware of any attempts on the part of the standards bodies to adopt royalty caps step-down royalty systems.

506 This is so provided each of them has also an approximately equal number of suspect patents declared as being essential. In these circumstances the incentive to increase the proportion of one's own essential patents is diminished by the risk of counter-measures and the ultimate reduction of the patent thicket which functions as an effective barrier to entry for outsiders.

Standards with several declared and uncontested essential patents and the related royalty-schemes of patent pools may thus become effective barriers to entry into the core activities of the key patent owners. This effect is likely to occur when two conditions are fulfilled: the implementation of the standard is necessary to operate on the core activities of the industry players and is first solidified on the markets or made *de jure* or *de facto* compulsory through governmental measures, such as in the New Approach harmonisation or within the framework of electronic communications networks and services. In these circumstances the incentive of the key industry players to use the standard as a barrier to entry is high. Likewise, they do not have to foster the adoption and proliferation of the standard on the markets through their own measures as this has already been taken care of by governmental measures or by the solidification of the standard on the markets, making changes in the standard or reducing its commercial relevance infeasible.⁵⁰⁷

The key patent owners may in such circumstances solidify the oligopoly structure of the markets by producing the standard-dependent products without having to fear direct challenge from outside. As it is likely that these key industry players are the ones capable of successfully challenging each others' patents and their essentiality due to information asymmetry related to the relevant technology prevailing between producers and non-producers, any challenge is unlikely to occur from potential entrants.

The 3G standards referred to above provide an illustrative example. The key industry players had an incentive to include as many patents as possible in the relevant standards in order to maximise their proportion of royalties from essential patents *and* to collectively erect a patent thicket, consisting of as many patents as possible. The latter acts as an entry barrier for newcomers. Likely cross-licenses, non-assertion agreements and the similar proportions of the declared patents between the key industry players (except for Qualcomm) connoted that they did not have an incentive to challenge the essentiality of each others' patent declarations, provided each had an approximately equal number of suspect declarations, as well.

In such circumstances challenging the essentiality of competitors' patents would likely have led to counter-measures. The end-result would have been the diminishing of the patent thicket and the related barrier to entry which protects the key players from potential entrants. Thus, except for Qualcomm, the key industry players had an incentive not to challenge each others' patent declarations, provided the conditions characterised above were fulfilled.

Finally, as the 3G3P-example demonstrates, big patent owners may for strategic or profit-maximising reasons wish to remain outside any patent pools. In particular, patent owners producing no standard-implementing goods or providing no such services may have no incentive to participate, as they are typically not dependant on

507 Cf. with Lemley & Shapiro (2007), p. 2044, where they state that permitting groups to collectively negotiate royalty rates are very likely to be procompetitive "if the technology would otherwise be so encumbered by patent rights and blocking positions that the standard would have difficulty moving forward in the market". The authors do not consider the options that the standard could be government-imposed, like in the case of 3G and DVB-standards.

the patents of others.⁵⁰⁸ It may also be a profit-maximising strategy for a producer with a minor proportion of essential patents to exit production and patent pool arrangements altogether and concentrate on licensing free of price-setting constraints caused by the essential patents needed for production.⁵⁰⁹

In conclusion, the potential of patent pools and intellectual property policies of standards bodies to offer a general solution to the fragmentation of essential patent rights, and the ensuing Cournot complements effect and the likely double marginalisation may ultimately remain relatively modest. More significantly, *the predominating transaction cost -oriented analysis of these self-regulative practices have largely ignored the capacity of the key industry players and even individual patent owners to orchestrate the direction of technological trajectories or to erect insurmountable barriers to entry for outsiders* by utilising the intellectual property policies, patent pools and bilateral cross-licensing and non-assertion agreement. Patent pools and intellectual property policies may be useful instruments of self-regulation in individual instances. However, they should not be naïvely celebrated as generic top-down self-regulation controlling the market and informational power underlying proprietary standards without problems.

Such power-based analysis of even existing examples has been almost non-existent in the recent discourses. Quite the contrary, the most recent US developments and scholarly proposals, like the recommendation to accept and promote prior negotiations of licensing terms, seem to accept the existence of intellectual property -enabled market power and in practice re-design the whole standardisation process to conform with power-based intellectual property negotiations.

In another possible direction is the so far predominant concern of the European Commission to emphasise the democratic decision-making processes of standardisation – inclusiveness, openness and transparency – as a condition for the acceptability of standardisation. Such an emphasis is based on the particular function of standardisation in European Union legislative processes and the plurality of objectives still underlying European competition laws. *These alternative competition law approaches function as important examples of how competition and antitrust laws may affect the democratic nature of private regulation with further connotations on the democratic nature of the technological environments being standardised.*

7.7.6 Competition Law Control of Standard-Related Patent Abuses

The embeddedness of standardisation in general European Union law and the evaluation of the standards bodies' intellectual property policies under the prohibition of cartels form a necessary background for analysing the interaction between the

⁵⁰⁸ As pointed out by *Lemley & Shapiro* (2007), p. 2014.

⁵⁰⁹ Such a firm has a competitive handicap in the production of the standard-dependent goods as it has to actually pay royalties to the major patent owners. On the other hand, exiting production enables the charging of higher patent royalties as the firm does not need licenses from other patent owners.

prohibition of abusing a dominant position and intellectual property in standards. Reference to standards in public procurement provisions or legislative acts solidifies them and may make it *de facto* obligatory to comply with them.

When a standard is referred to in public procurement it becomes a commercial necessity for tenderers and a law-like reference for public authorities and courts when evaluating the acceptability of the bids made or the legality of the public procurement procedure. Even though equivalent arrangements must be accepted, the referred standard sets the basis for evaluation and reduces the technological options otherwise available. It may often be that the only possibility (on technical or commercial grounds) for tenderers is to comply with the standard referred to.

In case of standards based on New Approach harmonisation the standard assumes a regulatory function going beyond industry self-regulation. New Approach standardisation is publicly mandated standardisation. The standard creates a presumption of conformity with law (the New Approach directive) and of market access for products complying with the relevant standards.

Even though conformity with the relevant directive can be proven also otherwise, and the directives often establish safety procedures available for the member states, the legal presumption is significant and gives the standard effects extending beyond normal self-regulation. This makes complying with the relevant standards if not obligatory, at least a commercial necessity as doing otherwise would place the non-complying firm in a competitive disadvantage. In practice, both the finding of dominance and abuse are greatly affected by such factors. Once an adopted standard becomes (*de facto*) binding due to governmental measures, the owner of an essential intellectual property right normally becomes dominant within the related technology markets. The same applies to situations where the standard becomes *de facto* mandatory due to its wide adoption on the markets.⁵¹⁰

The Commission has indicated that after the adoption and implementation of a standard and making it *de facto* mandatory by a Community instrument, a refusal to license the essential intellectual property rights underlying it would raise serious concerns under the prohibition of abusing a dominant position also in the absence of prior deceitful conduct.⁵¹¹ *Dolmans* argues that this only applies to technology which is essential for the standard in question. A technology merely giving a competitive advantage in the standardised environment would not suffice.⁵¹²

Yet, the starting point should be that the intellectual property policies of standards bodies and their definitions of essentiality do not bind the competition law court or authority. Competition law liability under Article 102 FEU, ex. 82 EC, could otherwise be contracted away. This could also lead to the diminishing of disclosure and licensing obligations in the intellectual property policies: doing so would provide an avenue for

510 See also *Dolmans* (2002), p. 187, who suggests that once the standard-compliant products represent more than 40% of the downstream market, the provider of an essential patent is likely dominant in its technology market.

511 See *Communication from the Commission* (1992), at paragraph 5.1.11.

512 *Dolmans* (2002), p. 170.

the key players to avoid competition law liability related to intellectual property. Yet, intellectual property policies mitigate market power and hold-up problems created by standards. Reflexive competition law application should recognise the value of self-regulation and avoid discouraging it when beneficial.⁵¹³

However, the ability of standards bodies to establish intellectual property policies should not be equated with the ability to effectively prevent hold-up or the exercise of intellectual property-enabled market power in practice. The intellectual property policies of standards bodies differ to a considerable degree. This also applies to their enforcement. Finally, even if the intellectual property policy of a standards body and its enforcement are well designed to prevent hold-up situations, they may fail to restrict strategic abuses of intellectual property rights.

The evaluation of the adequacy of an intellectual property right policy of a standards body to prevent intellectual property hold-up must thus be case-specific. As the *Rambus*-case treated below demonstrates, the intellectual property policy adopted by a standards body may not prevent all intellectual property-related abuses. Intellectual property commitments agreed to could define the minimum level under competition law, but for example the definition of “essentiality” may be stricter under the prohibition of abusing a dominant position.⁵¹⁴ Similarly, even if enabled by patent laws, requesting an injunctive relief instead of settling for royalties could in some conditions be interpreted to infringe either the cartel prohibition or the prohibition of abusing a dominant position.⁵¹⁵ Hence, although recognising the value of self-regulation in standardisation and the means available under patent law, competition law is bound by neither.

A practice whereby a firm during the development of a standard intentionally conceals that it has essential patents for that standard, and declares and identifies these

513 See *Lemley & Weiser* (2007), p. 833, who discuss liability-rule-based regimes from this perspective. See also *Lemley* (2002), p. 1969-1970 and (2007), p. 161-162.

514 It has been suggested that when there are two technical solutions to a problem, but one is prohibitively more expensive than the other, then the cheaper solution is essential despite potential intellectual property policy definitions to the contrary. See *Watts & Baigent* (2002), p. 838. The alternatives surrounding a standardised solution may be patented extensively, possibly leading to a hold-up problem in the future. See also *Lemley & Shapiro* (2007), p. 2017. Furthermore, a patent needed for the manufacturing of standard-compliant recording medium, for example, may not be formally deemed essential in the context of a standard-compliant recording equipment or process. See *Watts & Baigent* (2002), p. 841. Formally non-essential rights may, thus, at some point become later essential or desirable to the extent competitors feel obliged to obtain a license.

515 This is because the patent owner has disproportionate power in a standardised environment due to the lack of inter-technology competition. The lack of viable alternatives would connote that requesting an injunctive relief could significantly reduce competition to the detriment of consumers and be inconsistent with the principle of equality of arms. Accordingly, the patent owner should be content with an action for damages. An injunction to exclude the competitor from the market should be permissible only if the implementer breaches material license provisions or does not accept licensing on FRAND-terms regardless of the patent being found valid and essential in nature. See also *Dolmans* (2002), p. 189-192 and 205. Dolmans argues that a demand for injunctive relief could breach the conditions for exemption of the standard agreement or the associated patent pool (*ibid.*, at p. 192).

patents after the standard has been adopted, has been named a “*patent ambush*”⁵¹⁶ By so doing, the firm in question may obtain control over the standard and erect an unfair barrier to entry. As the Commission has noted, even if the essential patent claim is in itself valid, the firm’s actions connote that the opportunity of considering alternative technologies has been artificially removed, implying a distortion of the competitive process. A subsequent claim of unreasonable royalties could in such a situation constitute an abuse of a dominant position.⁵¹⁷

Dell-,⁵¹⁸ *Rambus*-⁵¹⁹ and *Unocal*-cases⁵²⁰ from the US provide some of the well known examples of intellectual property right -related misrepresentation and the manipulation of the standardisation process. Of these only *Rambus* reached the US courts. The actions of Rambus have also been treated in the European Union. It will be discussed below.

Rambus had allegedly engaged in a “*patent ambush*” as its conduct “*was calculated to mislead JEDEC members by fostering the belief that Rambus neither had, nor was seeking, relevant patents that would be enforced against JEDEC-compliant products*”. The Federal Trade Commission (“*FTC*”) opined that “*Rambus’s course of conduct constituted deception under Section 5 of the FTC Act.*” Moreover, it stated that Rambus’s actions and inactions contributed significantly to the standards body’s technology selections and that the standards body’s choice of the standard contributed significantly to the acquisition of monopoly power on the part of Rambus. Furthermore, the Opinion identified considerable switching costs, ultimately leading to a lock-in of the relevant industries to the standard in question: Rambus’s monopoly power was thus durable. The FTC opined that Rambus unlawfully monopolised the markets for four technologies incorporated into the standards body’s standards in violation of Section 5 of the FTC Act. The FTC ordered compulsory license of Rambus’s patents at a royalty level approximating the level of likely royalties absent hold-up enabled by the patent ambush.

516 Commission Press Release IP/05/1565: Competition: Commission welcomes changes in ETSI IPR rules to prevent ‘patent ambush’. See also e.g. Lemley (1996), p. 1088.

517 Commission Press Release IP/05/1565: Competition: Commission welcomes changes in ETSI IPR rules to prevent ‘patent ambush’ and MEMO/07/330: Antitrust: Commission confirms sending a Statement of Objections to Rambus.

518 Dell Computer Corporation had certified twice during the standardisation procedure that it had no intellectual property relevant to the VL-Bus proposed standard. After the adoption of the standard it allegedly demanded royalties for the implementation of the standard. In a consent decree, Dell obliged not to assert its patent rights relevant to the standard against the firms implementing it. In other words, the misrepresentation and the subsequent claim for royalties resulted in royalty-free licensing. *In re Dell Computer Corp.*, No. 931-0097 (F.T.C. 1995). For discussion see Lemley (1996), p. 1086-1087; (2002), p. 1928-1931; *Rahnasto* (2003), p. 193-194 and *DOJ & FTC* (2007), p. 44.

519 See Opinion of the Federal Trade Commission *In the Matter of Rambus, Inc.* Docket No. 9302. See also the Final Order of the FTC against Rambus, Docket No. 9302, dated February 2, 2007.

520 In a standardisation process Union Oil Company of California (“*Unocal*”) concealed its pursuance of patent rights covering the research results, and the state regulating board used these results in the setting of industry standards. According to the FTC’s complaint Unocal had misrepresented its proprietary interest in the standard until there was an effective lock-in of the relevant industries with the new standards in the form of investments. Unocal’s later invocation of its patents enabled it to charge substantial royalties. The case was settled as part of a broader dual consent agreement. Under its terms, Unocal obliged not to enforce its patents related to the standard set by the state board. See Statement of the Federal Trade Commission: *In the Matter of Union Oil Company of California*, Dkt. No. 9305 and *Chevron/Unocal*, File No. 051-0125 (June 10, 2005), available at www.ftc.gov/os/adjpro/d9305/050802statement.pdf.

On appeal Rambus managed to overturn the decision of the FTC.⁵²¹ Subsequently the US Supreme Court refused to review this final appellate decision that had found in favour of Rambus. This is significant as on appeal it was not overturned that Rambus had deceived in the standardisation process. According to the Court of Appeals, the contrafactual analysis left room for a case that the standards body could have adopted the standard nevertheless. This possibility was enough for the rejection of the FTC's decision. Moreover, deceit merely enabling a monopolist to charge higher prices than it otherwise could have charged was not treated as monopolisation contrary to antitrust laws. The case thus restricts the possibility to rely on antitrust laws considerably in case of deceitful interference with the standardisation processes.

More generally, the role recently entrusted for antitrust law in the US in solving fragmentation and hold-up problems related to standards seems to be restricted to that of keeping away from private regulation intended to reduce hold-up and fragmentation.⁵²²

As the treatment of Rambus under European Union competition law demonstrates, interpretations still differ on both sides of the Atlantic. The failure to disclose an essential intellectual property right in the standardisation process may be problematic under European Union competition law, should the non-disclosing firm lack dominance at the time of the failure, as the infringement of the prohibition of abusing a dominant position requires dominance at the time of the abusive behaviour. However, the subsequent claim for unreasonable royalties for an essential patent may constitute an abuse of a dominant position even if the firm was not dominant prior to the adoption of the standard.⁵²³

The Commission sent a Statement of Objections to Rambus in 2007. According to the Commission Memo, Rambus engaged in intentional deceptive conduct in the standardisation process, for example by not disclosing the existence of the patents which it later claimed were relevant to the adopted standard. The alleged abuse of a dominant position consisted of the subsequent claim for unreasonable royalties for the use of those relevant patents. According to the Memo, the Commission considered that without its "patent ambush" Rambus would not have been able to charge the royalty rates it currently does.⁵²⁴ Rambus's conduct prior to the adoption of the standard was thus deemed relevant in analysing the subsequent claim for unreasonable royalties.

521 *Rambus Incorporated v Federal Trade Commission*, Court of Appeals for the District of Columbia Circuit, decided April 22, 2008.

522 *US Philips Corp. v International Trade Commission*, 424 F3d 1179 (3d Cir. 2005); *Hovenkamp* (2007), *passim* and *Lemley* (2007), *passim* ("I think antitrust law serves a valuable purpose, but where the holdup problem is concerned, it is a backstop. In this particular circumstance, it's a backstop that's going to apply only if private efforts in SSOs and IP law have already failed us. Even then, it is not clear that antitrust law is up to the task of policing holdup"). See, however, also case *Princo Corporation and Princo America Corporation v International Trade Commission and US Philips Corporation*, United States Court of Appeals for the Federal Circuit, decided April 20, 2009 (enabling patent misuse in case of essential patents).

523 See also *Dolmans* (2002), p. 187-188 and *Watts & Baigent* (2002), p. 840.

524 See *Commission MEMO/07/330: Antitrust: Commission confirms sending a Statement of Objections to Rambus*.

In 2009 the Commission announced that it had reached an agreement with Rambus, leading to a commitment decision. According to the new Commission Memo:⁵²⁵

“The Commission considers that an effective standard setting process should take place in a non-discriminatory, open and transparent way to ensure competition on the merits and to allow consumers to benefit from technical development and innovation. Standards bodies should be encouraged to design clear rules respecting these principles. However, in a specific case where there appear to be competition concerns, the Commission will investigate and intervene as appropriate.”

The proposed commitments included an obligation to license on certain royalty rates, which have been considered as less punishing than those that the FTC sought to impose for Rambus.⁵²⁶ Yet, Rambus committed to offer *worldwide* licenses, not only for Europe. Although a commitment decision does not implicate formal infringement of European competition law norms, the difference in approach to that in the US in almost the same factual matter is remarkable.⁵²⁷

From one perspective, the case could be interpreted as undesirable fragmentation of the interpretations of competition/antitrust laws on both sides of the Atlantic. From another perspective, it could be seen as an important example demonstrating the importance of heterogeneity and diversity of competition law enforcement on international level. Economic and informational power exercised worldwide could be controlled *because* of such diversity of the underlying thinking. The Commission’s formulations in the Memo indicate that also under the prohibition of abusing a dominant position the democratic features of standard setting procedure – its non-discriminatory, open and transparent nature – may affect the competition law evaluation. *Deceptive conduct and the subsequent invocation of exclusive rights could be interpreted as an interference with the desired democratic governance of standardisation processes.* To an extent such concerns overlap with the more traditional objectives of competition law they may be easily integrated in its application.

The competition law authorities may affect directly the standards bodies’ intellectual property policies by requiring effective intellectual property disclosure as a condition for compliance with the prohibition of cartels. For example, the Commission investigations led ETSI to tighten its disclosure requirements in 2005.⁵²⁸ This is significant as the established procedures and intellectual property policy of the

525 Commission MEMO/09/273: Commission Market Tests Commitments Proposed by Rambus Concerning Memory Chips.

526 Updegrove (2009), *passim*.

527 Also an important competition law precedent from Germany indicates that essential patents included within industry standards could constitute essential facility –type resources to which access must be given non-discriminatorily. See *Standard-Spundfass*, Decision of 13 July 2004, KZR 40/02 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 36, issue 6/2005, pp. 741-754. The case has also been discussed previously in chapter 5. See also *Orange-Book-Standard*, Decision of 6 May 2009 (*Bundesgerichtshof*), KZR 39/06 (Germany).

528 See the Commission Press Release IP/05/1565: *Competition: Commission welcomes changes in ETSI IPR rules to prevent ‘patent ambush’*.

standards body, in turn, may affect the evaluation under the prohibition of abusing a dominant position.

The established procedure or intellectual property policy of the standards body may connote that a timely notification would have led to the modification of the proposed standard. The standardisation ideology of the standards body, expressed in its policies and procedures, could be based on strict avoidance of patents in standards.⁵²⁹ If the modification of the standard would have been technically feasible, it becomes likely that the misrepresentation has a causal link to the adoption of the standard and the market power generated. As a consequence, standards bodies with open source or open standards ideologies and strict avoidance of intellectual property rights within standards may be protected more intensively against misrepresentation. In a sense, competition law protects here the inherent rationality and ideology of the relevant standards body, thus exhibiting reflexivity as promoted in this research.

For example, the DVB-project's negative disclosure and FRAND-terms (referred to above) connote that a member's failure to notify any essential patents as defined in the intellectual property policy creates a presumption of licensing on FRAND-terms. Later refusal to license or discriminatory licensing terms could be seen as patent owner's misrepresentation during the standardisation procedure. Such past behaviour of the patent owner may legitimately affect the analysis of the refusal to license, as without the misrepresentation the standard could likely have been modified to the exclusion of the patent in question. The misrepresentation can be seen as part of the patent owner's strategy to distort the market and generate market power by improper means for the purpose of abusing it after the standard cannot be modified without heavy costs.

Thus, through their procedures and intellectual property policies the standards bodies may partially affect the application of competition law to their members' refusals or qualified refusals to license their essential intellectual property rights. A standardisation ideology based on open standards and avoidance of intellectual property rights within standards is reflected in the procedures and intellectual property policies of the standards body in question. The latter affect the application of competition law under the prohibition of abusing a dominant position so as to provide a strict criterion for evaluating misrepresentation of intellectual property rights during the standardisation process. Finally, the cartel prohibition, in particular, may affect the procedures and intellectual property policies of the standards body in question.

In addition to integrating democratic concerns related to the standardisation *processes* under the prohibition of abusing a dominant position it is possible discriminate between different standards in the competition law evaluation on the basis of their centrality for communications and hence their value for freedom of expression -related democratic objectives. As proposed in the previous chapter,

529 Lemley (2002), p. 1931-1932, notes that a requirement of supermajority approval of patented standards would imply that in the absence of misrepresentation the standard would probably not have been approved.

already the analysis of dominance could embed the standard in the communicative and informational structures as well as the networks of related technologies.

For example, the TCP/IP- standards are qualitatively different from an isolated industry standard affecting a small group of industrial firms only. The former types of standards entail broad societal repercussions. Intellectual property -enabled market power underlying such standards is also informational power to structure the democratic features of Internet-enabled communications and diverse economic and non-economic activities. As also argued previously, such considerations should also affect the analysis of abuse. Infrastructure theory, discussed previously in this chapter, could provide the economic model and terminology capable of integrating most of the democratic and constitutional values at stake.

Like the *Rambus*-case indicates, most refusals to license essential intellectual property rights within standards could be handled with commitment decisions. The negotiations with the parties and the market test used could often lead to royalty levels and other licensing conditions acceptable for all concerned. The flexibility of the commitment decisions could also enable the utilisation of independent experts and step-down royalty schemes to avoid prohibitive total royalty levels where not all essential intellectual property rights and royalties charged for them are known at the time of the commitment decision.

Competition law could thus provide a shadow of potential ultimate liability under which intellectual property -enabled market and informational power could to a certain degree be tamed and controlled under this regulated procedural framework involving public authorities, the firm accused of abusing its dominant position and all firms and other entities concerned and willing to affect the proposed commitments in the market test phase preceding the ultimate commitment decision. In case of societally important standards also civil society groups, associations and for example standards bodies and firms dependent on open source development could participate in this flexible process by commenting the adequacy of the proposed commitment decision.

Commitment decisions could ideally establish an inclusive and democratic procedure for addressing intellectual property -enabled power underlying standards. Also entities excluded from the standardisation procedure could be involved in this second-stage process concentrating on the principles regulating the use and access to the standard in question. Developing the role of commitment decisions in this direction would require activation on the part of civil society groups in standardisation and competition law processes, as well as support or at least tolerance on the part of competition law authorities towards such activism and arguments based not only on direct dependency on the standard but also its broader societal repercussions.

7.7.7 Conclusions on Standards and Intellectual Property

The foregoing concretisation related to standardisation makes it obvious that competition law is applied in normatively saturated contexts affecting the interpretation and application of the competition norms. As a matter of fact, competition law

application has assumed functions related to the legislative processes of the European Union in the context of the New Approach to harmonisation. In this type of regulation standardisation carried out by standards bodies constitutes a central element.

This has emphasised the democratic features of standardisation processes as a condition for their acceptability under competition law. Also intellectual property abuses or inadequate intellectual property policies of standards bodies could be seen to interfere with the processes and principles seeking to secure the democratic legitimacy of such public-private regulation. The concern over the inclusiveness, openness and transparency of standardisation seems to transcend the New Approach harmonisation and now affects the competition law evaluation of all technical standardisation, thus recognising its regulative capacity. This is especially the case with Internet-related standards as such standards processes constitute “*the discourses that establish the framework for all other Internet-based discourses*”.⁵³⁰

Standardisation is also otherwise in multiple ways connected to various European Union norms and policies which affect the interpretation of competition law. Rather than producing detailed proposals for individual instances of competition law application, the discussion served to bring forth such structural connections.

In addition to this, it was argued that in the competition law evaluation of intellectual property abuses related to standards such actions or inactions should be evaluated from the perspective of their impact on issues like communicative diversity and entrepreneurial freedom. This produces an additional layer of democratic considerations in the competition law treatment of standards in Europe. Important standards related to communications should be protected more rigorously from intellectual property-enabled exclusionary abuses as this typically not only advances democratic and constitutional values, but facilitates economic activities and thus competition taking place on the core competitive infrastructures of the information society.

More generally, the European competition law approach to intellectual property-enabled market and informational power underlying standards could form a core element upon which competition law case law related to intellectual property in general could build. This would imply derogation from the abstract microeconomics of the Chicago School, depicted in the previous chapter as the almost uncontested follower of the ordoliberal competition law approach. The inevitable embeddedness of competition law in normatively saturated contexts of application and the presence of diverse constitutional values in competition law decision-making could thus form conscious parts of reflexive competition law decision-making.

530 As formulated by *Froomkin* (2003), p. 777.

7.8 Concluding Perspectives

The transition from the early doctrines defining the relationship between intellectual property and abuse of a dominant position to essential facility -type, effects-based argumentation is an ongoing process reflecting paradigmatic change. Whereas the early distinction between the existence and exercise, as well as the essential function and specific subject-matter of rights, connected the decision-making to the case law on the basic Treaty freedoms and protected the Community-determined core of nationally defined intellectual property rights from the broad prohibition of abusing a dominant position, the essential facilities -approach *ideally* concentrates on addressing the competitive effects of a refusal to license and the bottleneck-position of the intellectual property owner for operation on downstream markets.

One may thus discern a separation of free movement and competition law interpretations. Instead of pursuing overarching coherence covering both fields of Community law as the predominant strategy, the predominant pattern of interpretation now seeks coherence within competition law only, in particular among the prohibitions of cartels and abuses of a dominant position. The changes reflect the relative diminution of the internal market objective in the interpretations of Union law, and the differentiation of competition law into a highly specialised branch of law with its distinctive methods, concepts and objectives, all increasingly based on microeconomics.

However, so far microeconomics has remained one discourse among others participating in the constitution of the competition norms. Important differences to US case law remain visible. In addition to microeconomic impulses, the ordoliberal legacy forms part of the case law, doctrinal evolution and competition law scholarly literature. The case law of the Community Courts is often formalistic in its argumentation, thus neglecting contextual effects-based analysis. An alternative for an effects-based argumentation model was characterised in this chapter.

Although the interpretations of competition law have now largely diverged from the law regarding the basic Treaty freedoms, the development of the competition law doctrine may usefully be compared to the evolution of the free movement case law.

As is well known, in *Keck*⁵³¹ and subsequent case law further extending the principles established in it, the European Court of Justice limited the outer boundaries of the Treaty norm prohibiting national measures equivalent to quantitative import restrictions (now Article 34 FEU), which had expanded in its potential reach in the pre-existing case law of the Court. The expanded scope of the norm now included in Article 34 FEU, and its formalistic application by the Court, had led to an increasing need for the member states to justify a wide spectrum of measures having the potential to affect any aspects of trade, including issues like national regulation of opening-hours, advertising and product-characteristics.

531 Joined cases C-267 and 268/91, *Criminal Proceedings against Keck and Mithouard* [1993] ECR I-6097.

By excluding in *Keck* certain “*selling arrangements*” from the scope of the norm now found in Article 34 FEU the Court limited the reach of the prohibition in question on the basis of an effects-based criterion and lessened the need for the member states to invoke reasons capable of justifying indistinctly applicable national measures. Although the *Keck* -case law may be seen to have led to formalism on top of the pre-existing ones,⁵³² it may also be seen as an attempt by the Court to introduce market access -based tests to the application discourse. Like the shift from the specific subject-matter to the essential facilities -type argumentation, the *Keck* -case law established substantive criteria defined on the Community level, designed to function as an inherent limitation of the Treaty prohibition in question.

Thus, both doctrinal shifts reduced the need for justification discourse and proportionality analysis between the reasons underlying the nationally defined laws on one hand, and the reasons underlying the respective Treaty prohibition, on the other hand. They signified rationalisation of the respective prohibitions and presentation of the related decision-making not as a weighing exercise between the Community objectives and the aims underlying the national laws,⁵³³ but rather as federal-level, objectified application of tests which – once established – by themselves decide between the conflicting policies. The measure under scrutiny either falls within or outside the category of selling arrangement or essential facility, both established and functioning on the Community level.⁵³⁴ Hence, instead of merely providing a decision-making framework through which the Community Courts ultimately determine the respective weights of the reasons behind the national laws and the Community objectives, the decision-making doctrines themselves materialise. They provide the standards for either accepting or rejecting measures *and thus also neutralise the role of the Community Courts as final arbiters of competing claims based on Union single market / competition law objectives and national / other Union policies.*

The neutralisation is enabled by the Community Courts’ formalistic application of the doctrines once established, and the related absence of substantive argumentation.

532 See more closely about the *Keck* case law and its implications for the doctrines regulating free movement of goods in Europe e.g. *Craig & de Búrca* (2008), p. 684-696 and the additional sources referred to there.

533 It should be noted that to an extent the member states could justify the measures now falling under the category of “*selling arrangements*”, *Keck* case law does not necessarily reflect a relaxation of the respective Treaty prohibition, but merely the establishment of a new kind of decision-making standard. The same applies to the shift from the notions of existence/exercise and specific subject-matter to the essential facilities -type argumentation patterns. The change of the decision-making standard as such neither expands nor reduces the reach of the prohibition of abusing a dominant position.

534 Obviously, the context of interpretation is different, as the other Treaty prohibition always involves the determination of the compatibility of national measures and laws with the principle of free movement of goods, the other ever more often the compatibility of a private exercise of European-level intellectual property rights with European competition law. But even if the analogy is far from perfect, it may point towards the materialisation of the respective European-level doctrines, also implying the increasing need to critically analyse the adequacy and legitimacy of these substantive standards and their capacity to integrate diverse context-dependent interests and values, often recognisable in additional norms or norm fragments present in a given context.

The Community Courts avoid discussing the justifications underlying the doctrines and norms, their further justifications, or any counter arguments. They are wary of expanding the norms forming the base of their argumentation beyond the obvious ones and the ones invoked by the parties. This unfortunate culture of argumentation is generic to the Community Courts. It makes the Community Courts unlikely venues for the development of competition law principles capable of integrating concerns related to private informational power. To an extent underlying pressure develops, the Courts may end up changing the doctrine, like the *Keck*, *Hag II*⁵³⁵ and *Magill* -cases demonstrate. Yet, the new doctrine typically leads to new (types of) formalisms.

For example, although the shift to the essential facilities -type argumentation model could ideally facilitate many-sided effects-based evaluation, the current doctrines do not consider the scope and quality of downstream activities prevented by the refusal to license. Infrastructure theory could lead to considering the effects of competition law application on the production of public and non-market goods and thus also on constitutional values related to communicative diversity, freedom of expression and entrepreneurial freedom, among others. However, it is a bit sad if courts and competition law scholars cannot discuss the implications of competition law for societal objectives, collective goods and democratic ends without resorting to terminology of microeconomics. It would be in many respects preferable for courts and scholars to address the constitutional issues underlying competition law also more directly.

Similarly, the innovation incentives objective justification as formulated by the Court of First Instance in *Microsoft* potentially insulates any restriction of competition from the application of the prohibition of abusing a dominant position provided the threshold of *a significant negative impact* on the dominant firm's incentives to innovate becomes fulfilled. Such a formalistic standard establishes a hierarchy of values whereby the protection of the innovation incentives of the dominant enterprise is on the top, capable of pardoning any conduct excluding competitors, leveraging the dominant position to other markets, and/or preventing the widespread production of public or non-market goods and/or jeopardising of democratic values.

The application of competition law typically affects freedom of contracting and the exercise of property rights. If generalised, the objective justification related to innovation incentives as interpreted by the Court of First Instance *could lead to a more generic insulation of some property rights from the reach of competition law, provided they are the result of sufficient investments*. It would undermine the need to weigh the competing claims of property and competition as rough equality in the application of competition law: the potential role of competition law as a legal framework enabling the constant negotiation and confrontation between competing claims in property would thus be frustrated. *It would ultimately neutralise private informational power based on intellectual property under an objectified test of significant negative impact*

535 Case C-10/89, SA CNL -Sucal NV v HAG GF AG [1990] ECR I -3711 (discussed in chapter 5).

on the dominant firm's incentives to innovate, permitting no weighing with the negative effects caused for others, competition and society in general.

Yet, the extent to which the application of competition law would frustrate innovation incentives could be considered as one factor affecting the overall *prima facie* evaluation of the case at hand, not as something analysed after establishing the *prima facie* liability based on other grounds. More generally, the research at hand actively sought to avoid simplistic tests intended for universal applicability. The more modest-sounding approach of asking a series of questions intended to direct attention and to broaden the issues considered seems preferable. This supports pluralistic and evolving objectives of competition law and the analysis of cases from multiple competing and partially overlapping perspectives.

The treatment of standardisation implied that concerns related to democratic values could already be integrated under European competition law application. Finally, domestic courts still provide competing interpretations, reflecting continuing diversity and competition of argumentation patterns and underlying approaches to market power based on intellectual property rights.⁵³⁶ Constitutional pluralism thus appears feasible and desirable even in sectors as federalised as European competition law. Together, these developments and phenomena could be seen to constitute elements of a now heterogeneous and volatile legal culture of European competition law. European competition law could develop into multiple directions and accommodate diverse concerns under its decision-making.

Far from proposing that the mainstream objectives of competition law should be rejected, it was argued that considerations related to them should be complemented with questions resonating on the level of constitutionalism whenever necessary. For example, in the conditions of the *Microsoft*-case, the attempt to leverage the near monopoly position of Microsoft on the markets for operating systems for personal computers to other markets equally central for the global Internet-based communications appears as a threat to democratic values and fundamental right-related interests. Asking whether the market power and alleged abusive practices extending it to new markets could pose a threat to such values and interests is thus highly relevant as a potential challenge for the straightforward application of the mainstream doctrines and propositions emanating from the now microeconomics-oriented competition law discourses.

It is a *cliché* that intellectual property and competition law should be seen as complementary instruments.⁵³⁷ Yet, what is meant with complementarity often remains obscure and varies according to the premises adopted. Intellectual property and competition law can be made cohere and complement each others through multiple perspectives and strategies. Depending on the perspective adopted, different values

536 See e.g. *Standard-Spundfass*, Decision of 13 July 2004, KZR 40/02 (*Bundesgerichtshof*), translated into English in *International Review of Intellectual Property and Competition Law*, vol. 36, issue 6/2005, pp. 741-754 and *Orange-Book-Standard*, Decision of 6 May 2009 (*Bundesgerichtshof*), KZR 39/06 (Germany).

537 See e.g. *Reichman* (1993a), p. 116; *Anderman & Kallaugher* (2006), p. 7 and *Drexler* (2008a), p. xv.

and objectives become the connecting denominators and different sets of institutional support relevant in the pursuit of coherence thus conceived.

Could competition law be seen from the above perspectives to have the function of also complementing intellectual property law in the sense that it enables partial control of informational power exercised as techno-economic action, and which is enabled or facilitated by the intellectual property institution? Could competition law be seen to foster the plurality and diversity of actors and types of actors the intellectual property institution and economic phenomena like globalisation of production, network effects and standardisation are likely to produce? The preceding chapters answered these questions in the affirmative.

8 Concluding Thoughts

The preceding chapters have explored dimensions of intellectual property -based informational power in the context of European law. Both the object and context of this research are moving targets. The Union transforms itself constantly. One of the most recent renewals, the Lisbon Treaty, could contain seeds for a change of its legal paradigm. Developments connected to multi-level constitutionalisation, globalisation and information society necessitate reconsidering many of the laws, policies and constitutional elements of the Union. The moving targets have been approached by concentrating on such deeper-level changes in the basic frameworks, premises and perceptions constituting private informational power and patterns of its boundaries.

One aim of this research has been to consider the possibilities, limits and feasible strategies of fundamental critique in the context of the research topic – and thus to add an idealist twist to realism, or perhaps a realist twist to idealism. The realist sees that constitutionalisation is not always progressive and harmonious. It takes place on many fronts and forms and may require counter-weights, external limits, and development of critical metaconstitutionalism. Similarly, the realist sees that it may not always be a good idea to introduce human rights provisions in all regimes (such as the WTO), in any form (intellectual property in the EU Charter) or in any way (simple horizontalisation of the Union's fundamental rights standards regarding intellectual property). Moreover, merely intensifying the application of competition law as a response to the expansion of intellectual property and informational power could lead to new problems, yet without adequately addressing the problems caused by the intellectual property institution.

The idealist sees that the on-going paradigm change related to information society and the constitutional transformation of the Union open a window of opportunity for progressive legal scholarship. The current research has sought to advance such an approach on many fronts by participating in several discourses constituting, legitimating, challenging and limiting informational power. This has necessitated the development of argumentation not only on an abstract level of legal theory and European constitutionalism, but also on the more concrete level of intellectual property and competition law doctrine and *allgemeine Lehren*.

Intellectual property and competition norms now constitute the primary laws regulating the structures of communication, access to and usage of information, and communicative and entrepreneurial diversity. They affect individual and collective autonomy, public sphere of the lifeworld, and the potential of the civil society groups to assume a more activist role in the structuring of our information society. Irrespective of one's wishes, these laws assume constitutional and democratic dimensions. The

idealist realises that these legal branches could constitute the primary areas of law where fundamental rights and collective goods affect the interpretation and systematisation of law. There *have* been increasing demands and attempts to constitutionalise or democratise intellectual property law. This research has continued such idealist efforts and explored similar possibilities in the context of competition law.

At the same time, the realist sees that both intellectual property and competition law institutions *already reflect intensive inherent constitutionalisation in neoliberal spirit*. International and European intellectual property norms seek to fence intellectual property exclusivity from outside threats in the form of the three-step tests, competition norms of TRIPS, enumerated exceptions of copyright and the patterns of interpretation within copyright and patent laws alike. For example, patent law doctrine excludes any non-technical considerations both from the determination of patentability and scope of protection. Competition law theory, in turn, is increasingly purified from non-efficiency considerations. Arguments related to collective goods and democratic values have to be smuggled in to the scholarly discourse by using the language of microeconomics, like in infrastructure theory discussed in chapter 7. Maximisations of innovation and creation or economic efficiency have become the foundational, unquestioned values in mainstream research. Moreover, both intellectual property and competition law are now highly specialised: they have developed their own terminology, legal culture, constitutional norms and legal theory.

The idealist took issue with such ideological monism and closure. He kept asking with even greater vigour whether democratic values could still be somehow integrated in the application of European intellectual property and competition laws, and explored feasible strategies for pursuing such agendas. European economic constitutional law provided the conceptual umbrella under which such discourses were pursued. It enabled challenging some of the branch of law -specific discourses and mainstream objectives like *innovation* and *global competitiveness*.

The chosen approach also necessitated discussion of the patterns and underlying values of judicial decision-making under European Union law, as well as the integration of fundamental rights law under the notion of European economic constitutional law. The idealist saw a progressive potential in fundamental rights and rights constitutionalism.

Yet the realist was not content with Union-level fundamental rights law. It seemed to *strengthen* the structural proprietary bias and private informational power identified. The realist could convince the idealist that the future evolution of intellectual property and competition law will not be determined – or at least not improved – by fundamental rights adjudication or new provisions in the basic Treaties. The idealist proposed that we need new kind of constitutionalism inspired by fundamental rights discourse and the deep-level transformations of Europe. Constitutionalism should be extended to intellectual property law, among others. The branch of law -specific developments must also be challenged *from within* by utilising and being aware of the inputs and limitations of traditional rights constitutionalism.

The idealist and realist agreed that the democratisation and constitutionalisation of intellectual property and competition laws does not have to mean that maximisation

of wealth, innovation or other mainstream objectives should be rejected. Even if the underlying theories disagree, the outcomes they propose may be compatible. Proposals based on discourse democracy, democratic culture and critical constitutionalism could be compatible with the recommendations of infrastructure theory, evolutionary economics and even microeconomics. Economic analysis of the relevant laws could thus also be used to support some of the proposals emanating from the alternative democratic theories and constitutional discourses. In any event, the legal decision-makers seem to need multiple, overlapping reconstructions or systematisations of laws, thus enabling the maintenance of their plural objectives and contextual application.

Some of the core “structural” criticisms presented in this research in the areas of European constitutional law, intellectual property and competition law should be summarised.

The European intellectual property developments place particular pressure on competition and other laws to integrate non-proprietary concerns when applied to intellectual property rights. Persistent doctrines of interpretation and international and European measures inhibit optimal protection and the realisation of just outcomes. European intellectual property laws lack flexible doctrines capable of being utilised by courts, such as the *misuse* and *fair use* doctrines known in the US. As a rule, the European intellectual property measures outside trade mark and design law do not integrate (adequate) compulsory exceptions based on economic or public policy concerns. Yet the exclusive rights are typically defined very broadly on the European level.

There is thus a structural problem peculiar to European intellectual property protection outside trade mark and design law: very broadly defined exclusive rights, but no (adequate) compulsory, harmonised exceptions and limitations on the European level. The values and interests behind the latter become considered only negatively when testing whether the national exceptions and limitations fall within the categories of exhaustively enumerated exceptions in the European legislative measures, or whether they satisfy the criteria imposed by the three-step test as interpreted in European law. The role of the European level is thus typically to establish *strong* or *high level of protection* throughout the Union and to censor the existence and application of exceptions and limitations. Such regulation of intellectual property protection on the European level is seriously deformed. Only some of the interests and values behind the exceptions and limitations become expressed on the European level, when the Community Courts interpret the rare compulsory exceptions. The national courts largely define the interpretations of the exceptions and limitations to copyright – in the greatly narrowed interpretive space left for them by the exhaustively enumerated possible exceptions in the Information Society Directive and the three-step tests functioning both on the WTO and European levels.

In such a framework, no single court has the responsibility or ability to secure that the limitations on the freedom of others and collective goods following from a particular interpretation or doctrine are in an appropriate relation to the protection interests and

the exclusive rights of the proprietor. There are no European-level inherent checks on any justness or “balance” within intellectual property law. In addition to the fact that such regulation cannot achieve the desired internal market objectives, it was argued that the European legislator could neglect its obligation to protect fundamental rights among private individuals, firms and other private entities.

When enacting intellectual property laws, the task of the Union legislator should be to ensure that individual right owners could not disproportionately restrict the fundamental rights of others, or seriously inhibit the realisation of fundamental right-related collective goods. Provided *strong* or *high level of protection* is established with the exclusive rights, the exceptions and limitations should correspond to these and be capable of adequately securing the realisation of the fundamental right-related values and interests behind them. Entrusting the task of protecting the fundamental right-related interests behind the exceptions and limitations to the member states by simultaneously imposing stringent restrictions on their scope and implementation hardly satisfies this obligation. The informational and market power produced with the European intellectual property rights is consensually left for Community competition law and the application of the nationally determined exceptions and limitations. The European-level exclusive rights are unable and unwilling to handle with the economic and informational power they produce.

Even though the further federalisation of intellectual property protection in Europe could ultimately lead to the exceptions and limitations functioning on the European level, changing the underlying proprietarian development seems more difficult. Intellectual property has become the generic drug, the aspirin offered without proper diagnosis and exploration of institutional alternatives for any possible or alleged innovation-related problems. Fostering cooperation, learning, sharing of information, ensuring sufficient competition and access to cultural and informational resources are not the likely candidates for the basis of any innovation policies.

The expansion of intellectual property protection – be it substantive or geographic – represents an example of the myth of progress as depicted by *Kahn* in the context of international law.¹ As the story of international law has been thought of as one of progressive civilisation of states, the story of intellectual property protection has been seen as one of progressive enhancement of protection of authors and inventors. Intellectual property legal scholars, too, have up till recently seen their role as one of aiding in the progressive realisation of an order improving the protection of authors and inventors, just like scholars of international law have seen their role as aiding in the progressive realisation of a civilised order for the international community.

The intensification of the proprietarian trend may also be connected to capitalist dynamics. The ability to transform knowledge and information into intellectual property rights can be interpreted as an expansion of modern capitalism in the form of mobilising raw materials and their inputs as property: things and services previously delivered outside market relations are rendered as commodities produced

1 Kahn (1999), p. 106-112. See also Koskenniemi (2001), *passim*.

by capitalists.² Hardt and Negri argue that capital no longer manages to accumulate through formal subsumption of non-capitalist environment (outside capital's existing domain), but rather through real subsumption of matters *inside* its domain, *thus altering the nature of capital's expansion from extensive to intensive*. After all of nature and regions have become capital, or at least subject to capital, there emerges a qualitative leap in the technological organisation of capital. This informational accumulation process relies on the real subsumption of the capitalist terrain itself.³ Capitalism thus seems to set in motion a continuous cycle of private re-appropriation of public goods or the commons.⁴ The intellectual property institution has so far reactively adapted to such demands. Public domain and communicative diversity typically have no voice in legislative or judicial processes. They do not invoke rights and file suits against multiple intellectual property owners, users of technological protection measures or proprietary-minded legislators all threatening their existence.

From this perspective, the proposals made concerning the interpretation of exceptions and limitations to intellectual property, development of the abuse of rights doctrine and the three-step test, among others, do not follow automatically from the prevailing logic and dynamics of intellectual property protection. Giving voice to public domain or communicative diversity requires that legal scholarship more actively proposes such reforms and reconstructs intellectual property from less proprietary premises. This requires opening up intellectual property towards other branches of law, discourses and constitutional perspectives.

An analysis of the relevant case law indicated that the Community Courts are likely to reject any challenge of Community intellectual property legislation even when the balance of fundamental rights in the legislative measure in question is distorted. For example, in *Laserdisken* the mere notion of intellectual *property* insulated the choices made by the Union legislator from any constitutional review and arguments based on freedom of expression. Moreover, the Court has taken the overprotective trend as reflected in TRIPS as a factor further shielding intellectual property from fundamental rights -based judicial review.

Although there are some promising developments, the relevant case law as a whole could not enable adequate fundamental rights control of private informational power adversely affecting collective goods and the rights of others. The Community Courts have given strong protection for the choices of the Union legislator in the area of intellectual property, like in other areas of secondary Union law. As argued before, this is particularly problematic in the area of intellectual property, as the Community measures now typically reflect proprietary bias and pre-empt the comparable national competence to legislate, thus resulting in persistent but single-sided intellectual property legislation throughout the Union. The relevant fundamental rights case law

2 See May (2002), p. 32-33 and 38-40.

3 Hardt & Negri (2001), p. 271-272.

4 Ibid., p. 301.

on the Union-level has had the function of legitimating a strong form of intellectual property ownership and the intellectual property institution in general.

The review of the relevant case law illuminates the fact that *even if fundamental rights would be extended to the private relations more extensively than currently, fundamental rights would not automatically take greater role in controlling private informational power or in putting limits to the proprietary bias prevalent in intellectual property legislation during the recent years*. The relevant fundamental rights case law of the Community Courts thus emphasises the importance of the new kind of constitutionalism proposed in this research: other legal institutions – and the inherent doctrines of intellectual property law – should react to the expansionary tendencies of intellectual property law and the generation of informational power without adequate inherent limits. The mainstream fundamental rights doctrine largely fails to function as an adequate control of private informational power enabled by intellectual property and as a check on the strong rights -ethos characterising intellectual property policy in the European Union.

The foregoing does not propose that the progressive potential of fundamental rights law should be left unutilised. Although straightforward horizontalisation of fundamental rights obligations is in many respects problematic, the private power to regulate collective goods or fundamental rights of others on a large scale should be subjected under fundamental rights control. However, many of the adverse effects on collective goods and rights of others are rather caused by anonymous structural processes like economic globalisation and excessive commodification than by individual perpetrators. Fundamental rights adjudication remains relatively powerless as a potential counter-weight to such developments. These self-limitations of fundamental rights law, too, speak in favour of extending critical constitutionalism beyond the domain of traditional constitutional law into the private law discourses.

Even though competition law has its own limitations, it may in some contexts be the best available instrument for controlling excessive, intellectual property -enabled informational power generated through market developments like network effects or standardisation. Yet, competition law has recently developed in the direction whereby economic efficiency gains may outweigh even considerable market power and anticompetitive effects. The Court of First Instance's judgement *in Microsoft* could insulate any restriction of competition from the prohibition of abusing a dominant position, provided the threshold of *a significant negative impact* on the dominant firm's incentive to innovate becomes fulfilled. Such a formalistic standard establishes a hierarchy of values whereby the protection of the innovation incentives of the dominant enterprise is on the top, capable of pardoning any conduct excluding competitors, leveraging the dominant position to other markets, preventing the widespread production of public or non-market goods, or the threatening of other democratic values. If generalised, such an objective justification could lead to a more generic insulation of some property rights from the reach of competition law, provided they are the result of sufficient investments.

The emergence of the networked information society with strong intellectual property rights connotes that besides the internal market and industrial contexts

of application, new types of intellectual property -enabled power-positions have emerged. They enable the control of activities of others on the global information, communications and innovation structures built around the Internet. The internal market objective, and the more recent aim of dynamic competition in the sense of industrial firms producing new goods on the markets, should be complemented with the concern for the structuring effects of the exercises of market power on such paradigmatic resources of the information society. The core of the competitive process functions within the communicative structures of the civil society: the techno-economic structures of communication are simultaneously structures of competition. Firms affect them directly by techniques of private regulation. While aiming to maximise their profits by affecting various economic parameters of the Internet environment, firms cannot avoid the political significance of their actions, as they have immediate and structuring effects in lifeworld and politics without any further mediation of politics. The regulative function of technologies means that the effective realisation of rights and collective goods depends not only on direct prohibitions of law, but also on other modalities of regulation.

To an extent such measures also constitute restrictions of competition, they become reviewed under competition law. However, competition law lacks instruments capable of integrating such values under its analysis. Typically complex concerns related to cultural and symbolic power escape its methodologies and standard orientation. Specialised regulation for the communications, media and broadcasting sectors is hence also needed. Yet, merger control in the media sector and cases like *Associated Press* demonstrate that competition law may assume concerns related to democratic ends. The openness of the core networks and information platforms constitute central pre-requisites related to workable competition and freedom of market values in the information and network -based economy. Protecting such values is often in line with the still identifiable interest and orientation of competition law to secure workable and diversified competition. Integrating such concerns under competition law is thus not only in conformity with democratic and constitutional values, but also in the more traditional interest of competition law to control the most central forms of excessive economic power capable of inhibiting competition on these communicative structures built around the Internet.

Competition law could be seen as a necessary control mechanism of techno-economic power in the information society and a facilitator of diversity of economic actors and communication possibilities. It could be seen not only as an instrument optimising the economic incentives and the degree of competition producing an optimal amount of innovation and other economic benefits for the producers and consumers (traditional complementarity). It could also be seen to complement intellectual property in the sense that it enables the partial control of informational power exercised as techno-economic action, which is enabled or facilitated by the intellectual property institution. It could further the diversity of actors the intellectual property institution and economic phenomena like globalisation of production, network effects and standardisation are likely to reduce. Competition law could thus have an important, but delicate constitutional role in complementing intellectual

property rights, which produce economic and informational power for the sake of innovation and creation, but leave its control to other laws.

Communicative diversity could thus become considered in the application of competition law, as well, when the context so requires. The interest to protect it overlaps with the more traditional competition law objective related to market pluralism, diversity of economic actors and avoidance of excessive market power. In markets characterised by network effects and tipping towards a single system, securing these values is the result of an active governmental policy. Instead of preventing network effects or artificially maintaining several non-operable systems, competition law should be calibrated to reduce barriers to entry by requiring information disclosure and compulsory licensing obligations on the part of firms controlling the core dominant technological systems. As has been emphasised, such interests should also be advanced in the framework of intellectual property protection and specialised regulation. Obviously, their effects could reduce the need to apply competition law. For multiple reasons, limiting private informational power at its source is preferable to the intensive application of competition laws.

Irrespective of one's wishes, competition law determines in an important way the kind of competition a society is willing to pursue: the diversity of market actors, the fairness of transactions, the prospects of smaller enterprises and the degree of economic power tolerated are constituents of an economic culture greatly affected by the competition law institution. Competition law is thus one of the central legislative instruments through which the democratic nature of the markets becomes determined. Workable markets characterised by a diversity of types of actors may be seen to represent the collective good aspect of many economic rights among the objectives of competition law. These need constitutional protection against abuses of power in order to enable the exercise of fundamental rights in the economic sphere.

Before ending, it is necessary to address some potential misinterpretations. First, the likely practical outcome of the proposals following from this research concerning compulsory licensing based on competition law would be less rather than more compulsory licenses. This conclusion is strengthened when compared to other proposals made in European legal scholarship, such as the one by Drexel and his colleagues. The approach favoured here would discriminate between different relevant markets. The ones central to the communicative structures and economic activities based on the Internet should be treated more rigorously and prioritised over relevant markets being less significant for Internet-enabled economic and non-economic activities.

Second, this research does not intend to propose that the essential facilities doctrine would be the solution to the problems of intellectual property -related informational and market power identified in this research. Doctrines tend to solidify into dogmas, thus ultimately reducing the argumentative flexibility and contextuality present in their inception. Discussing the doctrine simply enabled identifying relevant

competition law principles and developing the theme from a general competition law perspective familiar to experts of competition law. Attaching to the label of essential facilities could prove counter-productive with regard to the objectives of this research. The central questions and themes underlying the essential facilities doctrine will not disappear in the near future even if the label would be rejected.

Nor do I propose that the application of competition law could provide a sufficient counterweight to the proprietary tendencies and tensions created with the intellectual property institution. Importantly, market power or dominance as such is not within the reach of competition law. Even if competition law may be able to address the exercise of economic and informational power produced by intellectual property rights in some exceptional contexts, if rightly constructed, most of the problems generated with strong protection remain outside its potential scope of application. Hence, seeing competition law as an adequate counter-weight to “*strong industrial property rights*”, like the European Commission now argues, is not only positively naïve, but perilous. Intellectual property rights produce multiple societal effects regularly escaping all competition law control. Expansive application of competition law has also considerable risks: if not applied contextually and reflexively it may seek to superimpose its own economic logic on all social spheres, effectively destroying their inherent rationality and vitality.

The preferred strategy was rather to embed both legal institutions in economic constitutional law and constitutional discourse. Doing so could also speak in favour of limiting the application of competition law to intellectual property rights. Embedding intellectual property in economic constitutional law would mean that intellectual property would be reconstructed so that conflicts with competition law norms and problematic outcomes from the perspective of fundamental rights and collective goods could be avoided in advance. Nevertheless, the application of competition law to intellectual property rights could also produce new arguments and perspectives for the intellectual property discourse. Cases like *Volvo*, *Magill*, *IMS-Health* and *Microsoft* bring forth problems inherent to existing protection and arguments not likely advanced in the intellectual property application discourse. These could function as useful impulses for legislative reform or new interpretations within intellectual property discourse.

Competition law functions as a framework enabling the contestation of the boundaries of intellectual property. It could channel constitutional values in the interpretations when informational power enabled by intellectual property would jeopardise communicative diversity or other fundamental right-related concerns. The commercial interest of a competitor to challenge the limits of intellectual property may overlap with important societal interests capable of being internalised in competition law decision-making. Even if competition law cases may appear as mere battlegrounds of diverse commercial interests, the structural conflicts beneath them may involve societal choices of fundamental nature. For example, invoking the public and non-market goods capable of being produced with a platform protected by intellectual property may advance the commercial interests of the applicant in competition law proceedings. It would be naïve to think that that the applicant had

no commercial motivation to invoke such a line of argumentation. However, it would be equally naïve to think that the presence of such commercial interests somehow frustrates the societal significance of the decision at hand.

Different strands of economic thought produce competing models of how innovation and creativity are best facilitated. Such competing stories or fairytales of innovation now dominate the scholarly discourses of intellectual property law and its interactions with competition law. This research has approached these fields of law from less traditional premises. Despite all the reverse and forward engineering of existing doctrine and proposals, the latter may still be seen by many as controversial. Yet seeking to open up intellectual property and competition law institutions towards a plurality of scholarly discourses and contextually determined norms is not particularly radical. The same applies to the proposal to consider their interaction from an additional layer of concerns anchored in democratic and constitutional values.

Should not the prevailing approach seeking to exclude any non-economic and non-technical considerations from the application of these laws be considered radical instead? The inherent market-driven constitutionalisation processes characterising the recent developments of these laws simply require counterweights and alternatives from democracy and rights constitutionalism. To correspond with the efficacy of such processes and developments, the responses should be somewhat spirited (but realist) in their argumentation too, or what do you think?