Overcoming the "Impossible Issue" of Nonobviousness in Design Patents

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ARTICLE

Overcoming the "Impossible Issue" of Nonobviousness in Design Patents

Janice M. Mueller and Daniel Harris Brean

ABSTRACT

The United States offers legal protection for designs—the overall aesthetic appearances of objects—through the patent system. To obtain a U.S. design patent has long required something more than novelty. Just as the patentability of a utilitarian device mandates a "nonobvious" advance over earlier technology, the patentability of a new and ornamental design requires that it differ from prior designs to an extent that would not have been "obvious to a designer of ordinary skill who designs articles of the type involved." Ostensibly promoting progress in design, Congress in 1842 shoehorned design protection into the existing utility patent system. From that time forward, the design patent system has languished from prolonged inattention rather than benefited from any purposeful development. Even the initial imposition of a qualitative requirement for "invention" in designs (from which the modern requirement of nonobviousness derives) was likely the product of a typographical error. Failing to appreciate the fundamental distinctions between designs and utility inventions, the legislature and judiciary have repeatedly sought to assimilate these very different types of intellectual property. Nowhere in the design patent system is this assimilation more harmful than in the imposition of the nonobviousness requirement.

1 Janice M. Mueller is a Professor of Law at the University of Pittsburgh, a registered patent attorney, and a former law clerk to the late Judge Giles S. Rich of the U.S. Court of Appeals for the Federal Circuit. Mueller was a Visiting Professor at the University of Kentucky College of Law during the Spring 2010 semester. Daniel Harris Brean is an associate at The Webb Law Firm in Pittsburgh, Pennsylvania, and a registered patent attorney. Our thinking about how to improve legal protection for designs benefited greatly from conversations with Professor Dr. Annette Kur of the Max Plank Institute for Intellectual Property, Competition, and Tax Law, Munich, Germany; Donald S. Chisum, Co-Founder and President, Chisum Patent Academy; and Perry J. Saidman, Principal, Saidman DesignLaw Group. Industrial designers Randy Rossi, Ron Spears, George McCain, Tucker Viemeister, Cooper Woodring, Ron Kemnitzer, Tony Shoemaker, and Paul McGroary provided essential information and insights about the creative process of design. We thank Pitt Law Librarian Linda Tashbook and Pitt Law student Brian J. Jackson for their research assistance. All views expressed herein (as well as any errors) are our own and should not be attributed to our respective employers. We welcome comments by e-mail to mueller2@pitt.edu and dbrean@webblaw.com.
The U.S. Patent and Trademark Office (USPTO) and courts continue to struggle with gauging the nonobviousness of designs despite repeated acknowledgement that the requirement is inapt, subjective, unworkable, and even “impossible.” Although design protection would be more appropriately provided through a sui generis system outside the patent regime, a wholesale restructuring of U.S. design protection appears unlikely. Nonobviousness therefore continues to be imposed for design patentability. Our insight is that courts and the USPTO have previously unrecognized flexibility in how they apply the nonobviousness requirement to designs. Drawing from the industrial design literature as well as our interviews with experienced designers of differing career paths, we conclude that the current nonobviousness framework is fundamentally misaligned with the creative processes and objectives of designers. We accordingly propose a number of powerful yet practical tools for reconceptualizing the nonobviousness requirement in a manner that truly promotes innovation in design. The Federal Circuit’s recent decisions in Egyptian Goddess v. Swisa, Titan Tire v. Case New Holland, and International Seaway v. Walgreens signal a welcome judicial receptiveness to rethinking design nonobviousness. The time is ripe to bridge the gap between design patent standards and the reality of design. This Article offers a roadmap for overcoming the supposedly “impossible issue” of applying the nonobviousness requirement to designs.

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Introduction

Designs—the exterior shapes and ornamental features that make products visually appealing and desirable to consumers—are fundamentally different from the mechanical, chemical, and process inventions protected by utility patents. Today's consumers appreciate this distinction and value a product's aesthetics and user experience as much as the technology and craftsmanship underlying the product's functionality. To satisfy this consumer demand, firms in the global marketplace are increasingly competing on the basis of innovative product design. Such firms are quantifiably outperforming their competitors who fail to grasp the value-added of design. In order to stay competitive, companies that...

2 The U.S. patent system currently grants three types of patents: utility patents, design patents, and plant patents. The phrase "utility patent" refers to a patent granted on an invention falling within one or more of the subject matter categories enumerated in 35 U.S.C. § 101 (2006); that is, a "process, machine, manufacture, or composition of matter." Id. We refer herein to such inventions as "utility inventions." Designs are not encompassed within the § 101 categories. Rather, the subject matter of patentable designs is separately governed by 35 U.S.C. § 171 (2006) (A design patent is available for a "new, original and ornamental design for an article of manufacture...subject to the conditions and requirements of this title."). Plant patents are governed by 35 U.S.C. § 161 (2006).

This Article focuses on "design" in the sense of the subject matter protected by a U.S. design patent, that is, an "ornamental design for an article of manufacture." 35 U.S.C. § 171. We interpret the statutory phrase "ornamental design" to mean the overall aesthetic appearance of an article of manufacture, such as a three-dimensional object or product. The process of design on which we focus involves a designer creating the overall aesthetic appearance of an object by including one or more features not entirely dictated or required by the object's function, such as dimensions, surface ornamentation, contours, and the like. (Graphic design and the creation of two-dimensional representations such as posters, prints, and films are outside the scope of this Article.)

In practice, designers often create both ornamental and functional aspects of the products they work on. See infra Part I (detailing designers' creative processes and methodologies). Design patents, however, protect only the overall appearance of a designed product. To the extent that functional features exist in the product, it is only the form of those features in the aggregate that we refer to herein as the product's "design." For example, a handle on a door is functional in the sense of providing a means of opening or closing the door, but the particular form of the handle is part of its design as discussed herein.

The craft or business of design as addressed by this Article encompasses the field of "industrial design." Scholars have observed that the meaning of the phrase "industrial design" seems simple enough on its face—"it is the business of determining the form of objects which are to be made by machines, rather than produced by hand." Edward Lucie-Smith, A History of Industrial Design 7 (1983). Yet the breadth of the objects encompassed in this definition is virtually boundless; "[i]ndustrial design can concern itself with everything from a teacup to a jet aeroplane." Id.

traditionally emphasized manufacturing efficiency “must master a new set of skills known as ‘design thinking,’” or having “an intense focus on understanding real problems customers face in their day-to-day lives.”

“Both worlds—the quantum one where designers push boundaries to surprise and delight, and the Newtonian one where workers meet deadlines and margins—are meaningful. The most successful companies will learn to build bridges between them and leverage them both.”

Although the aesthetic form of a product and its underlying function are inherently distinct aspects of the product, patents are the preferred form of legal protection in the United States for both types of intellectual property. Unlike the rest of the world, the United States chose to protect industrial design through the grant of “design patents” that cover the “new, original and ornamental design for an article of manufacture.” Design patents have become an increasingly popular means of obtaining competitive advantage in the United States, with the number of issued design patents nearly doubling in the past ten years.

Despite their increasing popularity, design patents and the legal requirements for obtaining them have garnered surprisingly little notice or study. From their 1842 enactment of the first design patent law until today, policymakers have failed to pay adequate attention to these awkward offspring of the utility patent system. The U.S. design patent framework is built upon repeated attempts to assimilate protection for designs into the legal framework for patenting utility inventions. Legislators as well as courts have mechanistically applied the requirements for utility patentability to designs without consideration of desired policy goals or consequences.

(“A three year study of more than 40 Fortune 500 companies by the research firm Peer Insight found that companies focused on customer-experience design outperformed the S&P 500 by a 10-to-1 margin from 2000 to 2005.”; Design Index, DesignCOUNCIL.ORG.UK, http://www.designcouncil.org.uk/publications/Design-Index/ (last visited Sept. 7, 2009) (In the British stock market, “the share prices of a group of more than 150 quoted companies recognised as effective users of design out-performed the stock market by 200 per cent between 1994 and 2003.”).

4 Sara Beckman, Welcoming the New, Improving the Old, N.Y. Times, Sept. 6, 2009, at BU3.
5 Id.
8 Congressional enactment of the first design patent legislation in 1842 is detailed infra Part II.
"[P]rolonged inattention, rather than any ongoing purposeful development," grounds the U.S. design patent system.9

Nowhere in the design patent law are purposeful development and thoughtful analysis more lacking than in application of the nonobviousness requirement. Codified in 1952 at 35 U.S.C. § 103,10 the nonobviousness requirement was implemented in response to dissatisfaction with nineteenth-century efforts to gauge patent-worthiness via a nebulous test of "invention."11 Today’s statutory standard of nonobviousness reflects longstanding judicial recognition that a patentable device, substance, or process must involve something more than novelty.12 Nonobviousness is the ultimate, most difficult requirement for patentability.13 An applicant for patent must take a "large step" forward,14 establishing that its advance would not have been obvious to a hypothetical person having ordinary skill in the pertinent technology when the claimed invention was made.15

Assessing the extent of an advance in mechanical or chemical technology is by no means easy, but the applicable jurisprudence is relatively well-

10 The statute provides that

[a] patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.


11 See Giles S. Rich, The Vague Concept of “Invention” As Replaced by § 103 of the 1952 Patent Act, 14 FED. CIR. B.J. 147, 157 (2004) (reproducing full draft of Kettering Award Acceptance Speech delivered by Judge Rich on June 18, 1964) (Section 103 "is not a 'standard of invention' and it is not called a requirement of invention. The presence or absence of 'invention' is not mentioned. The use of the term was, in fact, carefully avoided with a view to making a fresh start, free of all the divergent court opinions about 'invention.' And in doing that it was contemplated, as the House Report (1923, p. 7) states, that 'This section should have a stabilizing effect and minimize great departures which have appeared in some cases.'").

12 See Hotchkiss v. Greenwood, 52 U.S. (11 How.) 248, 267 (1850) ("[U]nless more ingenuity and skill in applying the old method of fastening the shank and the knob were required in the application of it to the clay or porcelain knob than were possessed by an ordinary mechanic acquainted with the business, there was an absence of that degree of skill and ingenuity which constitute essential elements of every invention. In other words, the improvement is the work of the skillful [sic] mechanic, not that of the inventor.").


developed and stable. The U.S. Court of Appeals for the Federal Circuit (Federal Circuit) and the U.S. Patent and Trademark Office (USPTO) routinely apply the established tests and factors of the nonobviousness inquiry to utility inventions. Occasional Supreme Court correction of outlier decisions (as in *KSR International Co. v. Teleflex Inc.*19) has not fundamentally changed this landscape.

Far greater complexities arise in applying the nonobviousness requirement to designs. Assessing the extent of an advancement in design must focus on the overall appearance and aesthetic success of a product's external design, not its internal structure or utilitarian functionality. This assessment of visual appeal or distinctiveness is an inherently subjective effort. Courts have long admitted their discomfort with the task.19 The USPTO, the federal agency responsible for examining design patent applications, very rarely discovers and cites prior art designs as rendering a design application unpatentable.20 Inattention to the nonobviousness requirement may explain in part why the agency has nearly doubled its grant of design patents in the last ten years.21

16 See Lee Petherbridge & P. Polk Wagner, *The Federal Circuit and Patentability: An Empirical Assessment of the Law of Obviousness*, 85 TEX. L. REV. 2051, 2052 (2007) ("Although this study falls short of painting a complete picture of the Federal Circuit's performance with respect to patentability, the view that emerges is of a modern jurisprudence of obviousness that is more stable, more consistent, and more flexible than has been heretofore understood. These results, then, should give pause to those who argue for a radical reshaping of the Federal Circuit's doctrine under 35 U.S.C. § 103.").


18 *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 399, 419 (2007) (rejecting as overly rigid the Federal Circuit's application in that case of the "teaching, suggestion, or motivation" (TSM) test for combining the disclosures of multiple prior art references to establish that a claimed utility invention would have been obvious, but recognizing that the TSM test can serve more generally as a "helpful insight" in analyzing nonobviousness).

19 See 8 DONALD S. CHISUM, *CHISUM ON PATENTS* § 23.03[6] (2009) [hereinafter CHISUM ON PATENTS] ("With a design, the problem—how to make an article that is more ornamental and attractive to the eye—is normative in character and thus more open-ended. Not surprisingly, the courts openly admit that any assessment of the obviousness of the solution is necessarily subjective.") (citations omitted). Part III, *infra*, further describes judicial struggles to meaningfully apply an invention or nonobviousness requirement to designs.

20 See Dennis Crouch, *Design Patents: Sailing Through the PTO Part II*, PATENTLY-O (Apr. 22, 2009, 10:56 AM), http://www.patentlyo.com/patent/2009/04/ design-patents-sailing-through-the-pto-part-ii.html (reporting that only 3.5% of design application rejections included in Crouch's statistical analysis of 86 design patent applications were based on prior art).


In addition to the low incidence of prior art-based rejections, another factor responsible for the recent increase in design patenting is undoubtedly the significant contraction in availability of trademark law protection for product configuration. The Supreme Court held in
The unfortunate result of the "prolonged inattention" suffered by the design patent system is a fundamental inconsistency between the legal framework for evaluating design nonobviousness and the reality of the objectives and creative processes involved in generating new design. We interviewed experienced designers and consulted design texts to determine whether the extant design patent nonobviousness jurisprudence accords with its purported policy objectives to "encourage... the decorative arts" and promote more and better design. The results were astonishing. In several important respects the jurisprudence directly conflicts with the reality of how designers work and operates to suppress, rather than encourage, innovative design. Leading industrial designers view the current U.S. design patent system as a failure. We have seen no evidence that policymakers, the USPTO, or the courts have ever deliberately investigated or given any significant consideration to the actual objectives and processes of designers.

Unlike their legislative counterparts in Europe, the U.S. Congress has not seen fit to implement a sui generis legal system uniquely tailored to foster design innovation. The nonobviousness requirement of 35 U.S.C. § 103 was enacted in 1952 with a view to stabilizing the requirements for patenting utility inventions. No consideration was given to how §103 might

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*Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205 (2000), that trademark rights in product designs do not arise unless and until secondary meaning can be proven for a design. Id. at 216 ("[A] product's design is distinctive, and therefore protectible, only upon a showing of secondary meaning."). Rather than having to build up a trademark-like association with one's product design over time (if such an association can be developed at all), the award of a design patent affords the patentee an immediate right to exclude others from the design. See 35 U.S.C. § 271(a) (2006) (Containing no requirement of use by the patentee to sue for infringement, and stating that "whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent."); 35 U.S.C. § 171 (2006) ("The provisions of this title relating to patents for inventions shall apply to patents for designs.").

22 Gorham Co. v. White, 81 U.S. (14 Wall) 511, 524 (1871) (Design patent law was "plainly intended to give encouragement to the decorative arts.").

23 See infra Part I.

24 See infra Part III.

25 See Telephone Interview with Tucker Viemeister, Lab Chief, LAB at Rockwell Group and Fellow, Industrial Designers Society of America (July 2, 2009) [hereinafter Viemeister Interview] (expressing the view that the existing design patent system is not promoting better design and that designers are not happy with it).

26 See infra Part IV (describing the European Union's sui generis system of legal protection for industrial designs).
NONOBIousNESS IN DESIGN PATENTS

apply to designs. Rather, the drafters of § 103 intentionally set aside the acknowledged "problem" of designs for later review.

Both before and after the 1952 Patent Act, repeated attempts to enact a separate statutory scheme better adapted for designs never succeeded. More than 150 years after Congress shoehorned design protection into the pre-existing framework of the utility patent system, the judiciary and the industrial design community continue to struggle with the "impossible issue" of applying the nonobviousness requirement to designs. Patent Office leaders concur that nonobviousness "is not well suited to ornamental designs." The utility patent standard of nonobviousness continues to be applied to designs simply by default. A thorough reexamination of the nonobviousness requirement for designs is therefore long overdue.

Prolonged neglect of the design problem has implications for U.S. competitiveness in the global economy. "[M]any critics feel that it is the hostile legal environment faced by American designers which has caused the United States to lag behind European and Asian countries in design innovation, even during a period in which the United States has dominated in other areas of production." Although U.S. manufacturers have long been recognized as international leaders in technological innovation, they did not receive widespread acclaim in the field of industrial design until much more recently. While the innovative designs of products such as

27 See In re Nalbandian, 661 F.2d 1214, 1219 (C.C.P.A. 1981) (Rich, J., concurring) ("[T]he new § 103 . . . was written with an eye to the kinds of inventions encompassed by § 101 with no thought at all of how it might affect designs."); id. at 1218-19 ("When work on revision of the patent statutes began in 1950, a deliberate decision was made not to attempt any solution of the 'controversial design problem' but simply to retain the substance of the existing design patent statute and attack the design problem at a later date, after the new Title 35 had been enacted.").

28 Id. at 1219.

29 These attempts are further described infra Part II.

30 In re Nalbandian, 661 F.2d at 1219 (Rich, J., concurring) (Urging enactment of then-pending legislation [H.R. 20, 97th Cong. (1981)] "tailored to the problems of designers, of their employers and clients in the business world, and of the government agencies now concerned." The legislation would "get the impossible issue of obviousness in design patentability cases off the backs of the courts and the Patent and Trademark Office, giving some sense of certainty to the business world of what designs can be protected and how.").

31 See id. (quoting Aug. 8, 1981 speech of then Commissioner of Patents and Trademarks Gerald Mossinghoff to the American Bar Association's Patent, Trademark and Copyright Law Section).


33 See Telephone Interview with Dr. Ron Kemnitzer, Fellow, Industrial Designers Society of America and Chair, Indus. Design Program, Sch. of Architecture & Design, Virginia Polytechnic Inst. & State Univ. (Aug. 10, 2009) [hereinafter Kemnitzer Interview] (expressing view that Europe was unquestionably the leader in industrial design in the 1960s, and that it is only since the 1980s that the United States has taken the international lead in industrial design prominence).
Apple's iPod digital music player and the Motorola Razr mobile telephone are now lauded around the world, this positive recognition for U.S.-generated design is a new phenomenon. This Article identifies the heart of the problem as the placement of design protection within the patent system, which led to the inappropriate imposition of an invention/nonobviousness requirement for designs. We argue that the nonobviousness requirement plays a previously unrecognized role in setting back U.S. leadership in industrial design. The United States lagged behind other developed nations for many years in recognizing industrial design as an independent professional field, and it still trails behind in legal protection for designs. By setting the bar for design patentability unreasonably high, the nonobviousness requirement perpetuates the "hostile legal environment" for U.S. designers.

Scant academic attention has been paid to the negative impact of the nonobviousness requirement on design innovation. Among many design patent practitioners, obviousness is generally considered a "non-issue." This view is understandable because design patent applicants rarely confront obviousness rejections from the USPTO. Prior art rejections of any kind, let alone obviousness rejections, are uncommon in design applications. When the USPTO does enter an obviousness rejection, the

34 The historical source of the obviousness problem can be traced back to the original shoehorning of designs into the patent realm of "inventions," as opposed to the copyright or trademark systems. See infra Part II (describing historical development of U.S. design patent legislation). Copyright or trademark law provide more suitable forms of protection for designs. See generally Daniel H. Brean, Enough is Enough: Time to Eliminate Design Patents and Rely on More Appropriate Copyright and Trademark Protection for Product Designs, 16 Tex. Intell. Prop. L.J. 325 (2008). In addition to the misfit between design patents and the nonobviousness requirement, other legitimate criticisms of the current design patent system include the quality of substantive examination, the cost of preparation and prosecution of design applications, and the long pendency period from filing to issuance. See Perry J. Saidman & Theresa Esquerra, A Manifesto on Industrial Design Protection: Resurrecting the Design Registration League, 55 J. Copyright Soc'y U.S.A. 423, 425-26 (2008). These additional criticisms likewise all stem from the original placement of design protection in the patent system, which requires satisfaction of a multitude of formalities during the application and prosecution process to facilitate substantive examination, as well as compliance with all pertinent Patent Office regulations and procedures.

35 Goldberg, supra note 32, at 21.

36 An article published almost forty years ago praised the "ordinary, intelligent observer" perspective adopted in In re Laverne, 356 F.2d 1003 (C.C.P.A. 1966) (Rich, J.). Alfred L. Michaelelsen, Design Patents and Obviousness—Obvious to Whom?, 52 J. Pat. Off. Soc'y 620, 636 (1970). This aspect of Laverne was subsequently overturned by In re Nalbandian, 661 F.2d 1214, 1217 (C.C.P.A. 1981). Among other options for reconceptualizing the nonobviousness requirement for design patentability, we recommend that the Laverne standard be reinstated. See infra Part IV.

37 Telephone Interview with Cooper Woodring, Fellow, Industrial Designers Society of America (July 14, 2009) [hereinafter Woodring Interview].

38 See Crouch, supra note 20. The USPTO's lack of tools that can effectively locate the
design applicant rarely appeals to the Federal Circuit. From its creation in 1982 through January 2010, the Federal Circuit has decided only six precedential decisions in design patent application appeals raising an issue of obviousness. 39

After design patents have issued, the statutory presumption of their nonobviousness 40 seems to be infrequently challenged. The low incidence of Federal Circuit decisions reviewing the issue of obviousness on appeal from district court litigation is an indicator of such infrequency. From its creation in 1982 through January 2010, the Federal Circuit has issued only fourteen precedential decisions deciding the merits of an obviousness challenge to an issued design patent (including decisions on motions for preliminary injunctions). 41 Ten of the fourteen decisions (seventy-one

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39 See In re Haruna, 240 F.3d 1327, 1334 (Fed. Cir. 2001); In re Borden, 90 F.3d 1570, 1571 (Fed. Cir. 1996); In re Harvey, 12 F.3d 1061, 1062 (Fed. Cir. 1993); In re Klein, 987 F.2d 1569, 1570 (Fed. Cir. 1993); In re Carlson, 983 F.2d 1032, 1033 (Fed. Cir. 1992); In re Sung Nam Cho, 813 F.2d 378, 380-82 (Fed. Cir. 1987).


41 See Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1385 (Fed. Cir. 2009) (affirming district court’s denial of preliminary injunction because unlikely that design patent would survive obviousness challenge at trial); Rosco, Inc. v. Mirror Lite Co., 304 F.3d 1373, 1379 (Fed. Cir. 2002) (vacating district court’s judgment that design patent was invalid for obviousness because district court failed to make any findings in support of judgment; remanding for district court to make findings as to obviousness under Fed. R. Civ. P. 52); Catalina Lighting, Inc. v. Lamps Plus, Inc., 295 F.3d 1277, 1288 (Fed. Cir. 2002) (affirming district court’s judgment that upheld validity of design patent against obviousness challenge); Hupp v. Siroflex of Am., Inc., 122 F.3d 1456, 1463 (Fed. Cir. 1997) (reversing district court’s judgment that design patent was invalid for obviousness); Oddzon Prods., Inc. v. Just Toys, Inc., 122 F.3d 1396, 1404 (Fed. Cir. 1997) (affirming district court’s grant of summary judgment sustaining validity of design patent against an obviousness challenge based on confidential prior art designs that had been disclosed to inventor and thus deemed nonobviousness’ seems to be infrequently challenged. The low incidence of Federal Circuit decisions reviewing the issue of obviousness on appeal from district court litigation is an indicator of such infrequency. From its creation in 1982 through January 2010, the Federal Circuit has issued only fourteen precedential decisions deciding the merits of an obviousness challenge to an issued design patent (including decisions on motions for preliminary injunctions). Ten of the fourteen decisions (seventy-one
percent) sustained the validity of the design patent against an obviousness challenge; the remaining four decisions (twenty-nine percent) held the design patent invalid for obviousness.

Prior to the Federal Circuit era, the regional circuit courts of appeals did not view design patents so favorably. Sustaining the validity of a design patent was considered "exceedingly difficult" because of the requirement for nonobviousness, or its predecessor, the invention requirement. In 1981, the Court of Customs and Patent Appeals (C.C.P.A.) described design patents as "suffer[ing] a 70% mortality rate in the courts at the hands of judges reviewing the § 103 unobviousness of the designs." Although the Federal Circuit has thus far treated design patents much more favorably than did the regional circuits, four recent judicial decisions signal that this trend may be nearing its end:

1. The Supreme Court's latest pronouncement on the nonobviousness requirement in *KSR International Co. v. Teleflex Inc.*, a 2007 case involving an electro-mechanical utility patent invention;
2. The Federal Circuit's 2008 en banc rejection of the "point of novelty" component for determining design patent infringement in *Egyptian Goddess, Inc. v. Swisa, Inc.*;
3. The Federal Circuit's 2009 review (on appeal from denial of a preliminary injunction) of the nonobviousness of a design patent in *Titan Tire Corp. v. Case New Holland, Inc.*; and

The Federal Circuit considered but did not decide the merits of a design patent nonobviousness issue in *International Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1244 (Fed. Cir. 2009) (vacating district court's summary judgment invalidating design patent as anticipated under § 102 and remanding for reconsideration of both anticipation and nonobviousness). For a further discussion of *International Seaway*, see infra Part III.C.3.

42 See G.B. Lewis Co. v. Gould Prods., Inc., 436 F.2d 1176, 1178 (2d Cir. 1971) ("'[T]o obtain a valid design patent is exceedingly difficult.'" (quoting Chas. D. Briddell, Inc. v. Alglobe Trading Corp., 194 F.2d 416, 419 (2d Cir. 1952))).


44 *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 401-02 (2007) (rejecting as overly rigid the Federal Circuit's application in that case of the "teaching, suggestion, or motivation" (TSM) test for combining the disclosures of multiple prior art references to establish that a claimed invention would have been obvious, but recognizing that the TSM test can serve more generally as a "helpful insight" in analyzing nonobviousness).


46 *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1375, 1380-84 (Fed. Cir. 2009).

47 See *Int'l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1237-41 (Fed. Cir. 2009).
was able to decide the appeal in *Titan Tire* without resolving the "new and untested ground" of whether and how *KSR* should be applied to design patents.48 *Titan Tire* signals that *KSR*’s applicability to design patent nonobviousness is an issue ripe for judicial determination.49

The recent developments in nonobviousness jurisprudence have the potential to quickly increase the "mortality rate" for design patents. The rising number of design patents issuing from the USPTO also suggests that more enforcement litigation and, consequently, more validity challenges will be brought. Courts, the USPTO, advocates, and policymakers should be prepared to more frequently confront the difficult issue of nonobviousness as applied to designs.

This Article aims to provide all stakeholders with a variety of tools to understand and apply the nonobviousness requirement to designs in an appropriate and practical way. We do not dispute that current statutory and decisional law imposes a nonobviousness requirement for design patentability. Rather, we posit that the courts and the USPTO have previously unrecognized flexibility in how they apply the nonobviousness requirement to designs. We offer a number of recommendations for applying nonobviousness in a manner more specifically tailored to promoting progress in the design arts.

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48 *Titan Tire*, 566 F.3d at 1384 ("The trial court’s decision [to deny design patentee’s motion for a preliminary injunction] did not depend on the analysis in *KSR*. To the contrary, the court recognized that the application of *KSR* to design patents was new and untested ground." (internal quotation marks omitted)). The year-long pendency of the Federal Circuit’s decision in *Titan Tire* suggests possible internal disagreement about *KSR*’s applicability. The *Titan Tire* decision was issued on June 3, 2009, almost one year after the Federal Circuit heard oral argument on June 4, 2008, *Oral Argument Recordings, United States Court of Appeals for the Federal Circuit*, http://oralarguments.cafc.uscourts.gov/searchscript.asp (search "Appeal Number" for "2008-1078") (entry for Case No. 2008-1078 indicating that oral argument was heard on June 4, 2008) (last visited Oct. 10, 2010).

Part I of this Article describes what designers do—the process known as “design.” Drawing from our interviews and conversations with designers, we seek to contribute to patent law scholarship a better understanding of how designers work and how their creative design process differs fundamentally from the inventive process leading to the devices, methods, and compositions protected by utility patents. In Part II we examine the historical development of the U.S. design patent statutes, focusing particularly on the haphazard legislative evolution of the nonobviousness requirement. We describe the discordant (if not mistaken) application of nonobviousness to designs against the backdrop of a sluggishly developed culture of American industrial design. We also survey the repeatedly unsuccessful proposals to enact a sui generis legislative framework for design protection, independent of the patent system. Part III critiques the judiciary’s attempts to apply the utility patent construct of nonobviousness to designs. The resulting jurisprudence demonstrates an inadequate understanding of the design process and the unique value of designs. The courts’ difficulties can largely be traced to two nineteenth-century Supreme Court decisions that spawned a confusing dichotomy of approaches to design protection.

Part IV presents a menu of recommendations for reconceptualizing the nonobviousness requirement as applied to designs. Our proposals begin by recognizing that KSR and other Supreme Court decisions applying the nonobviousness requirement to utility inventions have very little, if any, applicability for design patentability. Rather, courts possess the flexibility to fine-tune the nonobviousness requirement for designs in a manner analogous to their past consideration of plants, another type of non-utility patent subject matter. We next recommend that courts utilize the “ordinary observer” standard of Gorham Co. v. White, the Supreme Court’s foundational design patent decision, as the proper perspective for determining design patent nonobviousness. In contrast with the prevailing “designer of ordinary skill” perspective, the ordinary observer perspective is far better aligned with the actual process and goals of design. Moreover, the ordinary observer perspective would tend to harmonize U.S. practice with the European Union’s application of an “informed user” perspective for assessing design validity.

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50 Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 528 (1871).

51 See Durling v. Spectrum Furniture Co., 101 F.3d 100, 103 (Fed. Cir. 1996) (“In the design patent context, the ultimate inquiry under section 103 is whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.”) (citing In re Rosen, 673 F.2d 388, 390 (C.C.P.A. 1982)); In re Nalbandian, 661 F.2d 1214, 1216 (C.C.P.A. 1981)” (“In design cases we will consider the fictitious person identified in section 103 as ‘one of ordinary skill in the art’ to be the designer of ordinary capability who designs articles of the type presented in the application.”).

52 See infra Part IV.C.3 for an examination of how the EU’s design protection experience, including its adoption of an “informed user” perspective for evaluating a design’s reg-
Part IV also recommends that Gorham's "substantial similarity" test be adopted as the measure of design obviousness, while testing for anticipation of a design be analyzed under a stricter standard of identicality. Further, we explain why the utility patent examination practice of combining the teachings of prior art references to establish obviousness should be modified, if not eliminated, for designs. Finally, we suggest that the USPTO implement mechanisms to locate more and better design prior art. Such mechanisms should improve the quality of design patent examination, which will also lead to a more robust design obviousness jurisprudence. Part V concludes.

I. The Purpose and Process of Design

This Part analyzes the creative processes of designers, with a view to assessing whether the nonobviousness requirement for patenting a design is appropriately aligned with designers' goals and motivations. Because design is essentially an art form, there may well be as many different approaches to design as there are designers. Accordingly, we do not presume to explain the creative process of design, but rather to identify what appear to be the fairly universal tools and themes underlying the design process.53

Industrial designers are frequently charged with optimally merging form and function, and so their "design" of a product is often influenced by the product's functional features.54 Because this Article addresses design as it is protected by design patents (which cover only the overall appearance of articles of manufacture55), we focus primarily on the aesthetic aspects of the design process. Herein we use the word "design" to refer to the designer's aesthetic contribution to a product (recognizing the reality that aesthetics are often influenced by functionality).

53 See Telephone Interview with George McCain, Fellow & President-Elect, Industrial Designers Society of America, and Principal, McCain Design, L.L.C. (June 22, 2009) [hereinafter McCain Interview] (expressing the view that the design process is difficult to define in any universal way).

54 See Kemnitzer Interview, supra note 33 (explaining that good design merges form and function, and that design has a "duality of purpose" because it is influenced by functionality); Telephone Interview with Randy Rossi, Bally Designs, and Ron Sears, Design Consortium (June 18, 2009) [hereinafter Rossi/Sears Interview] (explaining that industrial design involves a continuum of aesthetics and functionality, wherein good design seamlessly melds form and function); see also ID Defined, INDUSTRIAL DESIGNERS SOCIETY OF AMERICA, http://www.idsa.org/content/id-defined (last visited Oct. 8, 2009) ("Industrial design (ID) is the professional service of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems for the mutual benefit of both user and manufacturer." (emphasis added)).

The design patent law presently includes a substantial hurdle that denies protection to any design for an article that "would have been obvious to a designer of ordinary skill who designs articles of the type involved." This significant requirement for patentability begs at least two questions. First, who constitutes an "ordinary designer"? Second, what does it mean for a design to have been "obvious"? The judiciary has long struggled to answer these questions in the face of conflicting case law and a vacuum of information about the design process. Surprisingly, the patent law scholarship has not previously queried designers about the meaning of "designer[s] of ordinary skill," or the circumstances in which an ordinarily skilled designer would consider a particular design to have been obvious.

To begin to remedy patent law's dearth of first-hand knowledge about the design process, we interviewed several experienced designers of differing career paths. We asked the interviewees to explain the nature of their work, the creative processes involved, and their opinions as to when a designer's work product should merit patent protection. Every designer with whom we spoke had at least some knowledge of and experience with intellectual property, including design patents, and voiced strong opinions on the subject. All of the interviewees expressed some disappointment or frustration with the current design patent system, which was generally perceived as being "broken" in one way or another. These designers

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57 See infra Part III (describing the judiciary's ongoing struggle to apply nonobviousness requirement to designs).
58 We conducted telephone interviews with the following industrial designers: Randy Rossi of Bally Designs, Pittsburgh, Pennsylvania (June 18, 2009); Ron Sears of the Design Consortium, Pittsburgh, Pennsylvania (June 18, 2009); George McCain, Fellow and President-Elect of the Industrial Designers Society of America (IDSA) and Principal, McCain Design, L.L.C., Kirkland, Washington (June 22, 2009); Tucker Viemeister, Fellow of the IDSA and Lab Chief, LAB at Rockwell Group, New York, New York (July 2, 2009); Cooper Woodring, Fellow of the IDSA and 1985–86 President of the IDSA, Wakefield, Rhode Island (July 14, 2009); and Dr. Ron Kemnitzer, Fellow of the IDSA and Chair, Induct. Design Program, Sch. of Architecture & Design, Virginia Polytechnic Inst. & State Univ., Blacksburg, Virginia (Aug. 10, 2009). We are greatly indebted to these design professionals for sharing with us their time, expertise, and insights. Notes of these interviews are on file with the authors. We also would like to extend our gratitude to designers Tony Shoemaker of Sears Craftsman, Chicago, Illinois, and Paul McGroary of Philips Respironix, Pittsburgh, Pennsylvania, for their helpful comments.
59 See Viemeister Interview, supra note 25 (expressing view that the existing design patent system is not promoting better design and that designers are not happy with it); see also McCain Interview, supra note 53 (explaining that many designers feel that their designs are being "ripped off," and that the existing design patent system does not adequately protect them).
likewise expressed appreciation for our efforts to better understand their work as part of our assessment of the design patent system.60

A. The Traditional Purpose and Process of Utility Invention

Unlike design patents, utility patents are granted on utilitarian inventions arising from the technological arts, that is, processes, machines, manufactures, and compositions of matter.61 The late Judge Giles Rich imagined that the nonobviousness inquiry for utility inventions should be analyzed in a romanticized setting of an inventor's struggle to solve a particular technical problem.62 He wrote that "the proper way to apply the 103 obviousness test to a case like this [involving a combination of prior art teachings] is to first picture the inventor as working in his shop with the prior art references—which he is presumed to know—hanging on the walls around him."63 When the solutions to the particular problems faced by the inventor clearly appear in the prior art hanging on the walls, the application and/or combination of such solutions is most likely obvious.64

The essence of this romanticized image—that is, of an inventor combining elements from multiple prior art references in order to solve a given technical problem—persists in modern approaches to obviousness.65

60 See Rossi/Sears Interview, supra note 54 (encouraging us to help "clearly define what is required for design patents").
61 35 U.S.C. § 101 (2006). We refer herein to the subject matter enumerated as patentable in § 101 as "utility inventions" or "utility patent inventions."
63 Id.
64 Id. Winslow involved a patent application directed to a method for opening, filling, and closing thermoplastic bags. Id. at 1017. Judge Rich described what he viewed would be Winslow's thought process (looking at the cited Gerbe and Hellman prior art references) as follows:

[What applicant Winslow built here he admits is basically a Gerbe bag holder having air-blast bag opening to which he has added two bag retaining pins. If there were any bag holding problem in the Gerbe machine when plastic bags were used, their flaps being gripped only by spring pressure between the top and bottom plates, Winslow would have said to himself, "Now what can I do to hold them more securely?" Looking around the walls, he would see Hellman's envelopes with holes in their flaps hung on a rod. He would then say to himself, "Ha! I can punch holes in my bags and put a little rod (pin) through the holes. That will hold them! After filling the bags, I'll pull them off the pins as does Hellman. Scoring the flap should make tearing easier."

Id. at 1020.
65 Judge Rich would later clarify that following enactment of 35 U.S.C. § 103, it should not be the inventor who is imagined as omnisciently knowing all the prior art relevant to his claimed invention, but rather the hypothetical statutory "person having ordinary skill" in the field of the invention. Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1452–54.
The courts and the USPTO continue to apply it not only in the utility patent context, but also with respect to designs. As the next section demonstrates, the picturesque workshop tableau of Winslow has very little in common with the modern process of design.

B. The Motivation and Methodology of Design

Designers perform their work by placing the utmost importance on the impressions, reactions, and desires of consumers. It is the end user or observer who is intended to most directly benefit from or be affected by a design, and so making the design appealing to the end user or observer must be the paramount concern. Designers are concerned with the consumer's complete relationship with the designed object or product.

(Fed. Cir. 1984) (Rich, J.). The actual inventor may not be a person of "ordinary" skill because "[r]eal inventors, as a class, vary in their capacities from ignorant geniuses to Nobel laureates." Id. at 1454.

Despite this clarification, the Winslowian image of an inventor solving a technical problem by selecting solutions from the various prior art references conveniently hanging on the walls of his workshop remains pervasive in patent law. European patent law employs a similar "problem-and-solution" approach for analyzing the analogous "inventive step" requirement of patentability under Art. 56 of the European Patent Convention. Convention on the Grant of European Patents (European Patent Convention), art. 56, conclusion date Oct. 5, 1973, 1065 U.N.T.S. 199 (entered into force July 10, 1977), available at http://www.epo.org/patents/law/legal-texts/html/epc/1973/e/ars56.html. See, e.g., Guidelines for Examination in the EPO, Part C, Ch. IV, 11.5, EUROPEAN PATENT OFFICE, June 1, 1978, available at http://www.epo.org/patents/law/legal-texts/html/guiex/e/c_iv_11_5.htm ("In order to assess inventive step in an objective and predictable manner, [the examiner should normally] ... (i) determin[e] the 'closest prior art', (ii) establish[] the 'objective technical problem' to be solved, and (iii) consider[] whether or not the claimed invention, starting from the closest prior art and the objective technical problem, would have been obvious to the skilled person.").

66 See generally infra Parts II–III.

67 See ID Defined, supra note 54 ("The industrial designer's unique contribution places emphasis on those aspects of the product or system that relate most directly to human characteristics, needs and interests. This contribution requires specialized understanding of visual, tactile, safety and convenience criteria, with concern for the user. Education and experience in anticipating psychological, physiological and sociological factors that influence and are perceived by the user are essential industrial design resources."); see also HENRY DREYFUSS, DESIGNING FOR PEOPLE 25 (1955) ("[O]ne of [a designer's] greatest rewards is the realization that by producing a good design he is affecting the lives of millions of people. And if he designs enough things in good taste, he brings better living and greater satisfaction.").

68 See Rossi/Sears Interview, supra note 54 (expressing the view that a user's reaction to a design is very important); McCain Interview, supra note 53 (expressing the view that a foremost concern of a designer is what would appeal to the consumer).

69 See Linda Tischler, Object Lessons: Alberto Alessi, FAST COMPANY, Oct. 2009, at 116, 118 (describing work of Alberto Alessi, whose internationally known firm designs distinctive domestic items such as flatware, tea kettles, and corkscrews). Alessi has developed a formula for determining whether one of his firm's newly designed prototypes should be put into production. Id. A central parameter of the formula is a score Alessi assigns for "SMI," meaning "sensation, memory, and imagination." Id. The SMI parameter "tries to explore what people
consumer’s immediate reaction upon viewing a new design can profoundly influence his or her decision on whether to buy or use the product, as certain assumptions about the product (e.g., its quality, cost, or manner of operation) will be initially made based only on its appearance.\textsuperscript{70} Consumers also react to designs in emotional terms by deciding whether a design reflects their style, personality, and philosophy.\textsuperscript{71} If the appearance of the design fails to immediately convey a positive impression, the consumers may never again consider buying or using the product. It is therefore critical to the success of any product that its aesthetic appearance alone conveys a message that appeals to the target consumers.

In order to maximize a product’s appeal, many designers intentionally set out to have their designs’ appearances elicit certain responses or ideas in the minds of consumers. In other words, designs ideally “speak” to consumers in ways that trigger immediately favorable reactions and assumptions.\textsuperscript{72} For example, the design of a product like Apple’s iPhone might invoke thoughts like “cool,” “sleek,” or “high-tech,” while the design for a 1950s Cadillac car might invoke thoughts like “classic,” “durable,” or “swell.” Certainly, thoughts like “cheap,” “unreliable,” and “boring” are to be avoided.

Even if a design invokes in consumers’ minds all of the favorable responses and ideas that the designer intends, the designer still faces other constraints. The designer must ensure that the design still invokes reactions that appropriately correspond to the consumers’ understanding of mean when they say, ‘Oh, what a beautiful object!’”\textsuperscript{73} In Alessi’s view, “[b]eauty alone no longer expresses properly the relations of people with an object. You cannot use beauty when you describe a [Phillipe] Starck project, for example.”\textsuperscript{74} Obviously a substantial part of a consumer’s relationship with a designed product is their use of the product. As explained by Henry Dreyfuss, the first president of the Industrial Designers Society of America:

[W]hat we are working on is going to be ridden in, sat upon, looked at, talked into, activated, operated, or in some way used by people individually or en masse. If the point of contact between the product and the people becomes a point of friction, then the industrial designer has failed. If, on the other hand, people are made safer, more comfortable, more eager to purchase, more efficient—or just plain happier—the designer has succeeded.

\textbf{DREYFUSS, supra note 67, at 23–24.}

\textsuperscript{70} \textit{OBJECTIFIED} (Plexi Productions 2009) (documentary film directed by Gary Hustwit).

\textsuperscript{71} \textit{Id.}

\textsuperscript{72} See Rossi/Spears Interview, supra note 54 (explaining this concept of “product semiotics” and noting that verbalization of a design is an important part of the design process). See also Tischler, supra note 69, at 118 (describing designer Alberto Alessi’s mathematical formula for determining whether to launch a new product as also including a score for “communication language” or “CL,” which “measures the ability of a product to communicate something like status or values”). Alessi observes that “[a] gold Rolex watch, for example, conveys wealth, while a Richard Sapper teakettle indicates cultural sensitivity.” \textit{Id.}
the underlying product. If the design strays too far from what consumers can recognize and feel comfortable with, they may reject it.\textsuperscript{73} In other words, consumers must be able to at least recognize what a product is, and understand generally how it works. Internationally renowned designer Raymond Loewy coined the phrase “Most Advanced Yet Acceptable” (or “MAYA”) to describe this phenomenon.\textsuperscript{74} The MAYA principle recognizes that while consumers desire the best and newest technology and designs in their products, they cannot always immediately embrace the most advanced product design possible.\textsuperscript{75} At a certain point, the design reaches a “shock-zone” where consumers’ desire for novelty is outweighed by their reluctance to adopt what goes against their sense of the norm.\textsuperscript{76} Good designers are very conscious of where the shock-zone lies for every one of their projects.\textsuperscript{77}

In the days of rotary telephones, for example, many consumers likely had difficulty accepting the first touch-tone phone. Of course, the optimal “solution” for the new touch-tone design “calls for an understanding of the tastes of the American consumer[s],” for which “there are no yardsticks, no ways to chart a curve of public reaction to advanced design.”\textsuperscript{78} One of many ways that the designers of the first touch-tone phones could have stayed within the MAYA shock-zone would have been by continuing to arrange the numeric buttons in a circle (which was functionally required for rotary phones) instead of immediately adopting the more modern square arrangement. Radical new button placement or overall telephone shapes likely would have intimidated many consumers.

Design is undeniably intertwined with the subjectivity and complexity of consumer purchasing psychology. Far from being an exact science, design is more akin to an art form.\textsuperscript{79} Unlike inventors of utility inventions,
designers do not seek to solve specific technical problems with their designs. Any "problem" that a designer addresses via aesthetics is necessarily ill-defined, elusive, and subjective. For example, to say that a particular product is "ugly" or "looks cheap" does not identify a specific problem in any meaningful way, such that a hypothetical designer exercising ordinary skill could point to an "obvious solution" to make the product appear more attractive or expensive. Given the subjectivity of aesthetics, ten designers may form ten different yet valid opinions as to why the product looks ugly or cheap. Likewise, all ten designers may hold different yet valid opinions about how the product's design could be modified to make the product more appealing.

In a sense, the designer who re-designs an existing product to make it more attractive creates both the problem and solution simultaneously. Whatever design feature he or she adds to make the product more appealing has now become the solution. The prior absence of that feature may now be identified, in retrospect, as the "problem." Accordingly, it would be meaningless to conclude that any design would have been "obvious" when no objective and reasonably defined design goal or endpoint existed. All the designers whom we interviewed were perplexed by what the word "obvious" could mean in the design context, and none were able to propose a reasonable interpretation of the word. Similarly, the notion of an aesthetic design modification or combination of design features being "suggested" by prior art designs was nonsensical to the interviewees.

Like utility inventors, designers rely heavily on the prior art, always consulting and building upon the work of earlier designers. Here the analogy to Judge Rich's inventor's workshop breaks down, however. Because designers are not seeking to solve specific technical problems that have definite solutions, the scope of prior art that may be consulted by designers is boundless, and their inspiration to modify or combine may come from anywhere. Designers are not limited to consulting "analogous" prior art, as is hypothesized for the utility invention process.

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80. To reiterate, we use the word "design" to refer to the ornamental aspects of an article which are potentially protectable by a design patent. Design optimally involves a seamless merger of a product's functionality with its form, but the current design patent law does not appreciate or protect this duality.

81. See McCain Interview, supra note 53; Kemnitzer Interview, supra note 33 (expressing view that approach of rejecting designs over combinations of prior art is "fundamentally flawed").

82. Rossi/Spears Interview, supra note 54 (expressing the view that good design always draws on the work of pre-existing designs and looks to many sources for inspiration).

83. Compare utility patents, where a specific problem is being addressed and prior art must be "analogous" to be relied upon to show obviousness. Analogous arts are those in the
of one interviewee, designers exhibit a special form of Attention Deficit Disorder (ADD) when looking for design inspiration; they may "jump from flip phones to armadillos to lobster claws to forklift trucks."84

It is certainly common and useful for designers to consult the same or functionally related products for inspiration.85 However, designers routinely seek inspiration from designs far beyond those fairly considered "related" in any functional sense. Many designers regularly browse through photo books or other sources containing collections of designs, looking for prior design features to incorporate into their new designs, regardless of whether the designs are in any way related or analogous to the product they are presently designing. Some designers scan through any kind of prior art simply looking for "certain curves" they can use.86 Designers also look at competing products or the accessory market for inspiration.87

The design of a product must not detract from or impede the functionality or user experience of the product. Even though their sources of inspiration are unlimited, designers recognize that "the 'degree of freedom' dictated by a product's functionality (i.e., the extent to which a designer can modify the aesthetics of a product without interfering with its proper function) may constrain its design.88 For many products, however, substantial advances in manufacturing technology have lessened these design constraints. For example, the advent of space-age synthetic materials made feasible the manufacture of innumerable objects and shapes that otherwise would have been exceedingly difficult, if not impossible (e.g., intricately molded plastic glasses and bottles, medical supplies, or cell phone housings).

Technology advances have particularly increased the degree of freedom available in designing electronics. For example, electronics such as radios once had to house many complex and bulky circuits, transistors, mechanical

same field of endeavor, or reasonably pertinent to the problem faced by the inventor. See In re Antle, 444 F.2d 1168, 1171-1172 (C.C.P.A. 1971).

84 Kemnitzer Interview, supra note 33.

85 See Rossi/Spears Interview, supra note 54 (discussing an example of a designer charged with designing a new fire helmet, and consulting the designs of various helmets and headwear created for purposes entirely unrelated to fire safety, such as bike helmets).

86 McCain Interview, supra note 53.

87 Woodring Interview, supra note 37 (stating that competitive research can be a very useful source of inspiration for designers). Woodring further noted that accessories sold for products can often reveal deficiencies in the functional aspects of the products themselves. Id. For example, sales of non-slip adhesive stickers to be placed on the floor of a bath tub reveals a flaw in the bath tubs themselves, namely, that they do not adequately protect against slipping. Id. As a more aesthetically driven example, the existence of aftermarket decorative decals or "skins" for portable electronics may indicate that consumers would respond well to including surface ornamentation on the electronic product itself.

88 McCain Interview, supra note 53; Viemeister Interview, supra note 25 (comparing the limited scope of variation available when modifying a scroll on a spoon with the greater scope of variation possible when designing a cellular telephone); see infra Part IV for an examination of the European Union's approach to a designer's degree of freedom.
switches, visual indicators, and vacuum tubes. The functional requirements for these elements effectively dictated the size, proportions, and placement of many components in the electronics product, which in turn substantially limited the degree of freedom with which designers could impact the product's appearance. Today, many of the former bulky components have been replaced with compact microchips, integrated circuits, LCD screens, and the like. These much smaller and more streamlined components can be easily rearranged, giving today's designers wide latitude to design many types of electronics as they please.

Even when working within a restrictive degree of freedom, designers can often create fairly complex designs. It can be "simple to make a design complex, and complex to make a design simple." As an example of the former, the complex mechanical configuration of inventor Elias Howe's sewing machine imposed substantial limits on the contours and proportions of the machine's external appearance. Howe hired an artist to "stylize" the sewing machine by adding filigree roses to the ironwork. This styling complicated the appearance of the product, and yet involved little maneuvering around the functional constraints of the sewing machine.

The more complex and challenging task is to optimally merge form and function by simplifying a product's appearance via "reduction to essentials." As Raymond Loewy explained, this modern design philosophy posits that "[w]hen every component part has been stripped down to its simplest form, every duplication ruled out, projections and asperities reduced or eliminated, colors and textures simplified, the result is bound to be aesthetically correct." Successful simplification is far more difficult than adding superfluous ornamentation to a product. For example, Apple's iPhone houses numerous high-tech, interconnected, and delicately configured components, all of which must work together in minimal space with maximum efficiency. In view of these technical challenges, it was

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89 See Woodring Interview, supra note 37 (observing that electronics and technological developments have made possible greater freedom in the design process, allowing engineers to adapt products and make them fit with a given design, in contrast with designer's earlier subservience to engineers).
90 Id.
91 Id.
92 Id.
93 Id.
94 LOEWY, supra note 74, at 211. Loewy also clarified that "[f]or the sake of the record and to avoid possibilities of misunderstanding and misquotation, let me state once more that I am all in favor of the 'beauty through function' theory. However, I would like to alter it to 'beauty through function and simplification.'" Id.; see also DREYFUSS, supra note 67, at 240 ("I have the temerity to suggest that, by reducing objects to simple, unobtrusive forms, by relieving them of absurd and excessive decoration, by using appropriate colors and textures, and by avoiding obtrusive noises, we contribute to the serenity of those who use them. That is what we try to do.").
considerably complex and difficult to endow the iPhone with an appearance that is simple, streamlined, and sleek.95

The innovative design of Apple's iPhone is lauded around the world for its elegant simplicity. Paradoxically, the more simple a design for a new product, the more likely that it will be viewed as a minor improvement or "obvious variation" over the prior art.96 Because of this double-edged sword, some designers perceive the present design patent system as punishing the best designs by rejecting them as "obvious."97

Whether a design is worthy of patent protection is, at best, a highly subjective question. None of the designers whom we interviewed were comfortable giving us a definitive test or metric for analyzing the issue. The interviewees conceded that it is very difficult to decide what they themselves believe should be patentable.98 However, all agreed that the degree of freedom available to the designer is relevant to the inquiry.99 The adaptation or addition of prior art design features onto a new object having different degrees of freedom was generally viewed as worthy of protection.100 For example, Apple's design guru Jonathan Ive, who is responsible for the designs of such highly acclaimed products as the iMac and the iPod, drew heavily on the work of 1960s Braun designer Dieter Rams.101

95 Woodring Interview, supra note 37. It is important to clarify that when we discuss the substantial "complexity" involved in making the iPhone design simple, most of the complexity was presumably on the functionality side of the "design" process, even though the intended simple aesthetic result is surely what dictated the efforts of the engineers and programmers.
  96 Id.
  97 Id.
  98 See, e.g., Viemeister Interview, supra note 25; Kemnitzer Interview, supra note 33.
  99 See, e.g., Viemeister Interview, supra note 25; McCain Interview, supra note 53.
  100 See, e.g., Viemeister Interview, supra note 25; McCain Interview, supra note 53.
In these examples, the degree of freedom differed considerably between the Braun and Apple products. One key distinction is that the housing of acoustic speakers is influenced by certain size and space requirements, and needs particular supporting means, electric connections, and power supplies, all of which greatly differ from those for graphical interfaces such as LCD screens. Here, Ive's borrowing of a basic design concept and adapting it to a device having different functional requirements and limitations is generally viewed to be laudable.

The designers we interviewed generally felt that they should be encouraged to borrow, adapt, and combine prior design features in their own original way. In their view, this would lead to new and better designs. By

102 Viemeister Interview, supra note 25; McCain Interview, supra note 53; Kemnitzer Interview, supra note 33; Rossi/Spears Interview, supra note 54; see Woodring Interview, supra note 37.
contrast, outright copying of an entire design, even with *de minimis* changes, was generally not viewed as warranting protection.  

Design nonobviousness should be assessed from a perspective consistent with the realities of the design process. Current law applies the perspective of a "designer of ordinary skill who designs articles of the type involved." The concept of an "ordinary designer" was generally perceived by our designer interviewees to be nonsensical, if not offensive. Moreover, the legal construct of an "ordinary designer" is based on a fundamentally flawed assumption. Many designers, unlike inventors such as mechanics or chemists, do not specialize in designing any particular type of article.

Approximately half of the members of the Industrial Designers Society of America (IDSA) are design consultants who work on designs for a wide variety of products, as needed by their clients. Most of the remaining members are in-house designers for corporations, whose work is more focused on particular types of articles. In the case of a design patent application directed to a chair, for example, is the proper "ordinary designer" the in-house designer who works for a chair company or the consultant who may design chairs only occasionally? Both types of designers play equally valuable roles, yet the existing legal standard recognizes only one.

Although the "ordinary designer" perspective made little sense to them, an "ordinary observer" perspective generally squared well with all of our interviewees. Some designers we interviewed acknowledged that consumers are not always the most discerning or understanding of the subtleties of the design process. Nevertheless, they all agreed that given designers' paramount focus on the visual impressions conveyed by their designs, the perspective of the consumer—the targeted observer and intended user—is ultimately the best perspective from which to measure

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103 See Viemeister Interview, supra note 25 (expressing view that designers should not be allowed to blatantly copy, but they should be allowed to improve on what other designers have done; agreeing that incremental innovation in design is important).


105 Kemnitzer Interview, supra note 33 (expressing view that trying to define a "designer of ordinary skill" is an inherently fuzzy issue, "a great big furball"); see Viemeister Interview, supra note 25 (noting that designers as artists are not homogeneous, and posing the question, "was Picasso an ordinary artist?").

106 Woodring Interview, supra note 37; see also Industrial Designers Society of America (IDSA) Fact Sheet, INDUS. DESIGNERS SOC'Y OF AM. (Aug. 6, 2010, 11:04 AM), http://idsa.org/content/content/industrial-designers-society-america-idsa-fact-sheet ("As of July 2010, IDSA's total membership is over 2,300. An estimated 49 percent work in consultancies, 40 percent work in corporate offices and 10 percent work as educators.").

107 Woodring Interview, supra note 37.

108 Viemeister Interview, supra note 25; see Woodring Interview, supra note 37.
whether a design successfully makes a meaningful contribution over the prior art.\textsuperscript{109}

The nonobviousness requirement as currently applied to designs does not accurately reflect the realities of the creative processes and objectives involved in design. Rather, the excessive rigor and utilitarian focus of the nonobviousness requirement operates to discourage designers from engaging in their typical creative processes, effectively hindering the progress of the decorative arts. The next Part, which traces the strained development of design patent legislation as a neglected byproduct of the utility patent system, confirms what our designer interviewees intuitively grasped: that policymakers have yet to devote adequate attention to the fundamental differences between designs and utility inventions.

II. THE DISCORDANT DEVELOPMENT OF INDUSTRIAL DESIGN AND U.S. DESIGN PATENT LEGISLATION

This Part critically examines the historical development of the U.S. design patent statutes, focusing particularly on the legislative evolution of the nonobviousness requirement. Our inquiry revealed that nonobviousness (or its predecessor, the qualitative requirement for "invention") was originally imposed on design patentability through what appear to be mistaken and unintended changes to the statutory text. We map the awkward application of nonobviousness to designs against the backdrop of a sluggishly developed culture of American industrial design. We also survey the repeatedly unsuccessful proposals to enact a \textit{sui generis} legislative framework for design protection, independent of the patent system.

A. The Origins of Industrial Design in the United States

The earliest American manufacturers were individuals who made their own tools, weapons, harnesses, and clothing in order to survive. "Every farmer was his own mechanic, and every home was a manufactory in which adults and children worked together to serve their own needs."\textsuperscript{110} Although successful families sold or bartered their excess goods, making them visually appealing to purchasers was not of concern. Rather, the goal was survival and adaptation to frontier conditions.\textsuperscript{111} Beyond a few noticeable exceptions such as the silversmith and patriot Paul Revere,

\textsuperscript{109} See Woodring, Interview, \textit{supra} note 37; Viemeiser Interview, \textit{supra} note 25; Rossil Spears Interview, \textit{supra} note 54; Kemnitzer Interview, \textit{supra} note 33.

\textsuperscript{110} ARTHUR J. PULOS, \textit{AMERICAN DESIGN ETHIC: A HISTORY OF INDUSTRIAL DESIGN TO 1940}, at 5 (1983).

\textsuperscript{111} See \textit{id}.
colonial manufacture was limited to hand-made products that solved functional needs. Aesthetic appeal was not yet a conscious focus, despite the fact that "things made by hand unconsciously acquire a certain element of beauty."\textsuperscript{112}

The Industrial Revolution of the nineteenth century brought tremendous mechanical and communications innovation to the U.S., introducing inventions such as Whitney's cotton gin,\textsuperscript{113} Morse's telegraph,\textsuperscript{114} Howe's sewing machine,\textsuperscript{115} Bell's telephone,\textsuperscript{116} and Edison's incandescent light bulb.\textsuperscript{117} Moreover, goods that once required manual crafting could now be mass-produced by machine. The gains in production capacity also meant a loss of the beauty inherent in handmade products. Like their frontier forebears, manufacturers of mass-produced items simply did not concern themselves with aesthetics. Mass production techniques tamped down any earlier inclinations toward an appealing visual appearance:

\begin{quote}
The industrial revolution of the mid-nineteenth century had displaced the craftsman, and... engineers were really mechanics.... Will it work? was the question. No one gave a thought to cost and far less to appearance.... When mass production appeared on the scene, the country became flooded with products, usually of good quality but clumsily put together and wasteful of labor and materials.\textsuperscript{118}
\end{quote}

By the end of the nineteenth century, industrial technologies were transforming the U.S. economy, "but when a manufacturer produced a..."
machine that worked he stopped. It never occurred to him to go on and make his device pleasant to look at as well as efficient.”

Critics bemoaned the lack of aesthetic appeal in mass-produced products. The New York Times complained that “[a]long with the development of machines goes the progressive sterilization of individual activity; the artisan becomes a workman and the workman an ignorant tender of a machine.” Commentators warned Americans against trusting “the cheapness of machine-made goods,” demanding that goods must be “decidedly more attractive to the eye.” European manufacturers fought back against American success at mechanized cost-cutting by focusing on the artistic appearance of products, allowing the Europeans to charge higher prices.

Piracy, rather than creativity, marks the beginning of industrial design in America. No laws prevented the copying of a product’s ornamental appearance in early nineteenth-century America. Manufacturers were largely imitators of foreign design rather than creators of innovative domestic design. They were “too dependent upon imported inspiration to tolerate any interference with their practice of borrowing and putting out for sale any newly imported design, especially in the area of fabrics, as soon as it became or threatened to become popular.”

The U.S. manufacturers’ reputation for copying continued into the early twentieth century, when some European manufacturers refused to participate in the 1915 Panama-Pacific Exposition “for fear that their best ideas would be pirated by the Americans.” In the pre-World War I years, “the needs of American merchandisers and manufacturers for design in the industrial arts had been satisfied for the most part by the importation of products to be sold or copied and by the steady flow of skilled immigrants.”

When World War I began, U.S. manufacturers feared the loss of their best sources of design innovation—designs produced by foreign countries that had become enemy combatants.

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119 Calkins, supra note 112.
120 The French College of the Crafts, N.Y. Times, Sept. 18, 1902, at 8. With mechanization came “[t]he dwarfing of the individual in immense workshops where the workman is a laborer without knowledge, inventiveness, or character . . . .” Id. “[E]ventually the machine-made articles of a land will deteriorate and lose their selling quality unless along with them goes an output of work by individual minds, trained in workshops where they can express their artistic thought and feeling.” Id. “It is strange that . . . the United States should be so sluggish to provide centres of instruction in the arts and crafts.” Id.
122 See id. at 242-43.
123 Id. at 134.
124 Id. at 260.
125 Id. at 264.
126 Id. (As World War I went on, “Americans were chafing because their own sources of products and design had been interrupted and even halted.”).
B. The Impetus for Design Protection Legislation in the United States

Despite concern about unchecked design piracy on the part of American manufacturers, the United States was not the first nation to implement legislation that would protect and reward innovative designs. Suffering from its own domestic piracy concerns, Great Britain took the lead in addressing the problem by enacting design protection legislation in 1839. The British initially made design protection part of their copyright system. Parliament implemented “An Act to secure to Proprietors of Designs for Articles of Manufacture the Copyright of such Designs for a limited Time” on June 14, 1839. The act created a registration system to protect “the Authors and Proprietors” of “new and original Design[s]” for “Articles of Manufacture,” providing a one-year term of protection for fabric designs and a three-year term of protection for designs on articles made of metal. As a part of Britain’s copyright regime, the act did not include any requirement for “invention” as a prerequisite to protection.

Despite the relative paucity of original design work in the United States at this time, American manufacturers watched the developments in Britain and began to demand analogous protection for their own original designs, including fabric patterns. Trade between the United States and Great Britain undoubtedly contributed to the American manufacturers’ campaign for design protection legislation. The flow of goods between the two countries “was so interlaced that any legal action taken by one country to protect the original design of its products must certainly lead to reciprocal moves on the part of the other.”

On February 3, 1841, the U.S. Congress received a “Petition of [a] Number of Manufacturers and Mechanics of the United States, Praying [t]he adoption of measures to secure to them their rights in patterns

127 An Act to secure to Proprietors of Designs for Articles of Manufacture the Copyright of such Designs for a limited Time, 1839, 2 & 3 Vict., c. 17 (Eng.).
129 See An Act to secure to Proprietors of Designs for Articles of Manufacture the Copyright of such Designs for a limited Time, 1839, 2 & 3 Vict., c. 17 (Eng.) (silent as to patent protection for designs).
130 PULOS, supra note 110, at 134.
and designs." The signatories, including the inventor Jordan L. Mott, informed Congress that

> the frequent ornamental and other improvements which are and can be made in articles of manufacture have rendered necessary a registration of new designs and patterns; that ornamental and useful changes can, in many cases, be made in the design and form of articles of manufacture, for which no patent can be obtained; that the said new designs and patterns often require a considerable expenditure of time and money, and can be made use of by any person so disposed, in such a manner as to undersell the inventor or proprietor.

Although the petition referred to the lack of patent protection for designs, it is notable that its authors did not seek to protect their work within the patent system. Rather, they explicitly sought a system of "registration."

The request for a registration system outside the realm of patents is consistent with the British copyright legislation, which the American petitioners observed had gone into effect on July 1, 1839, "to secure such rights as your petitioners claim."

The petitioning manufacturers and mechanics emphasized U.S. achievements in utilitarian manufactures, but conceded that the United States was not yet a prominent source of aesthetic innovation. However, the petitioners contended that the visual appearance of their products would soon match the beauty of foreign goods if appropriate legal protection became available:

> [T]he manufacturers and mechanics of the United States are not surpassed by those of any other country, in the durability and utility of the articles manufactured by them; and they confidently affirm that the articles manufactured by them would equal any others in beauty, if new designs and patterns were secured by registration.

131 Petition of a Number of Manufacturers and Mechanics of the United States, Praying the Adoption of Measures to Secure to Them Their Rights in Patterns and Designs, S. Doc. No. 154, at 1 (2d Sess. 1841) [hereinafter Petition].


133 Petition, supra note 131, at 1.

134 Id.

135 Id.
Accordingly, the petitioners requested passage of an act, by which the rights of proprietors of new designs and patterns may be protected from piracy, and may be secured in a safe, cheap, and expeditious manner, to the end that the manufacturers and mechanics of the United States may be enabled fully to compete with those of any other country.136

The 1841 petition was “[r]eferred to the Committee on Patents and the Patent Office.”137 In retrospect it is unfortunate that design protection jurisdiction was conferred on the U.S. patent system, but not surprising. The petitioners’ primary advocate and champion was the Commissioner of Patents, Henry Ellsworth. In his annual report to the Senate “[s]howing the operation of the Patent Office during the year 1841,”138 Commissioner Ellsworth included the following recommendation: “The justice and expediency of securing the exclusive benefit of new and original designs for articles of manufacture, both in the fine and useful arts, to the authors and proprietors thereof, for a limited time, are also respectfully presented for consideration.”139

Notably, the Commissioner recommended a copyright-type system of registration for the “authors and proprietors” of “new and original” designs.” The remainder of Ellsworth’s remarks elaborated:

Other nations have granted this privilege, and it has afforded mutual satisfaction alike to the public and to individual applicants. Many who visit the Patent Office learn with astonishment that no protection is given in this country to this class of persons. Competition among manufacturers for the latest patterns prompts to the highest effort to secure improvements, and calls out the inventive genius of our citizens. Such patterns are immediately pirated, at home and abroad. A patent [sic, pattern] introduced at Lowell, [Massachusetts], for instance, with however great labor or cost, may be taken to England in twelve or fourteen days, and copied and returned in twenty days more. If protection is given to designers, better patterns will, it is believed, be obtained, since the impossibility of concealment at present forbids all expense that can be avoided. It may well be asked, if authors can so readily find protection in their labors, and inventors of the mechanical arts so easily secure a patent to reward their efforts, why should not discoverers of designs, the labor and expenditure of which may be far greater, have equal privileges afforded them?

The law, if extended, should embrace alike the protection of new and original designs for a manufacture of metal or other material, or any new and useful design for the printing of woollen, silk, cotton, or other fabric, or for

136 Id. at 1–2.
137 Id. at 1.
139 Id. at 2.
a bust, statue, or bas-relief, or composition in alto or basso relievo. All this could be effected by simply authorizing the Commissioner to issue patents for these objects, under the same limitations and on the same conditions as govern present action in other cases. The duration of the patent might be seven years, and the fee might be one half of the present fee charged to citizens and foreigners respectively.\footnote{140}{Id.}

Commissioner Ellsworth’s recommendations to Congress are noteworthy in several respects. First, Ellsworth viewed the “discoverers of designs” as a category of innovators distinct from both “authors” and “inventors of the mechanical arts.” Second, Ellsworth proposed granting patents on designs. But his language suggests that patents were relatively easy to obtain in 1841.\footnote{141}{See id. (asking why designers should not receive legal protection when “inventors of the mechanical arts so easily secure a patent to reward their efforts”).} The U.S. Patent Office was created in 1836,\footnote{142}{See Patent Act of 1836, ch. 357, 5 Stat. 117 (establishing within the Department of State “an office to be denominated the Patent Office”).} but it was not until 1851 that the Supreme Court in Hotchkiss v. Greenwood (the famous “doorknob case”) verbalized “invention” as a third patentability criterion, i.e., as a legal requirement that a patent-worthy invention must exhibit something more than novelty and utility.\footnote{143}{Hotchkiss v. Greenwood, 52 U.S. (11 How.) 248, 265-66 (1851).}

Ellsworth’s 1842 report contemplated that the sole requirements for design patent protection would be “new and original” designs, in contrast with the “new and useful” criteria then mandated by statute for utility patents.\footnote{144}{See REPORT FROM THE COMMISSIONER OF PATENTS, SHOWING THE OPERATION OF THE PATENT OFFICE DURING THE YEAR 1841, S. Doc. No. 169, at 2 (2d Sess. 1842); cf. Patent Act of 1836, ch. 357, 5 Stat. 117, 119 (“[A]ny person or persons having discovered or invented any new and useful art, machine, manufacture, or composition of matter . . . . may make application in writing to the Commissioner of Patents. . . . [who], on due proceedings had, may grant a patent therefor.”).} His suggestion that design patents could be issued “under the same limitations and on the same conditions as govern present action in other cases” does not suggest anything particularly onerous for designs.\footnote{145}{REPORT FROM THE COMMISSIONER OF PATENTS, SHOWING THE OPERATION OF THE PATENT OFFICE DURING THE YEAR 1841, S. Doc. No. 169, at 2 (2d Sess. 1842).} Further, Ellsworth’s use of copyright terminology (i.e., “original”) suggests that he did not intend for designs to meet the identical patentability requirements imposed on utility inventions.

Congress enacted design protection legislation in the following year. But what American manufacturers ultimately received was not the “cheap and expeditious”\footnote{146}{PETITION, supra note 131, at 1-2.} system of piracy protection for which they had petitioned Congress in 1841. Rather, the square peg of design was forced into the round hole of the utility patent system with its associated complexities.
and costs, where it remains today. Design protection was placed within the Patent Office in 1842 simply for political expedience and administrative convenience; no other suitable alternatives existed at the time.\textsuperscript{147}

Thomas Hudson posits three reasons for Congress’ placing design protection under the patent system rather than copyright:

(1) The nature of the subject matter involved—that is, designs of articles of manufacture—included underlying manufactured articles of commerce as distinguished from “purely intellectual products” such as writings, maps, charts, and the like;

(2) The source of the original suggestion for the design protection law, and its basic form, came from the Commissioner of Patents, Henry Ellsworth; and lastly,

(3) The practical fact that in 1842 no central copyright depository existed. At that time, copies of works to be copyrighted were deposited with the clerk of the appropriate U.S. District Court.\textsuperscript{148}

Regardless of the propriety or precise motivations underlying Congress’s actions, designs have remained firmly rooted in the U.S. patent system from the time Congress enacted the inaugural design patent legislation to the present day.


Congress enacted the first U.S. design patent legislation on August 29, 1842. The statute provided that

any citizen or citizens, or alien or aliens, having resided one year in the United States and taken the oath of his or their intention to become a citizen or citizens who by his, her, or their own industry, genius, efforts, and expense, may have invented or produced any new and original design for a manufacture, whether of metal or other material or materials, or any

\textsuperscript{147} See Brean, supra note 34, at 326–27.


The first U.S. copyright statute implemented deposit of copyrighted works with U.S. District Court clerks. See 8 Melville B. Nimmer & David Nimmer, \textit{Nimmer on Copyright} app. 7, at 7-41 (2009) (reprinting of Copyright Act of May 31, 1790, ch.15, § 3, 1 Stat. 124) (“[N]o person shall be entitled to the benefit of this act, in cases where any map, chart, book or books, hath or have been already printed and published, unless he shall first deposit, and in all other cases, unless he shall before publication deposit a printed copy of the title of such map, chart, book or books, in the clerk's office of the district court where the author or proprietor shall reside . . . .”). The Copyright Act of 1909 changed this procedure by requiring that the copies be deposited in the Copyright Office. See Copyright Act of 1909, Ch. 320, § 12, 35 Stat. 1075, 1078. See also Julie E. Cohen et al., \textit{Copyright in a Global Information Economy} 146 (3d ed. 2010) (overviewing evolution of copyright formalities, including deposit requirements); id. (“The first significant changes to the formalities required by copyright law occurred with passage of the Copyright Act of 1909.”).
new and original design for the printing of woollen, silk, cotton, or other fabrics, or any new and original design for a bust, statue, or bas relief or composition in alto or basso relievo, or any new and original impression or ornament, or to be placed on any article of manufacture, the same being formed in marble or other material, or any new and useful pattern, or print, or picture, to be either worked into or worked on, or printed or painted or cast or otherwise fixed on, any article of manufacture, or any new and original shape or configuration of any article of manufacture not known or used by others before his, her, or their invention or production thereof, and prior to the time of his, her or their application for a patent therefor, and who shall desire to obtain an exclusive property or right therein to make, use, and sell and vend the same, or copies of the same, to others, by them to be made, used, and sold, may make application in writing to the Commissioner of Patents expressing such desire, and the Commissioner, on due proceedings had, may grant a patent therefor, as in the case now of application for a patent: Provided, That the fee in such cases which by the now existing laws would be required of the particular applicant shall be one half the sum, and that the duration of said patent shall be seven years, and that all the regulations and provisions which now apply to the obtaining or protection of patents not inconsistent with the provisions of this act shall apply to applications under this section.  

Careful parsing of the 1842 Act is revealing. The statute contemplated protection for anyone who “may have invented or produced any new and original design for a manufacture.” The process of creating a patentable design required either “invent[ion]” or “produc[ion].” Although subsequent judicial decisions routinely interpreted the design patent statute as requiring “invention” for design patentability (along with novelty, originality, and ornamentality), such decisions misread the 1842 Act.

Several reasons support the conclusion that the first U.S. design statute did not contemplate anything more than novelty and originality as prerequisites to design patentability. First, the plain language of the statute contemplated that design patent applicants had either “invented” or “produced” their claimed designs. Congress’s use of the disjunctive “or” indicates that new designs might result alternatively from a process of “invention” or a process of “production.” In either case, the resulting design could still be deemed a novel and original creation by the applicant (who was, at that time, probably a mechanic or craftsman). Further, the plain meaning of “produced” suggests a far lesser quantum of ingenuity

150 Id. (emphasis added).
151 Id. at 544.
152 See infra Part III (describing case law development).
153 “Industrial design” did not develop as a recognized profession separate from manufacturing and engineering, and “designers” were not distinguished from manufacturers or engineers, until the twentieth century. See infra notes 207-214 and accompanying text.
than "invented."\textsuperscript{154} Statutory recognition that patentable designs could be "produced" indicates that a new design was protectable so long as it was somehow made or brought into existence by the applicant.\textsuperscript{155} In any event, inclusion of the word "or" refutes the interpretation that Congress intended designs to meet a qualitative criterion of "invention" in order to merit patent protection.

Second, it is unlikely that Congress intended the first design patent statute to include a requirement for invention when the utility patent statute in force at that time did not do so. The Patent Act of 1836\textsuperscript{156} (as modified in 1839 to provide a two-year pre-filing grace period\textsuperscript{157}) provided that patents would be granted to those who had "discovered or invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement [thereof]."\textsuperscript{158} To be sure, utility patents were granted on new and useful "discoveries or invention[s]," echoing the words used in the Constitution.\textsuperscript{159} But "discoveries or inventions" were merely the things conceived by utility patent applicants. The courts and the Patent Office did not divine that the word "invention" referred not just to a thing, but also to a qualitative standard or requirement of patentability, until the Supreme Court's 1851 decision in Hotchkiss.\textsuperscript{160} This something-

\textsuperscript{154} See Noah Webster, An American Dictionary of the English Language 643 (New York, Harper & Brothers, rev. ed. 1846), available at http://books.google.com/ (search "Researching a Topic" for "1846 Noah Webster, An American Dictionary of the English Language"; follow the first hyperlinked result) (defining the verb "produce" as meaning 1. To bring forward; to bring or offer to view or notice. . . . 5. To cause; to effect; to bring into existence. . . . 7. To make; to bring into being or form. 8. To yield or furnish. . . . In general, to bring in to existence or into view."); id. at 466 (defining the verb "invent" as meaning 1. To find out something new; to devise something not before known; to contrive and produce something that did not before exist. . . . ).

\textsuperscript{155} See id. at 643 (defining the verb "produce").


\textsuperscript{158} Patent Act of 1836, ch. 357, § 6, 5 Stat. 117, 119. The statutory term "art" was understood to mean "process" or "method." When the patent laws were reenacted in 1952, Congress changed "art" to "process." See 35 U.S.C. § 100(b) (2006) ("The term 'process' means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material."); Diamond v. Diehr, 459 U.S. 175, 182 (1982) ("The Patent Act of 1793 defined statutory subject matter as 'any new and useful art, machine, manufacture or composition of matter, or any new or useful improvement [thereof].' The Act of Feb. 21, 1793, ch. 11, § 1, 1 Stat. 318. Not until the patent laws were recodified in 1952 did Congress replace the word 'art' with the word 'process.'").

\textsuperscript{159} See U.S. Const., art. I, § 8, cl. 8.

\textsuperscript{160} See Hotchkiss v. Greenwood, 52 U.S. (11 How.) 248, 266 (1851); Graham v. John Deere Co., 383 U.S. 1, 11 (1966) ("The language in the [Hotchkiss] case, and in those which followed, gave birth to 'invention' as a word of legal art signifying patentable inventions."); S. Rep. No. 82-1979 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2410-11 ("The refusal of patents by the Patent Office, and the holding of patents invalid by the courts, on the ground of lack of invention . . . has been followed since at least as early as 1850.").
beyond-novelty criterion was not explicitly codified in the patent statutes for more than a hundred years thereafter, when 35 U.S.C. § 103 added "nonobviousness" to the utility requirement of § 101 and the novelty requirement analyzed under § 102.\textsuperscript{161}

Third, the 1842 Act language providing that "all the regulations and provisions which now apply to the obtaining or protection of patents not inconsistent with the provisions of this act shall apply to applications under this section" does not compel a contrary conclusion. This language cannot have imposed an "invention" requirement for designs in 1842 because no such requirement existed at the time for utility inventions. The Supreme Court did not recognize an "invention" test until 1851.\textsuperscript{162} Even assuming for the sake of argument that lower court decisions recognized a requirement for invention as early as 1842, imposing it on design patents would have been "inconsistent with the provisions of this act," i.e., the design patent provisions, in view of the text and plain meaning of those provisions.

The 1842 Act's provision of protection for anyone who "may have invented or produced any new and original design for a manufacture"\textsuperscript{163} was

\textsuperscript{161} See Graham, 383 U.S. at 15 ("It is undisputed that this section [103] was, for the first time, a statutory expression of an additional requirement for patentability, originally expressed in Hotchkiss."); S. Rep. No. 82-1979 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2410-11 ("There is no provision corresponding to the first sentence [of § 103] explicitly stated in the present statutes, but the refusal of patents by the Patent Office, and the holding of patents invalid by the courts, on the ground of lack of invention ... has been followed since at least as early as 1850. This paragraph is added with the view that an explicit statement in the statute may have some stabilizing effect, and also to serve as a basis for the addition at a later time of some criteria which may be worked out. The second sentence [of § 103] states that patentability as to this requirement is not to be negatived by the manner in which the invention was made, that is, it is immaterial whether it resulted from long toil and experimentation or from a flash of genius."); P.J. Federico, Commentary on the New Patent Act, 35 U.S.C.A. § 1 (1954) (discontinued in subsequent volumes), reprinted in 75 J. Pat. & Trademark Off. Soc'y 161, 163 (1993) ("It has been recognized for well over a hundred years that not everything which is new is capable of being patented. The newness, that is the difference over what was previously known, must be sufficient in character, or in quantity, or in quality, in order that the new thing may be patented. This requirement has commonly been referred to as the requirement for the presence of invention; when the requirement is not present it is stated that the subject matter involved lacks invention. ... The inventor may indeed have made an invention in the psychological sense, but it would nevertheless not be patentable if the quantum of novelty over the prior art material ... was not sufficient. This requirement for invention with which we are here concerned is more of a legal concept than a psychological one.").

\textsuperscript{162} See Hotchkiss, 52 U.S. (11 How.) at 266-67.

repeated in the Patent Act of 1861,\textsuperscript{164} as well as the Patent Act of 1870.\textsuperscript{165} Thus, in two successive amendments of the design statutes, Congress retained the same disjunctive treatment of patentable designs as resulting from either “invent[ing] or “produc[ing].” Congress changed “or” to “and” in 1874, but this change was most likely an unintended typographical error, as explained below.

As part of a larger project to reorganize and reenact all federal statutes, Congress in 1874 reenacted the then-existing statutes from the Patent Act of 1870.\textsuperscript{166} The design patent provisions from the 1870 Act became Sections 4929 to 4933 of the Revised Statutes of the United States.

\textsuperscript{164} Patent Act of 1861, ch. 88, 12 Stat. 246. The 1861 Act is notable for changing the term of a design patent. As originally conceived in the 1842 Act, design patents had a fixed term of seven years. See Patent Act of 1842, ch. 263, § 3, 5 Stat. 543, 544 (“[T]he fee in such cases which by the now existing laws would be required of the particular applicant shall be one half the sum, and that the duration of said patent shall be seven years . . . .”) The 1861 Act implemented a unique system in which the applicant elected a term for his design patent; no maintenance fees were charged for any term. The statute provided that the Commissioner could grant design patents “for the term of three and one half years, or for the term of seven years, or for the term of fourteen years, as the said applicant may elect in his application: Provided, [t]hat the fee to be paid in such application shall be, for the term of three years and six months, ten dollars, for seven years, fifteen dollars, and for fourteen years, thirty dollars . . . .” Patent Act of 1861, § 11. This unusual system of term election by the applicant would remain in force until 1982, when the design patent term was changed to its current term of fourteen years from grant. Patent Act of 1982, Pub. L. No. 97-247, § 16, 96 Stat. 317, 321. The 1861 Act also provided that issued design patents were entitled to a seven-year extension under same terms then applicable for extensions of utility patents. Patent Act of 1861 § 11. Lastly, the 1861 Act is notable for establishing the term of utility patents as seventeen years from issue, Patent Act of 1861, § 16, which term remained in effect until changed by the Uruguay Round Amendments Act of 1994. See Pub. L. No. 103-465, § 532, 108 Stat. 4809, 4983-85 (1994) (codified as amended at 35 U.S.C. § 154(a)(2) (2006)) (implementing the current utility patent term, under which protection expires twenty years after a patent application’s earliest effective filing date).

\textsuperscript{165} The 1870 Act provided that

“any person who, by his own industry, genius, efforts, and expense, has \textit{invented or produced} any new and original design for a manufacture . . . .

the same not having been known or used by others before his \textit{invention or production} thereof, or patented or described in any printed publication, may, upon payment of the duty required by law, and other due proceedings had the same as in case of inventions or discoveries, obtain a patent therefor.”


\textsuperscript{166} See S. Rep. No. 82-1979 (1952), \textit{reprinted in} 1952 U.S.C.C.A.N. 2394, 2395 (“[T]he sections of the Revised Statutes relating to patents were merely a compilation of the act of July 8, 1870, 16 Stat. 198 . . . .”); see also Mox, supra note 9, § 1:21 (“The [Patent] Act of 1870 was based on a draft prepared by the Commissioners assigned to revise the federal statutes generally, and formed the basis for the patent-related sections in the revised statutes when Congress enacted the latter in 1873-74.” (citation omitted)).
The Revised Statutes sections were intended as “merely a compilation of the act of July 8, 1870...” Nevertheless, and without any explanation, the phrase “invented or produced” from the 1870 Act was changed to “invented and produced” in the 1874 Revised Statutes. Section 4929 of the Revised Statutes provided:

Any person who, by his own industry, genius, efforts, and expense, has invented and produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief; any new and original design for the printing of woolen, silk, cotton, or other fabrics; any new and original impression, ornament, patent, print, or picture to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture, the same not having been known or used by others before his invention or production thereof, or patented or described in any printed publication, may, upon payment of the fee prescribed, and other due proceedings had the same as in cases of inventions or discoveries, obtain a patent therefor.

No legislative history explains the change from the disjunctive “or” in the 1870 Act to the conjunctive “and” in the 1874 Revised Statutes. The change was most likely inadvertent and not intended to import “invention” as a qualitative test or requirement for patentability of designs. First, the Revised Statutes were not intended to make substantive changes to the patent laws. Second, it is telling that in the 1874 version of § 4929, the word “or” is retained in the phrase “the same not having been known or used by others before his invention or production thereof.” Had Congress intended to change “or” to “and,” it is reasonable to assume that Congress would have applied that change consistently throughout § 4929. It did not. Third, an 1882 Supreme Court decision sustaining the validity

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167 See Revised Statutes of the United States 1873-1874, §§ 4929-4934, at 954 (Gov’t Printing Office, 2d ed. 1878) [hereinafter Revised Statutes (1874)]. The cited volume includes “Title LX. Patents, Trade-Marks, and Copyrights.” Id. at 945. Chapter One is titled “Patents,” and includes § 4883 to § 4936. Id. The design patent sections are § 4929 to § 4934. Id. See also Hudson, supra note 148, at 381 (“The laws relating to design patents, in force on June 22, 1874, formed § 4929 to § 4934 of the Revised Statutes of the United States, adopted and approved as law by Congress on [June 22, 1874].”).

168 S. Rep. No. 82-1979 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2395 (The legislative history of the 1952 Patent Act stated, “[s]ince the sections of the Revised Statutes relating to patents were merely a compilation of the act of July 8, 1870, 16 Stat. 198, our present patent law is essentially the act of 1870 with subsequent amendatory and supplemental enactments.”); see also id. at 2396 (“When the Revised Statutes, as in force on December 1, 1873, were enacted on June 22, 1874, the sections of the act of 1870 were distributed in various parts of the Revised Statutes.”).

169 Revised Statutes (1874), supra note 167, § 4929 (emphases added).

170 See S. Rep. No. 82-1979 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2395 (“[T]he sections of the Revised Statutes relating to patents were merely a compilation of the act of July 8, 1870 . . . .”).
of a design patent issued in 1875 makes no mention of any "invention" requirement. Rather, the Court observed that

[t]he design patented by the complainants differs essentially from any other which has been called to our attention. It is not covered by the other patents which are set out in the record. Whether it is more graceful or beautiful than older designs is not for us to decide. It is sufficient if it is new and useful.\textsuperscript{171}

In 1902 Congress eliminated the "and produced" language completely, leaving no textual alternatives to the words "invented" and "invention." As amended, § 4929 provided:

Any person who has \textit{invented} any new, original, and ornamental design for an article of manufacture, not known or used by others in this country before his \textit{invention} thereof, and not patented or described in any printed publication in this or any foreign country before his \textit{invention} thereof, or more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law and other due proceedings had, the same as in cases of inventions or discoveries covered by section forty-eight hundred and eighty-six, obtain a patent therefor.\textsuperscript{172}

The minimal legislative history for the 1902 amendment of Revised Statutes § 4929 focuses on the reasons for substituting the word "ornamental" for "useful."\textsuperscript{173} No explanation is provided for the deletion of "and produced" and "production," as was also the case with the 1874 enactment of the same section that changed "invented or produced" to "invented and produced." Beyond explaining why insertion of the word "ornamental" was required, the April 1902 report of the Committee on Patents merely states that "[t]he bill proposes to amend [§ 4929] of the Statutes by striking out unnecessary language of the statute ...."\textsuperscript{174} The report further states that "[t]his his bill was

\textsuperscript{171} Lehnbeuter v. Holthaus, 105 U.S. 94, 96 (1882) (emphasis added). With respect to the "useful" criterion [then imposed on the fourth category of designs enumerated in \textit{Revised Statutes} (1874), supra note 167, § 4929], the Court remarked that "[t]he fact that [the design patent in suit] has been infringed by defendants, is sufficient to establish its utility, at least as against them." \textit{Lehnbeuter}, 105 U.S. at 96-97. Congress deleted "useful" from the statute and replaced it with "ornamental" in 1902. \textit{See infra} notes 173-74 and accompanying text.

\textsuperscript{172} Act of May 9, 1902, ch. 783, § 4929, Pub. L. No. 57-109 (emphasis added).

\textsuperscript{173} \textit{See} H.R. REP. No. 57-1661, at 1-2 (1902) (report from the Committee on Patents regarding bill to amend design patent statute). Conflicting judicial decisions defining what consideration should be given to the word "useful" as applied to design patents had "brought ... the Patent Office much contention and some confusion." The amendment was offered "[t]o avoid these difficulties and to make plain the distinction between mechanical patents, where 'utility' is an essential element, and design patents, where 'utility' has nothing to do with it, but where ornamentation is the proper element of consideration." \textit{Id.} at 2.

\textsuperscript{174} \textit{Id.} at 1 (The report submitted by the Committee on Patents to accompany H.R. 12807, after quoting then-in-effect text of \textit{Revised Statutes} (1874), supra note 167, § 4929,
Thus it appears that Congress in 1902 agreed with the Patent Office that retaining the words “produces” and “production” to accompany the words “invents” and “invention” was simply “unnecessary” and that “produces” and “production” should be eliminated as surplusage.

Whether intended or not, the ostensibly minor textual changes of the 1874 and 1902 legislation had major consequences for design patentability. Courts now had an arguably viable statutory basis for applying “invention” as a qualitative standard for patenting a design. Congress’s use of the conjunctive “and” in the phrase “invented and produced” of the 1874 Revised Statutes, followed by the elimination of “and produced” and consequent stand-alone use of the words “invented” and “invention” in the 1902 amendment (and subsequent amendments), gave the courts a convenient textual hook with which to conclude that patentable designs had to exhibit the ephemeral, something-beyond-novelty criterion of invention.

For example, in Smith v. Whitman Saddle Co., the Supreme Court in 1893 first imposed a qualitative “invention” requirement for design patents. The starting point for the Court’s opinion was a quotation of the 1874 Revised Statutes, which by including the “invented and produced” phrase appeared to make mandatory for design patentability a creative act rising to the level of “invention.” The Court provided no attribution for the source of the new invention requirement it imposed, leaving only

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175 Id. at 2.


178 For a detailed discussion of the facts and holding of Whitman Saddle, see infra Part III.

179 Whitman Saddle, 148 U.S. at 677.
the statutory “invented and produced” phrase to reasonably support its
decision.180

The Court of Customs and Patent Appeals (C.C.P.A.) later perpetuated
the Whitman Saddle analysis to conclude that a qualitative requirement for
“invention” had existed as a prerequisite for design patentability under
the 1874 Revised Statutes, as well as its later amendments.181 Referring
to the 1874 text, the C.C.P.A. opined in In re Faustmann that “since the
word ‘invented’ and the word ‘produced’ were connected by the word
‘and’ and not the word ‘or’ the existence of invention was required then
as now.”182 Like the Supreme Court in Whitman Saddle, the C.C.P.A. in
Faustmann failed to mention that the 1842, 1861, and 1870 design patent
statutes did not mandate that designs meet a qualitative requirement for
invention. Rather, these earlier statutes simply used “invention” as an
alternative to “production” in referring to the types of activity in which
designers engaged.

180 See id. at 677-78. Although it did not cite the case, the Whitman Saddle Court also
plainly intended to invoke the “ordinary mechanic” metaphor of Hotchkiss v. Greenwood, the
1851 Supreme Court decision that gave birth to the qualitative requirement of “invention”
for utility patents. See id. at 680-81 (comparing design patentee’s effort to an “exercise of the
ordinary skill of workmen of the trade”). The quoted phrase from Whitman Saddle echoes the
Hotchkiss Court’s comparison of a doorknob manufacturer’s effort with that of an “ordinary
mechanic acquainted with the business.” See Hotchkiss v. Greenwood, 52 U.S. (11 How.)
248, 267 (1850). The Hotchkiss Court introduced an “invention” standard for patentability of
mechanical innovation by holding that

unless more ingenuity and skill in applying the old method of fastening
the shank and the knob were required in the application of it to the
clay or porcelain knob than were possessed by an ordinary mechanic ac-
quainted with the business, there was an absence of that degree of skill
and ingenuity which constitute essential elements of every invention.
In other words, the improvement is the work of the skilful mechanic,
not that of the inventor.

Id. The Whitman Saddle Court’s use of the Hotchkiss “ordinary mechanic” metaphor un-
doubtedly stems from the assimilation of designs to mechanical inventions that pervades the
Whitman Saddle analysis. See infra Part III.A (discussing how the Whitman Saddle decision
treats designs as the product of mere mechanical construction).

181 See In re Faustmann, 155 F.2d 388, 393 (C.C.P.A. 1946) (referring to Revised Statutes
(1874), supra note 167, § 4929, as applied by the Supreme Court in Whitman Saddle, 148 U.S.
at 677-78). The court stated:

It will be noticed that the statute then read “invented and produced,”
whereas the statute at bar does not contain the word “produced.” But
since the word “invented” and the word “produced” were connected by the word
“and” and not the word “or” the existence of invention was required then as
now.

In re Faustmann, 155 F.2d at 393 (emphasis added).

182 Id.
D. Renewed Legislative Efforts Paralleled Emerging Schools of Industrial Design

By means of the preceding legislative progression, Congress (witlessly or not) raised the bar for design patent protection through statutory text changes, leading to judicial imposition of an “invention” requirement. American design innovation had not yet progressed so as to routinely satisfy the invention standard, however. Even at the turn of the 20th century, the United States lacked a robust domestic pool of aesthetic design talent. The invention of the automobile most clearly evidenced the problem. A 1902 New York Times editorial opined that many of the motor vehicles then on the market were “simply shocking in their grotesque ugliness, which contributes nothing to their utility and has no excuse.” These “costly vehicles” were “vastly uglier than the ordinary dump cart for dirt.”

As dissatisfaction with the quality of product design grew, so did concerns about the rigorous standard that Congress had set for its legal protection. Some designers “felt that originality in design did not pay because it was too difficult to get adequate protection for an innovative concept.” A “general demand developed for better design patents or for regulations that would give [better protection].” Manufacturers criticized the inadequacy of U.S. patent law as a weapon against design piracy, advocating the need for “a simple law of design patents or registration” that would give broader protection at lower costs.

By 1913, even the U.S. Patent Office admitted concerns about patents as the primary form of legal protection available for designs. Edward B. Moore, Commissioner of Patents at that time, advocated “an extension of the law to protect, in an adequate manner, property in industrial designs.”

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184 Id. The Times editorial remarked further that “[i]n the dump cart we recognize a fitness due to the relation of means to ends, which is eminently satisfactory; in the automobile which looks like an unfinished traction engine prematurely escaped from the machine shop no such relation is recognizable, for the good reason that it does not exist.” Id.
185 PuLos, supra note 110, at 260.
186 Id.
187 For Laws Against Design Piracy, Government Ready for Business Interests to Act, Says C.R. Clifford, N.Y. Times, Sept. 21, 1913, at X16 (reporting Clifford’s speech to Federation of Trade Press Associations of the United States, in which he called for cooperation and assistance in the drafting of legislation to remedy design piracy).
188 Vivian Burnett, Letter to the Editor, Pirating of Designs, N.Y. Times, May 12, 1913 (describing then-recent meeting in Washington, D.C., of Burnett with Edward B. Moore, Commissioner of Patents). Moore “gave [Burnett] permission to quote him as being sincerely in favor of an extension of the law to protect, in an adequate manner, property in industrial designs.” Id. Commissioner Moore “also expressed himself as hopeful of getting something definite done soon, provided those interested could unite and present a clean-cut and practical programme. On the mere mechanical point of handling the business he thought there would be no obstacles.” Id.
Thus began "nearly a century of earnest but unsuccessful attempts to implement industrial design legislation," separate and apart from the design patent system. Design registration bills were introduced in the U.S. Congress in 1916, 1924, in 1957, 1969 (as part of the Copyright Revision Bill), in 1980, and most recently in 1990. During this "long and winding road," the primary justification for the proposed legislation shifted from simply that of a moral imperative against piracy to the need for enhancing American competitiveness in the international marketplace. Nonetheless, while some of the bills came close to enactment, none ever became law. Commentators identify "politically powerful opposition by automobile spare parts manufacturers, their insurance company allies, and discount retailers" as the primary impediment.

The repeated calls for a new form of legal protection for designs reflected a fundamental shift in the process of design itself—a redefinition of what good design meant. Ideas about how to give products a pleasing appearance evolved dramatically in the early twentieth century. Formerly, manufacturers hired artists to add ornamentation unrelated in any way to

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Footnotes:

189 Saidman & Esquerra, supra note 34, at 423.

190 Goldenberg, supra note 32, at 27-28 (discussing "Oldfield Bills" [introduced as H.R. 6458, 64th Cong. (1916) and H.R. 13618, 64th Cong. (1916)] drafted by Design Registration League) (citations omitted).

191 Id. at 31-37 (discussing the various "Vestal Bills" [introduced during 1924-1930 as H.R. 10351, 68th Cong. (1925), H.R. 6249, 68th Cong. (1926), H.R. 9358, 70th Cong. (1928), H.R. 11852, 71st Cong. (1930), and H.R. 7243, 71st Cong. (1930)] providing for registration in the Copyright Office rather than the Patent Office).

192 Id. at 44-46 (discussing "Willis Bill" introduced in 1957 as S. 2075, 85th Cong. (1957) and its successor, the "O'Mahoney Bill," introduced in 1959 as S. 2852, 86th Cong. (1959)).

193 Id. at 48-50 (discussing "historic docking" of design and copyright protection through merger of the former into the Copyright Revision bill, H.R. 2223, 94th Cong. (1975)).

194 Id. at 51-53 (describing hearings on H.R. 7270, 96th Cong. (1980), which would have created a U.S. Design Office within the Department of Commerce).


196 Id. at 50-51 ("[T]he justifications for design protection have changed as the United States has risen or fallen in competitiveness. In recent years, the debate has shifted in response to the increased competition faced by the United States from the other industrialized countries. No longer was design protection merely a morality bill about preventing theft. As of 1980, design protection was discussed as a matter of competitive survival in a cutthroat and international marketplace.").

197 See, e.g., id. at 37 (describing the history of the Vestal bill, H.R. 11852, 71st Cong. (1930), which passed the House but not the Senate, thereafter "die[ing] in committee").

198 Saidman & Esquerra, supra note 34, at 424.
the underlying product. The addition of decorative metal rosettes to the frame of Howe's revolutionary sewing machine is one such example.\footnote{See Woodring Interview, supra note 37 (discussing sewing machine); see also LOEWY, supra note 74, at 11, 12 (Observing that by the end of the nineteenth century, well-meaning "artistic" persons took on the "task of embellishment," resulting in "locomotives festooned with garlands of roses, steam rollers with pink angels, and coal stoves peppered with quails, butterflies, and nospays of forget-me-nots."). Loewy refers to this period as "the age of de-calcomania." Id. at 11.}

In the 1920s and '30s, however, leaders of American design began to emphasize the importance of simplicity in product design aesthetics. According to industrial designer Raymond Loewy, "multiplicity being the essence of confusion, the designer will endeavor to eliminate or combine parts, supports, or excrescences whenever possible."\footnote{LOEWY, supra note 74, at 211.} In Loewy's view, good design came to involve a streamlining or "reduction to essentials."\footnote{Id.} A product's external appearance became much more intimately related to its internal function, giving rise to the well known expression "form follows function."\footnote{Id.}

Automobiles and their role in American culture continued to serve as a focal point for industrial designers. Overcoming early criticisms for lack of aesthetic appeal, the development of the automobile catalyzed the merger of form and function in industrial design and led a retreat from pure ornamentation unrelated to product functionality. In launching his historic mass-produced Model T, Henry Ford famously "wanted no truck with stylists, and indeed was content to make occasional changes to the Model-T in reluctant response to technological change, without direct reference to the market, which seemed content to accept what he chose to give it."\footnote{Lucie-Smith, supra note 2, at 69.} Competitors took a different view. General Motors' focus on giving consumers a visually pleasing automobile was so successful that its Chevrolet eventually outsold Ford.\footnote{See PULOS, supra note 110, at 324.} General Motors established a "styling section" by 1927.\footnote{Id.} Even Ford came to see the value-added in product design and "introduced the more stylish Model A, launching annual model changes and deliberate styling as a marketing tactic."\footnote{Id.}
Industrial design did not “come into its own” as a profession in the United States until the 1920s, and “the design profession did not achieve full recognition until the [19]30s.” Part of the delayed development is attributable to a lack of industrial design education. United States institutions began to offer programs in industrial design far later than those in Europe. The Carnegie Institute of Technology (today the Carnegie Mellon University) in Pittsburgh, Pennsylvania, launched a program in Industrial Design in 1934. Carnegie Tech “was the first U.S. educational institution to install a full-time industrial design course, and the first institution to offer a Bachelor’s degree in industrial design.” Although the Carnegie Tech program thereafter lost key faculty and the early interest of Westinghouse Corporation, industrial design programs thrived during the late 1930s to mid-1960s at other schools including the Pratt Institute in Brooklyn, New York, and the University of Cincinnati.

While U.S. educational institutions were just beginning to offer industrial design programs in the 1930s, designers such as Raymond Loewy were helping manufacturers integrate the new industrial design concepts in ways that consumers would accept. As Loewy explained:

Our desire is naturally to give the buying public the most advanced product that research can develop and technology can produce. Unfortunately, it has been proved time and time again that such a product does not always sell well. There seems to be for each individual product (or service, or store, or package, etc.) a critical area at which the consumer’s desire for novelty reaches what I might call the shock-zone. At that point the urge to buy reaches a plateau, and sometimes evolves into a resistance to buying. It is a sort of tug of war between attraction to the new and fear of the unfamiliar. The adult public’s taste is not necessarily ready to accept the logical solutions to their requirements if this solution implies too vast a departure from what they have been conditioned into accepting as the norm. In other words, they will go only so far. Therefore, the smart industrial designer is the one who has a lucid understanding of where the shock-zone lies in each particular problem. At this point, a design has reached what I call the MAYA (Most Advanced Yet Acceptable) stage.

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207 Goldenberg, supra note 32, at 54 (describing 1994 congressional testimony of Robert Schwartz, Executive Director of the Industrial Designers Society of America (IDSA) and summarizing history of industrial design profession).
208 Lucie-Smith, supra note 2, at 236.
210 Id. at 270. The first Bachelor of Arts degree in Industrial Design was awarded in 1936. Id. at 274.
211 Set id. at 270, 284-85.
212 Loewy, supra note 74, at 277-78.
With a growing understanding of principles such as MAYA, manufacturers began to recognize a distinct and important role for industrial designers. “Once consumer motivation was firmly linked to a rapidly advancing technology, industrial design acquired a new and extremely functional role—it confronted what was already familiar to the consumer with what science and engineering were making possible.”

“Eventually the industrial designer came to be seen as an essential part of the whole process of manufacture, and also as someone quite different from the engineer...”

E. Modern Congressional Inaction in the Face of the Design “Problem”

Industrial design and its value-added for the consumer marketplace were well established in the United States by the mid-twentieth century. Regrettably, Congress made no moves to promote the progress of this expanding field either by improving the existing design patent law or creating a *sui generis* legal system. Rather, Congress seemed bent on equating designs to mechanical and chemical inventions insofar as mandatory criteria for patentability. When Congress overhauled the patent statutes in 1952, it imposed the requirement of nonobviousness on design and utility patents alike. The industrial design profession was not consulted. The struggle to understand and apply the concept of nonobviousness to product designs continues to this day.

The patent provisions of the Revised Statutes were reenacted in the Patent Act of 1952. The 1952 reenactment altered some language but was not intended to make substantive changes to the patent statutes. The 1952 Act replaced design patent § 4929 to 4933 of the Revised Statutes with the following sections of Title 35, U.S.C.:

§ 171. Patents for designs
Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.

The provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided.

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213 Lucie-Smith, *supra* note 2, at 111.
214 Id. at 69.
215 See *infra* Part III (describing judicial decisions).
217 Federico, *supra* note 161, at 202 (“Three sections relating to patents for designs have been placed in a chapter on Designs, without making any substantive changes. Section 171 is the basic section providing for the patenting of any ‘new, original and ornamental design for an article of manufacture,’ it omits the detailed conditions set out in the corresponding section of the old statute and incorporates by reference provisions relating to patents for inventions.”).
§ 172. Right of priority

The right of priority provided for by section 119 of this title and the time specified in section 102(d) shall be six months in the case of designs.

§ 173. Term of design patent

Patents for designs may be granted for the term of three years and six months, or for seven years, or for fourteen years, as the applicant, in his application, elects.218

As of this writing in January 2010, the text of § 171 remains unchanged.219 (Each of § 172 and § 173 has been amended.220) Despite the conceptual misfit in applying nonobviousness to designs, courts today do not question that the second sentence of § 171 imports the nonobviousness requirement of § 103 into design patentability.221

The drafters of the 1952 Act did not envision that design patenting would continue indefinitely to require nonobviousness, however, at least as


220 Section 172 was amended in 1994 to correspond with the expansion of § 119, which now encompasses both foreign and domestic priority. See Uruguay Round Agreements Act, Pub. L. No. 103-465, § 532(c)(2), 108 Stat. 4809, 4983-85 (1994) (codified as amended at 35 U.S.C. § 154 (2006)). Section 172 currently provides that

[the right of priority provided for by subsections (a) through (d) of section 119 of this title [i.e., the right of foreign priority] and the time specified in section 102(d) shall be six months in the case of designs. The right of [domestic] priority provided for by section 119(c) of this title shall not apply to designs.


Section 173 was amended in 1982 to eliminate the design patentee's option of choosing from three different terms of protection. See Act of Aug. 27, 1982, Pub. L. No. 97-247, 96 Stat. 317, 321. Section 173 currently provides that "[p]atents for designs shall be granted for the term of fourteen years from the date of grant." 35 U.S.C. § 173 (2006). Thus, design patents retain the computation of patent term expiration based on the grant date, which computation was also applied to utility and plant patents prior to the Uruguay Round Agreements Act (URAA). Uruguay Round Agreements Act, Pub. L. No. 103-465, 108 Stat. 4809, 4984-85 (1994) (conforming United States law to the April 1994 Uruguay Round trade negotiations agreement under the General Agreement on Tariffs and Trade on "Trade-Related Aspects of Intellectual Property" (TRIPS)). In order to bring U.S. law into compliance with international norms, as well as to address the problem of "submarine" patents, the URAA changed the law such that for utility or plant patent applications filed on or after June 8, 1995, the patent term now expires twenty years after the patent application’s earliest effective filing date. 35 U.S.C. § 154(a)(2) (2006).

that requirement was understood for utility inventions. They intentionally set aside the "problem" of designs for later attention.\textsuperscript{222} The drafters "were well aware of the fact that remedying the defects of design protection was a highly specialized problem of considerable complexity . . . involving problems quite unrelated to patents for inventions other than ornamental designs."\textsuperscript{223} After co-authoring the 1952 Act, New York patent attorney Giles S. Rich assumed the chairmanship in 1954 of a Coordinating Committee under the auspices of the National Council of Patent Law Associations "for the specific purpose of tackling the design protection problem."\textsuperscript{224} With the assistance of Pasquale J. Federico of the Patent Office as well as Copyright Office representatives, the Coordinating Committee produced draft legislation, known as the Willis Bill, which would have implemented a \textit{sui generis} registration system for designs.\textsuperscript{225} The bill was introduced in Congress in 1957 and reintroduced in modified form in 1963.\textsuperscript{226} These design protection bills, like their predecessors and successors, met political opposition and were never enacted into law.

As an attorney and later judge of the Court of Customs and Patent Appeals and the U.S. Court of Appeals for the Federal Circuit, Rich testified repeatedly on behalf of \textit{sui generis} design protection legislation "adapted specifically to the protection of ornamental designs for useful articles, the majority of which [could not] be protected satisfactorily, if at all, by ordinary patent protection.\textsuperscript{227}

\footnote{222.\textit{The Industrial Innovation and Technology Act: Hearing on S. 791 Before the Subcomm. on Patents, Copyrights and Trademarks of the S. Comm. on the Judiciary, 100th Cong. 8 (1987)} [hereinafter \textit{1987 Senate Hearings}] (statement of Hon. Giles S. Rich, U.S. Court of Appeals, Federal Circuit) ("\textquote{When we wrote the 1952 Patent Act, protection of designs was known to be a somewhat difficult problem. The Patent Act of 1952 was primarily a codification, and we deliberately laid aside the whole problem of design legislation to be taken up at a later date . . . ").

\footnote{223.\textit{1987 Senate Hearings}, supra note 222, at 17 (commenting on the then-pending design bills H.R. 323, 100th Cong. (1987), H.R. 769, 100th Cong. (1987), and H.R. 5523, 100th Cong. (1987)). Judge Rich explained that the drafters of the 1952 Act had as a major objective the speedy enactment of a new patent code and to further that objective the decision was made to make no attempt to change the law of design patents. It was therefore retained substantially without change as an integral part of our general law of patents, where it is still to be found as three short sections (171, 172, and 173) plus one special section (289) on damages. This decision to do nothing about designs at that time was made with the intention to take up the design problem as a special project at a later date.

\textit{Id.} at 18.

\footnote{224.\textit{Id.} at 18.

\footnote{225.\textit{Id.} at 18–19 (describing the Coordinating Committee’s development of the Willis Bill, H.R. 8873, 85th Cong. (1st Sess. 1957), introduced in the House of Representatives on July 23, 1957).

\footnote{226.\textit{Id.} at 19.}
under existing patent or copyright laws." \textsuperscript{227} In 1987, Judge Rich noted that imposition of the nonobviousness requirement "tends to make the mill-run of designers' work unpatentable." \textsuperscript{228} Rich told Congress that "those familiar with the working of th[e] design patent laws have been acutely conscious of their defects and inadequacies." \textsuperscript{229} In earlier testimony, Rich challenged his congressional committee audience to "attempt in its own mind to figure out how, as a court, it would go about determining that any given completed ornamental design would be unobvious to a professional designer of ordinary skill or competence as a designer or would involve "invention." \textsuperscript{230} The determination, Rich observed, "is, and always has been, anomalous and very difficult of administration and adjudication," rendering design patent protection "illusory." \textsuperscript{231} Rich's concerns and criticisms, like all those voiced before and after him, fell on deaf ears in Congress.

As this Part has shown, the analytical and practical difficulties identified by Rich and others took their root in almost-unnoticed, minor, and most likely unintended changes to the text of the design patent statutes. Courts relied on the resulting statutory language as the basis for imposing first the "invention" requirement and thereafter the nonobviousness requirement of 35 U.S.C. § 103 as prerequisites to design patenting. As demonstrated in the following Part, the courts have not imposed these difficult if not "impossible" standards without justifiable hesitancy.

III. The Judiciary’s Ongoing Struggle with the "Impossible Issue" of Nonobviousness in Designs

This Part critiques judicial approaches to the invention/nonobviousness requirement for design patents. \textsuperscript{232} After addressing design patents in \textit{Gorham} and \textit{Whitman Saddle} in the late nineteenth century, the Supreme Court has not provided any further guidance on the requirements for

\textsuperscript{227} Id. at 11.
\textsuperscript{228} Id. at 13. Judge Rich pointed to \textit{In re Nalbandian}, 661 F.2d 1214 (C.C.P.A. 1981), as "[a] fairly typical example of the design patent situation." \textit{1987 Senate Hearings, supra note 222}, at 13. The \textit{Nalbandian} decision is discussed in detail, infra Part III. Judge Rich told Congress that "the manufacturers of the articles involved in \textit{[Nalbandian and In re Spreter}, 661 F.2d 1220 (C.C.P.A. 1981)] should have been afforded protection from copying of the designs they paid someone to make by an appropriate law such as that here under consideration." \textit{1987 Senate Hearings, supra note 222}, at 13.
\textsuperscript{229} \textit{Id}.
\textsuperscript{230} \textit{Id.} at 17.
\textsuperscript{231} \textit{Id.} at 21.
\textsuperscript{232} The statutory nonobviousness requirement is analogous but not identical to its judicially created predecessor, the invention requirement. Both require that a patentable invention possess something more than novelty. However, Congress created the nonobviousness requirement in an attempt to fashion a more objective measure of patentability than the nebulous invention requirement. \textit{See supra} Introduction and Part I.
design patentability. These early Supreme Court decisions spawned a confusing dichotomy of widely disparate and inconsistent approaches to design protection. This Part concludes that the lower courts have never succeeded at reconciling the Supreme Court's mixed messages. The "impossible issue" of whether and how to apply the nonobviousness requirement to designs remains unresolved. Nevertheless, thoroughly tracing the courts' difficulties is an important analytical first step that reveals the bases for the recommendations we propose in Part IV.

Some courts have only reluctantly applied the invention/nonobviousness requirement to designs, explaining that they view the requirement to be difficult, if not impossible to apply, but they apply it nevertheless due to their mandate from higher authority (i.e., Congress or the Supreme Court). Their decisions demonstrate little understanding of the reality of the design process and the unique value of designs. The lower court decisions may be generally broken down into two types: the court either (1) forces an analogy to mechanical (utility) patents and conflates the design with the underlying article, or (2) distinguishes the design from the underlying article and emphasizes the aesthetic appearance of the design. The former approach improperly focuses on the manner of mechanical construction of the designed article and results in nonsensical standards that punish a design for the apparent simplicity of its construction, regardless of its aesthetics. The latter approach is the correct one because it focuses on the true value of a design: its ability to create a visual impression that makes a product appear unique, distinct, or desirable to the consumer.

The remainder of this Part traces the attempts of the Supreme Court and the intermediate appellate courts to apply the invention/nonobviousness requirement to designs. The regional circuits were the first appellate courts to grapple with the problem. After assuming jurisdiction for Patent Office appeals in 1929, the Court of Customs and Patent Appeals (C.C.P.A.) encountered design patentability issues with much greater frequency. Most of the current doctrine was developed during the C.C.P.A. era, which lasted until 1982 when the C.C.P.A. was merged into the newly-created United States Court of Appeals for the Federal Circuit. The Federal

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233 See In re Nalbandian, 661 F.2d at 1219 (Rich, J., concurring) (urging enactment of then-pending legislation, H.R. 20, 97th Cong. (1st Sess. 1981)). Judge Rich described the legislation as "tailored to the problems of designers, of their employers and clients in the business world, and of the government agencies now concerned." Id. It would "get the impossible issue of obviousness in design patentability cases off the backs of the courts and the Patent and Trademark Office, giving some sense of certainty to the business world of what designs can be protected and how." Id.

234 See supra Part I (explaining that designers intensely focus on how their designs will be perceived by consumers, as the visual appearance causes consumers to immediately make assumptions and judgments about the design and the underlying product).


Circuit assumed the C.C.P.A.’s patent jurisdiction, but has refined C.C.P.A. design patent doctrine in only minor respects. As of this writing in January 2010, the Federal Circuit has yet to determine whether or how the Supreme Court’s decision in KSR International Co. v. Teleflex Inc., dealing with the nonobviousness requirement for utility patents, impacts design patentability.

A. The Supreme Court’s Mixed Messages in Gorham and Whitman Saddle

The Supreme Court first addressed design patents in the landmark case of Gorham Co. v. White. In Gorham, the design patent in suit was directed to a pattern for handles of silverware, and the Court took up the task of setting forth the proper standard for determining infringement of a design patent.

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237 See id. § 127, 96 Stat. at 37-38.
239 In Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1384-85 (Fed. Cir. 2009), the Federal Circuit was recently presented with, but declined to rule on the “new and untested ground” of whether and how KSR should be applied to design patents. See discussion of Titan Tire, infra this Part.
240 Gorham Co. v. White, 81 U.S. (14 Wall.) 511 (1871).
241 Id. at 524 (Setting forth the Court’s purpose as follows: “The sole question is one of fact. Has there been an infringement? Are the designs used by the defendant substantially the same as that owned by the complainants? To answer these questions correctly, it is indispensable to understand what constitutes identity of design, and what amounts to infringement.”).
As a threshold matter, the Court noted that design patent law was “plainly intended to give encouragement to the decorative arts.” Unlike utility patents which provide functional advancements, design patents offer an aesthetic benefit, and “[i]t is the appearance itself, therefore, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense.”

The Court correctly pinpointed the most substantial benefit of obtaining protection for one’s design, namely that designs have the capacity to “enhance [the] salable value [of a product]” or to “enlarge the demand for it.”

The Court quickly decided that “sameness of appearance” between the claimed design and the accused design must be the test for design patent infringement. The more difficult issue, however, was to whom the appearances must be the same: an expert observer or an ordinary observer. While the lower court had decided that the observer must have expertise in dealing with designs of the type in the asserted patent, the Court concluded that such a perspective would “destroy all the protection which the act of Congress intended to give.” This is because “[t]here never could be piracy of a patented design, for human ingenuity has never yet produced a design, in all its details, exactly like another, so like, that an expert could not distinguish them.” The Court ultimately held that design patent infringement exists, i.e. two designs are substantially the same, “if, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, . . . the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other.”

243 Gorham, 81 U.S. at 524.
244 Id. at 525.
245 Id.
246 Id. at 526–27 (“Plainly, [the test for ‘substantial identity’ for designs] must be sameness of appearance, and mere difference of lines in the drawing or sketch, a greater or smaller number of lines, or slight variances in configuration, if sufficient to change the effect upon the eye, will not destroy the substantial identity.”).
247 Id. at 527 (“[T]he only remaining question upon this part of the case is, whether it is essential that the appearance should be the same to the eye of an expert.”).
248 Id. (The lower court held that “there could be no infringement unless there was ‘substantial identity’ in view of the observation of a person versed in designs in the particular trade in question—of a person engaged in the manufacture or sale of articles containing such designs—of a person accustomed to compare such designs one with another, and who sees and examines the articles containing them side by side.”).
249 Id.
250 Id.
251 Id. at 528. The Federal Circuit recently reaffirmed this test as the “sole test for determining whether a design patent has been infringed.” Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 678 (Fed. Cir. 2008) (en banc) (rejecting an additional “point of novelty” component as part of the infringement test).
Although the Court in *Gorham* did not directly address the invention requirement for designs, it did make some observations that accurately reflect industrial designers' focus on the ultimate appearance of the design, as well as the importance of the impressions of the end users and purchasers of the products.\(^{252}\) The Court's decision to apply the infringement standard from the perspective of an ordinary observer allows for an end user or consumer to measure the relative value and importance of design features, as is intended by designers. The Court also recognized that a design's primary purpose is to make the underlying product more appealing to consumers, and therefore the overall end appearance is the only truly "useful" aspect of the design.

By focusing on the visual end result as opposed to the mechanical construction of the designed product, *Gorham* correctly avoided any insistence on "invention" for designs. The Court repeatedly referred to designs as being "produced," as opposed to being invented, in accord with the 1842 Act's "invented or produced" language discussed *supra*.\(^{253}\) Indeed, the Court felt that the protection afforded to designs "must refer to finished products of invention rather than to the process of finishing them, or to the agencies by which they are developed."\(^{254}\) It is for this reason that the Court held that designs are protectable regardless of the manner in which they are made because "the mode in which those appearances are produced" has nothing to do with the ultimate aesthetic value of the product.\(^{255}\) The *Gorham* Court further observed that "[t]o speak of the invention [of a design] as a combination or process, or to treat it as such, is to overlook its peculiarities."\(^{256}\) *Gorham* confirms that any proper discussion of the merits of any particular design should have nothing to do with the mechanical construction or the manner of combining various design features, but should look only to the visual impression created by the design's end appearance.

\(^{252}\) *See supra* Part I (explaining that designers intensely focus on the effect that the visual appearance of their designs has on consumers, and in turn noting that the aesthetics of a design can profoundly influence a consumer's reaction to or desire for the underlying product).

\(^{253}\) *See supra* Part II (detailing the 1842 Act); *Gorham*, 81 U.S. at 525 ("And the thing invented or produced, for which a patent is given, is that which gives a peculiar or distinctive appearance to the manufacture, or article to which it may be applied, or to which it gives form. . . . It therefore proposes to secure for a limited time to the ingenious producer of those appearances the advantages flowing from them. Manifestly the mode in which those appearances are produced has very little, if anything, to do with giving increased salability to the article. . . . The appearance may be the result of peculiarity of configuration, or of ornament alone, or of both conjointly, but, in whatever way produced, it is the new thing, or product, which the patent law regards." (emphasis added)).

\(^{254}\) *Gorham*, 81 U.S. at 525.

\(^{255}\) *Id.*

\(^{256}\) *Id.*
In *Lehnbeuter v. Holthaus*, the Supreme Court again took up design patents. The patented design in *Lehnbeuter* was directed to a display case, and both validity and infringement were before the Court. Regarding validity, the Court held:

The design patented by the complainants differs essentially from any other which has been called to our attention. It is not covered by the other patents which are set out in the record. Whether it is more graceful or beautiful than older designs is not for us to decide. It is sufficient if it is new and useful.

*Lehnbeuter* makes no mention whatsoever of any invention requirement for patentability. The Court was satisfied that the design was patentable over the prior art to the extent that it was new or different from the prior art. By the time that *Lehnbeuter* was decided, the design patent statute afforded protection for designs that were “invented and produced.” The fact that the Court did not recognize a separate invention requirement suggests that the 1874 statutory change from “invented or produced” was indeed no more than a typographical error that was not intended positively to require that designs be the product of invention. The Court’s opinion in *Lehnbeuter* is admittedly brief, with virtually no discussion of the complex legal issues relating to design validity and infringement. Nevertheless, *Lehnbeuter* provides valuable insight as to how the Supreme Court regarded designs in the early days of the design patent system.

The next, and most recent, time the Supreme Court took up a design patent case was in 1893 in *Smith v. Whitman Saddle Co.*, which concerned the patentability of a design for a saddle. The patented saddle design was characterized as a combination of the front half of one prior art saddle and the rear half of another, with an additional change in the contour of the pommel.

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258 *Id.* at 96. As for infringement, the Court found that the accused display case was “a service copy of the [patented design], excepting a slight inclination backwards, hardly perceptible to the naked eye, of the glass constituting the front of the elevated portions of the case. We think, therefore, that the infringement is clearly established.” *Id.*

259 *Id.* The word “useful” was deleted from the design patent statute in 1902. See *supra* Part II.

260 *Revised Statutes* (1874), *supra* note 167, § 4929 (emphasis added).

261 See *supra* Part II (discussing the legislative history of the design patent statute, and noting that the codification of 1874, which changed the word “or” to “and,” was apparently intended not to make any substantive changes to the design patent law).


263 *Id.* at 680. The prior art included a Granger saddle, “which had a cut-back pommel and a low, broad cantle,” and a Jenifer saddle, which “had a high, prominent pommel and a high-backed cantle, or hind protuberance, in the shape of a duck’s tail.” *Id.*
The Court began its analysis by setting forth the statutory requirements for design protection, namely that a person must have “invented and produced [a] new and original design for a manufacture.” The 1874 Act had inexplicably changed the language “invented or produced” to “invented and produced,” thereby providing a textual basis for courts to interpret the statute as mandating an invention requirement.

*Whitman Saddle* favorably acknowledged the *Gorham* Court’s prior characterization of designs as having different purposes and involving different creative processes than the subject matter of utility patents. *Whitman Saddle* then quickly departed from *Gorham*, declaring that all of the discussion regarding design patentability in *Gorham* was with regard to the ornamentality requirement only, and that because the 1874 Act included

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The [patented] saddle design described in the specification differs from the Granger saddle in the substitution of the Jenifer cantle for the low, broad cantle of the Granger tree. In other words, the front half of the Granger and the rear half of the Jenifer, or Jenifer-McClellan, make up the saddle in question, though it differs also from the Granger saddle in that it has a nearly perpendicular drop of some inches at the rear of the pommel, that is, distinctly more of a drop than the Granger saddle had.

Id.


265 *Whitman Saddle*, 148 U.S. at 677 (emphasis added).

266 See supra Part II (noting that this change from “or” to “and” has indeed caused courts to find that “invention” is a distinct requirement for patentability of designs).

267 *Whitman Saddle*, 148 U.S. at 678 (“[T]he acts of Congress authorizing the granting of patents for designs contemplated ‘not so much utility as appearance . . . . It is the appearance itself, therefore, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense.’” (quoting *Gorham Co. v. White*, 81 U.S. (14 Wall.) 511, 524 (1871))).
the word "useful" (which was absent in the 1842 Act), utility was a proper factor to be considered when evaluating the patentability of a design. (Congress legislatively overruled this reasoning in 1902, removing "useful" from the design patent statute.) The Whitman Saddle Court then noted that the law applicable to utility patents did not materially differ from that applicable to design patents, quoting the 1874 Act, which provided that "all the regulations and provisions which apply to the obtaining or protection of patents for inventions or discoveries . . . shall apply to patents for designs."

Having concluded that utility patents and design patents must be treated alike, the Whitman Saddle Court unequivocally proclaimed the requirement for "[the exercise of the inventive . . . faculty] for design protection. To help identify whether a design involves the requisite level of invention, the Court set forth that "[m]ere mechanical skill is insufficient. There must be something akin to genius—an effort of the brain as well as the hand. The adaptation of old devices of forms to new purpose, however convenient, useful or beautiful they may be in their new role, is not invention." This test includes language that is far more applicable to utility patents than designs, and suggests that the aesthetic design process involves essentially the same methodology and objectives as the engineering of the underlying product. The test ignores the fact that the true "utility" of a design lies in the visual impression given by the

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268 Id. at 677 (The 1874 Act afforded protection for "any new, useful and original shape or configuration of any article of manufacture.").

269 Id. at 678 (The Court held that "now where a new and original shape or configuration of an article of manufacture is claimed, its utility may be also an element for consideration." (citing Lehnhueiter v. Holthaus, 105 U.S. 94 (1882))).

270 See supra Part II.

271 Whitman Saddle, 148 U.S. at 679 (ellipses in original); cf. 35 U.S.C. § 171 (2006) ("The provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided.").


273 Id. (quoting Northrup v. Adams, 18 F. Cas. 374, 374 (C.C.E.D. Mich. 1877) (No. 10,328)). The Whitman Saddle Court elaborated on this test as follows:

The exercise of the inventive or originative faculty is required, and a person cannot be permitted to select an existing form and simply put it to a new use any more than he can be permitted to take a patent for the mere double use of a machine. If, however, the selection and adaptation of an existing form is more than the exercise of the imitative faculty and the result is in effect a new creation, the design may be patentable.

Id.

274 In particular, the Court's references to "mechanical skill" and adapting "old devices" to "new purposes" which may make products more "convenient" or "useful" have nothing to do with aesthetics. Id. (quoting Northrup, 18 F. Cas. at 374).

275 Whitman Saddle, 148 U.S. at 679.
design’s appearance, not in the function of the underlying product.\textsuperscript{276} By failing to appreciate this critical distinction, the test naturally causes one to focus on the manner in which the design was made, as the *Whitman Saddle* Court did.

*Whitman Saddle* ultimately held that the patented saddle design lacked the requisite invention, reasoning that there existed “several hundred styles of saddles or saddle-trees belonging to the prior art, and that it was customary for saddlers to vary the shape and appearance of saddle-trees in numerous ways according to the taste and fancy of the purchaser.”\textsuperscript{277} Further, the two prior art saddles that were combined to make the patented saddle design were shown to have frequently included design feature variations of the type found in the patented design.\textsuperscript{278} In the Court’s opinion, “[n]othing more was done in this instance (except as hereafter noted) than to put the two halves of these saddles together in the exercise of the ordinary skill of workmen of the trade, and in the way and manner ordinarily done.”\textsuperscript{279}

The *Whitman Saddle* Court’s application of its test highlights how the very concept of “invention” causes one to improperly focus on the mechanical process of making the design, rather than the resulting appearance of the design. The Court concluded that because the design features existed independently in the prior art, and it was well within the skill set of “workmen of the trade” to combine such features, the design lacked invention. *Whitman Saddle* effectively denied protection to the saddle design because of the mechanical simplicity and predictability of the construction of the saddle, with no discussion whatsoever about the visual impression given by the patented design.

Indeed, the *Whitman Saddle* Court seemed to find the overall appearance of the saddle to be of little relevance, as the Court expressly rejected the following view set forth by the district judge who originally decided the case:

A mechanic may take the legs of one stove, and the cap of another, and the door of another, and make a new design which has no element of invention; but it does not follow that the result of the thought of a mechanic who has fused together two diverse shapes, which were made upon different principles, so that new lines and curves and a harmonious and novel whole are produced, which possesses a new grace and which has a utility resultant from the new shape, exhibits no invention.\textsuperscript{280}

\textsuperscript{276} Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 525 (1871) (noting that the appearance of a design can enhance the salable value of a product or can increase the demand for it).

\textsuperscript{277} *Whitman Saddle*, 148 U.S. at 681.

\textsuperscript{278} Id.

\textsuperscript{279} Id.

\textsuperscript{280} Id. at 680–81 (The district judge “held that this was effected by the patentee and that the shape that he produced was, therefore, patentable. But we cannot concur in this
The district judge's approach recognized that the combination of design elements, even if it is simple to construct in a mechanical sense, can still create "new lines and curves" to result in "a new grace."\textsuperscript{281} This approach was in accord with Gorham's conclusion that any protection given for a design "must refer to finished products . . . rather than to the process of finishing them, or to the agencies by which they are developed."\textsuperscript{282} Nevertheless, the Supreme Court in Whitman Saddle reached the exactly opposite conclusion, holding that a design may not be protected unless its manner of construction involves "something akin to genius."

As a practical matter, it is important to consider the Whitman Saddle opinion in its proper historical context. When the Supreme Court decided Whitman Saddle in 1893, there was no such occupation as an "industrial designer." As discussed in Part II, it was not until after the Industrial Revolution and World War I that "designers" were recognized separately from the ranks of engineers and mechanics and were given the task to make mass-produced products visually appealing. The only people designing saddles in 1893 were probably those actually making the saddles. Modern industrial designers, however, can design the form of a product even if they lack the capability to themselves make the underlying article. Given the nineteenth century context of its decision, the Whitman Saddle Court's conflating of the manufacture and design of the claimed saddle is understandable. However, Whitman Saddle still commits a serious fallacy\textsuperscript{283} by measuring the value of a design by the mechanical skill involved in making it, instead of by the design's capability to make an impression on an ordinary observer.

Gorham and Whitman Saddle, the two primary opinions of the Supreme Court regarding design patents, offer widely disparate approaches to design patentability. While Gorham emphasizes the value of the overall aesthetic appearance of the design, Whitman Saddle focuses on the skill involved in making the product to embody the design (an analysis more akin to that of utility patentability). As the following subsections demonstrate, these mixed messages have yet to be adequately reconciled even after more than one hundred years of subsequent design patent jurisprudence.

\textsuperscript{281} Id.
\textsuperscript{282} Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 525 (1871).
\textsuperscript{283} Cf. William D. Shoemaker, Patents for Designs 24 (1929). In a section titled "Design Confused With its Production," the author states that the method of production of a design gives rise to "a fruitful source of confusion." Id. "The novelty of a design is to be tested, not by investigation of the means employed for its creation, but by ocular comparison of the design itself with the prior designs, which are alleged to be substantially the same." Id. (quoting Braddock Glass Co. v. Macbeth, 64 F. 118, 120 (3d Cir. 1894)).
B. Fallout and Dissonance in the Regional Circuits and the C.C.P.A.

In the wake of Gorham and Whitman Saddle, the federal courts handled design patent cases with substantial dissonance and inconsistency.

1. District and Regional Circuit Cases.—Starting in the nineteenth century, the federal district courts (originally called “circuit courts”) and appellate courts were the first to confront the difficulty of determining design patentability. Although the federal appellate courts other than the Federal Circuit (collectively referred to herein as the “regional circuits”) have not decided patent appeals since the Federal Circuit’s creation in 1982, their analysis remains relevant and worth considering today (though not considered binding by the Federal Circuit).

The district and regional circuit court decisions were generally split as to how rigorously to apply the invention requirement for designs. One commentator observed that

[n]o definitive decisions have been found in which an interpretation of the words “invented or produced” is given. The decisions generally hold that “invention” is required. Some recognize that a relatively low order of originality is sufficient. Other decisions take the opposite view and hold that as high degree of invention is required in design cases as in other patents.

For example, the court in Untermeyer v. Freund took a lenient approach to the invention requirement, saying that

[i]f [a design] presents a different impression upon the eye from anything which precedes it, if it proves to be pleasing, attractive, and popular, if it creates a demand for the goods of its originator, even though it be simple, and does not show a wide departure from other designs, its use will be protected.

Similarly, the court in Smith v. Stewart held that

[i]nvention in a majority of patented designs is very small, and of a low order. All the statute, as commonly interpreted, requires is the production of a new and pleasing design, which may add value to the object for which it is intended. The invention consists in the conception and production of this, however simple it may be.
The court in *Smith* recognized the incongruity of treating designs as "inventions." In its view, "it would seem absurd to say that the designs covered by these patents, generally, exhibit the exercise of 'inventive genius,' as the term is commonly applied to mechanical inventions. . . . Some of the rules applied to mechanical patents are wholly inapplicable to those for designs."289

In contrast, the court in *G.B. Lewis Co. v. Gould Products, Inc.* applied a much more stringent standard.290 It read the invention requirement as insisting that a design be more than simply "new and pleasing enough to catch the trade," but must "reflect 'some exceptional talent beyond the skill of the ordinary designer,' or 'inventive genius.'"291 In view of this heightened standard for invention, the court itself characterized obtaining a valid design patent to be "exceedingly difficult."292

Several regional circuit cases candidly admitted the difficulty in applying the concept of invention/nonobviousness to designs. For example, in *Schwinn Bicycle Co. v. Goodyear Tire & Rubber Co.*, the Ninth Circuit recognized that the Patent Act and Supreme Court precedent did not seem to contain language applicable to designs in terms of obviousness, but nevertheless felt bound to apply the obviousness requirement.293 In *Hadco Products, Inc. v. Walter Kidde & Co.*, the Third Circuit observed that the forced analogy to mechanical patents for obviousness of designs "renders the decision-making process far from simple," but this difficulty must be addressed by "appropriate legislative reform rather than judicial fiat."294 In *Fields v. Schuyler*, the D.C. Circuit took the position that design cases present "interesting questions" which raise "the possible need for a different gloss on the obviousness standard in the case of design patents," but nevertheless concluded that having judges apply the standard "as is" would not stifle design creativity.295

288 See id. at 482.
289 Id.
290 G.B. Lewis Co. v. Gould Products, Inc. 436 F.2d 1176, 1178 (2d Cir. 1971).
291 Id. (citations omitted).
292 Id. (citation omitted).
293 Schwinn Bicycle Co. v. Goodyear Tire & Rubber Co., 444 F.2d 295, 298 (9th Cir. 1970) ("Graham involved a mechanical (or utility) patent and some of the language therein does not fit design patent cases with precision. Nonetheless, the statutory criteria of non-obviousness is specifically incorporated into design patent applications by the language of 35 U.S.C. § 171, and we are convinced that the approach of Graham is equally applicable where the question is the obviousness of a design patent."). (citation omitted). Schwinn also adopted the "ordinary intelligent man" standard for the obviousness inquiry perspective from In re Laverne. Id. at 299 n.8. See discussion of Laverne, infra this Part.
295 Fields v. Schuyler, 472 F.2d 1304, 1306 (D.C. Cir. 1972). The court stated:

we are in no position to say that a judge's effort to determine what is "obvious . . . to a person skilled in the art" will stifle design creativity.
2. C.C.P.A. Cases.—As the only court having jurisdiction over direct appeals from the Patent Office from 1929 onward, the design patent jurisprudence of the Court of Customs and Patent Appeals (C.C.P.A.) is substantially more robust than that of the district and regional circuit courts. Nevertheless, despite the expertise of the C.C.P.A. in patent matters generally, many of its design patent decisions were not well reasoned in light of the unique peculiarities of designs. Although the court in some cases gave serious thought to the legal principles it applied and came down with sensible rulings, in others the court blindly applied utility patent principles to designs and fashioned rules that either suppressed design or were simply incomprehensible. The following subsections discuss how the C.C.P.A. handled difficult and fundamental issues of design patents such as identifying the value added by a new design and deciding whether and how designs can be rejected for lacking an elusive “something more than novelty.”

a. In re Schnell's Initial Take on “Applied” Design

An important early C.C.P.A. case addressing design patents was In re Schnell. Although Schnell addressed more the scope of design patent claims than the invention requirement, the decision provides helpful insight into what a design really is. The applicant in Schnell had attempted to claim an “ornamental design for an interior fitting of an automobile body or similar article.” The specification and the drawings showed the design only as applied to a handle, but mentioned that “it is also applicable to other fittings of an automobile.” The Schnell court observed that designs in a sense exist independently of the articles to which they are applied, but that “the design must be shown not to be the mere invention of a picture, irrespective of its manner of use.” Instead, “the applicant

The judge’s experience enables him to compensate for the tendency of inventions to look obvious—with the 20-20 vision of hindsight. And he will know how to use the “average observer” as an indicator of patentability, especially in an area of consumer goods design, where the patent is not a reward for an advance in utility so much as for distinctiveness, ornament and aesthetic satisfaction.

Id. at 1306.


297 In re Schnell, 46 F.2d 203 (C.C.P.A. 1931).

298 Id. at 204.

299 Id.

300 Id. at 209.
should be required to show by an appropriate drawing the manner of its application." The court, in affirming a narrow construction of the claim that limited the scope of the design to "an automobile door handle or similar article," explained that it is the *application of the design* to an article of manufacture that Congress wishes to promote, and an applicant has not reduced his invention to practice and has been of little help to the art if he does not teach the manner of applying his design. Furthermore, we know of no statutory or other reason why he may not be permitted to submit drawings of more than one article if his design applies to more than one article and if it seems necessary and essential to use more than one drawing in order that he may teach the manner of applying the same to different articles.

The *Schnell* court recognized that the conception of an abstract design idea constitutes only part of what the design patent system rewards. Because an abstract design concept cannot exist independently of an article to which it is applied, the application of the design to the underlying article is an inextricable part of the value that designers provide. "Designing" products necessarily involves working within the particular degree of freedom for each product, because not every old design feature can work with and look good in a new product. A designer must not only design in a way that does not detract from the functionality or the user experience, but also must be sure to design in a way that consumers can aesthetically accept and feel comfortable with.

If a design patent applicant does not sufficiently show how the design may be applied to articles other than those particularly shown in the drawings, it cannot be said that such non-disclosed articles are fairly part of the claimed design. It follows that unless a designer has sufficiently applied his or her abstract design concept to a particular article, such unapplied designs effectively do not yet exist. Accordingly, unapplied

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301 Id.
302 Id. at 211 (quotation marks omitted).
303 Id. at 209 (emphasis added). Modern cases support some flexibility in the scope of the design patent being greater than the particularly disclosed embodiment(s) in the patent. See, e.g., Avis Grp. Int'l, Inc. v. L.A. Gear Cal., Inc., 853 F.2d 1557, 1565 (Fed. Cir. 1988) (holding that a patented design for an adult's shoe could be infringed by a children's shoe); see also 8 CHISUM ON PATENTS, supra note 19, § 23.04(2), at 23-147-48.
304 See supra Part I (discussing how designs are limited by the degree of freedom of a product, which limitations include the functional aspects of the underlying products as well as the consumer tolerances for accepting new designs).
305 See supra Part I.
306 This notion stems from the patent law principle that one has not successfully created his or her claimed subject matter to practice until he or she has actually made the product or has provided a detailed description of the product. See Hyatt v. Boone, 146 F.3d 1348, 1352 (Fed. Cir. 1998).
designs or design features cannot serve as prior art that would defeat a later patent directed to the design concept as applied to the particular article.

Schnell stands for the proposition that protection should be available for a designer who is able to adapt old design features on one product onto a different product having a different degree of freedom. The patent system must "give encouragement to the decorative arts" by allowing designers to obtain protection for such commonplace adaptive work product.\textsuperscript{307}

\begin{flushleft}
\textsuperscript{307} Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 524 (1871) (The design patent laws were "plainly intended to give encouragement to the decorative arts.").
\end{flushleft}

\begin{flushleft}
\textsuperscript{308} For example, as discussed supra Part I, Apple's Jonathan Ive adapted the basic design concepts of Braun's Dieter Rams into new technology such as the iMac and iPod. Ive's work for Apple has been lauded by designers and consumers alike for creating a distinct visual appeal. Such a concededly imitative approach to design is not only common among designers, but is also highly creative and can yield remarkable new aesthetic effects.
\end{flushleft}
b. The Apology of *In re Faustmann* for the Invention Requirement

*In re Faustmann* was one of the early cases at the C.C.P.A. to extensively analyze the invention requirement for designs. The design at issue was for a keyboard configuration on a typewriter.

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310 *Id.* at 390.
311 *Id.* at 390.
The claimed design had keys that were flat at the front and rounded across the back, and a prior art patent to Lentz had keys that were rounded at the front and flat across the back. A patent to Fairweather disclosed another key design with a convex rounded front and a concavely rounded back. The claimed design also included a space bar with beveled corners—a feature found in a prior art patent to Bills.

The Patent Office rejected the applicant’s design as lacking invention, and the applicant argued on appeal that it was improper for his design to be rejected in this manner because it was undisputedly new and ornamental. The applicant felt that his design should be patentable because he created it not by “follow[ing] the teaching[s] of any of the references,” but by “conceiv[ing] a design which the ordinary skilled worker in the art would not have been able to produce by merely drawing upon the teachings of the reference.” The claimed design was indeed a new combination and adaptation of the prior art, albeit with relatively minor design changes made.

The C.C.P.A. conceded that the fundamental differences between designs and mechanical inventions are such that “[t]o lay down any hard and fast rules as to when invention exists in a design patent application would be a difficult, if not impossible, task.” Nevertheless, the court concluded that it was bound to follow the “mandate of the statute” that a design must have been “invented.” The court discussed the Gorham case, noting that even though Gorham was directed to the issue of infringement, its comments regarding the role and value of designs expressed “certain basic principles . . . which seem pertinent here.” Inexplicably, the court applied none of these principles from Gorham, but rather cited Whitman Saddle as controlling precedent, requiring the application of its standard for invention in designs. Ultimately, the design in Faustmann was deemed

312 Id. at 389.
313 Id. at 391.
314 Id. at 389.
315 Id. at 391.
316 Id.
317 Id.
318 Id. at 392.
319 Id. at 392-93.
320 Id. at 393-94. The Faustmann court cites another reason for its being bound to apply the invention requirement:

It will be noticed that the statute [when Whitman Saddle was decided] read “invented and produced,” whereas the statute at bar does not contain the word “produced.” But since the word “invented” and the word “produced” were connected by the word “and” and not the word “or” the existence of invention was required then as now.

Id. at 393. This explanation bolsters our previous observation that the apparently inadvertent
to be invalid for lacking invention, and the court's reasoning echoes that in *Whitman Saddle*: "we can see nothing in what appellant has done that is beyond the ability of the ordinary skilled mechanic or designer of typewriters. We agree with the Patent Office that, in view of the prior art, the inventive faculty was not exercised in producing appellant's keyboard." As in *Whitman Saddle*, the *Faustmann* court erroneously speaks of invention for designs in terms of mechanical construction, thereby focusing on the difficulty of making the design instead of the appearance of the resulting design.

*Faustmann* is one of several cases conceding that the concept of invention is not readily applicable to designs, but applying the invention requirement anyway, albeit with a tone of reluctance or apology. The reluctance is typically due to the court's obligation to follow higher authority, such as Congress or the Supreme Court. It is likely also due to a philosophical reluctance to apply rules that cannot be implemented by an objective standard. *Faustmann*'s ultimate holding that the claimed design lacked the requisite invention is wholly conclusory because of the inescapable subjectivity of the invention requirement. Indeed, several cases in the C.C.P.A. after *Faustmann* openly declared that while design protection requires the exercise of inventive faculty, the invention requirement "defies definition and resides as a subjective standard in the mind of the judge considered as an 'average observer.'"

c. *In re Jennings* and *In re Glavas* on Whether and How to Combine References Cited Against Designs

In evaluating the patentability of a utility (mechanical) invention, the longstanding approach of the courts and the USPTO is to compare the claimed invention with the disclosures in multiple prior art references and determine whether it would have been obvious to combine the teachings of the prior art disclosures to arrive at the claimed invention. After *Faustmann*, the C.C.P.A. began to apply an analogous approach to determine when a combination of prior design elements constitutes invention. The court's efforts to objectively measure the aesthetic worth of designs by applying the same analytical technique fashioned for mechanical inventions

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321 *In re Faustmann*, 155 F. 2d at 394 (emphasis added).
322 See id. at 392 ("Applying that principle in the case at bar, we, like the tribunals below, while cognizant of appellant's new consolidation, involving, for the most part, what seems to be minor features relating to typewriter keyboards, do not think that he has produced any new and ornamental design of a keyboard, or a typewriter, which rises to the level of invention.").
323 *In re Johnson*, 175 F.2d 791, 792 (C.C.P.A. 1949) (citations omitted); see also *In re Jabour*, 182 F.2d 213, 215 (C.C.P.A. 1950) (citing *In re Johnson*, 175 F.2d at 792).
ultimately backfired. Its decisions suffered from the inherently inescapable subjectivity involved in applying an "invention" requirement to designs.

The C.C.P.A. seemed to start in the right direction, at least. In re Park followed Gorham's focus on the visual impression created by the design when it held that "each element in a patented design [being] old does not of itself negative invention, for patentability may reside in the manner in which the elements are combined. The design as a whole, and the impression it makes on the eye, must be considered."324

In re Jennings further elaborated on this concept.325 Jennings' design application had been rejected over five prior art patents,326 each of which disclosed separate design features which could allegedly be combined to produce the claimed design.327 The court held that

[In considering patentability of a proposed design the appearance of the design must be viewed as a whole, as shown by the drawing, or drawings, and compared with something in existence—not with something that might be brought into existence by selecting individual features from prior art and combining them, particularly where combining them would require modification of every individual feature, as would be required here.]328

The Jennings requirement that a design be compared with "something in existence" correctly precludes the kind of combination of references that tends to focus the obviousness inquiry toward individual design features. Like Schnell, Jennings would not permit a design to be deemed lacking invention unless the prior art in some way applied the claimed design features to the same underlying article. The Jennings approach helpfully moved the analysis toward a more objective standard that focuses on the appearance of the claimed design as a whole, rather than a subjective

324 In re Park, 181 F.2d 255, 256 (C.C.P.A. 1950) (citing Grelle v. City of Eugene, 221 F. 68 (9th Cir. 1915)).
325 In re Jennings, 182 F.2d 207 (C.C.P.A. 1950).
326 The patents cited against the claimed design were all utility patents. Id. at 208. The court observed:

It is obvious that the appearance of a utilitarian, or mechanical, device properly may be cited as a reference in considering an application for a design, although a design patent, which must be based solely upon appearance, would not seem to be a proper reference in considering an application for a mechanical patent.

Id.

327 Id. ("[I]t seems to have been held that by selecting features taken from five different patents, that is, one feature from one patent, another from another, etc., a device might be considered which would so closely resemble the drawings of appellant that his design would not be patentable over such possible construction.").
328 Id. (emphasis added).
standard that can be applied to deny protection where the mechanical combination of design elements is perceived to have been “obvious.”

The C.C.P.A. then took a wrong turn in In re Glavas, departing from the Jennings approach by encouraging the combination of prior art references to be cited against designs in certain circumstances. In Glavas, the claimed design was for a swimming float, and several prior art patents (both utility and design) were cited against it in combination. The claimed float design was “a six-sided body of generally rectangular form, having parallel side and end members and upper and lower surfaces which are concave in the direction of the greatest length of the float body.” The patent examiner had rejected the claimed design over the combination of one prior art patent showing a conventional rectangular float, a second patent showing a pillow having a single concave side, and a third patent showing a pillow having opposing concave portions. The Board of Patent Appeals affirmed, and further relied on additional references showing oppositely concaved surfaces, these additional references being directed to very different objects such as bottles, soap, and razor blade sharpeners.

A central issue on appeal was whether any of these secondary non-float references could be properly relied upon for the rejection, given that they were clearly not from analogous arts, in the mechanical sense.

The Glavas court noted that in the case of design anticipation by a single prior art reference, analogousness of the reference is irrelevant as long as it has the same appearance as the claimed design. When a “combination of references” is alleged to invalidate a claimed design, however, “a different situation is presented.”

A design, from the standpoint of patentability, has no utility other than its ornamental appearance, and the problem of combining references is therefore one of combining appearances rather than uses. The principle of

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330 A swimming float is akin to a life preserver, and is generally a buoyant device adapted to be secured to a swimmer’s chest with straps around the swimmer’s body. Id. at 448.
331 Id.
332 Id.
333 Id. at 449.
334 Id. at 449, 451.
335 Id. at 449. Analogous arts in the mechanical sense would be those in the same “field of . . . endeavor,” or “reasonably pertinent” to the problem faced by the inventor. See In re Antle, 444 F.2d 1168, 1171–72 (C.C.P.A. 1971). In Glavas, razor blade sharpeners are clearly very far removed from the floats in terms of functionality and mechanical operation.
336 In re Glavas, 230 F.2d at 450 (“It is true that the use to which an article is to be put has no bearing on its patentability as a design and that if the prior art discloses any article of substantially the same appearance as that of an applicant, it is immaterial what the use of such article is. Accordingly, so far as anticipation by a single prior art disclosure is concerned, there can be no question as to nonanalogous art in design cases.” (citations omitted)).
337 Id.
nonanalogous arts, therefore, cannot be applied to design cases in exactly the same manner as to mechanical cases. The question in design cases is not whether the references sought to be combined are in analogous arts in the mechanical sense, but whether they are so related that the appearance of certain ornamental features in one would suggest the application of those features to the other. 338

Ultimately, the Glavas court concluded that although the prior art directed to bottles, soap, and razor blade sharpeners all included opposite concave portions, "the articles and their shapes are of such a nature that they would not, in our opinion, suggest the modification" to the traditional rectangular float. 339 Regarding the cited references directed to pillows, the court found it was "plausible" that a float maker might look to pillows as "related" art, 340 but in any event concluded that nothing "in ... the former patents ... would suggest modifying [a rectangular float] in such a manner as to produce [the claimed] design." 341 The court held that the prior art pillow having one broad concave surface would not suggest the inclusion of opposite concave surfaces because "the opposite face of the pillow is necessarily flat so that it may rest firmly against a flat vertical wall." 342 Therefore, "while its component features may be individually old in the prior art, that art does not suggest combining them as the appellant has done, and the design claimed here, therefore, involves patentable novelty." 343

The Glavas test requiring that references be "so related" to "suggest" the combination of design features is vague and nonsensical—the result of a forced analogy to utility patents. What does "related" mean if not in a mechanical and utilitarian sense? Designers do not limit themselves to "related" designs when they look for inspiration—every prior art design is potentially related to what a designer might be seeking to do. 344 Even if the designs are defined as being "related" by virtue of having similar appearances, what does it mean for those designs to "suggest" that certain features be combined with other designs, if not a suggestion in terms of...

338 Id. (emphasis added).
339 Id. at 451.
340 Id. The examiner at the Patent Office had taken the position that "pillows are sometimes adapted to serve as floats." Id.
341 Id.
342 Id. It should be noted that with regard to the other cited pillow patent, the concave portions were on its narrow surfaces and so created a substantially different visual impression, which the Court held "would not suggest the broad concave upper and lower surfaces of appellant's float." Id.
343 Id.
344 See supra Part I (explaining that designers consult a wide variety of sources for inspiration and design ideas, without any particular regard for the types of objects in which the prior art designs are embodied). In many instances designers are simply looking for "certain curves" they can use for their designs, which curves could be found in any type of product. See supra Part I.
the functionality of the underlying articles? Indeed, designers themselves have no concept of what such an aesthetic "suggestion" might be.\textsuperscript{345}

The \textit{Glavas} court's application of the "so related as to suggest" test highlights the test's necessary reliance on mechanical and functional arguments to justify a combination in a way that simply does not reflect the reality of the design process. Indeed, the court found that the pillow prior art that included a flat side for a \textit{functional} purpose (i.e., resting flat against a wall) effectively taught against the \textit{appearance} of having opposite concave sides.\textsuperscript{346} The \textit{Glavas} court engaged in no reasoned analysis as to why the references were not sufficiently related or suggestive with regard to \textit{appearance}, but reached its decision in a wholly conclusory and subjective manner.\textsuperscript{347} As in \textit{Faustmann}, this conclusory subjectivity was the result of a forced attempt to measure the value of aesthetic creativity in designs by a yardstick fashioned for mechanical (i.e., utility) inventions.

\begin{enumerate}
\item \textit{In re Rosen} Sets the Modern Standard
\end{enumerate}

The final word from the C.C.P.A. on the issue of whether and how references are to be combined against claimed designs was \textit{In re Rosen}, which set the modern analytical framework for design nonobviousness.\textsuperscript{348} The design in \textit{Rosen} was directed to a contemporary style coffee table.\textsuperscript{349}

\textbf{FIG. 1}

The Claimed \textit{Rosen} Coffee Table

\begin{table}[h]
\centering
\includegraphics[width=0.5\textwidth]{Rosen_Coffee_Table.png}
\caption{The Claimed \textit{Rosen} Coffee Table}
\end{table}

\textsuperscript{345} \textit{See supra} Part I (noting that the concept of a prior design "suggesting" an aesthetic modification or combination of design features is nonsensical to designers, as aesthetic design does not seek to solve well defined technical problems).

\textsuperscript{346} \textit{In re Glavas}, 230 F.2d at 451 ("[T]he opposite face of the pillow is necessarily flat so that it may rest firmly against a flat vertical wall." There is "nothing . . . which would suggest" a design having opposite concave portions.).

\textsuperscript{347} \textit{See, e.g., id.} ("[T]he articles and their shapes are of such a nature that they would not, in our opinion, suggest the modification."); \textit{id.} ("This would not suggest the broad concave upper and lower surfaces of appellant's float . . . .").

\textsuperscript{348} \textit{In re Rosen}, 673 F.2d 388 (C.C.P.A. 1982).

\textsuperscript{349} \textit{id.} at 389 & fig.1.
The primary reference cited against this design was a desk having a semi-circular top and v-shaped legs.\textsuperscript{350}

\begin{center}
\textit{Rosen Desk Reference}
\end{center}

A secondary reference to Klein was cited for its teachings of three v-shaped legs having a slot into which a flat top portion could be inserted and situated.\textsuperscript{351}

\begin{center}
\textit{Rosen Klein Reference}
\end{center}

Another secondary reference to Hysten was cited for its teachings of a table having a circular top that could be inserted into slots as in Klein.\textsuperscript{352}

\begin{itemize}
\item\textsuperscript{350} \textit{Id.} \& n.2.
\item\textsuperscript{351} \textit{Id.} \& n.3.
\item\textsuperscript{352} \textit{Id.} \& n.4.
\end{itemize}
Finally, another secondary reference to Mudde was cited for its teachings of three equally spaced apart legs on a table.\(^{353}\)

In view of this prior art, the examiner took the position that it would have been obvious to “join the Rosen [desk] legs to the circular top of Hysten by use of a slot as taught by (Klein).”\(^{354}\) The Board affirmed, holding that “one of ordinary skill in the art would assess the teachings of the applied references and readily observe that three equally spaced slotted V-shaped legs may be used to support a table top or shelf which is inserted in the slots of the legs.”\(^{355}\)

On appeal, the design applicant argued that none of the cited references had “the same overall appearance as [the claimed] table” and that the Board “wrongly emphasized construction (means of ‘support’) rather than appearance or design.”\(^{356}\) The court concluded that all of the cited

\(^{353}\) Id. at 389 & n.5.
\(^{354}\) Id. at 390 (quotation marks omitted).
\(^{355}\) Id.
\(^{356}\) Id.
references would be within the scope of knowledge of an ordinary designer of contemporary furniture.357 The court then merged the Glavas rule that the references be “so related” as to “suggest” a combination with the Jennings rule that patentability of a design must be based on a comparison with “something in existence,” to arrive at the following rule of law:

Thus there must be a reference, a something in existence, the design characteristics of which are basically the same as the claimed design in order to support a holding of obviousness. Such a reference is necessary whether the holding is based on the basic reference alone or on the basic reference in view of modifications suggested by secondary references.358

Ultimately, the Rosen court held that the primary desk reference was “significantly different in concept” from the claimed coffee table design and gave a substantially different “visual impression.”359 Because the desk reference was not basically the same as the claimed design, the court did not reach the question of whether the modifications were suggested by the prior art.360

Rosen’s analysis was a positive step forward because it placed the exclusive focus of the obviousness inquiry (at least the primary reference part of the inquiry) on the aesthetics of the designs, adopting the central

357 Id. (“Under the ‘ordinary designer’ standard, in contrast to the ‘ordinary intelligent man’ standard previously used in this court, the test for obviousness may well bring more art into consideration since we must look to the knowledge of the ‘ordinary designer’ rather than that of the ‘ordinary intelligent man.’ Thus, here, designs of contemporary furniture other than coffee tables would reasonably fall within the scope of the knowledge of the designer of ordinary skill, such as the Rosen desk and the Hysten table. The fact that tables may have three equally-spaced legs (the only contribution of Mudde) would also clearly lie within the designer’s realm of knowledge. Only the Klein display stand design raises a question as to the propriety of attributing knowledge thereof to a designer of contemporary furniture.” (internal citations omitted)).

358 Id. at 391.

359 Id. (“Nor does the Rosen desk design meet the test of a basic design reference in which features might reasonably be interchanged with or added from those in other pertinent references to achieve appellant’s design. We have no doubt a designer would characterize Rosen’s and appellant’s designs as both being of contemporary styling, but we also believe that a designer of ordinary skill would find them significantly different in concept. Rosen does not give the same visual impression of lightness and suspension in space conveyed by appellant’s table. On the contrary, Rosen embodies a concept of confinement of space, resulting in a different overall appearance and aesthetic appeal.” (citation omitted)). The court also held that the desk would not, on its own, render the claimed coffee table design obvious. Id. (“If the Rosen desk design is modified only to the extent that it becomes a table, it does not thereby have the design characteristics of appellant’s table. The table top would be notched, and the surface surrounded by a substantial apron which is integral with the legs. Appellant’s table cannot be rejected as no more than an adaptation of the desk design to table form. Thus, the reference clearly cannot stand alone.” (internal citation omitted)).

360 Id.
principles of *Gorham* (even though purporting to rely primarily on cases such as *Jennings* and *Glavas*). *Rosen’s* emphasis on the overall visual appearance of a design is in accord with how designers actually assess whether a design has successfully added something of value to a product.  

After *Rosen*, it seemed clear that any focus on mechanical construction for design patentability was error. Yet *Rosen* did not go far enough. It is unfortunate that the *Rosen* decision was limited to whether the primary reference (henceforth referred to as a “*Rosen* reference”) was proper. Although *Rosen* properly focused exclusively on design aesthetics, it failed to take the next step and provide much-needed clarification as to when, if ever, the very appearances of multiple designs “suggest” the combination or modification of design features.

d. *In re Laverne* versus *In re Nalbandian*: Shifting Perspectives for the Design Nonobviousness Analysis

While the C.C.P.A. struggled to clarify whether and how to apply a modification or combination of design elements, it also debated a more fundamental issue: even if it is legally proper to modify or combine the references, who is to say whether the modification or combination would have been obvious? That is, what is the proper perspective for analyzing whether a claimed design would have been obvious? Fifteen years after answering the question in *In re Laverne*, the C.C.P.A. dramatically changed its position. In a move that erroneously assimilated design patent standards to those of utility patents, the court’s flip-flop in *In re Nalbandian* seriously undermined the policy objective of promoting progress in the decorative arts.

In its 1966 decision, *In re Laverne*, the court acknowledged that Congress at some level recognized the differences between “patents for inventions” and “patents for designs.” Nevertheless, the obviousness

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361 *Compare id.* (“*Rosen* does not give the same visual impression of lightness and suspension in space conveyed by appellant’s table. On the contrary, *Rosen* embodies a concept of confinement of space, resulting in a different overall appearance and aesthetic appeal.” (citation omitted)), *with Gorham Co. v. White*, 81 U.S. (14 Wall.) 511, 525 (1871) (“It is the appearance itself, therefore, no matter by what agency caused, that constitutes mainly, if not entirely, the contribution to the public which the law deems worthy of recompense.”).

362 *See supra* Part I (noting that a paramount concern in design is the effect that a design’s overall aesthetic appearance makes on the consumer).

363 *In re Rosen*, 673 F.2d at 390 (The court reversed the asserted error of the Patent Office and Board because those bodies “wrongly emphasized construction (means of ‘support’) rather than appearance or design in sustaining the rejection.”).


365 *Id.* at 1005 (“The provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided.” (emphasis added) (quoting 35 U.S.C. § 171 (2006))).
provisions of § 103, which were drafted with language directed to utility inventions (e.g., referring to the “ordinary skill in the art”), had been deemed to apply to designs. Accordingly, it was “somewhat difficult to apply to the problem of the patentability of designs.” In Laverne, the claimed design was directed to a molded chair, which begged the following fundamental questions:

What is “the art to which the subject matter pertains” in this case? Is it the molded chair “art” or is it the ornamental design “art”? In what field is the “inventor” of the design operating? Since those who create designs are designers, not chair makers, it would seem to follow that he is operating in the field of industrial design and that it is the “art” involved.

Thus, the C.C.P.A. in Laverne refused to cabin the pertinent art to the design of a particular article. Rather, the “art” involved was industrial design, generally. This approach properly reflects the reality that designers generally look to designs for all types of articles for inspiration, and that approximately half of all industrial designers are consulting designers who develop designs for many different types of products.

Next, the Laverne court asked, “who is a ‘person having ordinary skill in’ this art?” In the case of utility patents, one can distinguish between an “ordinary mechanic” who is a “craftsman or routineer,” and an “inventor” or “innovator of unobvious innovations,” even though both are workers in the same “art.” For designs, it is more difficult to draw this distinction. Because designing is done by designers,

if we equate [the class of competent designers] with the class of mechanics . . . are we not ruling out, as a practical matter, all patent protection for ornamental designs for articles of manufacture? Yet the clear purpose of

366 35 U.S.C. § 103 (2006). The statute describes the obviousness inquiry as whether “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” Id. The § 103 hypothetical person having “ordinary skill in the art” is the historic successor to the “ordinary mechanic acquainted with the business” of Hotchkiss v. Greenwood, 52 U.S. (11 How.) 248, 267 (1851). Hotchkiss is the first case in which the Court applied a qualitative requirement of “invention” for the patentability of utility inventions. See supra Part II.


368 In re Laverne, 356 F.2d at 1005.

369 Id. at 1005-06 (citation omitted).

370 See supra Part II.

371 In re Laverne, 356 F.2d at 1006.

372 Id. (citation and quotation marks omitted).

373 Id. In other words, if designers are deemed to be equivalent to the ordinary mechanics in the utility invention context, then there is no one in the design realm who would be equivalent to the inventors and innovators of the mechanical realm. As such, the work product of all designers would be deemed obvious for being “no more than a ‘competent designer’
the design patent law is to promote progress in the "art" of industrial design and who is going to produce that progress if it is not the class of "competent designers"?

Thus, an "ordinary designer" approach would effectively "deny[] patents to everything competent designers produce by the skill of their calling." Accordingly, the Laverne court concluded that obviousness should be determined not from the perspective of a designer, but rather an ordinary observer.

[W]hat we have to do is to determine obviousness to the ordinary intelligent man. The test is inherently a visual test, for the design is nothing more than appearance, and the appearance is that of the article as a whole. No special skill is required to determine what things look like, though individuals react differently. It is bound to be an individual reaction.

Under this test, Laverne's claimed design would not have been obvious. Numerous small differences between the claimed design and the prior art reference resulted in a "cumulative effect" that "create[d] a different appearance."

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374 Id. The court further elaborated:

We feel that the test of patentability of an admittedly new design cannot be whether it is no more than a "competent designer" might produce. That would be parallel to saying of a mechanical invention that it is no more than a "competent inventor" might produce. The test must be obviousness, for that is the dictate of section 103, but it must be applied in a way which will implement the legislative intent to promote progress in the field of industrial design by means of the patent incentive. This will not be done by denying patents to everything competent designers produce by the skill of their calling.

375 Id.
376 Id. (internal citation omitted).
377 Id. at 1006-07.
The court viewed these two designs for molded chairs as two distinct designs, which were more than mere variations of the same design.\textsuperscript{379}

One might feel that the two chairs were part of the same style trend, just as competing automobiles or refrigerators or radios seem to follow similar patterns from year to year, but they are, in our opinion, distinctly different designs within that style trend. The design which initiates a new style does not automatically close the field to all other designs within the same style pattern.\textsuperscript{380}

\textit{Laverne} therefore stands for the proposition that even where the visual impressions given by two designs are similar, they should each be protectable (i.e., patentable) in their own right to the extent that there are

\begin{itemize}
  \item \textsuperscript{378} \textit{Id.} at 1004.
  \item \textsuperscript{379} \textit{Id.} at 1007-08.
  \item \textsuperscript{380} \textit{Id.}
\end{itemize}
differences noticeable to an ordinary observer. This principle facilitates competition in designing and provides incentives for more designers to produce new and better designs. Further, viewing the obviousness inquiry from the perspective of an ordinary observer accurately captures how designers themselves would measure the value of a design, looking at whether consumers would view the design as being distinct when compared with prior designs.\footnote{See supra Part I.B (noting that designers place the utmost importance on the visual impressions given to consumers by their designs, and that therefore it makes sense for the value and protectability of a design to be based on whether consumers recognize it as being distinct).}

Despite its important and well-reasoned policy justification, the ordinary observer rule of \textit{Laverne} was overturned fifteen years later in the C.C.P.A.'s 1981 decision, \textit{In re Nalbandian}.\footnote{\textit{In re Nalbandian}, 661 F.2d 1214, 1216 (C.C.P.A. 1981).} The claimed design and primary reference cited were directed to illuminable tweezers.\footnote{\textit{Id.} at 1215.}

\begin{itemize}
\item \textbf{Appellant's}
\item \textbf{Johnson's}
\end{itemize}

The C.C.P.A. noted that after \textit{Laverne}, several regional circuits had rejected \textit{Laverne}'s ordinary observer test in favor of an "ordinary designer" test.\footnote{\textit{Id.} at 1215–16 ("Since the \textit{Laverne} decision, the Second, Third, Tenth and District of Columbia circuits have specifically considered the 'ordinary observer' test set forth therein and rejected it. These circuits continue to interpret 'one of ordinary skill' as requiring obviousness to be tested from the viewpoint of the 'ordinary designer.' Since board decisions may be reviewed by the District of Columbia Circuit as well as this court, the PTO has been faced with two standards in design cases. We believe it is appropriate to close this schism." (internal citations omitted)).}

At least one other regional circuit, however, directly addressed the issue and was convinced that the \textit{Laverne} "ordinary observer" standard was "the appropriate measure and one which has substantial historical backing."\footnote{Schwinn Bicycle Co. v. Goodyear Tire & Rubber Co., 444 F.2d 295, 299 (9th Cir. 1970). The \textit{Schwinn} court cited \textit{Whitman Saddle} for its statement that "[t]he test is the eye of an ordinary observer, the eyes of men generally, of observers of ordinary acuteness, bringing to the examination of the article upon which the design has been placed that degree of observation which men of ordinary intelligence give." \textit{Id.}}
To close what it perceived as a "schism," the Nalbandian court decided that "the test of Laverne will no longer be followed. In design cases we will consider the fictitious person identified in § 103 as 'one of ordinary skill in the art' to be the designer of ordinary capability who designs articles of the type presented in the application." The court justified this decision by citing to the Supreme Court (namely, Graham v. John Deere Co., the paradigm nonobviousness decision for utility patents) and Congress as requiring the present result.

The Nalbandian court dismissed the analysis of Laverne as being simply caught up in semantics.

If an "ordinary designer" test for designs were necessarily equivalent to applying an "ordinary inventor" test for inventions, we would not return to it here. However, the problem thus stated can be viewed as one created by semantics. The "ordinary designer" means one who brings certain background and training to the problems of developing designs in a particular field, comparable to the "mechanic" or "routineer" in non-design arts. We do not have a name for that person in the design field other than "designer" which is also the name we must use for the person who creates a patentable design.

Here the Nalbandian court gravely misconstrued the rationale of Laverne. The C.C.P.A. in Laverne was not engaging in semantics. Its "ordinary observer" standard implemented the policy goal of Congress as explained by Gorham—promoting progress in the design arts. The Laverne court conceded that the statutory scheme required application of the obviousness test, but recognized that it should not be applied identically for utility inventions and designs. Design patentability required a more nuanced approach. As keenly observed in Laverne, the test of obviousness "must be applied in a way which will implement the legislative intent to promote progress in the field of industrial design by means of the patent incentive. This will not be done by denying patents to everything competent designers produce by the skill of their calling." Based on its inaccurate reading of Laverne, the Nalbandian court concluded that the required inquiry into the level of ordinary skill can be made with respect to designs to arrive at an "ordinary designer." Further,

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386 In re Nalbandian, 661 F.2d at 1216.
387 Id. ("This approach is consistent with Graham v. John Deere Co., which requires that the level of ordinary skill in the pertinent art be determined." (citation omitted); id. ("[T]he statute does not specifically create a test for nonobviousness of a design which is different from that for inventions defined in 35 U.S.C. § 101. That § 103 applies to designs follows from 35 U.S.C. § 171, which states: "The provisions of this title relating to patents for inventions shall apply to patents for designs . . . ." (ellipsis in original)).
388 Id.
390 In re Nalbandian, 661 F.2d at 1216–17.
the court believed the “ordinary designer” standard had certain pragmatic benefits, namely that it would be easier and more objective to identify a designer in the field for purposes of assisting a jury in a patent litigation context, or for obtaining expert affidavits during patent prosecution.\textsuperscript{391} This was perceived to be a substantial advantage over the ordinary observer standard because “[n]o affiant can be qualified as an expert ordinary observer.”\textsuperscript{392}

The \textit{Nalbandian} court did not adequately explain why an affiant could not be an “expert” with regard to what ordinary observers perceive. A person who had worked in the industry of the claimed design and had experience interacting with consumers, such as a purchasing, sales, or marketing manager, would be able to offer objective evidence about the visual impressions that the designs would likely make on such consumers.\textsuperscript{393}

The court also did not address the fact that consumer surveys are another objective means to present evidence of how an ordinary observer would view the claimed design and the prior art. Consumer surveys are standard evidence in other types of intellectual property cases such as in trademark litigation.\textsuperscript{394}

Applying its “ordinary designer” standard, the \textit{Nalbandian} court concluded that the claimed design and the prior art design were substantially identical, with the primary differences contained in the finger grips of the claimed and prior art tweezer designs being \textit{de minimis}.\textsuperscript{395} The claimed design was deemed obvious because “it is well within the skill of an ordinary designer in the art to make the modification of the fluting and that it would have been obvious to do so. Such changes do not achieve a patentably distinct design.”\textsuperscript{396} \textit{Nalbandian} did not make any findings or point to any evidence of record as to the level of ordinary skill of an

\textsuperscript{391} \textit{Id.} at 1217 ("It is apparent the ‘ordinary designer’ standard has been found helpful to courts in infringement litigation because of the objective evidence which can be brought to bear on the question of obviousness under the tests of \textit{Graham}. We believe it also can be more effectively dealt with by an applicant during patent prosecution than can the ‘ordinary observer’ test. For example, where an examiner selects features from various designs, or relies on common knowledge in the art, the possibility is present of submitting an affidavit from an expert in whose opinion, subjective though it may be, it would not have been obvious to an ordinary designer, despite knowledge (or imputed knowledge) of the prior art to combine features or make modifications as shown in an applicant’s design.” (citations omitted)).

\textsuperscript{392} \textit{Id.}

\textsuperscript{393} For example, a person involved in the marketing or sale of a designed product would be able to testify concerning reactions consumers have had to the design (including which features are more or less prominent/important), either as a result of personal interactions with consumers or via market research.


\textsuperscript{395} In re \textit{Nalbandian}, 661 F.2d at 1217.

\textsuperscript{396} \textit{Id.} at 1217–18 (citation omitted).
ordinary designer in the illuminable tweezer art, nor did it explain why it would be obvious to such a designer to make the alleged modifications.

Reminiscent of the approaches taken in Whitman Saddle and Faustmann, the Nalbandian court’s decision is entirely subjective and conclusory. This result is ironic because the Nalbandian majority placed great emphasis on analyzing the Graham factors (e.g., the level of ordinary skill in the art), and further praised the virtues of the “ordinary designer” test for its objectivity. The court, however, did not appear to consider any evidence whatsoever that would substantiate its conclusions under the Graham “factual inquiries.”

Judge Giles Rich, author of the C.C.P.A.’s opinion in Laverne, wrote a concurrence in Nalbandian. Rich felt it was appropriate “as the father of the so-called ‘ordinary observer’ test (as applied to 35 U.S.C. § 103), to say a few kind words over the corpse.” Judge Rich restated his concern about equating designers with ordinary mechanics, noting that he was “interested in retaining within the ambit of the patent system the made-for-hire products of ‘competent designers’ so businessmen or corporations would find it economically advantageous to employ them, thus carrying out the objective of 35 U.S.C. § 171, to promote the ornamental design of articles of manufacture.” He took issue with the majority’s implication that references to an “ordinary” designer necessarily suggests that there exist “extraordinary” designers, and that only those extraordinary designers can produce unobvious designs. Ultimately, Judge Rich believed that the “real problem” was not whether the fictitious person under § 103 is an ordinary designer or an ordinary observer, but rather the very “presence of ‘invention’ in a design.”

It is unclear whether the Nalbandian court even appreciated the fact that an “ordinary designer” of tweezers could conceivably encompass multiple types of designers, for example, a designer employed by a tweezer company, a more generalized consulting designer, or even a designer of an entirely different type of article. See supra Part I (discussing how an “ordinary designer” of a particular article is not easily identifiable given that some designers specialize while others do not).

In re Nalbandian, 661 F.2d at 1217.
Id. at 1218.
Id.
ld.
Id.
ld. Judge Rich felt that setting the semantics issues aside, “courts will, with phraseology of their own choosing, continue to find designs patentable or unpatentable according to their judicial ‘hunches.’” Id.
ld. Judge Rich’s concurrence included many additional comments on the invention/nonobviousness requirement, the legislative evolution of which we detailed supra Part II.
C. Refinement in the Federal Circuit—For Better or Worse

The basic analytical framework of Rosen and Nalbandian has remained essentially unchanged since the Court of Appeals for the Federal Circuit was established in 1982 and inherited the C.C.P.A.'s and the regional circuits' patent jurisdictions. The Federal Circuit has generally re-expressed and applied the previously settled principles, following the Rosen framework and focusing on the overall appearance of the claimed design. The most significant contribution to the analysis in the Federal Circuit era has been some elaboration on when a combination or modification is deemed to have been "suggested" by the appearance of the prior art designs. Such elaboration, however, raises more questions than it answers.

1. Clarifying the "Suggestion" Prong.—The Federal Circuit correctly applied Rosen's appearance-oriented analysis in In re Carlson. There, the claimed design was directed to a symmetrical dual-compartment bottle.

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404 See, e.g., Durling v. Spectrum Furniture Co., 101 F.3d 100, 104 (Fed. Cir. 1996) (holding that because of significant differences in design features between the claimed and prior art designs, the prior art "does not create . . . the same visual impression" as the claimed design, and the claimed design is therefore nonobvious).

405 See, e.g., L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1124 (Fed. Cir. 1993) (The court stated that "not only the individual elements, but the ornamental quality of the combination must be suggested in the prior art," without providing any definition of what is meant by "ornamental quality" (citations omitted)); In re Sung Nam Cho, 813 F.2d 378, 382 (Fed. Cir. 1987) (The court held that even though the prior art showed components of the claimed design, the court was "satisfied that the overall appearance of Cho's design is not suggested by the references," with no explanation of why the requisite suggestion was absent).

406 In re Carlson, 983 F.2d 1032, 1039 (Fed. Cir. 1992).

407 Id. at 1038.

By contrast, the cited prior art was asymmetrical.\footnote{In re Carlson, 983 F.2d at 1038.}

Although the court acknowledged that the symmetry of the claimed design produced a different visual impression, it nevertheless held the design would have been obvious over the asymmetrical prior art.

In a field of art such as this, where products are deliberately designed as asymmetrical in order to create distinctive, memorable images, it would have been obvious to one of ordinary skill in the art to create a "normal" or symmetrical orientation for a design. Indeed, knowledge of symmetry is one reason why more complex designs are developed—the expected design configuration is one of symmetry.\footnote{In re Carlson, 983 F.2d at 1038-39 (internal citation omitted).}

Thus, Carlson sheds some light as to what it means to say that a combination or modification is "suggested" by the appearance of the prior art—the test seems to be whether the change is "expected."

However, Carlson is not clear as to whether the change would have been expected by an ordinary designer (in accordance with \textit{Nalbandian}) or by an ordinary observer (in accordance with \textit{Laverne}). Carlson contends that it would have been obvious for a designer to make a symmetrical design in a field where asymmetry was the norm, even though the prior art did not disclose symmetrical objects. Although designers make the designs, it is the consumers who would "expect" a design. The logical inference from Carlson is that the proper test for whether a modification or

\footnote{U.S. Patent No. 86,749 fig. 2 (filed Oct. 23, 1931) (issued Apr. 12, 1932). A German Geschmacksmuster (essentially a design registration) that exhibited similar asymmetry was also cited against the claimed design. \textit{In re Carlson}, 983 F.2d at 1034, 1038.}

\footnote{In re Carlson, 983 F.2d at 1038--39 (internal citation omitted).}
combination would have been obvious is whether an ordinary observer—a consumer of designs—would have expected the differences or changes. This expectation-based approach accords with designers’ views that the success and distinctiveness of a design is best measured by the reactions of consumers.\textsuperscript{412} Carson still leaves open the crucial question, however, of when an “expected” design modification rises to the level of being obvious.\textsuperscript{413}

\textit{In re Harvey} provided additional gloss as to when a design combination or modification may be considered obvious.\textsuperscript{414} The claimed designs in Harvey were directed to “vase[s] formed by the intersection of two geometric solids.”\textsuperscript{415}

\begin{figure}[h]
  \centering
  \includegraphics[width=0.5\textwidth]{vases.png}
  \caption{The prior art included an earlier design made by Harvey having a spherical vase with superimposed cube.\textsuperscript{417}}
\end{figure}

\begin{figure}[h]
  \centering
  \includegraphics[width=0.5\textwidth]{vases2.png}
  \caption{The design shown above on the left was characterized as an “oblative ellipsoid with a pentagonal cylinder,” and the design on the right was characterized as an “egg-shaped revolved hyperboloid with a truncated pyramid (also referred to as a square frustrum).” Id. at 1062, 1067–68.}
\end{figure}

\begin{figure}[h]
  \centering
  \includegraphics[width=0.5\textwidth]{vases3.png}
  \caption{Id. at 1067 exhibit A.}
\end{figure}

\begin{figure}[h]
  \centering
  \includegraphics[width=0.5\textwidth]{vases4.png}
  \caption{Id. at 1068 exhibit D.}
\end{figure}

\begin{figure}[h]
  \centering
  \includegraphics[width=0.5\textwidth]{vases5.png}
  \caption{Id. at 1062.}
\end{figure}

\begin{figure}[h]
  \centering
  \includegraphics[width=0.5\textwidth]{vases6.png}
  \caption{Id. at 1067 exhibit B.}
\end{figure}

\textsuperscript{412} See supra Part I.B (explaining that designers seek to elicit certain reactions and emotions with the appearances of their designs).

\textsuperscript{413} Id. at 1062. The design shown above on the left was characterized as an “oblative ellipsoid with a pentagonal cylinder,” and the design on the right was characterized as an “egg-shaped revolved hyperboloid with a truncated pyramid (also referred to as a square frustrum).” Id. at 1062, 1067–68.

\textsuperscript{414} Id. at 1067 exhibit A.

\textsuperscript{415} Id. at 1068 exhibit D.

\textsuperscript{416} Id. at 1062.

\textsuperscript{417} Id. at 1067 exhibit B.
The Patent Office deemed the visual differences over the prior art to be minimal, and the substitution of the different geometric shapes to be obvious and well-known variations to designers in the art. The Federal Circuit disagreed, holding that major modifications would be required to produce the claimed design from the prior art design. Accordingly, the prior art cited could not qualify as a proper Rosen reference because the visual characteristics of the claimed and prior art designs were not basically the same.

The Patent Office in Harvey repeated its error in Rosen—it had “improperly mixed principles of obviousness for utility patents with those for ornamental design patents.” The Patent Office had confused the “design concepts” with the claimed ornamental appearance. The Harvey court distinguished the case before it from one involving the “substitution of a single, simple, two-dimensional, geometric shape (an octagon) for another (a circle).” Rather, “the present case involves the replacement of two, more complicated, three-dimensional figures (a sphere and a cube) with two highly complicated solids (an egg-shaped hyperboloid and a truncated pyramid or an oblate ellipsoid and a pentagonal cylinder).” Harvey held the design to be nonobvious, explaining that “if prior art designs are to be modified in more than one respect to render a claimed design obvious, then those modifications must be 'de minimis' in nature and unrelated to the overall aesthetic appearance of the design.”

Harvey generally follows the Rosen approach of focusing on the appearance of the claimed and prior art designs. Harvey fails to draw a clear line between obvious and nonobvious designs, however. Under Harvey, a design would be obvious when only de minimis changes are made to the prior art having no effect on the overall appearance. Of course, what is de minimis and has no effect on the overall appearance of a design is in the eye of the beholder, making this aspect of the test highly subjective. Also under Harvey, the prior art may be modified in “one respect” (which is more

419 Id. at 1062–63.
420 Id. at 1063.
421 Id. at 1065.
422 Id. at 1064.
423 Id.
424 Id. These were the facts in In re Hopkins, 34 F.2d 1016, 1016 (C.C.P.A. 1929), which the Patent Office relied upon for its rejections. The Harvey court also pointed out that Hopkins was decided prior to the 1952 Patent Act and “is at best, a weak, old and questionable precedent.” In re Harvey, 12 F.3d at 1064.
425 In re Harvey, 12 F.3d at 1064.
426 Id. at 1065 (citing In re Carter, 673 F.2d 1378, 1380 (C.C.P.A. 1982)).
427 This general notion seems to accord with the view of designers. See supra Part I.B (noting that very minor changes to a prior art design not affecting that design's appearance are not viewed as being worthy of protection by designers).
than *de minimis*) so as to render a subsequent claimed design obvious. Unfortunately, *Harvey* provides no suggestion as to the outer limits of such permissible modifications to the prior art (e.g., only those modifications that are "expected," as in *Carlson*) which would still render new designs obvious.

The Federal Circuit next sought to refine the concept of suggestion to combine/modify designs in *In re Borden*. There, the claimed design was for a twin-neck dispensing container.

The prior art cited against the claimed design included a design to Bettix as the primary reference, with designs to Freshn Tea and Costa as secondary references.

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428 See *In re Harvey*, 12 F.3d at 1065. Query whether *Harvey*'s insistence on not modifying designs in "more than one respect to render a claimed design obvious" suggests that limitations be placed on the number of references which may be combined against a design. *Id.*

429 *In re Borden*, 90 F.3d 1570 (Fed. Cir. 1996).

430 *Id.* at fig.1.

431 *Id.* at 1572-73 & 1573 figs.2, 3 & 4.
The only differences between the Bettix design and the claimed design involved the shape of the smaller chamber on the twin neck container, namely (1) the small chamber of Bettix included an outward flare near the top surface, whereas the sides in the claimed design were straight, and (2) the small chamber in Bettix was rectangular and narrower than the width of the overall container, whereas the small chamber in the claimed design was square and as thick as the width of the overall container.

The USPTO examiner took the position that the Freshn Tea and Costa references showed design features that could be combined with Bettix to render the claimed invention obvious. The Freshn Tea reference showed a small chamber that was cubical and had straight sides, rather than the flared edges of Bettix. The Costa reference showed a small chamber that was as thick as the width of the main chamber, rather than the narrower small chamber in Bettix.

The Federal Circuit agreed with the Patent Office that the Bettix container’s design “‘[was] basically the same as the claimed design’”—a proper Rosen reference. Given that there were some differences between the Bettix design and the claimed design, the court also noted that when “the basic reference alone does not render the claimed design unpatentable, design elements from other references in the prior art can be considered in determining whether the claimed design would have been obvious to one of skill in the art.” At issue was whether the references properly suggested the combination to make the claimed design. The Borden court held that the cited references did suggest the combination, noting that “the two missing design elements are not taken from unrelated references, but are found in other dual-chamber containers.” Unlike the situation in Harvey, where the prior art “simply provide[d] a general approach to creating new designs,” the claimed design in Borden was deemed obvious because the prior art “taught the two specific design elements that would convert the Bettix reference into appellant’s claimed design, and did so in a setting that would suggest the combination to one of skill in the art.”

The Borden court sidestepped the critical issue that the secondary references were not particularly similar in their overall appearances to the claimed design. The applicant had argued that this should negate
any perceived suggestion of the alleged modifications. The court failed to explain why a designer would include the design features from other containers that had distinct visual appearances. The message from Borden seems to be that de minimis changes to a proper Rosen reference are permissible to render a design obvious as long as the changes (i.e., the different design features) are found in secondary references directed to the same type of article (even when that article looks distinctly different). This message somewhat accords with the views of designers, who would generally consider the adaptation of design concepts and features to be worthy of protection when those features are adapted into new articles having different degrees of freedom. Thus, the addition of very minor features from prior designs for the same article having the same degree of freedom, even if their appearances are different, should not be protectable.

2. Titan Tire Skirts the Looming KSR Issue.—The U.S. Supreme Court in 2007 decided KSR International Co. v. Teleflex Inc., its first pronouncement on the nonobviousness requirement for patentability in over thirty years. The KSR Court significantly raised the bar for satisfying the nonobviousness requirement for utility patent inventions. KSR dealt specifically with the patentability of “combination” inventions, i.e., combinations of known mechanical elements, and declared a broad array of evidence relevant to determining whether they would have been obvious. “Under the correct analysis,” the Court stated, “any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” Notions of predictability and common sense weighed heavily in the Court’s rhetoric, although it failed to define either term. For example, the Court observed that an invention may be obvious if it represents no more than the “predictable use of prior art elements according to their established functions.”

In Titan Tire Corp. v. Case New Holland, Inc., the Federal Circuit raised, but did not decide, the difficult question whether or how KSR’s

441 Id. at 1575.
442 See supra Part I.
444 Prior to KSR, the Supreme Court last decided an obviousness case in 1976. See Dann v. Johnston, 425 U.S. 219, 229-30 (1976) (finding it obvious to combine a modern computer program described in the patent with “existing machine systems in the banking industry”).
445 KSR, 550 U.S. at 420.
446 See, e.g., id. at 421 (“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.”).
447 Id. at 417.
pronouncements apply to designs. The patented design in *Titan Tire* was directed to a tractor tire. The district court had denied the patentee's motion for a preliminary injunction, finding that the accused infringer was likely to prevail on its assertion that the claimed design would have been obvious over the prior art designs.

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*Titan's Claimed Design*

*683 Patent Prior Art*  
*Ram Implement Prior Art*

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449 *Id.* at 1374.
450 *Id.* at 1375.
451 *Id.* at 1374 fig.1.
452 *Id.* at 1382 fig.2A.
453 *Id.* at 1383.
The district court relied upon the Supreme Court’s statement in *KSR* that an invention may be obvious if it is no more than the “‘predictable use of prior art elements according to their established functions.’” The district court rejected the patentee’s argument that the quoted passage of *KSR* “has no application in the design patent context because design patents do not have functional elements,” but are aesthetic creations made for the visual appearance.

On appeal, the Federal Circuit first summarized the analytical framework for design patent nonobviousness as follows:

Our precedents teach that “the ultimate inquiry under section 103 is whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.” . . . [T]his general principle translates into “whether one of ordinary skill would have combined teachings of the prior art to create the same overall visual appearance as the claimed design,” and that this in turn requires that “one must find a single reference, a something in existence, the design characteristics of which are basically the same as the claimed design.” Once the primary reference is found, other “secondary” references “may be used to modify it to create a design that has the same overall visual appearance as the claimed design.” Further, these secondary references must be “so related [to the primary reference] that the appearance of certain ornamental features in one would suggest the application of those features to the other.”

The Federal Circuit agreed that the prior art references cited against the patented design were both proper *Rosen* references having basically the same appearance as the claimed design. One design feature that the primary references failed to teach was the hexagonal lug heads of the patented tire. Another tire reference existed, however, which disclosed enlarged six sided lug heads, qualifying it “as a secondary reference for modifying one of the primary references to create a design with the same overall visual appearance as the [patented] design.” Because the prior art ostensibly satisfied the presently existing obviousness framework to render the claimed design obvious, the Federal Circuit concluded that the district court had not abused its discretion in denying the patentee a preliminary injunction.

The Federal Circuit in *Titan Tire* did not stop there, however. In the remainder of its opinion the appellate court strongly suggested that the *Rosen* framework for design obviousness is not in accord with the current

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454 *Id.* at 1384 (emphasis omitted) (citation omitted).
455 *Id.*
456 *Id.* at 1380–81 (second bracketed alteration in original) (citations omitted).
457 *Id.* at 1381.
458 *Id.* at 1383.
459 *Id.*
460 *Id.* at 1384.
and/or proper state of design law, which should emphasize the overall visual appearance of a claimed design:

This process, first finding a primary reference in the prior art and then modifying it with secondary prior art references to demonstrate the claimed design’s obviousness, may have a tendency to draw the court’s attention to individual features of a design rather than the design’s overall appearance. In this respect, it is similar to the “point of novelty” test that until recently was used in the infringement side of design patent law. The “point of novelty” test required a trial court to examine the prior art and the claimed design, identify one or more points of novelty that distinguished the claimed design from the prior art, and then determine whether those points of novelty were included in the accused design, a sometimes contentious analysis. See Egyptian Goddess, Inc. v. Swisa, 543 F. 3d 665, 670-71 (Fed. Cir. 2008) (en banc). One perceived problem with the point of novelty test was that it might cause the court to focus “on whether the accused design has appropriated a single specified feature of the claimed design, rather than on the proper inquiry, i.e., whether the accused design has appropriated the claimed design as a whole.” Id. at 677.\(^{461}\)

The Titan Tire court acknowledged that Egyptian Goddess was a decision about the standard for design patent infringement rather than validity. Even though Egyptian Goddess “reestablished the ordinary observer test as the controlling doctrine applicable to design patent infringement,”\(^{462}\) the Titan Tire court concluded that it was “not clear to what extent, if any, the doctrine applicable to obviousness should be modified to conform to the approach” of Egyptian Goddess.\(^{463}\)

The Titan Tire court also skirted the larger, looming question of KSR’s applicability to design patent nonobviousness. While commenting that “it is not obvious that the Supreme Court necessarily intended to exclude design patents from the reach of KSR,”\(^{464}\) it offered no support or explanation for this suggestion. Although the Titan Tire court was able to decide the case before it without resolving the “new and untested ground” of whether and how KSR should be applied to design patents, Titan Tire signals that the issue of KSR’s applicability is ripe for determination.\(^{465}\) Titan Tire stands as a harbinger for much-needed clarification of the nonobviousness analysis for design patents.

\(^{461}\) Id. at 1383-84.
\(^{462}\) Id. at 1384.
\(^{463}\) Id. at 1384. The Titan Tire court concluded that it “need not decide that issue to decide this case.” Id. The Federal Circuit thereafter addressed the Egyptian Goddess issue in International Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233 (Fed. Cir. 2009), which we further discuss infra Part III.C.3.
\(^{464}\) Titan Tire, 566 F.3d at 1385.
\(^{465}\) Titan Tire, 566 F.3d at 1384.
Indeed, a blind application of *KSR* to design patents could be devastating to the entire field of decorative arts, denying protection to virtually every new design. Design, insofar as the aesthetic appearance is concerned, is an artistic endeavor that is not generally perceived as or likened to technical problem solving. Accordingly, it is far too easy for judges, juries, and patent examiners alike to look at a claimed design in view of the prior art and subjectively conclude that the design constitutes nothing more than the “predictable” and “common sense” use of prior design features. Most lay people can envision and speculate as to what a modification or combination of specific design features in the prior art will look like, and the actual result will almost always seem “obvious” under *KSR*’s amorphous common sense and predictability approach.

3. International Seaway Unnecessarily Complicates the Analysis.—Six months after its *Titan Tire* decision, the Federal Circuit again considered the determination of design patent nonobviousness in *International Seaway Trading Corp. v. Walgreens Corp.* International Seaway (Seaway) sued Walgreens and its buying agent for importing and selling clog-style shoes that allegedly infringed Seaway’s design patents. A district court granted the accused infringers’ motion for summary judgment that Seaway’s patents were invalid, finding them anticipated under 35 U.S.C. § 102 by the disclosure of an earlier design patent covering the CROCS brand Beach model clog design. The Federal Circuit vacated and remanded the case for reconsideration of anticipation as well as obviousness.

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466 *See supra* Part I (distinguishing the technical problem/solution approach employed in utility invention from the creative process of designing).

467 More than one hundred years ago, Justice Holmes cautioned against permitting the availability of protection for artistic subject matter to be decided at the mercy of the particular tastes and opinions of a few adjudicators. *See* Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 251-52 (1903) ("It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits.").

468 *Int’l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233 (Fed. Cir. 2009). *International Seaway* was issued on December 17, 2009, just over six months after the Federal Circuit’s June 3, 2009 decision in *Titan Tire*.

469 *Id.* at 1236.

470 *Id.* at 1236-37.

471 *Id.* at 1244 (“We vacate and remand for further proceedings on the limited issue of whether the differences in the insole patterns between the prior (Crocs) art and the patented designs bar a finding of anticipation or obviousness.”). Although the district court had not decided whether Seaway’s design patents were invalid on the ground of obviousness, *id.* at 1237, the Federal Circuit apparently considered the issue preserved on appeal. *Id.* at 1243-44 (“Walgreens and Touchsport assert that the issue [of obviousness under § 103] can be considered on appeal because they raised both anticipation and obviousness arguments below.”). The Federal Circuit concluded that the district court’s failure to compare the insoles of the claimed and accused clog designs “precludes a finding of obviousness.” *Id.* at 1244.
court had erred by basing its anticipation finding on an examination of only
external design features, failing to consider the entirety of the patented
designs (including the clogs' insoles) when comparing the patented designs
to the prior art (CROCS) design.\textsuperscript{472}

The more notable issue raised in \textit{International Seaway} was one that
the Federal Circuit had reserved in \textit{Titan Tire},\textsuperscript{473} namely, whether its en-
banc rejection in \textit{Egyptian Goddess} of the point of novelty test as part of the
analysis for design patent \textit{infringement} required a similar modification
to the analysis for design patent \textit{validity}.\textsuperscript{474} The \textit{International Seaway}
court observed that some of its \textit{pre-Egyptian Goddess} decisions had
invoked both (1) a point of novelty test and (2) an ordinary observer test
when determining whether design patent claims were anticipated.\textsuperscript{475} In
accordance with the “general rule” that “the same test must be used for
both infringement and anticipation,”\textsuperscript{476} however, the court concluded that
after \textit{Egyptian Goddess} the point of novelty test can no longer be part of
a design anticipation analysis.\textsuperscript{477} Agreeing on this issue with the district
court, the Federal Circuit held that henceforth “the ordinary observer test
is the sole test for design patent invalidity under § 102.”\textsuperscript{478}

\textsuperscript{472} See \textit{id.} at 1241-43 (explaining that the “normal use” lifetime of a clog includes its
point of sale, when the clog's insole design would be visible to potential purchasers).

\textsuperscript{473} \textit{id.} at 1237.

\textsuperscript{474} \textit{id.} at 1237-41.

\textsuperscript{475} \textit{id.} at 1238 & n.2 (“Our cases have recognized that in the past we have applied a dual
test for anticipation identical to the then-applicable test for infringement, namely the ordinary
observer and point of novelty tests.” (citing \textit{Bernhardt, L.L.C. v. Collezioni Europa USA, Inc.},
386 F.3d 1371, 1383 (Fed. Cir. 2004), and four earlier Federal Circuit design patent decisions)).
The court explained that in these anticipation cases it had

compared the patented design with the alleged anticipatory reference to
see if it appropriated the points of novelty of the prior art reference. The
points of novelty of the prior art reference were determined by looking
to earlier prior art to determine the points of novelty in the anticipatory
reference.

\textit{id.} at 1238.

\textsuperscript{476} \textit{id.} at 1239 (citation omitted).

\textsuperscript{477} See \textit{id.} at 1240 (“[W]e now conclude that the ordinary observer test must logically be
the sole test for anticipation as well [as infringement].” (emphasis added)).

\textsuperscript{478} \textit{id.} at 1241. We disagree with \textit{International Seaway} on this point, insofar as the court's
application of the ordinary observer test for anticipation under § 102 contemplates that prior
art which is merely “substantially similar” to a claimed design can anticipate that design. \textit{See id.} at 1239. The court described the ordinary observer test as originating from the statement
in \textit{Gorham Co. v. White}.

\[If,\] in the eye of an ordinary observer, giving such attention as a pur-
chaser usually gives, two designs are substantially the same, if the re-
semblance is such as to deceive such an observer, inducing him to pur-
chase one supposing it to be the other, the first one patented is infringed
Although the district court had not reached the issue, the Federal Circuit next considered whether the analysis for design patent nonobviousness under § 103 should also be altered in light of Egyptian Goddess. The appellate court opined that in earlier Federal Circuit decisions, the ordinary observer and point of novelty tests were applied in much the same manner for obviousness as for anticipation, except that in the case of obviousness the features of the prior art could be combined to create a single anticipatory reference or an earlier single reference could be modified based on the knowledge of a skilled artisan. See, e.g., Durling v. Spectrum Furniture Co., 101 F.3d 100, 103 (Fed. Cir. 1996).40 The quoted description of an obviousness analysis involving a combination of prior art features “to create a single anticipatory reference” improperly muddles the vocabulary of two distinct invalidity concepts—anticipation under § 102 and obviousness under § 103. Nevertheless, the language is accurate to the extent it was meant to describe the practice of first identifying a “basic” or “primary” design reference in accordance with In re Rosen, and thereafter modifying or combining it with features found in “secondary” design references to show that a particular claimed design would have been obvious to a person of ordinary skill in the art.482

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479 Int’l Seaway, 589 F.3d at 1237 (“The district court did not determine whether the patents-in-suit were invalid as obvious.”).
480 Id. at 1238-39 (internal citation omitted).
481 In re Rosen, 673 F.2d 388, 391 (C.C.P.A. 1982) (In order to support a holding of design obviousness, “there must be a reference, a something in existence, the design characteristics of which are basically the same as the claimed design. . . . Such a reference is necessary whether the holding is based on the basic reference alone or on the basic reference in view of modifications suggested by secondary references.”).
482 See, e.g., In re Borden, 90 F.3d 1570, 1574 (Fed. Cir. 1996) (“If [a] basic reference alone does not render the claimed design unpatentable, design elements from other references in the prior art can be considered in determining whether the claimed design would have been obvious to one of skill in the art. In order for secondary references to be considered, however, there must be some suggestion in the prior art to modify the basic design with features from the secondary references.” (citations omitted)); In re Rosen, 673 F.2d at 390; In re Glavas, 230 F.2d 447, 449, 451 (C.C.P.A. 1956). Contrary to this common past practice, we recommend that the combining of prior art designs to establish obviousness be modified or eliminated. See infra Part IV.E.

Oddly, the Darling case cited as support by the International Seaway court did not involve a combination of prior art design features to reach a conclusion of obviousness. Rather, the Federal Circuit in Darling reversed a district court’s judgment invalidating a furniture design
We disagree, however, with International Seaway's description of the perspective for assessing nonobviousness of designs. The court described a bifurcated approach involving two different perspectives: first, "one skilled in the art," and second, the "ordinary observer":

For design patents, the role of one skilled in the art in the obviousness context lies only in determining whether to combine earlier references to arrive at a single piece of art for comparison with the potential design or to modify a single prior art reference. Once that piece of prior art has been constructed, obviousness, like anticipation, requires application of the ordinary observer test, not the view of one skilled in the art.\footnote{83}

In describing the first part of this approach, that of a skilled artisan "arriving at a single piece of art for comparison" purposes,\footnote{84} the International Seaway court suggests that it must be shown that an ordinary designer would combine a proper Rosen reference\footnote{85} with other prior art teachings to make a single designed object similar to the claimed design.\footnote{86} If an ordinary designer can and would have made such a combination, the second part of the court's approach inquires whether the resulting design is "substantially similar" to the claimed design in the eyes of an ordinary observer. International Seaway implies that only if both parts of its bifurcated approach are satisfied—via both perspectives—can a claimed design patent for obviousness, Durling v. Spectrum Furniture Co., 101 F.3d 100, 105 (Fed. Cir. 1996). The Durling court explained that "[b]efore one can begin to combine prior art designs, ... one must find a single reference, 'a something in existence, the design characteristics of which are basically the same as the claimed design.'" Id. at 103 (quoting In re Rosen, 673 F.2d at 391). The accused infringer in Durling had failed to identify any prior art design similar enough to the patented design that it would qualify as a primary (or "basic") reference under Rosen. Durling, 101 F.3d at 104 ("Because of these significant differences" between the claimed design for a sectional sofa grouping and the prior art Schweiger model proffered by the accused infringer, "the Schweiger model does not create basically the same visual impression as does Durling's design, and therefore cannot suffice as a primary reference."). The Durling court concluded that "[w]ithout such a primary reference, it is improper to invalidate a design patent on grounds of obviousness." Id. at 105.

\footnote{83} Int'l Seaway, 589 F.3d at 1240 (citation omitted). The omitted footnote reads: "That combination or modification would not necessarily yield a single piece of prior art identical to a patented design since there may be no motivation to change the prior art to achieve such identity." Id. at 1240 n.5.

\footnote{84} Id. at 1240.

\footnote{85} See In re Rosen, 673 F.2d at 391 ("[T]here must be a reference, a something in existence, the design characteristics of which are basically the same as the claimed design in order to support a holding of obviousness. Such a reference is necessary whether the holding is based on the basic reference alone or on the basic reference in view of modifications suggested by secondary references.").

\footnote{86} The International Seaway court characterized this similar designed object as a "single anticipatory reference," i.e., a reference that is substantially similar to the claimed design in the eye of an ordinary observer. Int'l Seaway, 589 F.3d at 1238-39 (inquiring whether it would be obvious for "the features of the prior art [to] be combined to create a single anticipatory reference").
be invalid as obvious. Whether this is the court's intended meaning is not entirely clear, however, because it failed to cite Rosen or any other supportive authority when discussing its approach. Indeed, none of the precedent cited in the International Seaway decision (or anywhere in this Article) expressly applies a bifurcated approach utilizing both ordinary designer and ordinary observer perspectives to determine obviousness.\textsuperscript{487} Rather, "[Federal Circuit] precedents teach that 'the ultimate inquiry under section 103 is whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.'"\textsuperscript{488}

Courts and the USPTO should reject International Seaway's unsupported, overly complicated, two-part approach to design nonobviousness. The better view is to evaluate design nonobviousness entirely from the perspective of an "ordinary observer," the consumer purchaser having some familiarity with the prior art.\textsuperscript{489} In other words, the second part of International Seaway's perspective (that of the "ordinary observer") is the only perspective necessary.\textsuperscript{491}

\textsuperscript{487} See, e.g., supra note 482 (questioning International Seaway's reliance on Darling as support for International Seaway's bifurcated analysis, considering that the court in Darling did not even reach the issue whether the alleged combination would have been obvious); see infra note 491 (explaining how International Seaway erroneously relied on Whitman Saddle as authority for using an ordinary observer perspective when analyzing invalidity, because the Court in Whitman Saddle plainly performed its analysis from the perspective of an "ordinary workman[an] of the trade").

\textsuperscript{488} Titan Tire Corp. v. Case New Holland, Inc. 566 F.3d 1372, 1380 (Fed. Cir. 2009) (emphasis added) (quoting Darling v. Furniture Spectrum Co., 101 F.3d 100, 103 (Fed. Cir. 1996)). Accordingly, International Seaway's bifurcated analysis stands in considerable tension with Federal Circuit design obviousness precedent as summarized in Titan Tire.

One could argue that International Seaway's two-part analysis is implicitly satisfied if the "ordinary designer" test explained in Titan Tire is satisfied. If it is true that "the claimed design would have been obvious to a designer of ordinary skill" under Titan Tire, then it must also be true that (1) the combination/ modification could have been made by an ordinary designer, and (2) that the combined/modified design is the same as (and therefore at least substantially similar to) "the claimed design." However, the converse is not necessarily true. Although a design identical to "the claimed design" surely satisfies the ordinary observer/substantial similarity test, when references are combined or modified by an ordinary designer "to arrive at a single piece of art for comparison" under International Seaway, that single piece of prior art is not necessarily identical to the claimed design and in fact need not even be substantially similar. Thus, the design obviousness tests set forth in International Seaway and Titan Tire are not logically identical.

\textsuperscript{489} See Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 677 (Fed. Cir. 2008) (en banc) (instructing that the "ordinary observer" test should be applied "through the eyes of an observer familiar with the prior art"); see also infra Part IV.C.

\textsuperscript{490} Int'l Seaway, 589 F.3d at 1240.

\textsuperscript{491} We recommend below that the practice of combining features of multiple prior art designs to render obvious a claimed design tends to punish good design and should be eliminated. See infra Part IV.E.

As a less preferred option, we would limit the practice to combinations of a primary Rosen reference with secondary references that disclose exactly the same type of underlying article
4. Summary.—More than one hundred years after the Supreme Court in Gorham and Whitman Saddle spawned a confusing dichotomy of inconsistent approaches to design protection, it is time for the Federal Circuit to reconceptualize the nonobviousness requirement as applied to designs. The courts and the Patent Office must refocus on the true value of designs that is worth protecting: their ability to create an overall visual impression on consumers that can make the underlying products appear unique, distinct, and desirable. The existing obviousness jurisprudence must be reconsidered with this guiding principle in mind so that nonsensical precedent is no longer followed, and the law of design patents can better reflect and promote the design arts. The following Part proposes a number of tools and options that courts should consider in order to reorient design patent law towards its policy objectives.

IV. Recommendations

The judicial decisions analyzed in the previous Part amply demonstrate the problematic subjectivity inherent in applying the utility patent-originated requirement of nonobviousness to ornamental designs. Nevertheless, the current patent statute compels the courts and the USPTO to do so. The Patent Act provisions specific to designs mandate that “[t]he provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided.” 492 Although 35 U.S.C. § 171 explicitly enumerates only that patentable designs must be “new, original and ornamental design[s] for an article of manufacture,” 493 courts have uniformly read the section’s “shall apply” language as importing the requirement of nonobviousness from 35 U.S.C. § 103. 494

("having the same degree of freedom for design") as the primary reference (and the “claimed design”). See infra Part IVE. Obviousness should result only when the differences between the primary Rosen reference and the claimed design are found in our narrowly-defined category of secondary references, and only when those differences are essentially de minimis or trivial in terms of effect on the overall appearance of the claimed design. See infra Part IVE. A conclusion of obviousness under such circumstances does not require the perspective of a “designer of ordinary skill.” See infra Part IVE. Contra Int’l Seaway, 589 F.3d at 1240 (The role of the designer of ordinary skill is “determining whether to combine earlier references to arrive at a single piece of art for comparison with the potential design or to modify a single prior art reference.”). Rather, given the triviality of the differences under the framework we propose, the combination of prior art design features that would render a claimed design obvious would be self-evident to an “ordinary observer.”

493 Id.
494 See Int’l Seaway, 589 F.3d at 1238 (Section 171 “requi[es] application of the provisions of sections 102 (anticipation) and 103 (invalidity [sic: obviousness]).”); Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1380 (Fed. Cir. 2009) (The court cited § 171 for the proposition that “[d]esign patents are subject to the nonobviousness requirement of 35
We do not dispute that under the current statutory scheme, U.S. design patentability mandates nonobviousness. Rather, we contend that courts and the USPTO have previously unrecognized flexibility in how they apply the nonobviousness requirement to designs. Tools exist to facilitate a more nuanced approach in the design context. Parts I, II, and III analyzed in depth the design process, design patent legislation, and design nonobviousness judicial decisions. The insights drawn in Parts I, II, and III form foundational tools for meaningful change in the application of design nonobviousness. The remainder of this Part presents our particular recommendations for applying the nonobviousness requirement in a manner more specifically tailored to promoting progress in the design arts. We offer these recommendations as a menu of options to spur discussion and debate among the courts, the USPTO, the design community, and its legal representatives.

A. Recognize That Supreme Court Decisions Applying the Nonobviousness Requirement to Utility Inventions Have Very Limited, if any, Applicability to Design Patentability

In Titan Tire Corp. v. Case New Holland, Inc., the Federal Circuit raised but did not answer the question of whether the Supreme Court's 2007 decision in KSR International Co. v. Teleflex Inc. applies to design patentability. Although the Federal Circuit found it "not obvious that the Supreme Court necessarily intended to exclude design patents from the reach of KSR," nothing in KSR evidences an affirmative intent by the Supreme Court to include design patents, either. The question remains

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495 We doubt, however, that the nonobviousness requirement as currently applied by U.S. courts and the USPTO is the best way to test the protectability of a design. Ideally, industrial design should be protected by a sui generis registration system. But repeated attempts to enact such a system in the U.S. have not succeeded. See supra Part II (describing failed attempts to enact a U.S. registration system for designs outside the confines of the patent system). Thus, U.S. patent law continues to govern protection for designs when trade dress and/or copyright protection are not available or adequate. Protection under the patent law contemplates satisfaction of the nonobviousness requirement, even for designs. See 35 U.S.C. §§ 103, 171; Titan Tire, 566 F.3d at 1380; L.A. Gear, 988 F.2d at 1124.

497 Titan Tire, 566 F.3d at 1384-85.
498 Id. at 1385.
499 Although the Supreme Court in KSR referred to "designers," it did so when referring to those persons working in the electro-mechanical technology at issue. See KSR, 550 U.S. at 424 ("The proper question to have asked was whether a pedal designer of ordinary skill,
open because the Federal Circuit affirmed the preliminary injunction denial on appeal in *Titan Tire* without resolving the "'new and untested ground'" of whether and how *KSR* should be applied to design patents.500

The Supreme Court's decision in *KSR* has very limited, if any, applicability to design patents. Courts should be cautious in automatically applying the specific holdings of *KSR* to designs. Most of the *KSR* Court's discussion is completely irrelevant to what design patents protect—the ornamental appearance of an article of manufacture, considered as a whole, not as a combination of its individual features or the manner by which the article's design was achieved. The subject matter of a design patent is fundamentally different from a utility patent, as evidenced by the separate statutory provisions that define the eligible subject matter of each type of patent.501 Indeed, a patented design "need not have any practical utility,"502 the antithesis of a utility invention.

The Supreme Court in *KSR* reaffirmed that its landmark 1966 decision, *Graham v. John Deere Co.*,503 still dictates the proper nonobviousness considerations.504 *Graham* instructed that a nonobviousness determination lends itself to several basic factual inquiries: (1) "the scope and content of the prior art"; (2) "differences between the prior art and the claims at issue"; (3) "the level of ordinary skill in the pertinent art"; and (4) "[s]facing the wide range of needs created by developments in the field of endeavor, would have seen a benefit to upgrading Asano with a sensor."). The *KSR* decision concerned the obviousness of an invention claimed in a utility patent. The Court did not discuss design patents or the subject matter they protect; namely, the ornamental designs of articles of manufacture, as opposed to the functionality of such articles.


502 *In re Nuijten*, 500 F.3d 1346, 1357 n.9 (Fed. Cir. 2007). The *Nuijten* court held that a claimed electrical signal, standing alone, was not a "manufacture" within the meaning of 35 U.S.C. § 101, and that its holding was not contravened by the design patent case *In re Hruby*, 373 F.2d 997 (C.C.P.A. 1967)). *Id.* The *Nuijten* court explained that

*Hruby* dealt with a 35 U.S.C. § 171 design patent for an aesthetically pleasing water fountain rather than a § 101 utility patent, and is therefore of limited applicability to this case. The subject of a design patent need not have any practical utility. Compare § 101 ("new and useful") with § 171 ("new ... and ornamental").

*Id.* (ellipsis in original). The *Nuijten* court did "not decide whether a signal of the sort addressed in this case would merit a design patent." *Id.*


504 See *KSR*, 550 U.S. at 399 ("While the sequence of these questions [set forth in *Graham*] might be reordered in any particular case, the factors define the controlling inquiry.").
uch secondary considerations as commercial success, long felt but unsolved needs, [and] failure of others. 506

Although Graham's multi-factor analysis undoubtedly continues to control in the realm of utility invention patentability, the first three of the Graham factors have little meaning for designs. For the following reasons, factors (1)-(3) do not lend themselves to a particularly helpful or objective analysis. Designers are not constrained in the prior art sources to which they turn for inspiration, 506 thus the standard notion of identifying the analogous prior art encompassed by Graham factor (1) does not reflect design practice. A design patent claim is a visually depicted claim to the overall appearance of an article. Thus a mandate under Graham factor (2) to identify discrete differences by comparing such a claim with prior art designs undermines the holistic essence of the design's contribution. Attempting to identify a level of "ordinary skill" in the pertinent design field pursuant to Graham factor (3) is perhaps the most problematic part of the analysis—the far more meaningful perspective is that of the "ordinary observer." 507

Like its predecessor Graham v. John Deere Co., the KSR decision undeniably concerned the validity of utility patents. In Graham, the Supreme Court invalidated a utility patent claiming a shock-absorbing device for a plow shank, 508 in KSR, it invalidated a utility patent on an adjustable electro-mechanical gasoline pedal for an automobile. 509 Both KSR and Graham dealt with "combination" mechanical inventions, each component of which was arguably taught by a prior art reference. The holdings of both cases, that it would have been obvious to combine the prior art teachings to achieve the claimed mechanical inventions, are inapposite to designs.

505 Graham, 383 U.S. at 17-18.
506 See supra Part I (discussing designers' virtually unlimited sources of design inspiration, which sources may be designs of articles having nothing whatsoever in common with the article being designed).
507 See supra Part I (observing that designers view the concept of an "ordinary designer" as nonsensical, and that approximately half of all industrial designers are consultants who design many different types of articles); infra Part IV.C. (detailing our argument for utilization of "ordinary observer" perspective when analyzing design nonobviousness); cf. Yoder Bros., Inc. v. Cal.-Fla. Plant Corp., 537 F.2d 1347, 1379 (5th Cir. 1976) ("We see no meaningful way to apply the third [Graham] criterion to plants i.e. the level of ordinary skill in the prior art."); infra Part IV.

In contrast with factors (1)-(3), Graham's "secondary considerations" factor (4) seems potentially useful in assessing design nonobviousness. Some types of secondary considerations evidence may be probative of consumer reactions to designs, considered as the overall visual appearances of products. For example, evidence of commercial success and copying might show that the market demand for a relatively commoditized product (i.e., a product owned by many people and always having the same general functionality regardless of its producer or design, such as furniture or a cellular telephone) is created by the product's aesthetics.

508 See Graham, 383 U.S. at 4.
509 See KSR, 550 U.S. at 426 (agreeing with district court's analysis that "claim [four] encompassed obvious subject matter").
Designs are claimed centrally rather than peripherally. Designs claims are visual depictions or drawings that do not recite or identify components, elements, or limitations; what is claimed is the overall appearance of the underlying article of manufacture—its overall visual impact. The en banc Federal Circuit recently reaffirmed this fundamentally distinct nature of designs by instructing courts to generally refrain from construing design claims by translating these visual representations into words.

Utility patent inventions are typically made by inventors attempting to solve particular technical problems. The KSR Court instructed that a utility invention is likely obvious and thus unpatentable if it resulted from the application of known options already within the technical ability of

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510 See Mov, supra note 9, § 5:41 (“The [design] system operates under central claiming, where the scope of the patent right is determined by the scope of the associated patent disclosure, rather than the system of peripheral claiming that is used in connection with utility patents.”).

511 See Dobson v. Dorman, 118 U.S. 10, 15 (1886) (In a case alleging infringement of a design patent on a carpet, the Court stated that “the claim in this case covers the design as a whole, and not any part of it as a part, and it is to be tested as a whole as to novelty and infringement.”). Although the concurrence in Dobson thought the patent invalid, id. at 18 (Field, J., concurring), the accused infringer “[d]id not question the novelty of the invention.” Id. at 15. In contrast with Smith v. Whitman Saddle Co., 148 U.S. 674 (1893), decided less than ten years later, the Supreme Court in Dobson mentioned only the requirement of novelty and said nothing about any requirement of “invention” for design patentability. See Dobson, 118 U.S. at 15.

The Federal Circuit recently reemphasized that the proper scope of a design patent must be the claimed design's overall appearance, and not merely a collection of individual features. In Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665 (Fed. Cir. 2008) (en banc), the Federal Circuit abrogated the “point of novelty test” for design patent infringement, which found no infringement where an accused design lacked a feature that in the patented design was shown to be novel over the prior art. By contrast, the “ordinary observer” test, which was reaffirmed as the “sole test for determining whether a design patent has been infringed,” is concerned with the overall appearance. Id. at 678. “[U]nlike the point of novelty test, the ordinary observer test does not present the risk of assigning exaggerated importance to small differences between the claimed and accused designs relating to an insignificant feature simply because that feature can be characterized as a point of novelty.” Id. at 677.

512 Egyptian Goddess, 543 F.3d at 679 (“Given the recognized difficulties entailed in trying to describe a design in words, the preferable course ordinarily will be for a district court not to attempt to ‘construe’ a design patent claim by providing a detailed verbal description of the claimed design.”). The Federal Circuit recognized that in an earlier case involving an obviousness determination, it had required a district court to “attempt to ‘translate’ [the] visual descriptions into words” in order to communicate the reasoning behind the court’s decision and enable “the parties and appellate courts... to discern the internal reasoning employed by the trial court.” Id. at 679 n.1 (alteration in original) (quoting Durling v. Spectrum Furniture Co., 101 F.3d 100, 102 (Fed. Cir. 1996)). Although nonobviousness was not at issue in Egyptian Goddess, the court characterized Durling as simply “[r]quiring... an explanation of a legal ruling as to invalidity,” and observed that such an explanation “is quite different from requiring an elaborate verbal claim construction to guide the finder of fact in conducting the infringement inquiry.” Id.
a person having ordinary skill in the particular field. The KSR Court invoked a problem/solution approach in describing an "obvious to try" scenario:

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.

As interpreted by the KSR Court, an "obvious to try" situation is one in which a combination invention results from selecting among a limited number of known solutions to a particular technical problem.

Several factors highlight the inapplicability of this KSR reasoning to design patents. First, a primary goal of design is to add value and salability to products by giving them an aesthetically pleasing appearance. Unlike the inventors contemplated in KSR, designers are not responding to market pressures to solve technical problems. Instead, designers typically seek to create previously untapped market demand by making known, familiar products more desirable to the consumers of the products. Second, designers are rarely, if ever, limited to a "finite number of identified, predictable solutions." Rather, they seek inspiration in an unlimited number of sources that need not have anything in common with the underlying article the designer is working with. Third, application of
an undefined and unbounded test, such as KSR's reference to "common sense," is particularly unwieldy when applied to the creative design of a product's ornamental appearance.

Rather than trying to contort the holdings of Graham and KSR to fit designs, which are fundamentally different subject matter than the mechanical combination devices of those utility patent decisions, courts and the USPTO should consider the Supreme Court's design patent decisions to be their primary source of guidance. We detailed above the analytical weaknesses of Smith v. Whitman Saddle Co., in which the Supreme Court applied the nebulous utility patent standard of "invention" to deny protection for the design of a riding saddle. A better approach would hew to the Supreme Court's foundational design patent decision, Gorham Co. v. White. Although the parties in Gorham disputed design patent infringement rather than validity, the Supreme Court's decision addressed design patents generally and emphasized the policy goal of promoting progress in the design arts. Courts have the means to apply the nonobviousness requirement to designs in a manner that serves, rather than frustrates, this paramount policy goal.

To the extent that the Supreme Court's recent KSR decision is relevant at all to the nonobviousness of designs, it would be only for the general principle that the nonobviousness requirement should be applied in a flexible manner. The KSR Court rejected the Federal Circuit's formalistic "teaching, suggestion, or motivation [TSM] test" for utility patent nonobviousness, observing that "throughout this Court's engagement with the question of obviousness, our cases have set forth an expansive and flexible approach inconsistent with the way the Court of Appeals applied its TSM test here." The Federal Circuit's erroneously rigid approach in KSR prevented courts and the USPTO from utilizing other appropriate tools available for evaluating the nonobviousness of an invention. At

\textsuperscript{519} KSR, 550 U.S. at 421.

\textsuperscript{520} Justice Holmes once cautioned against permitting the availability of protection for artistic subject matter to be decided at the mercy of a few adjudicators' subjective opinions. See Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 251 (1903) ("It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits.").


\textsuperscript{522} See supra notes 262-83 and accompanying text (critiquing Whitman Saddle).

\textsuperscript{523} Gorham Co. v. White, 81 U.S. (14 Wall.) 511 (1871).

\textsuperscript{524} KSR, 550 U.S. at 415 (emphasis added). The strict TSM test, as applied by the Federal Circuit to determine the nonobviousness of Teleflex's patent, insisted that the prior art references cited in combination contain an explicit teaching, suggestion, or motivation to combine the references and make the claimed automobile pedal assembly. Id. at 414.

\textsuperscript{525} Id. at 415-18 (directing courts to consider factors such as market forces, common sense, and predictability in order to inform the nonobviousness analysis).
this level of generality, courts and the USPTO can properly rely on the Supreme Court's *KSR* decision as authority for interpreting and applying the nonobviousness requirement for designs in a flexible manner, one that furthers the goal of promoting progress in the decorative arts.

**B. Fine-Tune the Nonobviousness Requirement for Non-Utility Subject Matter by Looking to the Plant Patent Example**

Part III of this Article described the courts' difficulties with application of the nonobviousness requirement (and its predecessor, the requirement for invention) to designs. Courts also have struggled with application of the nonobviousness requirement to a third type of patentable subject matter: plants. Prior judicial examination of the nonobviousness requirement for one type of non-utility patent subject matter—plants—provides important insights for the analysis of patentability of the other type of non-utility patent subject matter—designs.

In *Yoder Bros., Inc. v. California-Florida Plant Corp.*, the U.S. Court of Appeals for the Fifth Circuit confronted a challenge to the validity of seven plant patents claiming varieties of ornamental chrysanthemum plants. After giving "considerable thought" in light of "the difficulty and novelty of the issues presented," the Fifth Circuit affirmed the district court's ruling that the accused infringer had failed to rebut the statutory presumption of validity for the plant patents in suit. Sustaining the nonobviousness of the claimed plants, the Fifth Circuit utilized a "shift in focus" that led it to a "more productive inquiry for plant patents."

The Fifth Circuit began its analysis in *Yoder Bros.* by conceding that the nonobviousness requirement of 35 U.S.C. § 103 applied to plant patents. This followed from the incorporation language of the plant patent statute (which is almost identical to that of the design patent statute). Section 161 of the Patent Act provides that

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526 *Yoder Bros., Inc. v. Cal.-Fla. Plant Corp.*, 537 F.2d 1347 (5th Cir. 1976).
527 *See id.* at 1376–77, 1377 n.31 (describing the seven plant patents in suit).
528 *Id.* at 1377.
529 *Id.* at 1379. *Yoder Bros.* appears to be the sole decision of a U.S. appellate court on the merits of plant patent nonobviousness; neither the C.C.P.A. nor the Federal Circuit ever decided the issue. This conclusion is based on the results of August 2009 Westlaw and LexisNexis searches of federal appellate decisions using the search phrase ("plant patent" AND obvious! OR nonobvious! OR 103)).

In a non-precedential decision, *Oglesby Plant Labs., Inc. v. Atkinson*, No. 95-1353, 1996 U.S. App. LEXIS 13452 (Fed. Cir. June 6, 1996), the Federal Circuit affirmed a district court's grant of summary judgment that the plant patent in suit was not invalid, rejecting several validity challenges that included obviousness. *See id.* at *3,*6. Neither court applied the nonobviousness requirement on the merits, however. The Federal Circuit affirmed because the validity challenger (a *pro se* litigant) failed to present any evidence in support of its obviousness argument. *See id.*
Whoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, may obtain a patent therefor, subject to the conditions and requirements of this title.

The provisions of this title relating to patents for inventions shall apply to patents for plants, except as otherwise provided.530

The Fifth Circuit reasoned that “[s]ince section 161 makes the general patent law applicable to plant patents except as otherwise provided, we take as our starting point the general requisites for patentability, and then apply them as well as we can to plants.”531

For utility patents, the Fifth Circuit noted, “the three requirements for patentability are novelty, utility, and [non]obviousness.”532 For plant patents, however, “the requirement of distinctness replaces that of utility, and the additional requirement of asexual reproduction is introduced.”533 The court observed that “[t]he third requirement, nonobviousness, is the hardest to apply to plants, though we are bound to do so to the best of our ability.”534

The Fifth Circuit forthrightly acknowledged its “problem in applying patent concepts” to the ornamental plants at issue, namely that “[b]eauty for its own sake is not often a goal of inventors—indeed, even ornamental plant breeders might be more aptly described as seekers of beauty for profit.”535 As is the case with ornamental plants, it is inherently difficult to apply utility patent concepts such as nonobviousness to ornamental designs for articles of manufacture. Like the breeders of new ornamental varieties of plants, designers seek to enhance the external beauty of an underlying product (here, an article of manufacture), in order to increase appeal to consumers and hence product sales. Designers’ efforts must be evaluated based on the end result—the patented design—rather than the process used to develop the design.

The Yoder Bros. court proceeded by modifying the multi-factored standard for nonobviousness previously announced by the Supreme Court

531 Yoder Bros., 537 F.2d at 1377 (citing 35 U.S.C. § 162).
532 Id. (citing 35 U.S.C. §§ 101, 103).
533 Id. Requirements for design patents likewise differ from those for utility patents. The requirement of ornamentality for designs replaces that of utility. See 35 U.S.C. § 171; see also Shoemaker, supra note 285, at 15 (In the 1902 Patent Act, “the law was amended to substitute the word ‘ornamental’ for the word ‘useful’ in the former statute.”). The design statute also adds the requirements that a patentable design be “original” and “for an article of manufacture.” 35 U.S.C. § 171.
534 Yoder Bros., 537 F.2d at 1378.
535 Id. at 1379 n.35.
in *Graham v. John Deere Co.* The Fifth Circuit had no difficulty in applying the first two factors in a manner tailored for plants. "Rephrasing the *Graham v.* John Deere tests for the plant world," the Fifth Circuit applied *Graham* factor (1), the scope and content of the prior art, by "ask[ing] about (1) the characteristics of prior plants of the same general type, both patented and nonpatented." The court rephrased *Graham* factor (2), the differences between the prior art and the claims at issue, as "(2) the differences between the prior plants and the claims at issue." In contrast with the first two *Graham* factors, the Fifth Circuit saw "no meaningful way to apply the third [Graham] criterion to plants—i.e. the level of ordinary skill in the prior art." Although the court did not elaborate, it presumably concluded that defining a hypothetical "plant breeder of ordinary skill" would be an exercise in futility. Because the Fifth Circuit viewed the first two *Graham* factors as analogous to the "distinctness" requirement already in the Plant Patent Act, the court concluded that the nonobviousness requirement had to carry "an independent meaning." As applied to plants, nonobviousness "must refer to something other than observable characteristics." The Fifth Circuit looked to its precedent in pharmaceutical patent cases for insight into the problem of applying the nonobviousness requirement to "new and esoteric subject matter." In *Eli Lilly & Co. v. Generix Drug Sales, Inc.*, the Fifth Circuit sustained the patentability of a chemical compound because it achieved unexpectedly good therapeutic value. Even though the compound was "closely related in structure to a known or patented drug," the court concluded that it would have been nonobvious and hence patentable because it "exhibit[ed] anew needed medicinal capability."  

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536 Id. at 1378 (discussing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)). The *Graham* factors are detailed supra Part IV.A.

537 *Yoder Bros.*, 537 F.2d at 1379.

538 Id.

539 Id.

540 Id.

541 Id. By "something other than observable characteristics," the *Yoder Bros.* court was not suggesting that the manner of breeding or cultivating the claimed ornamental plants factored into its analysis. Rather, the court felt that the increased beauty and desirability of the plants provided a measure of the value added by them. *Id.* While related to the "observable characteristics" of the plants, indications of value such as increased beauty and desirability are actually measured by the effect and impression made on observers. Such effects and impressions are not observable characteristics of the plants themselves.

542 *Id.* The Fifth Circuit referred to the nonobviousness requirement of 35 U.S.C. § 103 as codifying the "invention" requirement. This is an example of the courts stubbornly clinging to "invention" as a qualitative standard for patentability. The § 103 nonobviousness framework established in the 1952 Patent Act was intended to replace the nebulous "invention" standard and provide a more workable standard for assessing patentability. See supra Part II.

543 *Eli Lilly & Co. v. Generix Drug Sales, Inc.*, 460 F.2d 1096 (5th Cir. 1972).

544 *Id.* at 1103.
The *Eli Lilly* decision is consistent with the well-established principle of chemical patent law that unexpected results can overcome a prima facie case of obviousness based on structural similarity. In the chemical arts, the subject matter to be assessed for patentability is not only a compound's chemical structure but also the totality of its properties.

Adapting this analysis to the question whether a patented plant would have been obvious, the *Yoder Bros.* court observed that

> The same kind of shift in focus would lead us to a more productive inquiry for plant patents. If the plant is a source of food, the ultimate question might be its nutritive content or its prolificacy. A medicinal plant might be judged by its increased or changed therapeutic value. Similarly, an ornamental plant would be judged by its increased beauty and desirability in relation to the other plants of its type, its usefulness in the industry, and how much of an improvement it represents over prior ornamental plants, taking all of its characteristics together.

In other words, the nonobviousness inquiry is amenable to fine-tuning, depending upon the type of plant at issue. Under the Fifth Circuit's analysis, nonobviousness turned on a plant's enhancement in value—whether nutritive, therapeutic, or increased beauty—to its consumers.

The Fifth Circuit concluded that the patented ornamental chrysanthemum plants in suit satisfied this value-added test. Based on an “objective judgment” of the patented plants’ “new and different characteristics,” including “ornamental value, hardiness, longevity, etc.,” and “viewing the evidence offered on the patent validity question as a whole,” the Fifth Circuit affirmed the district court's judgment that the accused infringer had failed to rebut the statutory presumption of validity as to the patented chrysanthemum plants.

The *Yoder Bros.* decision is an important model for “shift[ing the] focus” of the nonobviousness analysis in order to reach a “more productive

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545 See 2 CHISUM ON PATENTS, supra note 19, § 5.06[1][b][ii] (discussing submission to Patent Office of affidavit evidence of “unexpectedly superior properties or advantages” of the claimed invention as compared with the prior art products or processes” (citing *In re Peterson*, 315 F.3d 1325 (Fed. Cir. 2003)); see also *Eli Lilly & Co. v. Zenith Goldline Pharm., Inc.*, 471 F.3d 1369, 1378 (Fed. Cir. 2006) (affirming district court's judgment sustaining validity of patent claim to chemical compound although prior art disclosed adjacent homolog). The court explained that “patentability for a chemical compound does not depend only on structural similarity” and noted “unexpected beneficial properties” of the claimed compound. (citation omitted). Id.

546 See *In re Papesch*, 315 F.2d 381, 391 (C.C.P.A. 1963) (“From the standpoint of patent law, a compound and all of its properties are inseparable; they are one and the same thing.”); see also *Eli Lilly*, 471 F.3d at 1378 (“This court will not ignore a relevant property of a compound in the obviousness calculus.” (citation omitted)).

547 *Yoder Bros.*, 537 F.2d at 1379 (emphasis added).

548 Id. at 1382.
inquiry" for patentable subject matter beyond utility inventions.\textsuperscript{549} Although \textit{Yoder Bros.} addressed the patentability of plants, its application of the nonobviousness inquiry to subject matter valued for its ornamentality and beauty rather than utilitarian functionality is directly pertinent to the patentability of designs. Just as the \textit{Yoder Bros.} court departed from the Graham standard by looking at the overall aesthetic effect of plants bred for their beauty, analysis of design patents for nonobviousness can likewise benefit from a proper focus on the true value of a design—its visual impact upon consumers. The \textit{Yoder Bros.} analysis thus offers courts a template for thoughtfully adapting nonobviousness principles to designs.\textsuperscript{550}

\section*{C. Utilize Gorham's "Ordinary Observer" as the Statutory "Person Having Ordinary Skill in the Art" When Determining the Nonobviousness of Designs}

In its foundational design patent decision, \textit{Gorham Co. v. White}, the U.S. Supreme Court formulated a test for determining whether two designs have the requisite "sameness of appearance" for design patent infringement.\textsuperscript{551} Convinced that "substantial identity" was the proper standard, the Court considered whether the designs must be analyzed for substantial identity from the perspective of an "expert" observer or an "ordinary" observer.\textsuperscript{552} The Supreme Court rejected the notion that the expert should compare the two designs.\textsuperscript{553} If an accused design escaped infringement because of minor details that would be noticeable to the expert but overlooked by "those who buy and use" the designed product, "the patentees [would

\begin{itemize}
\item \textsuperscript{549} \textit{Id.} at 1379.
\item \textsuperscript{550} If application of \textit{Yoder's} "more productive inquiry" lowers the threshold for design patentability, this relaxation of traditional nonobviousness standards is surely commensurate with the narrower property right that results. Both plant patents and design patents are much narrower in scope than utility patents. The Federal Circuit interprets the Plant Patent Act as limiting "the scope of a plant patent [to] the asexual progeny of the patented plant variety." \textit{Imazio Nursery, Inc. v. Dania Greenhouses}, 69 F.3d 1560, 1568 (Fed. Cir. 1995). In order to establish infringement of its plant patent, a patentee must therefore establish that the defendant's allegedly infringing plant is the asexually reproduced progeny of the original patented parent plant. \textit{Id.} at 1569. An independently developed plant, even if genetically identical to the patented plant, does not infringe. \textit{See id.} at 1570. Design patents likewise are considered quite narrow in scope. \textit{In re Mann}, 861 F.2d 1581, 1582 (Fed. Cir. 1988) ("Design patents have almost no scope. The claim at bar, as in all design cases, is limited to what is shown in the application drawings.")
\item \textsuperscript{551} \textit{Gorham Co. v. White}, 81 U.S. (14 Wall.) 511, 526–27 (1871) ("We are now prepared to inquire what is the true test of identity of design. Plainly, it must be sameness of appearance, and mere difference of lines in the drawing or sketch, a greater or smaller number of lines, or slight variances in configuration, if sufficient to change the effect upon the eye, will not destroy the substantial identity.").
\item \textsuperscript{552} \textit{Id.} at 527.
\item \textsuperscript{553} \textit{Id.}
\end{itemize}
be injured, and that advantage of a market which the patent was granted to secure [would be] destroyed. The Court defined the appropriate standard as follows:

[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.

Under the “ordinary observer” test of Gorham, the ordinary observer is deemed to be an ordinary purchaser of the product in which the claimed design is embodied. The ordinary observer is also deemed to be familiar with prior art designs. Below we demonstrate that utilizing the perspective of an “ordinary observer” for evaluating nonobviousness of designs better promotes progress in the design arts than would utilizing an “ordinary designer” perspective. The ordinary observer perspective correctly recognizes that the value of a design is in its ability to provide a distinct visual impression upon the relevant consumers and purchasers of the designed products.

554 Id. at 528.
555 Id.
556 See Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc., 501 F.3d 1314, 1322 (Fed. Cir. 2007) (“The focus of the ordinary observer test is ‘on the actual product that is presented for purchase, and the ordinary purchaser of that product.’” (quoting Goodyear Tire & Rubber Co. v. Hercules Tire & Rubber Co., 162 F.3d 1113, 1117 (Fed. Cir. 1998))).

The manner in which a design is claimed can affect the identity of the ordinary purchaser, and the identity of the ordinary purchaser in turn can affect the scope of a claimed design. More sophisticated purchasers are generally more likely to notice differences between designs, and would find infringement less frequently. Id. at 1321. For example, in Arminak the claimed design was for a trigger sprayer shroud used in connection with household cleaning products. Id. at 1318. The Federal Circuit emphasized that the design patent encompassed only the sprayer shroud and not the entire cleaning product. Id. at 1323–24. The ordinary observer was therefore deemed to be an industrial purchaser of trigger sprayers because only such industrial buyers ever purchased the article embodying the claimed design by itself, i.e., the triggers individually (generally for assembly into retail products). Id. By contrast, retail consumers ordinarily purchased the entire cleaning product, including the bottle and trigger sprayer together. Id. Because the ordinary purchaser was deemed to be a sophisticated industrial buyer of sprayer shrouds, the court found that the differences between the patented and accused designs would be noticeable by such purchasers, resulting in no infringement by the accused design. Id. at 1324. Had the design patent encompassed the bottle as well, presumably the ordinary observer would have been a less sophisticated retail consumer who may have regarded the two designs as being the same.

557 See Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 676 (Fed. Cir. 2008); Int'l Seaway Trading Corp. v. Walgreens Corp., 389 F.3d 1233, 1239 (Fed. Cir. 2009) (“In Egyptian Goddess [the en banc Federal Circuit] refined the ordinary observer test by characterizing the ordinary observer as being ‘deemed to view the differences between the patented design and the accused product in the context of the prior art.’” (quoting Egyptian Goddess, 543 F.3d at 676)).
1. An "Ordinary Observer" Perspective Properly Emphasizes the Visual Nature of Design Patent Subject Matter.—A design patent protects the overall visual appearance of an article of manufacture. The article’s appearance is something perceived by the human eye—it is observed. The observer of the article experiences its design through his or her sense of vision, and the value or success of any given design may be measured by the impression that its overall appearance makes upon the observer. As the C.C.P.A. explained in In re Laverne, “[t]he test [to determine obviousness of a design] is inherently a visual test, for the design is nothing more than appearance, and the appearance is that of the article as a whole. No special skill is required to determine what things look like, though individuals react differently.”

By contrast, assessing nonobviousness from the perspective of an “ordinary designer” steers the focus away from the appearance of the designed article as a whole. It reorients the inquiry towards the manner of designing the article—an improper focus on the process of design rather than its result. Applying the “ordinary designer” perspective leads to conclusory and highly subjective decisions as to whether the inclusion or removal of particular design features would have been “obvious” to a designer of ordinary skill who designs such articles.

The very notion of an “ordinary designer” of any particular article is problematic. The Laverne court recognized that the hypothetical § 103 “person having ordinary skill in the art to which said subject matter pertains” does not easily translate to “a designer having ordinary skill” in creating designs for particular types of articles. Because of the adaptability and/or consulting nature of their work, industrial designers are not typically identified as possessing “ordinary skill in the art of designing chairs” or “ordinary skill in the art of designing silverware patterns,” for example.

In contrast with the typically specialized inventors of utility patent subject matter, it is relatively rare for designers to work exclusively with particular products or in particular industries. By necessity, they must be familiar with design trends in a wide variety of fields. It is the job of industrial designers

558 See supra Part I (explaining that designers seek to have their designs invoke certain reactions and impressions in consumers).

559 In re Laverne, 356 F.2d 1003, 1006 (C.C.P.A. 1966) (internal citation omitted).

560 See supra Part III (discussing how the court in In re Nalbandian, 661 F.2d 1214 (C.C.P.A. 1981), provided no explanation for why it believed that the differences between the claimed design and the prior art were obvious variations).

561 See In re Laverne, 356 F.2d at 1005–06.

562 See supra Part I (explaining that approximately half of IDSA designer members are consulting designers who design a wide variety of products in different industries).

563 See supra Part I.
to be familiar with over-all trends that are above and beyond the particular industry with which we are dealing. For example, with the air full of jet planes, the public may be so conditioned to these sleek forms that it will accept or even seek out such forms translated into household appliances. We must make an evaluation of the extent of this conditioning process.\textsuperscript{564}

Attempting to judge the nonobviousness of a design from the perspective of a "designer of ordinary skill in the art" is fundamentally unsound because the notion of a "designer of ordinary skill in the art" has no useful meaning in the real world of industrial design. Rather than employing the designer's perspective, we recommend that nonobviousness of designs be assessed from the perspective of the viewer, i.e., the "ordinary observer" of \textit{Gorham Co. v. White}.\textsuperscript{565} The \textit{Gorham} court held that "substantial" similarity between designs should be judged "in the eyes of men generally, of observers of ordinary acuteness, bringing to the examination of the article upon which the design has been placed that degree of observation which men of ordinary intelligence give."\textsuperscript{566} Like the C.C.P.A. in \textit{Laverne}, we would again extend this same "ordinarily intelligent man" perspective to the realm of design nonobviousness.\textsuperscript{567}

The ordinary observer of U.S. design patent law is deemed to be the ordinary purchaser of the underlying designed article, and is also familiar with the prior art.\textsuperscript{568} As such, the ordinary observer represents the target audience of designers—the typical consumers of the designed products. Because designers measure the success of a design in its visual ability to invoke in consumers certain reactions to and associations with the underlying product, only the perspective of the ordinary observer can meaningfully measure whether a design has succeeded in creating the intended distinct visual impression.\textsuperscript{569} To the extent that the design patent system purports to reward designers of "nonobvious" designs with a patent, it would be more appropriate for consumers, not designers, to effectively decide whether the design creates a visual impression worthy of protection.

\begin{thebibliography}{99}
\bibitem{564} DREYFUSS, supra note 67, at 45.
\bibitem{565} Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 528 (1871).
\bibitem{566} Id. at 528.
\bibitem{567} See \textit{In re Laverne}, 356 F.2d 1003, 1006 (C.C.P.A. 1966).
\bibitem{568} See \textit{Int'l Seaway Trading Corp. v. Walgreens Corp.}, 589 F.3d 1233, 1239 (Fed. Cir. 2009) (in \textit{Egyptian Goddess} the en banc Federal Circuit "refined the ordinary observer test by characterizing the ordinary observer as being 'deemed to view the differences between the patented design and the accused product in the context of the prior art.'" (quoting \textit{Egyptian Goddess, Inc. v. Swisa, Inc.}, 543 F.3d 665, 676 (Fed. Cir. 2008) (en banc)); \textit{Egyptian Goddess}, 543 F.3d at 676 (describing ordinary observer as familiar with prior art designs); Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc., 501 F.3d 1314, 1322 (Fed. Cir. 2007) (describing ordinary purchaser of underlying designed article).
\bibitem{569} See supra Part I.
\end{thebibliography}
2. The Validity/Infringement Parallelism of the Gorham “Ordinary Observer” Perspective Should Extend to Design Patent Nonobviousness.—The Federal Circuit currently evaluates the novelty of a claimed design from the perspective of an “ordinary observer.” The same “ordinary observer” perspective is applied to determine infringement of a design patent. The Federal Circuit’s use of the “ordinary observer” perspective in both contexts is based on the maxim that “that which infringes, if later, would anticipate, if earlier.” The converse of this parallelism principle is generally that if an accused device is outside the scope of a claimed

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570 See Int’l Seaway, 589 F.3d at 1240 (concluding, based on Federal Circuit’s en banc rejection in Egyptian Goddess of a point of novelty component in the test for design patent infringement, that “the ordinary observer test must logically be the sole test for anticipation as well”); Door-Master Corp. v. Yorktowne, Inc., 256 F.3d 1308, 1313 (Fed. Cir. 2001) (In determining either “infringement or anticipation [of a design patent claim], the court compares the claim to the accused or allegedly anticipating article. For infringement or anticipation to be found the two designs must be substantially the same.” (citing Gorham, 81 U.S. at 528)); id. at 1313 (“Two designs are substantially the same if their resemblance is deceptive to the extent that it would induce an ordinary observer, giving such attention as a purchaser usually gives, to purchase an article having one design supposing it to be the other.” (citing Gorham, 81 U.S. at 528) (emphasis added)).

571 See Gorham, 81 U.S. at 528; Egyptian Goddess, 543 F.3d at 680.

572 Door-Master, 256 F.3d at 1312 (quoting Peters v. Active Mfg. Co., 129 U.S. 530, 537 (1889)); see Int’l Seaway, 589 F.3d at 1239 (“[I]t has been well established for over a century that the same test must be used for both infringement and anticipation.”). The International Seaway court recognized that “[o]ne possible exception [to the maxim] is product by process claims.” Id. at 1239 n.4 (citing Amgen Inc. v. F. Hoffman-La Roche, Ltd., 580 F.3d 1340, 1370 (Fed. Cir. 2009) (“For product-by-process claims, that which anticipates if earlier does not necessarily infringe if later.”)).

A more accurate recitation of the maxim would be “that which would literally infringe if later in time anticipates if earlier than the date of invention.” Lewmar Marine, Inc. v. Barient, Inc., 827 F.2d 744, 747 (Fed. Cir. 1987). It has long been held that for equitable reasons, an accused device cannot escape infringement of a utility patent merely because it is outside the literal boundary of the claim language. See Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 607 (1950) (“Courts have . . . recognized that to permit imitation of a patented invention which does not copy every literal detail would be to convert the protection of the patent grant into a hollow and useless thing.”); Winans v. Denmead, 56 U.S. (15 How.) 330, 343 (1853). This principle is known as the “doctrine of equivalents.”

The scope of a design patent claim is very narrowly construed, dictated only by the patent drawings, and so the doctrine of equivalents is virtually never applied or analyzed by courts in design cases. In re Mann, 861 F.2d 1581, 1582 (Fed. Cir. 1988) (“Design patents have almost no scope. The claim at bar, as in all design cases, is limited to what is shown in the application drawings.”); 8 CHISUM ON PATENTS, supra note 19, § 23.05[7] (questioning whether, with respect to designs, there is any reason to distinguish between literal infringement and infringement under the doctrine of equivalents, “[g]iven the mode of claiming with design patents, that is, a claim that merely refers to the drawing(s) illustrating the design, and given the Gorham standard for determining infringement, that is, substantial similarity to an ordinary observer of the claimed and accused designs, . . . and excluding similarity due to common functional features”).
invention, then if such a device were instead prior art, the claimed invention should be patentable over such prior art.\textsuperscript{573}

Maintaining this parallelism between validity and infringement lends further support to our recommendation that nonobviousness of designs, like their infringement, should be judged solely from the same "ordinary observer" perspective.\textsuperscript{574} The Federal Circuit in \textit{International Seaway Trading Corp. v. Walgreens Corp.} recently relied on this parallelism principle in announcing that "[o]bviousness, like anticipation, requires courts to consider the perspective of the ordinary observer."\textsuperscript{575} Nevertheless, \textit{International Seaway} set forth a bifurcated approach that additionally requires consideration of an ordinary designer's perspective regarding the combination of prior art teachings.\textsuperscript{576} Even if supplemental to an ordinary observer's perspective, any use of the ordinary designer perspective is still harmful and inappropriate for the design patent system.

The use of different perspectives for validity and infringement can yield absurd results, as the following example demonstrates. Suppose a first design "A" is patented, and a second design "B" has an appearance distinct in the eyes of an ordinary observer, such that it would not infringe the patented design A. Now suppose instead that design B is the subject of a pending design application and that design A has been cited as prior art against design B. If any aspect of obviousness is judged from an "ordinary designer" standard, design B may be unpatentable even though it would clearly fall outside the scope of design A from an infringement standpoint. This is because an ordinary designer has a greater knowledge and familiarity with the design process than an ordinary observer and may be more likely to view design combinations and modifications as "obvious" over the prior art.

By contrast, if the same "ordinary observer" test is utilized for design patentability, then a design that would not infringe a prior art design (if it were patented) would be patentable in its own right. This result is

\textsuperscript{573} This converse is illustrated by \textit{Wilson Sporting Goods Co. v. David Geoffrey & Associates}, 904 F.2d 677, 683 (Fed. Cir. 1990). The court in \textit{Wilson Sporting Goods} recognized that a patentee should not be able to use the judicially-created doctrine of equivalents to ensnare subject matter over which the patentee could not have obtained exclusionary rights in the first instance by applying to the USPTO for patent protection of that scope. See id. at 684.

\textsuperscript{574} See \textit{Int'l Seaway}, 589 F.3d at 1244 ("[T]he district court correctly held that the ordinary observer test is the sole test of invalidity [of a design patent]."); cf. id. at 1243-44 ("Obviousness, like anticipation, requires courts to consider the perspective of the ordinary observer.").

\textsuperscript{575} Id. at 1243-44.

\textsuperscript{576} Id. at 1240 ("For design patents, the role of one skilled in the art in the obviousness context lies only in determining whether to combine earlier references to arrive at a single piece of art for comparison with the potential design or to modify a single prior art reference. Once that piece of prior art has been constructed, obviousness, like anticipation, requires application of the ordinary observer test, not the view of one skilled in the art." (internal citation omitted)); see \textit{supra} Part III.C.3, for further discussion of \textit{International Seaway}. 
both logical and appropriate. Otherwise, a prior design patent operates to bar designers from protecting their subsequent designs when those subsequent designs are outside the scope of the patented design. The policy goal of the design patent system is to promote progress in design, but such progress is substantially hindered if the protectability of two distinct designs depends on which design was the first to appear as prior art under 35 U.S.C. § 102. Designs that are visually distinct from one another for purposes of infringement should each be equally eligible for patent protection.

3. The European Union's Design Protection Experience Should Inform the Proposed “Ordinary Observer” Perspective for U.S. Design Patent Nonobviousness.—Design requires protection in a global marketplace. U.S. courts and policymakers should be aware that foreign jurisdictions utilize a single, uniform perspective for evaluating design infringement and validity. In particular, the European Union (EU) uses the perspective of an "informed user" to evaluate not only the protectability of a design as a Community Design, but also to determine whether the Community Design has been infringed. Characteristic of the EU's informed user are well aligned with the ordinary observer perspective we propose for assessing the nonobviousness of U.S. design patent claims.

The EU is a recognized international leader in legal protection for industrial design. In 2001, the EU enacted a regulation to create a unitary EU-wide "Community Design." The regulation established a sui generis

577 See Council Regulation 6/2002, art. 6.1, Community Designs, 2001 2002 O.J. (L 3) 1, 4 (EU) [hereinafter Community Design Regulation], available at http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:003:0001:0024:EN:PDF ("A design shall be considered to have individual character if the overall impression it produces on the informed user differs from the overall impression produced on such a user by any design which has been made available to the public: (a) in the case of an unregistered Community design, before the date on which the design for which protection is claimed has first been made available to the public; (b) in the case of a registered Community design, before the date of filing the application for registration or, if a priority is claimed, the date of priority." (emphasis added)); id. at 5, art. 10.1 ("The scope of the protection conferred by a Community design shall include any design which does not produce on the informed user a different overall impression." (emphasis added)).

578 See Saidman & Esquerra, supra note 34, at 428-29 (The U.S. industrial design protection system "lag[s] significantly behind [that] of the European Union," and the EU's Community Design Regulation "serves as a model for how the United States could go about implementing an industrial design sui generis law through the copyright statute.").

579 Community Design Regulation, supra note 577, at 1. The Community Design Regulation entered into force in March 2002. See id. at 24, art. 11.11 ("This Regulation shall enter into force on the 60th day following its publication in the Official Journal of the European Communities."). The Regulation was published in the OFFICIAL JOURNAL OF THE EUROPEAN COMMUNITY on Jan. 5, 2002. Id. at 1.

A Community Design is a unitary right because it is obtained through a single application filed with the EU's Office for Harmonization in the Internal Market (Trade Marks
system for protecting designs, outside of either the patent or copyright regimes.\textsuperscript{580}

The EU implemented its Community Design system after years of careful study and deliberation by policymakers in order to arrive at an appropriate and customized form of protection for design.\textsuperscript{581} The EU's purposeful, deliberative process stands in stark contrast to the "prolonged inattention" that characterizes the U.S. design patent system.\textsuperscript{582} The development of the EU's "individual character" requirement, assessed from the perspective of an "informed user" as described below, is a particularly informative model for effective and appropriate protection of designs in any jurisdiction.

580 The Community Design regime incorporates some aspects of both patent and copyright protection, but the rights granted are distinct. For example, Community Designs may be registered or unregistered. An unregistered Community Design (like a copyright) protects its owner only against copying, see Community Design Regulation, supra note 577, at 7, art. 19.2, and lasts three years from the date that the design was first publicly disclosed within the EU. \textit{See id.} at 5, art. 11.1. In contrast, a registered Community Design is protected (like a patent) against any unauthorized use (including making, offering, selling, importing, or exporting a product incorporating the design). \textit{See id.} at 7, art. 19.1. The registered Community Design remains in force for five years from the date of application filing with the OHIM, and the period of protection is renewable for a maximum duration of 25 years from filing. \textit{See id.} at 5, art. 12.


Prior to 2002, with the exception of the Benelux countries which previously introduced a uniform law, individual countries ("member states") within the EU protected industrial designs in accordance with their own national laws; the scope of protection of such designs was limited to the territory of the protection-granting member state. Community Design Regulation, supra note 577, at 1. "Substantial differences" developed between the various member states' design protection laws, creating conflicts in trade between the states. \textit{Id.}


582 \textit{Moy, supra} note 9, § 5:41 (observing that U.S. design patent system has resulted from "prolonged inattention, rather than any ongoing purposeful development").
The EU's Community Design system is a "registration" system rather than an examination system as required for U.S. design patents. The EU authority that administers the system, the Office for Harmonization in the Internal Market (Trade Marks and Designs) ("OHIM"), does not substantively examine design applications against the prior art. Rather, the validity of a Community Design can be challenged only post-registration, either via an application for a declaration of invalidity filed in the OHIM, or as a counterclaim in an infringement proceeding.

The EU's criteria for validity of a Community Design are that the design (1) "is new" and (2) has "individual character." The latter individual character criterion parallels the U.S. requirement of nonobviousness to the extent that it is a "something beyond novelty" requirement. But the EU's sui generis design system does not define individual character as nonobviousness, nor as the "inventive step" required for European patents. Rather, a Community Design possesses "individual character if the overall impression it produces on the informed user differs from the overall impression produced on such a user by any design which has been

583 See Community Design Regulation, supra note 577, at 12, art. 45 (describing only "[e]xamination as to formal requirements for filing"); see also Schlotelburg, supra note 579, at 386 ("Prior to registration Community designs are examined only with respect to the formalities of the application (payment of the fee, quality of the representation, etc.), i.e.,[ ] compliance with the requirements for protection are not subject to examination ex officio (except where the subject-matter of the application is not a design or where it offends public policy or morality).")

584 Community Design Regulation, supra note 577, at 13, art. 52.1 (providing that applications for design invalidity may be filed in the OHIM by "any natural or legal person"). Invalidity decisions are made in the OHIM in the first instance by its Designs Invalidity Division; these decisions are appealable to the OHIM Boards of Appeal. See Pedro Rodinger, Community Design Invalidity: The Issues, as Viewed Through the Case Law, 4 J. INTELL. PROP. L. & Prac. 629, 629 (2009). The Boards' decisions are in turn appealable to the Court of First Instance (CFI) of the European Court of Justice (ECJ), and in some circumstances the CFI's decisions may be appealed to the ECJ. See id. As of September 2009, a total of six OHIM Board of Appeal decisions on Community Design validity had been taken to the CFI but the CFI had not issued decisions in any of the cases. See id.

585 Community Design Regulation, supra note 577, at 8, art. 24.1.

586 Id. at 4, art. 4.1. Novelty is satisfied for a Community Design "if no identical design has [previously] been made available to the public." Id. at 4, art. 5.1. Designs are "deemed to be identical if their features differ only in immaterial details." Id. at 4, art. 5.2.

587 The EU's Community Design system is decidedly not a U.S.-style patent system for designs. The EU does not apply an "inventive step" requirement to designs, as is the case for patents issued by the European Patent Office. See Convention on the Grant of European Patents (European Patent Convention), art. 56, conclusion date Oct. 5, 1973, 165 U.N.T.S. 199 (entered into force July 10, 1977), available at http://www.epo.org/patents/law/legal-texts/html/epc/1973/ela56.html ("An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art.").
Two aspects of the individual character definition are particularly important. First, it is the design’s “overall” impression made on the informed user that must differ from that of any prior art design. The EU properly focuses on differences in overall appearance of a product, that is, the product’s design as it is holistically observed, rather than dissecting the design’s individual features. Nothing in the individual character definition considers or turns on the manner in which the designed product was made or manufactured.

Second, the EU’s individual character requirement must be determined from the perspective of an “informed user,” not a designer, of the product in question. Although the Community Design Regulation does not define the “informed user,” several appellate decisions of the OHIM have explored the characteristics of this hypothetical person. The decisions clarify that the informed user is a purchaser and user of the product having the protected design; informed users have done their homework and are reasonably familiar with the available range of competing products. The informed user “has a certain degree of awareness and familiarity with the subject matter of the design,” as well as “some awareness of the prior art and the product trends in the relevant market.” Depending on the product or object involved, a number of different types of consumers or users of such products or objects could properly be “informed users.”

588 Community Design Regulation, supra note 577, at 4, art. 6.1 (emphasis added).
589 The recitals of the Community Design Regulation elaborate that the overall impression produced by the design on the informed user must “clearly differ” from that produced on him by the prior art. See id. at 2 (“The assessment as to whether a design has individual character should be based on whether the overall impression produced on an informed user viewing the design clearly differs from that produced on him by the existing design corpus, taking into consideration the nature of the product to which the design is applied or in which it is incorporated, and in particular the industrial sector to which it belongs and the degree of freedom of the designer in developing the design.”) (emphasis added). EU law is not uniform on the weight to be given recitals, however. See Tadas Klimas & Jurate Vaiciukaite, The Law of Recitals in European Community Legislation, 15 ILSA J. INT'L & COMP. L. 61, 62 (2008) (“The doctrine surrounding recitals in EC law is mystifying.”).
590 See Community Design Regulation, supra note 577, at 4, art. 6.2 (“In assessing individual character, the degree of freedom of the designer in developing the design shall be taken into consideration.”) (emphasis added). In the U.S., some courts have appropriately focused on the aesthetic appearance of a design when evaluating nonobviousness, while other courts have improperly focused on the manner of construction of the underlying product. See supra Part III.
591 Community Design Regulation, supra note 577, at 4, art. 6.1.
592 Rodinger, supra note 584, at 638. The informed user is not the same as a purchaser in the trademark law sense, who “has to rely on his imperfect recollection of trade marks which may lead to a risk of likelihood of confusion.” Id. at 639. Rather, the informed user makes a direct visual comparison of the challenged design versus the prior art design. Id.
593 Case R 1001/2005-3, Pepsico, Inc. v. Grupo Promer Mon-Graphic, S.A., 1 8 (OHIM
any event, the informed user is not a designer, an expert, or a specialist. 

"[T]he evaluation of individual character does not rest on the impression made in specialised circles, but on the impression on an informed user who is presumed to have a certain degree of knowledge or understanding of design."

In a recent application of the EU's informed user framework, the OHIM Third Board of Appeal declared invalid a registered Community Design of the exterior of an engine intended to power lawnmowers in Honda Giken Kogyo Kabushiki Kaisha v. Kwang Yang Motor Co.
In assessing the design's individual character, the Board defined the relevant informed user as "someone who wants to use a lawn mower to cut the grass in his garden, needs for example to buy one and has become 'informed' on the subject by browsing through catalogues of lawn mowers; visiting specialised stores, garden centres; downloading information from the internet, etc." Because lawnmowers are "technical tools," the "informed user" would place "primary importance" on "factors such as power source, ease of operation, ability to dispose of mown grass, possible hazards, etc." Thus, the Board concluded, the informed user would "more likely ... be impressed by the overall aspect of the product—in this case by the internal-combustion engine of the lawn mower which powers it—rather than by relatively insignificant details, which concern minor aspects of the engine (such as the exact shape of the cap or the number of holes in a vent)."

Because the challenged and prior art designs differed only in a single minor detail (the placement of a starter cord), the challenged Community Design lacked individual character and was therefore invalid.

Although the EU's informed user is not a designer or a manufacturer, the informed user's perspective is influenced by the degree of freedom that was available to the designer of the product in question. If the designer...
enjoyed a relatively high degree of freedom, the individual character requirement is less likely to be satisfied when the resulting design differs from the prior art design in only minor respects. For example, the Board in *Kwang* considered that lawnmower designers enjoyed a “high degree of freedom” when designing at least the upper, exposed part of the lawnmower engine (in contrast with the lower part closest to the ground). This liberal degree of design freedom reinforced the Board’s conclusion that the challenged Community Design would produce the “same overall impression” on the informed user as that produced by the prior art design. The only difference between the designs was the position of the starter cord (placed on opposite sides of the designs). Discounting these “minor differences” in design, the overall impression did not differ to the informed user.

In contrast, even minor differences can result in a different overall impression to the informed user when the designer’s degree of freedom was relatively limited. For example, in *Pepsico, Inc. v. Grupo Promer Mon-Graphic, S.A.*, Pepsico obtained a Registered Community Design for promotional items for games in the form of small (approximately 2-4 centimeters in diameter) metal disks known as “rappers” or “pogs.”

Although not further defined by the Regulation, the degree of freedom concept is also incorporated into its infringement standard. See Community Design Regulation, supra note 577, at 5, art. 10.2 (“In assessing the scope of protection, the degree of freedom of the designer in developing his design shall be taken into consideration.”). As is the case for the “informed user” standard, the “degree of freedom” concept is another instance in which the EU’s tests for protectability (i.e., individual character) and infringement are structured in parallel.

602 *Kwang*, supra note 594, at 11.

603 *Id.* Comparing the challenged and prior art designs, the Board found that in both, “each component (vent, fuel tank, air filter cover, muffler, top cover, starter cord) is easily discernible and its position is identical.” *Id.* at 10-11.

604 *Id.* at 10-11.

605 *Id.* at 11.

606 *Pepsico*, supra note 593, at 8; *id.* at 2 (reproducing design shown in text); see also *Rodinger*, supra note 584, at 629 n.3 (describing size of disks). As of this writing in January 2010, an appeal from the OHIM Third Board of Appeals’ decision in *Pepsico* was still pending before the Court of First Instance of the European Court of Justice.
The Board held that the informed user would understand that a designer of rappers would have a limited degree of freedom. According to the Board, the "paradigm" promotional product of the "pog" type was "a small flat or nearly flat disk on which coloured images can be printed. Often the disk will be curved toward the centre, so that a noise will be made if a child's finger presses the centre of the disk."\(^7\)

A designer of such disks would face severely constricted design freedom, because "[a] rapper that does not possess these characteristics is unlikely to be accepted in the marketplace."\(^8\) Given the marketplace-generated constraints on the design, "even relatively small differences suffice to create a different overall impression."\(^9\) Reversing the Invalidity Division, the Board determined that Pepsico's registered Community Design and Grupo Promer's prior art design (which had a different contour and two fewer concentric circles in the disk's center area) would "produce a different overall impression on the informed user."\(^10\) Thus, the Board sustained the validity of Pepsico's design.\(^11\)

The EU's successful development of its Community Design system illustrates how to evaluate design validity using an "informed user" perspective that considers the degree of freedom available to a designer. Although a few U.S. courts have applied analogous principles in evaluating design patent nonobviousness,\(^12\) such application has never been widespread or uniform. Creation of an EU-style sui generis design registration system in the United States appears unlikely in the near term.\(^13\) Nevertheless, legislative inaction need not prevent U.S. courts from reconceptualizing the nonobviousness requirement in a manner informed by the EU's purposeful, deliberative experience with design protection.

D. Limit Design Anticipation to "Strict Identity" Situations and Apply the Gorham "Substantial Similarity" Test as the Measure of Design Obviousness

A patentable design must be novel as well as nonobvious.\(^14\) The Federal Circuit currently evaluates the novelty of designs (in patent parlance, determines whether designs are "anticipated") under the same

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607 Pepsico, supra note 593, at 8.
608 Id. at 8-9.
609 Id. at 9.
610 See id.
611 See id.
612 See, e.g., In re Faustmann, 155 F.2d 388 (C.C.P.A. 1946), discussed further supra Part III, and In re Borden, 90 F.3d 1570 (Fed. Cir. 1996), discussed further supra Part III, and infra Part IV.E.
613 See supra Part II.
"substantially similar" test applied to determine infringement of design patents in *Gorham Co. v. White.* Courts in the pre-Federal Circuit era likewise applied a test of substantial similarity when determining the novelty of designs.

We recommend that the novelty of designs be assessed in a manner that more closely parallels the "strict identity" standard imposed on utility patent inventions. The strict identity (or identity) standard for proving anticipation follows from the preamble language of 35 U.S.C. § 103. That language provides that "[a] patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if . . . [it would nevertheless have been obvious]." As applied to utility patent claims, which generally recite multiple elements (or preferably, "limitations"), the strict identity standard for anticipation means that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Moreover, the prior art reference must describe or show each element or limitation "arranged or combined in the same way as in the claim."

615 See Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233, 1244 (Fed. Cir. 2009) (The district court "correctly determined that there was no genuine issue of material fact that the exterior features of the patented [clog] designs were substantially similar to the [prior art Crocs brand clog design]," but summary judgment of anticipation was vacated due to the district court's failure to compare the insole [interior] portion of the designs.); Hoop v. Hoop, 279 F.3d 1004, 1007 (Fed. Cir. 2002) ("The ultimate test for design-patent inventorship, like the test for anticipation and infringement, is whether the second asserted invention is 'substantially similar' to the first." (emphasis added) (citing *Gorham Co. v. White*, 81 U.S. (14 Wall.) 511, 528 (1871); *Payless ShoeSource*, Inc. v. Reebok Int'l Ltd., 998 F.2d 985, 990 (Fed. Cir. 1993)); *Door-Master Corp. v. Yorktowne, Inc.*, 256 F.3d 1308, 1313 (Fed. Cir. 2001) (In determining either "infringement or anticipation [of a design patent claim], the court compares the claim to the accused or allegedly anticipating article. For infringement or anticipation to be found the two designs must be substantially the same." (emphasis added) (citing *Gorham*, 81 U.S. at 528)).

616 See Phoenix Knitting Works v. Rich, 194 F. 708, 714 (C.C.N.D. Ohio 1911) ( "The law is well stated by complainant . . . in this language: The test of novelty of a design, the test of infringement of a patented design, and the test of anticipation of a patented design are each and all the same simple test. Do the designs look alike to the eye of an ordinary observer—and not whether careful scrutiny and inspection will reveal differences." (internal citations and quotation marks omitted)); Bevin Bros. Mfg. Co. v. Starr Bros. Bell Co., 114 F. 362, 363 (C.C.D. Conn. 1902) ("In design patents the test of identity, on questions of anticipation and infringement, is the eye of the ordinary observer.").

617 See Trintec Indus., Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1296 (Fed. Cir. 2002) (vacating district court's invalidation on summary judgment of utility patent as allegedly anticipated because the "strict identity required of the test for novelty" had not been not satisfied).


619 Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631 (Fed. Cir. 1987) (citations omitted).

620 Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1370 (Fed. Cir. 2008) (citation
Federal Circuit precedent reveals some tension concerning which of these two tests is appropriate for design anticipation. Although the bulk of Federal Circuit cases analyze the question under the "substantially similar" test, a few decisions have applied the "strict identity" approach.621 The decisions cannot be reconciled or synthesized, because the two tests are mutually exclusive. That is, whether two designs are "substantially the same" cannot logically be the same determination as whether the designs are "strictly identical."

The roots of this tension within design patent jurisprudence likely stem from the courts' blind application of the maxim "'[t]hat which infringes, if later, would anticipate, if earlier.'"622 The "substantial similarity" test was first set forth in *Gorham Co. v. White* as a test for design patent infringement (validity not being at issue).623 Thereafter, courts extended the same test to the question of design anticipation.624 An early twentieth-century decision, *Williams v. Syracuse & S.R. Co.*, concluded that the ordinary observer test (phrased as, "[d]o the two things present to the eyes of the ordinary observer and purchaser and user the same general appearance?") "must be the test as to invention, and as to the newness and originality of the patented design, and, also, as to anticipation. That which infringes, if subsequent, anticipates, if prior."625 Just as the *Williams* court assumed that the test for anticipation "must be" that of substantial similarity, other early twentieth-century courts likewise applied the substantial similarity test to design anticipation without any serious discussion or justification.626

621 See *Hupp v. Siroflex of Am., Inc.*, 122 F.3d 1456, 1461 (Fed. Cir. 1997) (For design anticipation, "[t]he publication must show the same subject matter as that of the patent, and must be identical in all material respects." (emphasis added)).


624 See *Int'l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1239 (Fed. Cir. 2009) ("'[I]t has been well established for over a century that the same test must be used for both infringement and anticipation.'" (citation omitted)). The *International Seaway* court recognized that "[o]ne possible exception [to the maxim] is product by process claims."

Id. at 1239 n.4 (citing *Amgen Inc. v. F. Hoffman-La Roche, Ltd.*, 580 F.3d 1340, 1370 (Fed. Cir. 2009) ("For product-by-process claims, that which anticipates if earlier does not necessarily infringe if later.").


626 See, e.g., *Bevin Bros. Mfg. Co. v. Starr Bros. Bell Co.*, 114 F. 362, 363 (C.C.D. Conn. 1902) ("In design patents the test of identity, on questions of anticipation and infringement, is the eye of the ordinary observer.").

In *Phoenix Knitting Works v. Rich*, 194 F. 708 (C.C.N.D. Ohio 1911), the court held that

[t]he test of novelty of a design, the test of infringement of a patented design, and the test of anticipation of a patented design are each and all the same simple test. Do the designs look alike to the eye of an ordinary
Design patent claims are visual depictions that do not recite individual limitations, unlike utility patent claims. Thus the standard case law formulation of the strict identity test for anticipation of utility patent claims is not directly applicable. We would instead derive an anticipation test for design claims from the "identically disclosed" preamble language of 35 U.S.C. § 103 and ask, "does a single prior art design exist that identically discloses the claimed design?" The requisite identity should be construed strictly, such that the claimed design would lack novelty (that is, be deemed anticipated) only in instances where the design had been exactly disclosed in the prior art. Examples of such instances include prior publications, public uses, or sales of the identical, now-claimed design. If such barring events occurred, then the claimed design has been anticipated. On the other hand, if a prior art design exists that is deemed similar but not identical, then the extent of the similarity should be evaluated under a different rubric; namely, the nonobviousness requirement and the "ordinary observer"/"substantial similarity" framework we propose herein.

As recommended above, when applied to designs, the nonobviousness requirement should operate in a manner that parallels the test for design patent infringement. A design patent is infringed if "in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same." Adapting this test to the requirement observer—and not whether careful scrutiny and inspection will reveal differences.

Id. at 714 (quoting Brief for Petitioner at 77) (internal quotation marks omitted). Interestingly, the Phoenix Knitting court acknowledged that Gorham did not address validity, but nevertheless accepted the above explanation of the law without question, justification, or citation to authority. Indeed, the court noted that "novelty . . . was not in question" and "the language we quote [from Gorham] has little application to sustain a patent in a case where both novelty and originality are attacked. . . . [H]owever, . . . we believe the law is well stated by complainant, on page 77 of its brief." Id. (emphasis added).

627 See 35 U.S.C. § 102(a)-(b) (2006); Cont'l Plastic Containers v. Owens Brockway Plastic Prods., Inc., 141 F.3d 1073, 1077-80 (Fed. Cir. 1998) (affirming district court's grant of summary judgment that patent for design of plastic juice container was invalid under "on sale" bar of 35 U.S.C. § 102(b) where patentee provided molds and three-dimensional article drawings that embodied the patented design to potential customers in the U.S. more than a year before filing design patent application); In re Mann, 861 F.2d 1581, 1581 (Fed. Cir. 1988) (affirming USPTO's rejection of design application claim on grounds of § 102(b) public use where applicant had publicly displayed a table embodying the claimed design at a trade show in the U.S. more than a year before filing application); cf. Tone Bros., Inc. v. Sysco Corp., 28 F.3d 1192, 1196-1200 (Fed. Cir. 1994) (vacating district court's grant of summary judgment of invalidity based on § 102(b) public use of patented design for spice container because fact questions existed about alleged experimental use; patentee's consultant showed design to college students for evaluation of article's functional (rather than aesthetic) features more than a year before patentee filed design patent application).

628 See supra Part IV.C.2; cf. Int'l Seaworx, 589 F.3d at 1243-44 ("Obviousness, like anticipation, requires courts to consider the perspective of the ordinary observer.").

629 Gorham Co. v. White, 81 U.S. (14 Wall.) 511, 528 (1871). The similarity must be such
of nonobviousness, it follows that if the differences between the claimed design and the prior art (limited as we propose below) are minor enough that an ordinary observer would have considered them “substantially similar,” then the claimed design would have been obvious. In other words, we suggest that when 35 U.S.C. § 103 is applied to designs, it should be interpreted as follows:

A design patent may not be obtained though the claimed design is not identically disclosed or described as set forth in section 102 of this title, if the differences between the claimed design and a prior art design are such that the claimed design as a whole would have appeared substantially the same as the prior art design to an ordinary observer at the time the claimed design was made.

E. Modify or Eliminate the Current Procedure of Combining Prior Art Designs to Establish Design Obviousness

Designers draw upon sources of inspiration and influence without bound. They regularly consult or consider a variety of prior designs, regardless of whether the prior designs bear any logical or functional relationship to the product they are currently designing. Virtually every new design utilizes some combination of prior art design elements. To suggest that it would be “obvious” to combine or modify any particular prior design features has no meaning for designers. Designers’ choices are essentially artistic, unlike the functional motivations facing inventors of utility inventions, to whom the word “obvious” has meaning. In order to promote progress in the design arts, the law should encourage, not penalize, the borrowing of prior design features and design concepts to be combined into new designs.

When concluding that a claimed utility invention would have been obvious under 35 U.S.C. § 103 and thus unpatentable, the USPTO (during prosecution of pending applications) and the courts (during litigation challenging the validity of issued patents) typically identify each limitation of the claim in question as having been disclosed or described in a prior art reference. This approach contends that it would have been obvious for a hypothetical person having ordinary skill in the art at the time of the claimed utility invention to have combined the teachings of multiple references in order to arrive at the claimed invention.

"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." Id.

630 See supra Part I.
631 See supra Part I.
632 The Supreme Court recently expanded the bases for concluding that the person of ordinary skill would have engaged in such a combination, stating that “any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” KSR Int’l Co. v. Teleflex
The courts and USPTO have long applied the same combining of references procedure to assess whether a claimed design would have been obvious. For example, the design patent applicant in In re Glavas, a decision issued by the C.C.P.A. in 1956, appealed a USPTO obviousness rejection of his claimed design for a rectangular and concave-shaped swimming float. The USPTO had based its rejection on a combination of prior art references that included not only a conventional swimming float but also pillows, bottles, soap, and razor blade sharpeners. The C.C.P.A. in In re Rosen identified the issue before it as "whether the various elements selected by the PTO from each of these [prior art design] references would have made the overall appearance of the claimed design obvious."

The Federal Circuit has perpetuated the C.C.P.A.'s practice of applying a combination of references approach to assess designs. The Circuit stated in 1996 that "[i]f [a] basic reference alone does not render the claimed design unpatentable, design elements from other references in the prior art can be considered in determining whether the claimed design would have been obvious to one of skill in the art." Elsewhere the court confirmed that the nonobviousness inquiry for designs "is whether one of ordinary skill would have combined teachings of the prior art to create the same overall visual appearance as the claimed design[,]" explaining that "[o]nce [a] primary reference is found, other references may be used to modify it to create a design that has the same overall visual appearance as the claimed design."

The courts' attempts to explain whether and how prior art references should be combined against a claimed design raise more questions than they answer. For example, the Glavas test requiring that references be combined in a way that makes the claimed design obvious has been criticized for its inflexibility and lack of clear guidance.

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633 See generally supra Part III.
634 In re Glavas, 230 F.2d 447, 448 (C.C.P.A. 1956). The Glavas decision is further detailed in supra Part III.
635 See In re Glavas, 230 F.2d at 448-49, 451.
636 In re Rosen, 673 F.2d at 388, 390 (C.C.P.A. 1982). The court further noted that "a § 103 rejection of a claimed design need not be based on a single reference," id. at 390–91, but added the constraint that "whether the holding [of obviousness] is based on [a] basic reference alone or on the basic reference in view of modifications suggested by secondary references," the USPTO must identify "a reference, a something in existence, the design characteristics of which are basically the same as the claimed design in order to support a holding of obviousness." Id. at 391.
637 In re Borden, 90 F.3d 1570, 1574 (Fed. Cir. 1996). The court concluded that "the [USPTO] Board was correct in finding an implicit suggestion to combine references in the prior art and that the Board therefore correctly held Borden's design unpatentable for obviousness." Id. at 1576.
639 See supra Part III.
“so related” as to “suggest” the combination of design features is vague and nonsensical. In re Carlson’s “expectation” test for the suggestion prong of Glavas leaves open at least the fundamental question of what constitutes an obviating expectation. In re Harvey held that designs may be modified in “one respect” and still be obvious, but provided no indication of the outer limits of the “one respect” modification. These attempts to clarify the law regarding combination and modification of designs have failed because such matters are inherently highly subjective. The design patent jurisprudence demonstrates that straining to establish bright line rules as to whether a design should be protectable over the prior art is an exercise in futility. This provides another compelling reason to utilize the more flexible and objective “substantial similarity” test for design obviousness that we propose above.

The Federal Circuit has recently distanced itself from any endorsement of combining prior art references to demonstrate obviousness in design cases. In Egyptian Goddess, Inc. v. Swisa, Inc., the en banc court abrogated the “point of novelty test” for infringement, recognizing that it “present[s] the risk of assigning exaggerated importance to small differences between the claimed and accused designs relating to an insignificant feature simply because that feature can be characterized as a point of novelty.” By highlighting the risk of over-emphasizing one particular design feature, the Egyptian Goddess court reaffirmed that designs should be evaluated as an integrated visual whole rather than dissected into individual features. In Titan Tire Corp. v. Case New Holland, Inc., the Federal Circuit observed that the process of combining prior art references to determine obviousness of a design similarly places undue emphasis on individual features of the design, as opposed to its overall appearance. Egyptian Goddess and Titan Tire signal a welcome judicial receptivity to a new analytical framework that discourages the conventional approach of combining prior art designs to establish obviousness.

Such a shift in design nonobviousness jurisprudence would substantially promote better design because it accords with the actual

640 In re Glavas, 230 F.2d at 450, further discussed supra Part III.
641 In re Carlson, 983 F.2d 1032, 1038–39 (Fed. Cir. 1992) (holding that the claimed symmetrical design would have been obvious because the asymmetry in the prior art rendered the symmetry “expected”); see also supra Part III.
642 In re Harvey, 12 F.3d 1061, 1065 (Fed. Cir. 1993), further discussed supra Part III.
644 Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1383 (“This process, first finding a primary reference in the prior art and then modifying it with secondary prior art references to demonstrate the claimed design’s obviousness, may have a tendency to draw the court’s attention to individual features of a design rather than the design’s overall appearance. In this respect, it is similar to the [now abrogated] ‘point of novelty’ test that until recently was used in the infringement side of design patent law.”).
practice of designers. In contrast, combining individual design features from multiple prior art designs in order to establish obviousness punishes good design. Because they can indiscriminately draw on prior designs for inspiration, designers are able to bring new and refreshing aesthetics to our surroundings. Further, because they recognize limits in what consumers will find visually appealing, industrial designers purposefully incorporate into their new designs some familiar elements from earlier designs:

Almost without exception, our designs include an ingredient we call survival form. We deliberately incorporate into the product some remembered detail that will recall to the users a similar article put to a similar use. People will more readily accept something new, we feel, if they recognize in it something out of the past. Most of us have a nostalgia for old things. Our senses quickly recognize and receive pleasure when a long-forgotten detail is brought back. It may be an old tune, a taste of old-fashioned pudding, the odor of a particular flower, the patina of an antique table, or, as in most cases, the remembrance of what something looked like. Somehow these recollections of the past give us comfort, security, and silent courage. By embodying a familiar pattern in an otherwise wholly new and possibly radical form, we can make the unusual acceptable to many people who would otherwise reject it.

Because the citation of a combination of prior art designs against a claimed design tends to stifle, rather than promote, the progress of design, the optimal approach would be to completely abrogate the combination practice. Nevertheless, we recognize that to entirely eliminate the practice would substantially depart from a deeply ingrained concept of patent law. Further, it may be difficult to successfully allege or defend an obviousness claim unless one can provide evidentiary support in the form of secondary references. Thus, a more practical recommendation would enforce narrow limits on the permissible scope of combinations of references, rather than to entirely eliminate combination practice.

We accordingly recommend that if secondary references are ever to be cited against a design, such secondary references should be limited to those that disclose exactly the same type of article as the primary Rosen reference (and the claimed design). In this regard we interpret the Glavas "so related" as to "suggest" the combination language as requiring that

645 See supra Part I (discussing designers’ creative processes and motivations).
646 Dreyfuss, supra note 67, at 59–60.
647 For example, to say that a design feature is "de minimis" under In re Harvey, 12 F.3d 1061, 1065 (Fed. Cir. 1993), or is "expected" under In re Carlson, 983 F.2d 1032, 1039 (Fed. Cir. 1992), would be more defensible and persuasive if it could be demonstrated via documentary evidence of some sort. Providing secondary references indicating that certain design features for a particular article are commonplace would be more convincing than a bare allegation that the differences between a claimed design and the prior art would have been "obvious."
648 See In re Glavas, 230 F.3d 447, 450 (C.C.P.A. 1995); see also supra Part III.B.2.c (discussing In re Glavas in further detail).
the secondary references not only are mechanically analogous to the article embodying the claimed design, but also are exactly the same type of article. Our proposed approach ensures that only articles having the same degree of freedom for design are cited against a claimed design. This is in accord with designers' views that the adaptation of an old design feature or concept into a new object having a different degree of freedom can produce a distinct visual impression worthy of protection.649

The Federal Circuit's *In re Borden* decision exemplifies the limited combining of references approach that we recommend. In *Borden*, the claimed design was directed to a twin neck dispensing container, essentially a bottle having two openings.650 The cited secondary references were likewise twin neck dispensers, and were relied upon only for their teachings of two very minor features not found in the primary reference. Thus, the USPTO examiner did not simply cite any design that showed the design features that were absent from the primary reference. Indeed, he did not even cite other bottles generally. Rather, the examiner cited secondary references disclosing twin neck bottles having two openings, arranged in the same manner as that of the primary reference.651 Because these prior art designs made under the same degree of freedom had previously incorporated the two very minor features absent from the primary reference, and because the presence or absence of such features had virtually no effect on the overall appearance of the claimed design, the *Borden* court held that the claimed design would have been obvious.652

To the extent that courts or the USPTO continue the practice of combining multiple prior art designs against a claimed design, it should be done with great hesitation and only under the most narrow of circumstances. Where the differences between a *Rosen* prior art design and the claimed design are very few and very minor (essentially de minimis or virtually unnoticeable in terms of effect on the overall appearance), and those trivial differences are disclosed in prior art designs of the exact same type of article, then the claimed design has not succeeded in creating a different overall impression and should not be awarded a design patent.653 A conclusion of obviousness under such circumstances does not require the

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649 *See supra* Part I (noting that designers are limited by the degree of freedom they have when designing a product, and discussing the laudable work of Apple's Jonathan Ive, who adapted many design concepts from different objects designed by 1960s Braun designer Dieter Rams).

650 *In re Borden*, 90 F.3d 1570, 1571-72 (Fed. Cir. 1996); *see also supra* Part III (further discussing *Borden*).

651 *See supra* Part III (discussing *Borden* and including images of the claimed and prior art designs).

652 *In re Borden*, 90 F.3d at 1575-76.

653 This conclusion accords with the view of designers, who generally would not perceive as being patent-worthy those designs that make only de minimis changes to a prior art design. *See supra* Part I.
perspective of a "designer of ordinary skill." Rather, given the triviality of the differences under the framework we propose, the combination of prior art design features that would render a claimed design obvious would be self-evident to an "ordinary observer." On the other hand, when the differences between the Rosen reference and the claimed design are more than de minimis and are not found in prior art designs for the same exact type of article, the design should be patentable.

F. Implement Mechanisms in the USPTO to Obtain and Apply More and Better Design Prior Art

In Part I we noted the very low incidence of USPTO rejections in design patent applications based on prior art, including rejections for obviousness. Examiners may understandably hesitate to make inherently subjective determinations about the extent of a claimed design's advance over prior art designs. Another contributing factor is likely the examiners' inability to consistently access the most pertinent prior art designs. Below we recommend three ways in which the USPTO could enhance its access to pertinent design prior art. Implementing these measures would facilitate more meaningful patent examination and generate a more robust jurisprudence on the difficult issue of design patent nonobviousness.

1. Improve Design Prior Art Searching Capability.—The patentable feature of a design is its aesthetic appearance, something that is not easily searchable when using conventional text-based databases. The USPTO currently lacks tools such as sophisticated image recognition software that could more effectively locate the closest prior art designs. Unless design applicants know of material prior art and submit it to the USPTO, examiners currently must search for prior art designs by using key words or USPTO classifications. Verbal or numerical categories from the USPTO's classification system cannot accurately convey a design's overall visual appearance. Moreover, USPTO design examiners generally cite only prior design patents rather than non-patent prior art. More comprehensive and

654 Contra Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233, 1240 (Fed. Cir. 2009) (describing the role of the designer of ordinary skill as "determining whether to combine earlier references to arrive at a single piece of art for comparison with the potential design or to modify a single prior art reference").

655 See also supra Part III (describing the courts' hesitancy in this regard). USPTO officials also have noted the difficulty of the analysis, admitting that "unobviousness is not well suited to ornamental designs." In re Nalbandian, 661 E2d 1214, 1219 (C.C.P.A. 1981) (Rich, J., concurring) (quoting Gerald Mossinghoff, Comm'r, Patents and Trademarks, Speech to the ABA Patent, Trademark and Copyright Law Section in New Orleans (Aug. 8, 1981)).

656 See Woodring Interview, supra note 37.

657 See id.
sophisticated databases with advanced image-based search functionality could provide immense assistance to examiners in their searches.

2. Make More Frequent Use of Examiner Requests for Information.—A design patent applicant (like a utility patent applicant) is not required to conduct a search of the prior art.658 An applicant bears an affirmative duty to disclose only that prior art which is (1) material to patentability and (2) known to the applicant (or the applicant's representative).659 Thus, design applicants who have not searched the prior art may have little or nothing relevant to submit to the USPTO.

However, USPTO examiners have a mechanism for requesting information from applicants that is reasonably necessary to properly conduct their examination. Under 37 C.F.R. § 1.105 (“Rule 105”), an examiner could request that a design applicant (or the applicant's assignee) provide information about any particularly relevant commercial databases, copies of non-patent literature authored by the design applicant, information the applicant knows about related art, and any other known factual information pertinent to patentability.660 Under the authority

658 See 37 C.F.R. § 1.56(a) (2010) (“Each individual associated with the filing and prosecution of a patent application has a . . . duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section.” (emphasis added)).

659 See id. The duty of disclosure includes not only prior art, but “information” material to patentability. Id. “[I]nformation is material when a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.” Star Scientific, Inc. v. R.J. Reynolds Tobacco Co., 537 F.3d 1357, 1367 (Fed. Cir. 2008) (quoting Symantec Corp. v. Computer Assoc. Int'l, Inc., 522 F.3d 1279, 1297 (Fed. Cir. 2008)). Because this expansive definition of materiality can be fairly ambiguous for purposes of design patents (because their aesthetic merits are so subjective), we believe that our proposal for examiners to more frequently utilize requests for information will lead to more useful and productive submissions by design patent applicants.

660 See 37 C.F.R. § 1.105 (2010). The regulation provides:

(a)(1) In the course of examining . . . a pending . . . application filed under 35 U.S.C. 111 . . . , the examiner or other Office employee may require the submission, from individuals identified under § 1.56(c), or any assignee, of such information as may be reasonably necessary to properly examine or treat the matter, for example:

(i) Commercial databases: The existence of any particularly relevant commercial database known to any of the inventors that could be searched for a particular aspect of the invention.

(ii) Search: Whether a search of the prior art was made, and if so, what was searched.

(iii) Related information: A copy of any non-patent literature, published application, or patent (U.S. or foreign), by any of the inventors, that relates to the claimed invention.

(iv) Information used to draft application: A copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used to draft the application.
of Rule 105, a design examiner might request, for example, that the applicant provide a list of corporations or firms that make articles of the type for which the applicant is claiming design patent protection. The examiner could also seek the names of designers who have similar styles, ask for any terms of art that describe the applicant’s design features, or simply request that the applicant identify and characterize the sources of inspiration and influences for the claimed design. Any information of this sort could assist the examiner in finding the closest prior art by searching corporate websites, catalogues, and other non-patent prior art sources.

3. Publish the Content of Pending Design Patent Applications.—Unlike utility patent applications, pending design patent applications are exempt from eighteen-month publication. The claims and exclusionary scope of design patents are therefore unknown to the marketplace until a design patent has been granted. As another mechanism to enhance USPTO examiners’ access to the most pertinent design prior art, we recommend that the Patent Act be amended such that the USPTO would publish the content of all design patent applications during their pendency. Such publication would need to occur much sooner than eighteen months after a design application’s filing because the average total pendency for a design patent application (from filing date to issue date) is currently (in January

(v) Information used in invention process: A copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used in the invention process, such as by designing around or providing a solution to accomplish an invention result.
(vi) Improvements: Where the claimed invention is an improvement, identification of what is being improved.
(vii) In use: Identification of any use of the claimed invention known to any of the inventors at the time the application was filed notwithstanding the date of the use.
(viii) Technical information known to applicant. Technical information known to applicant concerning the related art, the disclosure, the claimed subject matter, other factual information pertinent to patentability, or concerning the accuracy of the examiner’s stated interpretation of such items.

Id. See also U.S. Patent and Trademark Offices, U.S. Dep’t of Commerce, Manual of Patent Examining Procedure §§ 704.10–704.14(d) (2008) [hereinafter MPEP], available at http://www.uspto.gov/web/offices/pac/mpep/documents/0700.htm. As justification for an examiner’s request for information under Rule 105, the MPEP cites the example of a situation in which “the examiner’s search and preliminary analysis demonstrates that the claimed subject matter cannot be adequately searched by class or keyword among patents and typical sources of non-patent literature.” MPEP § 704.11 (criteria (A)). This example would appear to be particularly pertinent to examination of design patent applications.

661 See 35 U.S.C. § 122(b)(2)(iv) (2006). In contrast, publication at eighteen months after their earliest effective filing date is the default rule for utility patent applications. See id. § 122(b)(1).
2010) only about fifteen months.662 Optimally, pre-grant publication would occur immediately upon the filing of a design patent application. After a pending patent application has been published, any member of the public can submit patents or publications relevant to the application.663 Submissions that comply with the USPTO’s rules will be entered in the application file.664 Entry into the file should expose the examiner to the submitted prior art, although the examiner is not obligated to apply the art against the claimed design. The Patent Act currently forbids any protest or other form of pre-issuance opposition by third parties to the granting of a patent after the underlying application has been published.4

4. Summary.—We have suggested several mechanisms for getting better information about the state of design prior art before USPTO examiners. The expanded volume of design data would undoubtedly enhance the quality of design patent examination. USPTO awareness of a greater volume of pertinent design prior art (including non-patent prior art) could prompt an increased number of obviousness rejections, which in turn could be appealed to the Board of Patent Appeals and Interferences and ultimately to the Federal Circuit. The result would be a more robust body of decisions on the difficult issue of design patent nonobviousness. More regular and thoughtful analysis of the nonobviousness requirement is likely


663 See Third-Party Submission in Published Application, 37 C.F.R. § 1.99(a) (2010). 664 Id. Third-party submissions must also be served upon the patent applicant. Id. § 1.99(c).

665 See 35 U.S.C. § 122(c) ("The Director shall establish appropriate procedures to ensure that no protest or other form of pre-issuance opposition to the grant of a patent on an application may be initiated after publication of the application without the express written consent of the applicant."). A formal system of pre-grant opposition by third parties has been rejected by most industrialized country patent systems due to the potential for significantly delaying the patent application process. Nancy J. Linck et al., A New Patent Examination System for the New Millennium, 35 Hous. L. Rev. 305, 323 (1998) ("Most [countries] have now abandoned such [pre-grant opposition] proceedings, either because of the delay they have caused or because they wanted to harmonize their laws." (citation omitted)). On the other hand, post-grant opposition is a common, well received practice in the European Patent Office, see Convention on the Grant of European Patents (European Patent Convention), conclusion date Oct. 5, 1973, 1065 U.N.T.S. 199, 284-86 (entered into force July 10, 1977), available at http://www.epo.org/patents/law/legal-texts/html/epc/1973/e/356.html, and has been recommended for adoption in the U.S. patent system. See FEDERAL TRADE COMMISSION, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY 7-8 (2003), available at www.ftc.gov/os/2003/10/innovationrpt.pdf. Those advocating legislative reform of the U.S. patent system should include a post-grant opposition system for design patents.
the best and quickest way to challenge and reorient the design patent law toward its policy objectives.

CONCLUSION

This Article has demonstrated that the nonobviousness requirement for design patentability operates in stark contrast to the reality of designers' objectives and practices. The imposition of nonobviousness as a "something more than novelty" criteria for design patentability originated with an ill-advised insertion of design protection into the utility patent system in 1842. Based on an apparent mistake in subsequent legislative drafting, the judiciary mechanistically imposed the invention requirement and its successor, the nonobviousness requirement, with little consideration of the fundamentally different nature of ornamental designs from utility inventions. The "impossible issue" of how to meaningfully apply nonobviousness to designs continues to baffle the USPTO and courts in the twenty-first century.

The time has arrived to reconceptualize the nonobviousness requirement in a manner that thoughtfully addresses these concerns, with a view to promoting rather than stifling progress in the decorative arts. To recap, the reconceptualization we propose recognizes that:

(1) Precedent assessing whether utility inventions would have been obvious, including the Supreme Court's decisions in *Graham v. John Deere* and *KSR v. Teleflex*, is essentially irrelevant to the patentability of designs;

(2) Nonobviousness can properly be fine-tuned for design patents as it has been for plant patents;

(3) The "ordinary observer" perspective of the Supreme Court's foundational design patent decision, *Gorham Co. v. White*, is the best perspective from which to assess design nonobviousness;

(4) *Gorham*'s "substantial similarity" test should be adopted as the measure of design obviousness;

(5) The practice of combining prior art design features to establish the obviousness of a claimed design should be severely restricted or eliminated; and

(6) The USPTO should implement mechanisms to obtain and apply more and better design prior art.
Our recommendations are intended to empower policymakers, the courts, the USPTO, and legal practitioners to press for more appropriate application of the nonobviousness requirement to designs. At a minimum, we aim to spur deliberation and debate among all those in a position to make a difference in U.S. design patent law. By reaching out to designers to better understand the design process, this Article has taken a first step toward overcoming the supposedly “impossible issue” of applying the nonobviousness requirement to designs.