Introduction

Design is absolutely central to the success of new products. But how does intellectual property law protect that design? The biggest problem in getting a clear picture of design protection under U.S. law is one that is also faced in other countries. A product's design is art; it may embody a functional invention; and increasingly it may act as a product's source-identifier. The shape of a beetle car may at once be an artistic work of authorship, embody a safety advance that prevents the car from crumpling upon impact, and serve to inform consumers that the car is made by Volkswagen.

The design may thus fit within traditional theories of copyright protection, patent protection or trademark protection. And different countries place design into different parts of their overall intellectual property scheme, which may include not only the three regimes just mentioned but also utility model or petty patent rights, registered and unregistered design codes, and varying laws of unfair competition including a prohibition against slavish imitation. Indeed, in Europe, a producer seeking IPR protection for its design has all these options available to it, and has so not only at the national level, but at the Community level for trademarks, registered designs, and unregistered designs.

So, in fact, in the United States, design protection options might look relatively simple. The United States doesn't have utility model laws, and it does not grant protection against slavish imitation; in the United States, that's called free competition. Neither does the United States, except with a very small exception for boat hulls, have a real registered design law. It does have a system of what is called “design patents”, but that has proven to be very unreliable. Instead, protection for designs in the United States has come by treating designs under the traditional intellectual property statutes, namely, copyright, trademark, and patent law.

In this article, I will discuss each of the principal forms of protection in the United States in turn. However, a common theme of each form of protection is that each traditional system seems an imperfect fit for designs. And that perhaps explains why for over 80 years, there have been efforts – always unsuccessful – to enact real design legislation in the U.S. Congress. But in the meantime, we need to work with seeking protection under the three big regimes.

I. Summary of The Position

In recent years, protection of designs in the United States has been achieved most effectively under trademark and unfair competition law. In the early years of the U.S. trademark statute, the Lanham Act, disputes under the Act largely involved producers claiming rights in words and two-dimensional logos that identified the source of their products and distinguished them from other products.
the goods of others. Over time, however, the categories of subject-matter protected as trademarks grew to encompass the packaging or receptacles in which products were contained. This is sometimes called “trade dress”, but the term has for all intents and purposes come to mean the same as trademark.

Historically, the term “trade dress” was used to refer to product packaging that identified the source of the product it packaged; the term “trademark” was conventionally reserved for situations where the identifier of a product’s source was a word or pictorial symbol. But the significance of this terminology is now slight. The terms are often used interchangeably and their usage tends to reflect the historical classification of different source-identifying subject matter rather than any different treatment under modern trademark law.

This expansion in subject-matter reflected the realization that consumers had come to identify and distinguish products by products' packaging. Consumers clearly identified the carbonated soft drink produced by the Coca-Cola Company as much from the shape of the bottle in which it was contained as by the word COKE® emblazoned on the side of the bottle. Eventually, this acceptance of the growing bases for consumer identification led to the acknowledgment that the source of a product could be identified not only by the packaging in which was contained (for example, the appearance of the box in which the product is sold) but by the design of a product itself (for example, the very appearance of the Volkswagen beetle). The first recognition of this development at the federal appellate level came in 1976 from the Eighth Circuit in Truck Equipment Service Co. v. Fruehauf Corp., where the court of appeals affirmed a successful infringement claim predicated upon the appearance of the hopper of a truck acting to identify its source.

Twelve years before that, the U.S. Supreme Court had made it more difficult for individual states to offer this form of protection under state unfair competition laws. But those decisions have been circumvented by the invocation of federal protection, and the basic legitimacy of federal protection has not yet really been tested before the Supreme Court. The Court has managed to avoid answering any fundamental challenge to trade dress protection for designs. Thus, federal courts have protected under the rubric of "trade dress" the design features of an extensive range of products including kitchen appliances, sporting equipment, candies, bathroom fittings, sports cars, furniture, hardware items, fashion accessories, lamps, and even golf holes. Two U.S. Supreme Court decisions in the last couple of years have somewhat reversed the trend, and made courts somewhat more sceptical about trademark protection. But it remains the easiest and most effective protection in a number of industries.

This activity under the federal trademark statute has become an integral part of design protection efforts on the part of many U.S. producers, largely because designs received inadequate protection under other intellectual property laws (i.e., copyright and design patent) that would appear at first glance more suited to the protection of designs. Design patents are available for new and nonobvious ornamental designs. This is confirmed in Section 171 of the Patent statute. But the design patent system has never fully fulfilled its more explicit promise to protect designs because of its costly and lengthy registration process and its high thresholds to protection. The registration process, because it involves a substantive examination of the application, can take between 18 months to two years, and protection begins only when the patent is issued. This is too long for many fast-paced dynamic industries. And those thresholds -- of novelty and nonobviousness -- are intentionally linked to those thresholds used for utility patent grants. But design is not in the nature of radical groundbreaking discoveries and inventions. It is consciously a process of tinkering, problem-solving.
The combination of these variables -- costly and slow registration, and high thresholds -- for many years caused few producers to seek design patents. And those who did found their patents largely invalidated by the courts. The situation improved somewhat with the creation of the specialist patent appeal court -- the Court of Appeals for the Federal Circuit -- in 1982, but designs patents remain essentially useless for many industries. And a couple of recent decisions discussed below, including one presently on appeal to an banc panel of the Federal Circuit, threaten to make the system even less useful.

Copyright protection of the design of useful articles is significantly restricted in U.S. law by the requirement that, to be protected, the artistic elements of the design features must be separable from the utilitarian features of the article. This requirement -- which has proved fatal to copyright protection for designs that attempt to blend form and function -- was introduced into the U.S. copyright statute in 1976. Coincidentally, this was the same year that the federal appellate courts decide to protect product design under the trademark statute.

Right up until passage of the 1976 bill, however, this separability requirement did not simply prevent protection. Rather it caused protection to be available not under the copyright Act proper, but under a proposed Title II, which would have created design rights for original ornamental designs without imposing patent-based thresholds or costs. That is, a real design law. But, at the last minute, Title II was deleted because of opposition by the Chair of the powerful congressional subcommittee responsible for copyright. Efforts to enact design protection have been made almost every year since then, but they have not succeeded.

But that is the historical background in the United States against which recent developments have occurred: a design patent system that offers protection too slowly and to too few designs; a copyright system that largely denies protection to designs that (like most successful designs) embody a blend of form and function; a failure to enact effective sui generis design protection laws; and a trademark law pressed into service to fill these gaps and protect producers against imitation designs.

II Trademark and Unfair Competition Law

Trademark and unfair competition law remains an effective weapon through which to protect designs. But, since about 2001, we have entered a period of more restricted trademark protection for designs. Historically, trade dress or trademark protection for designs has tended to be cyclical in nature. In 1964, it was restricted; in 1976, it expanded; in 1989, it was restricted again; in 1992, it seemed to be re-energized. But the latest period of increased protection began to wane around 2001.

The cyclical nature of the protection may be explained by the fact that trade dress protection for designs has, with only a couple of small exceptions, been judicially developed. Courts inevitably make decisions not only on what they see as the proper scope of protection, but also based on the factual exigencies of the random cases that come before them. There is an almost inherent back and forth in judicially-developed efforts to find the right amount of protection.

The high point in trade dress protection (at least from a plaintiff’s perspective) arguably came in 1992. In Two Pesos v. Taco Cabana, the court agreed that non-verbal trade dress (there, the decor and ambiance of a fast-food Mexican restaurant) could be protected as distinctive even without proof that the trade dress had over time acquired secondary meaning, in the minds of consumers.
It was long-established that word marks could be protected without proof of secondary meaning if they were inherently distinctive. The Supreme Court said that the same rule should apply to trade dress. The Court rejected the approach of several leading courts and declined to impose upon non-verbal trade dress a requirement for protection not generally applicable to word marks.

The court rebuffed concerns that its liberal approach on eligibility for protection would exhaust a limited number of possible trade dress and hinder rival products, noting that the functionality doctrine — which denies the full benefits of trademark law where protection of the features at issue would place competitors at a significant non-reputation related disadvantage — works against such anti-competitive effects.

Why was this important? There are tremendous advantages in being able to protect a design as an inherently distinctive mark, rather than having to prove secondary meaning. In particular, a producer obtains immediate protection upon using the mark. In the United States, trademark protection for inherently distinctive marks begins as soon as a producer uses the mark in commerce. If the producer has to wait till the mark has acquired secondary meaning – till he can prove that consumers regard the sign as a source-identifier – then there is an initial period when the design might be copied with impunity. This is especially a concern for small and medium-sizes enterprises, who might see their design swamped on the market by a larger rival who quickly established secondary meaning for its design. Moreover, proving secondary meaning can be costly. Although the producer can rely on some circumstantial evidence such as advertising expenditures and unsolicited publicity about the design, the best way to nail down proof of secondary meaning is to conduct a survey . . . and that costs money.

So Two Pesos made it a lot easier to use trademark laws to protect designs. And immediately, courts began to protect a wide variety of designs as trademarks. The Supreme Court initially did not seem to back down. Just three years after Two Pesos, the Court decided Qualitex v. Jacobsen. There, the Court reaffirmed its expansive approach to trademark eligibility, recognizing explicitly that the mere color of a product (there, the green gold color of pads for dry-cleaning clothes) may be registered as that product's trademark. The defendant in Qualitex also launched several broad policy-based attacks on the registration of color as a trademark, arguing, among other things, that because colors are in limited supply trademark rights in a color would afford a single producer monopoly rights and place competitors at a significant disadvantage.

The Court rejected these arguments. The Supreme Court was also unconvinced that the mere possibility of colors becoming scarce justified the wholesale exclusion of protection for color; an occasional problem did not warrant a blanket prohibition, and, again the Court stressed, the functionality doctrine was available to address the occasions where the possibility became a reality.

If we accept the possibility that nonverbal indicia might indicate source, we must then determine how to apply the trade mark regimes to such indicia. Case law shows the task has been a difficult one. After Two Pesos, courts struggled to assess the distinctiveness of product design marks. Some courts continued to apply to product design claims the classical (Abercrombie) test used with respect to word marks. Others applied the Seabrook test, which called upon a court to consider whether a shape or packaging feature was “a common, basic shape or design, whether it [was] unique or unusual in a particular field, or whether it [was] a mere refinement of commonly adopted and well-known form of ornamentation for a particular class of goods viewed by the public as a dress or ornamentation for the goods.” Finally, in a third approach, some courts
concluded that while existing distinctiveness analysis might helpfully assist in an evaluation of
the distinctiveness of product packaging, it was unhelpful in the case of product design, and thus
developed different tests depending upon the category—design or packaging—into which the
trade dress fell. This final approach required the courts in question to develop new analytical
devices with which to measure the distinctiveness of product design. The tests that they
developed were unduly complex and tended to provide lesser trade dress protection for product
designs than for packaging.

Application of multiple tests without clear guidance by the Supreme Court led to a circuit split. It
was unclear what test applies, or if different tests should apply to design and packaging trade
dress. Then, the Supreme Court handed down its decision in Wal-Mart Inc. v. Samara Bros.
(2000). There, the plaintiff claimed trade dress rights in the design of a line of children’s
seersucker clothing. Although the Court took the case to determine, “what must be shown to
establish that a product’s design is inherently distinctive for purposes of Lanham Act trade-dress
protection?,” in a unanimous decision the Court concluded that while packaging may be
inherently distinctive, product design may not. To be protected, product design must be shown
to have acquired secondary meaning.

This seemed somewhat inconsistent with Two Pesos. Indeed, the Court admitted that Two Pesos
“unquestionably established the legal principle that trade dress can be inherently distinctive.”
But the Wal-Mart Court distinguished Two Pesos by describing that case as involving “product
packaging” (which the Court implied can be inherently distinctive) “or else some tertium quid
that is akin to product packaging and has no bearing on the present case.” And because this
distinction between packaging and design would be difficult to define, the Court suggested that
in close cases, courts err on the side of classifying trade dress as product design and thus
requiring secondary meaning.

This appeared to suggest an attempt by the Court to cut back on the use of trademark law.
Indeed, the Court did not seem worried about doing so, commenting that “the producer can
ordinarily obtain protection for a design . . . by securing a design patent or a copyright for the
design— as, indeed, respondent did for certain elements of the designs in this case. The
availability of these other protections greatly reduces any harm to the producer that might ensue
from our conclusion that a product design cannot be protected under §43(a) without a showing of
secondary meaning.” Of course, as noted below, this is a somewhat optimistic assessment of
copyright and design patent law, but it did signal an effort to restrict trademark law.

The Court sent the same signal a year later in TrafFix Devices v. Marketing Displays. The
plaintiff sought to protect the dual-spring design of a road sign on which its utility patents had
expired. The dual-spring design enabled the road sign to withstand the gusts that would often
blow on the open road. When a rival copied the dual-spring design after the expiry of the
plaintiff’s patents, the plaintiff brought an action under trademark and unfair competition law.
The TrafFix Court confirmed that “in general terms, a product feature is functional . . . if it is
essential to the use or purpose of the article or if it affects the cost or quality of the article.”

This was not a new test; it could be found in the Court’s earlier Inwood case. But importantly,
the Court both rejected competitive necessity as a comprehensive measure of whether this
functionality test was met and also found that there was no need to have regard to alternative
design possibilities if the Inwood test was met. That is to say, if a design feature is essential to
the use or purpose of the article in question or affects the cost or quality of the article (the
Inwood test), then the design feature is functional without further analysis. Thus, the plaintiff’s
case failed, and the design was found to be functional, even though a rival did not need to copy
the design in order to compete and even though the plaintiff showed the court alternative designs that would perform just as well. The Court said the dual-spring design of a road sign was functional simply because that design “provides a unique and useful mechanism to resist the force of wind.” As the Court put it: “the dual-spring design . . . is the reason the device works”.

The TrafFix Court also held that “[a] utility patent is strong evidence that the features therein claimed are functional.” According to the Court, there was a “strong evidentiary inference of functionality based on the disclosure of the dual-spring design in the claims of the expired patents,” such design being “the central advance claimed in the expired utility patents” and “the essential feature of the [claimed] trade dress . . .” Then, the Court concluded (without much analysis) that the plaintiff had failed to overcome the inference of functionality. So, after the Wal-Mart court made it harder to get immediate trademark protection upon first use of a design, the TrafFix court made it harder for designs of useful products to use trademark law for protection – especially if the product was also protected by a utility patent.

Moreover, although the Court rejected the plaintiff’s efforts to make the case that competitiveness concerns did not require allowing the defendant to copy the plaintiff’s design, the Court did endorse a second test of functionality (from its Qualitex opinion) that took account of competitiveness considerations. It held that if exclusive use of the design feature in question by the plaintiff would put competitors at a significant non-reputation related disadvantage, it could also be treated as functional and hence unprotectable. The Court did not have to rely on this second definition of functionality in TrafFix, because the road stand design failed the first test. But the Court hinted that this second definition of functionality would be relevant in particular if the defendant was relying on a claim of “aesthetic functionality.”

What is a defense of aesthetic functionality? The doctrine of “aesthetic functionality” is derived from commentary to the first Restatement of Torts in 1938 and a 1952 decision of the Ninth Circuit in Pagliero v. Wallace China Co., 198 F.2d. 339, 343 (9th Cir. 1952) where the court refused to protect the design of hotel china because that design that was “an important ingredient in the commercial success” of a product and thus was de jure functional and unprotected even if that feature was aesthetic. Although the Pagliero standard was heavily criticized and is now rarely used by courts the doctrine of aesthetic functionality has survived, and has now been endorsed by the Court.

To explain why we have it, consider this box of chocolates. Suppose I open a chocolate store in Chicago just in time for St. Valentine’s Day. I decide to market chocolates in a red heart-shaped box. Quickly, the chocolate lovers of Chicago come to associate the heart-shaped box with the chocolates produced by me. Would you be willing to grant me trademark protection in the heart-shaped box for chocolates? The answer is likely no. Trademark protection would then be used to shield me from competition from others trying to sell chocolates as a romantic device.

So the Supreme Court has clearly sent a signal that it wants to cut back a bit on trademark protection for designs. And it has given courts a couple of tools through which to do so. First, they can require secondary meaning from plaintiffs. Second, the defendant can invoke a couple of different functionality defenses, and the mere availability of alternative designs might not be enough evidence for the plaintiff to persuade a court that it should reject the functionality argument.

How have lower courts read these signals? In short, they have really listened, applying the case law quite strictly and arguably taking the Supreme Court’s message even further. First, in interpreting the line between design (where secondary meaning is necessary) and packaging
(where it is not), courts have followed the instruction to err on the side of requiring secondary meaning. And when they ask the plaintiff to prove secondary meaning, they have been strict in assessing the sufficiency of the evidence. Survey evidence is of course the best evidence. But that can be costly. Instead, a plaintiff might wish to rely on circumstantial evidence, typically the length and manner of the use of the trade dress, the nature and extent of advertising and promotion of the trade dress, and the efforts made to promote a conscious connection by the public between the trade dress and the product’s source. Courts have stressed, however, that to be probative of secondary meaning, the advertising must direct the consumer to those features claimed as trade dress. Merely “featuring” the relevant aspect of the product in advertising is not probative of secondary meaning.

Second, the lower courts have picked up on one of the concerns expressed by the Supreme Court in *Wal-Mart* and *TrafFix*. In both cases, the Court wants to ensure certainty. In *Wal-Mart*, the Court feels that competitors need the “legal” certainty of being able to dismiss strike suits; in *TrafFix*, the Court gives some weight to the competitor’s certainty in being able to practice expired patents. The Court is concerned about practical difficulties that uncertainty brings for competitors.

Most trade dress design claims in the United States are litigated as unregistered right cases under section 43(a), so there is rarely a registration record to assist; most definitions are crafted in litigation. So lower courts have become more stringent in requiring careful (and consistent) definition of what plaintiffs claim as trade dress. The burden to clearly identify the trade dress is on the plaintiff. In some cases, courts that have been insistent about the need for a specific written description of the design claimed talk in language extremely reminiscent of patent law: For example, “Plaintiffs are bound to what they claim and it is therefore possible that relatively minor variations in the replicas may affect the overall appearance and defeat plaintiff’s claims”). Outside the registration context (or in assessing the effect of registration), courts in trademark places typically determine infringement by reference to the effect in the marketplace. Concern with what is “claimed” in trade dress cases may highlight that the trade dress law is in fact acting as a design law of sorts, with the registration undertones that that carries with it.

Finally, most lower courts are holding plaintiffs to the burden of proving both tests of functionality. The Supreme Court’s opinion leaves open at least two ways to approach the “two tests of functionality.” On the one hand, one could regard the two tests as applicable to different types of features, *Inwood* to mechanical features and “competitive necessity” to aesthetic features. On the other hand, one could regard the two tests as separate filters, both of which any feature claimed to be non-functional must pass through to be protected. In practice, this second, very hard standard appears to have been followed, although obviously mechanical features are more likely to have problems under the *Inwood* test than might aesthetic features.

The strictness of the way that courts have read the Supreme Court opinions can be seen well in two contexts. First, although some courts have recognized that answering the functionality inquiry might require an examination of alternative designs, others have taken the Supreme Court strictly at its word and refused plaintiffs the chance to show protectability through showing other designs that would perform the same function.

Second, one court post-*TrafFix* has commented on the strictness of the trademark functionality doctrine by comparing it to the functionality determination in design patents that I will mention in a moment. In particular, the court noted that “although functionality will invalidate a design patent only when the design is “dictated” by the function, a lesser showing of functionality is necessary to invalidate trademarks. Functionality will invalidate a trademark “if it is essential to
the use or purpose of the article or if it affects the cost or quality of the article.” The court explained that “the more rigorous standard of functionality required to defeat a design patent as opposed to a trade dress claim is reflected in the ownership term of the respective rights” in that the trade dress rights can be perpetual and design patents expire after a limited term). On this basis, the court found that certain design features of clothes hangers were functional and not protected by trademark law.

Thus, one can see that trademark protection of designs has been restricted in a couple of different ways in recent years. However, it does remain an important way of protecting designs in the United States, in part because of the weaknesses of the alternatives, design patent and copyright.

III Copyright

Background

In 1976, immediately prior to the enactment of the Copyright Act, the copyright bill contained a title granting copyright-like protection to ornamental designs. This title was deleted at the last minute, and it was in that same year that the federal appellate courts handed down their first modern decision protecting product design trade dress under sec 43 (a) of the Lanham Act. Nevertheless, the design of useful articles can be protected under copyright law, which can be useful, if trade-dress protection is not available.

Copyright protection has been granted to a wide variety of designs. However, the ability to use copyright protection for designs varies widely depending upon the industry in question. There have been several cases where copyright protection for designs has been accepted for example for items of jewelry, or certain two-dimensional design aspects of furniture. Generally, the role of copyright has since 1976 been secondary to trade dress protection because of the “separability” requirement that copyright law imposes prior to protecting the design of useful articles. That is to say, the copyright statute provides that:

“the design of a useful article . . . shall be considered a pictorial, graphic or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.”

It is accepted that Congress recognized two types of separability that might be sufficient to allow copyright protection for the design features of a useful article: physical separability and conceptual separability. Physical separability occurs when the ornamental nature of the object can be physically removed from the object. But for most modern design this is a very hard test to pass as the form and function of the design are integrated.

Defining conceptual separability has proved difficult for courts and few designs have managed to pass the test. Conceptual separability differs from physical separability by asking not whether the features to be copyrighted could be sliced off for separate display, but whether one can conceive of this process.

The courts have struggled to make sense of this concept and have come up with a number of different tests. But the test that now appears to be the most popular among the lower courts is a strict one. Thus, the courts now hold that conceptual separability exists where “design elements can be identified as reflecting the designer’s artistic judgment exercised independently of
functional influences, conceptual separability exists.” “To be conceptually separable, [the design element] must be the result of aesthetic decisionmaking that is independent of functional considerations”.

To show how hard that test is, consider this bike rack that was issue in the Brandir case where this test was first articulated. An artist had created a sculpture of thick, interwoven wire. A friend suggested that, with some changes, the sculpture could work as a bicycle rack. So the artist and engineers from the plaintiff modified the sculpture to produce a workable and marketable bicycle rack. The courts denied the design copyright protection. Design features had been altered to allow in- and above-ground installation of the rack, and the ability to fit all types of bicycles and mopeds. And the construction of it in rustproof galvanized steel was intended to make for a safe, secure, and maintenance-free system of parking bicycles and mopeds.

As the Brandir court itself noted:

“While the RIBBON Rack may be worthy of admiration for its aesthetic qualities alone, it remains nonetheless the product of industrial design. Form and function are inextricably intertwined in the rack, its ultimate design being as much the result of utilitarian pressures as aesthetic choices .... Thus there remains no artistic element of the RIBBON Rack that can be identified as separate and “capable of existing independently, of, the utilitarian aspects of the article.”

Moreover, even where copyright is established, many designs received quite narrow scope of protection from copyright law. To be sure, exact reproduction is not necessary to establish infringement, and minor and unimportant differences will not preclude a court from finding infringement. If, however, only few protectable elements of the work exist and therefore only a “thin” copyright is awarded, “virtual identity” might be required for a finding of infringement.

For example, in Cosmos Jewelry Ltd. v. Po Sun Hon Co, 82 USPQ2d 1808, 1817 (C.D. Cal. 2006), the court held that there could be no copyright protection for a piece of jewelry in the shape of a plumeria flower with five petals slightly overlapping, slightly longer than they are wide, and with slightly pointed tips, because all of these features occur frequently in plumeria flowers. Nor could one get copyright protection for sand-blasted finish and high-polish finish, are treated as unprotectable by copyright, in the manner of ideas. There could no protection for depiction of the blossom as having hard petals and a yellow color, as these are intrinsic characteristics of the rendering material. However, there was protection for minute characteristics of the blossom petals, the arrangement of blossoms and other flourishes in different variations combined with the particular sand-blast finish. However, with only a few protectable elements, only “thin” copyright could be awarded requiring “virtual identity” for finding of infringement, instead of applying the usual “substantial similarity” test.

### IV Design Patents

The U.S. patent system encompasses two types of patent regimes: the utility patent regime and the design patent regime. As the Supreme Court has explained, “[t]o qualify for [design patent] protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone, and must satisfy the other criteria of patentability.” That is to say, design patent protection is granted to new and nonobvious ornamental designs. And a design patent applicant must also demonstrate the nonfunctionality of its design.
The same institutions that have primary responsibility for overseeing the U.S. utility patent system also have similar responsibility for the design patent system. The U.S. Patent and Trademark Office (PTO) receives design patent applications, examines them in an \textit{ex parte} process to determine whether they comply with substantive patentability requirements and other procedural requirements, and issues them as design patents if they do comply.

Situating design patents within the substantive statute and institutional apparatus that operates the utility patent system has contributed to their ineffectiveness as a protection system. Design patent documents are less elaborate than utility patent documents, including only a single, \textit{pro forma} claim, which in turn refers to the drawings. However, there is still an examination process, which can take 18 months, and protection begins only when the patent is issued. This is too long for many fast-paced dynamic industries. Copyright and trade dress, which do not require registration, are thus attractive alternatives.

Moreover, the application of the substantive standards of utility patents to designs makes the system a bad option. There are some substantive differences between utility patents and design patents. For example, design patents protect the way an article looks, not the way an article works. Thus, a design patent must not be functional; it must be ornamental. But because design patents are largely subject to the same rigorous thresholds as utility patents, historically U.S. design patent law has been relatively ineffective (especially as compared with foreign design laws) in protecting designs. The thresholds of novelty and nonobviousness are linked to those thresholds used for utility patent grants. But design is not in the nature of radical groundbreaking discoveries and inventions. It is consciously a process of tinkering, problem-solving.

Moreover, an important additional limitation on the patentability of designs is that they must be primarily ornamental in character. If the design is dictated by performance of the article, then it is judged to be functional and ineligible for design patent protection. And this standard, which does \textit{not} apply to utility patents, has also arguably been made harder of late. Classically, the courts have held that a design is functional for design patent purposes only if the design is dictated solely by its function. And a design is not dictated solely by its function if alternatives designs for the article in question are available.

However, in a recent case, \textit{PHG Technologies LLC v. St. John Companies Inc.}, the Federal Circuit arguably tightened the functionality requirement. In that case, the patentee claimed rights in the design of medical patient identification labels. The Court appeared to revive an older, stricter test that looks at a number of factors, \textit{including} “whether alternative designs would adversely affect the utility of the specified article.” One could read this case, some critics have feared, as holding that in order to escape a conclusion of functionality, the patentee must show not only that alternative designs exist, but that those alternative designs would perform the function of the article equally as well. Mere alternative designs will not, of themselves, be sufficient to sustain a finding of non-functionality. Thus, the functionality doctrine in design patent law appears to be moving toward the stricter trademark doctrine.

What is left of design patent protection is also currently under attack in the context of infringement. Patent infringement occurs most commonly when a party makes, uses, sells, or offers to sell a patented invention in the U.S., imports a patented invention into the U.S., without the patent owner’s permission during the term of the patent (14 years in the case of design patents). Because the statute defines acts of infringement so broadly, most disputes in patent infringement cases revolve around whether the alleged infringer’s acts in fact involve the claimed invention. Infringement of a design patent occurs if “the designs have the same general
visual appearance, such that it is likely that the purchaser (or the ordinary observer) would be deceived into confusing the design of the accused article with the patented design.”

This basic question has been elaborated on in modern design patent case law, creating two tests, both which must be satisfied for a showing of infringement: the ordinary observer test and the point of novelty test. The “ordinary observer test” was first enunciated by the Supreme Court in *Gorham Manufacturing Co. v. White*, 81 U.S. 511 (1871) and looks at the external similarity of the products: “[I]f in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other.” The correctness of this basic *Gorham* test has not really been challenged in the courts.

The “point of novelty test” is more technical in nature and requires proof that the accused design appropriated the novelty which distinguishes the patented design from the prior art. A court must compare the construed claims to the accused design to determine whether the accused design has “appropriated” the points of novelty from the patented design. In *Lawman Armor Corp. v. Winner Int’l, LLC*, 449 F3d 1190 (Fed. Cir. 2006), the Court of Appeals for the Federal Circuit made the point of novelty requirement a larger hurdle by rejecting the argument that the overall design can be a point of novelty. In *Lawman*, the patentee listed eight points of novelty for its steering wheel lock design, but every one of these eight points of novelty was shown in prior art patents. Instead, the patentee claimed that the combination of the eight points in a single design was a ninth point of novelty. The court rejected that argument, though the nature of industrial design is often in the nature of this type of incremental activity.

Indeed, the point of novelty requirement is becoming such a large hurdle that, in an *amicus curiae* brief in a case pending before the en banc Court of Appeals for the Federal Circuit, *Egyptian Goddess, Inc. v. Swisa, Inc.*, Apple Computer has asked the court to abolish that requirement and return to *Gorham*. It is agued that the point of novelty test has posed problems with regard to claim construction because designs are difficult to verbalize unequivocally and is unnecessary in light of, and indeed inconsistent with, the *Gorham* test. Apple’s brief points out that the point of novelty test – requiring the plaintiff to verbalize its design – is frequently used by the defendant to obtain summary judgment without the *Gorham* inquiry ever getting to the jury.

But this is the problem of the continual analogy to utility patents. In utility patent law, the Supreme Court’s *Markman* decision compels the involvement of the court in defining the claims as a matter of law. The *Gorham* test instead is much more impressionistic and fact-based. But, of course, that is precisely the nature of visual impression; it should be more impressionistic. Thus, argues Apple, the court should have less of a role in giving guidance as a matter of law in infringement of a design patent, and thus there really is no need for the point of novelty analysis, which is where courts have typically tried to offer that guidance.

We await the decision of the en banc Federal Circuit in *Egyptian Goddess*, which is the first time the Federal Circuit has sat en banc in a design patent case. But, almost regardless of the outcome, design patents remain a largely ineffective way of protecting designs.
V Sui generis design protection

Although the United States has no real design registration law, there is one exception. In 1998, Congress enacted the Vessel Hull Design Protection Act to protect the design of boat hulls. The Vessel Hull Act would appear to be a potential model for more broad-based design protection legislation. The current provisions have been drafted in a way that would, with extremely minimal legislative effort, be converted into a broad-based regime.

For example, the central provision of the legislation (Section 1301(a)(1)) states that:

"The designer or other owner of an original design of a useful article which makes the article attractive or distinctive in appearance to the purchasing or using public may secure the protection provided by this Chapter upon complying therewith."

That sounds like the basis for a general design law. But the scope of the regime is circumscribed by the definition of "useful article." For the most part, that definition follows that currently found in the body of the copyright statute: an article with "an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information." However, the definition of "useful article" for the purposes of this chapter is preceded by this language: "a useful article is a vessel hull, including a plug or mold, which in normal use has . . ." With this preceding language, the design law is restricted to the appearance of the hull of boats; without it, you have a turnkey design law of general application.

An alternative approach to getting a real design law would be to accumulate lots of industry-specific design laws. The current legislative battle in the United States is over fashion designs. Copyright protection is only available for the two-dimensional manifestation of aesthetic features. The design of actual pieces of clothing is unprotected by copyright to the extent that the aesthetic features are inseparable from the utilitarian aspects of the article (the clothing is a useful article subject to the separability requirement of the U.S. copyright statute). Therefore, fashion designers argue that they lack an effective means of addressing infringement of their creations. Moreover, they claim that they are disadvantaged as against European or Japanese designers, where fashion-design-protection is available. To that end, the Design Piracy Prohibition Act was introduced. It would provide three years protection to the appearance as a whole of an article of apparel, including its ornamentation. However, it is unlikely that the fashion bill will pass.

Conclusion

As has been the case for the last century and a half, the United States protects designs through a mish-mash of copyright, trade dress and design patent. Hardly a recipe, unfortunately, for legal certainty.

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