

Functionality and Design Patent Validity and Infringement

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I. Introduction²

Confusion and uncertainty surrounding the issue of functionality has plagued design patent law for some time, both as to determinations of validity and infringement.

Regarding design patent validity, there have been wide variations in the test for determining whether a claimed design is

impermissibly functional, i.e., not ornamental, such that it constitutes non-statutory subject matter under 35 U.S.C. § 171. At various times courts have used tests that ask whether a claimed design is "primarily functional" or "solely functional", which are ostensibly different standards.³ Another formulation says that a claimed design is impermissibly functional if it is "dictated by" functional considerations.⁴

² An abbreviated version of this article was originally published in 77 PAT. TRADEMARK & COPYRIGHT J. 201 (December 19, 2008), and portions of that version are used here with permission.

³ *Power Controls Corp. v. Hybrinetics, Inc.*, 806 F.2d 234 (Fed. Cir. 1986). See generally, P. Saidman and J. Hintz, *The Doctrine of Functionality in Design Patent Cases*, 19 U. BALT. L. REV. 352 (Fall 89-Winter 90).

⁴ See *In re Carletti*, 328 F.2d 1020, 1022 (C.C.P.A. 1964).

More frequently than not, these facially different tests are used rather interchangeably by the courts.⁵ In addition, the Federal Circuit recently has inexplicably used trade dress functionality standards when determining design patent functionality.⁶

This article will demonstrate how the judicial test for functionality of a patented design has gone astray, particularly in the recent case law. Important definitions regarding the fundamental meaning of the words "functional" and "function" will also be proposed.

Regarding design patent infringement, the case law seems to have accepted without critical review that the presence of so-called functional features in a claimed design is a defense to infringement. This line of cases says that a court must identify during *Markman* claim construction the ornamental and functional features of a claimed design, and then somehow extract the functional features, prior to giving the case to the trier of fact to apply the test for infringement.⁷

In *Egyptian Goddess v. Swisa*, 543 F.3d 665 (Fed. Cir. 2008), the Federal Circuit sitting *en banc*, in discussing *Markman* claim construction of design patents, said: "...a trial court can usefully guide the finder of fact by addressing a number of ... issues that bear on the scope of the claim, [including]: "...distinguishing between those features of the claimed

design that are ornamental and those that are purely functional". In support, the court quoted with approval from *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997): "Where a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent." *Egyptian Goddess*, 543 F.3d at 680.

This article debunks the notion that a court needs to delineate between so-called functional and non-functional design elements during *Markman* claim construction before turning the case over to the trier of fact for applying the ordinary observer test for infringement.⁸

Further, it will be shown that it is only in exceedingly rare cases, so rare that no reported decision can be found, that the so-called functionality of the claimed design needs to be considered during the infringement phase. During such largely hypothetical circumstances, this should be done by the trier of fact rather than by the court.

Although the *Egyptian Goddess en banc* opinion had nothing to do with the merits of the issue of functionality, its pronouncement regarding the alleged functional/ornamental dichotomy, like much other *dicta* that have previously slipped unnoticed into design patent jurisprudence⁹,

5 See *Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373, 1378 (Fed. Cir. 2002); *Eldon Indus., Inc. v. Vanier Mfg., Inc.*, 923 F.2d 869 (Fed. Cir. 1990).

6 Brief for Industrial Designers Society of America as *Amicus Curiae* in Support of Combined Petition for Panel Rehearing and Rehearing *En Banc*, *PHG Tech's, Inc. v. St. John Co's, Inc.*, 469 F.3d 1361 (Fed. Cir. 2006) (No. 2006-1169).

7 *OddzOn Prod's, Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997); *Spotless Enter's, Inc. v. A&E Prod's Group L.P.*, 294 F. Supp. 2d 322 (E.D.N.Y. 2003).

8 C.f. C. Zieminski, *A Function for Markman Claim Construction in Design Patents*, 90 J. PAT. & TRADEMARK OFF. SOC'Y 326 (May 2008).

9 The most notorious being the shibboleth: "Design patents have almost no scope", *In re Mann*, 861 F.2d 1581, 1582 (Fed. Cir. 1988).

needs to be brought to the attention of design patent practitioners so that clarity might emerge in future cases.

II. *de facto* and *de jure* Functional: A Critical Distinction

It is necessary at the outset to differentiate between two distinct meanings of the word "functional".¹⁰ As noted by Judge Rich in the seminal *Morton-Norwich* trade dress case¹¹, there are two quite different meanings of the word: *de facto* functional refers to a design or a feature that performs a function; *de jure* functional in the context of design patents refers to a design that fails to present an appearance that is not dictated by function alone¹², *i.e.*, one for which there are no alternate designs that perform the same function¹³. A *de facto* functional design or feature may also be *de jure* functional, under very limited circumstances, to be discussed below.

It will also be necessary to keep in mind the difference between the claimed design as a whole, and the individual features of the claimed design (which of course make up the claimed design as a whole).

The only designs that qualify for design patent protection are, *inter alia*,

"...ornamental designs for an article of manufacture...." 35 U.S.C. §171 (emphasis added). An article of manufacture is akin to a useful article in copyright jurisprudence, *i.e.*, "...an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article...." 17 U.S.C. §101. Thus, patentable industrial designs inherently have *de facto* functional characteristics and features¹⁴; otherwise, they would be displayed in the halls of an art museum, and be much better served by copyright protection.

The public buys industrial designs (*i.e.*, articles of manufacture), because of how they work *and* how they look. The form and function of a product of industrial design are ideally "inextricably intertwined." *Brandir Int'l Inc. v. Cascade Pacific Lumber Co.*, 834 F.2d 1142, 1144 (2d Cir. 1987). Courts have recognized the difference between *de jure* and *de facto* functional features of an industrial design:

There is no dispute that shoes are [*de facto*] functional and that certain features of the shoe designs in issue perform functions. However, a distinction exists between the [*de facto*] functionality of an article or features thereof and the [*de jure*] functionality of the partic-

¹⁰ The failure to distinguish between these two different meanings has been the root cause for much of the confusion in the law of design patent functionality. A good example of this confusion, as it pertains to parsing of so-called functional and ornamental elements during *Markman* claim construction, is painfully evident in *Spotless Enter's*, *supra* note 7, at 345-347 ("...even elements that are not solely dictated by function are not included in the [*Gorham*] comparison to the extent they are functional...").

¹¹ *In re Morton-Norwich Prod's, Inc.*, 671 F.2d 1332 (C.C.P.A. 1982). Judge Rich's logical lexicon unfortunately did not lead to widespread judicial adoption.

¹² The Supreme Court, specifically addressing design patents, set forth the proper test for design patent functionality as follows: "To qualify for protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone." *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 148 (1989).

¹³ *Best Lock Corp. v. ILCO Unican Corp.*, 94 F.3d 1563, 1566 (Fed. Cir. 1996) ("A design is not dictated solely by its function when alternative designs for the article of manufacture are available.").

¹⁴ *Hupp v. Siroflex of Am., Inc.*, 122 F.3d 1456, 1460 (Fed. Cir. 1997) ("...the fact that the article of manufacture serves a function is a prerequisite of design patentability, not a defeat thereof.").

ular design of such article or features thereof that perform a function. Were that not true, it would not be possible to obtain a design patent on a utilitarian article of manufacture.

Avia Group Int'l Inc. v. L.A. Gear California Inc., 853 F.2d 1557, 1563 (Fed. Cir. 1988).

The USPTO agrees:

The distinction must be maintained between the ornamental design and the article in which the design is embodied. The design for the article *cannot be assumed* to lack ornamentality merely because the article of manufacture would seem to be [*de facto*] primarily functional.

Manual of Patent Examining Procedure ("M.P.E.P.") §1501.04(c) [R-5] (emphasis in original).

It should be apparent from even this brief discussion that if the individual *de facto* functional features of an article of manufacture claimed in a design patent were removed from consideration prior to applying the ordinary observer infringement test, there would in most cases be nothing left of the patented design to compare to the accused design. This cannot be the law.

III. Design Patent Validity and Functionality

A. *The Traditional Test: Alternate Designs*

Although there was some confusion in the early case law about the proper standard for determining whether an overall claimed design was impermissibly *de jure* functional,¹⁵ there never was any question that a design patent is invalid when the overall claimed design is determined to be *de jure* functional, since the statutory requirement that a design be "ornamental" is then not satisfied, 35 U.S.C. §171.

There are a number of well-reasoned cases in which the generally accepted standard for determining whether the entire claimed design is impermissibly *de jure* functional is whether there are alternate designs for performing the same function¹⁶. This makes perfect sense, since the overriding policy behind the functionality doctrine is to prevent a design patent from monopolizing a function that should only be monopolized by a utility patent. CHISUM ON PATENTS §23.03[4] (2006). If the function of the overall claimed design can be performed by other designs, then the design patent *ipso facto* is not monopolizing that function and the claimed design is not *de jure* functional.

Functionality is the converse of the statutory requirement that a claimed

¹⁵ P. Saidman and J. Hintz, *supra* note 3.

¹⁶ See *Avia*, 853 F.2d at 1563; *Best Lock*, 94 F.3d at 1566; *Hupp v. Stiroflex*, 122 F.3d at 1460; *Seiko Epson Corporation v. Nu-Kote International, Inc.*, 190 F.3d 1360, 1368 (Fed. Cir. 1999) ("The 'ornamental' requirement of the design statute means that the design must not be governed solely by function, i.e., that this is not the only possible form of the article that could perform its function"); *Rosco*, 304 F.3d at 1378 ("...if other designs could produce the same or similar functional capabilities, the design of the article in question is likely ornamental, not functional."); *Unique Functional Prod's, Inc. v. Mastercraft Boat Co., Inc.*, 82 Fed. Appx. 683, 690 (unpub. Fed. Cir. 2003) ("We do agree with [the patentee] that the rectangular coupler having a width and a height not substantially greater than those of the trailer extension arm to which the coupler mounts is not purely functional, because one could, after all, make a differently shaped coupler that includes a rectangular opening to receive that extension arm.")

design must be “ornamental” under 35 U.S.C. §171. Functionality historically has always been an invalidity defense, rather than something the absence of which is required to be proven by the patentee in order to establish infringement.¹⁷ Again, a design patent applicant inevitably claims *de facto* functional features as part of his overall design, and the PTO examines the overall visual appearance of the entire claimed design, including intrinsic *de facto* functional features, to ensure that it is overall new, original, ornamental (i.e., not *de jure* functional), and non-obvious, and grants the patent on these bases. Issued patents are presumed valid, 35 U.S.C. §282 (2007). If a defendant in litigation believes that the PTO erred, i.e., if the defendant believes the overall claimed design was dictated solely by functional considerations and is thus invalid, it has the burden of proving same by clear and convincing evidence.¹⁸ The Federal Circuit described as “stringent” its standard for invalidating a design patent on grounds of functionality.¹⁹

B. The Meaning of “Function” Relative to Alternate Designs

When faced with the validity defense of functionality under 35 U.S.C. § 171, the

patent owner logically will focus on proving up alternate designs that perform the same function.²⁰ It has been this author’s experience, serving as an expert witness in many design patent cases,²¹ that in such circumstances the patentee will tend to define the “function” of the design broadly (e.g., an electrical connector that conducts electricity from a cable to another conductor), while the accused infringer will tend to define the “function” of the design much more narrowly (e.g., an electrical connector used to hand-terminate a cable during installation thereof to a TV, the connector conducting electricity from a shielded coaxial cable to a center-pin conductor with a hex tightening nut, where the electrical signal is attenuated no more than 5%, the hex nut occupies no more than 25% of the length of the connector, and the connector is crimped to the cable during installation rather than soldered).²² Obviously, the plaintiff’s broad definition renders it easier to find alternate designs that perform the same function, while the accused infringer’s narrow definition makes it more difficult, and perhaps impossible, to identify alternate designs that perform the same function.

No case has ever addressed the issue of how to properly define the “function” for

17 This is analogous to the situation that existed prior to *Egyptian Goddess*, *supra*, concerning novelty of a claimed design, the lack of which is an invalidity defense under 35 U.S.C. §102. But the so-called point of novelty test turned the requirement for patentable novelty into something the presence of which had to be found in the accused design in order to establish infringement. *Egyptian Goddess* thankfully excised the illogical point of novelty test from design patent jurisprudence.

18 *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1122 (Fed. Cir. 1993).

19 *Rosco*, 304 F.3d at 1378.

20 See note 37, *infra*.

21 The Federal Circuit recently rejected testimony from an expert patent lawyer, who did not have the requisite technical background, that went to validity and infringement, *Sundance, Inc. v. Demonte Fabricating, Inc.*, __ F.3d __ (Fed. Cir. 2008), leaving open, however, the possibility of relevant patent lawyer testimony going to PTO procedure, *Markman* claim construction, and the like, and/or where the patent lawyer indeed has the requisite technical background.

22 The tendency of the patentee to define the function broadly, and the accused infringer to define it narrowly, is reminiscent of the pre-*Egyptian Goddess* battle over the point of novelty, where the patentee would posit a broad point of novelty that could easily be found in the accused design, while the accused infringer would posit a narrow point of novelty that is unquestionably not present in the accused design. The inability of the courts, or anyone else, to define the “correct” point of novelty is one reason that led to its demise in *Egyptian Goddess*, 543 F.3d at 678.

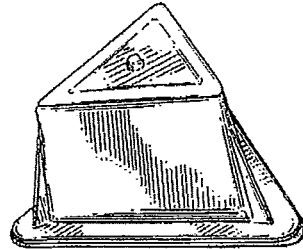
which alternate designs need to exist in order to defeat a functionality defense. Should a court adopt the patentee's general function, or the accused infringer's specific function?

One reason it should be the general function of the design rather than its specific function is because if it were the latter, it would be a rare alternate design that would meet the test, and most design patents would be held invalid. The practice of parading expert engineers to the stand, waiving the technical spec sheets for the design, and testifying as to its numerous, inevitable and specific *de facto* functional features would increase; the accused infringer would posit such an extremely narrow definition of the "function" so that no alternates exist, thereby purportedly invalidating the patent.

In other words, if in order to defeat a functionality defense, proof of alternate designs is required that perform the detailed function of the design, down to its specific engineering specifications, it is much more likely than not that no alternative designs would exist. Recalling that the ultimate industrial design is one that ideally blends form and function,²³ under such circumstances it would be the rare design patent that would be held valid, since *de facto* functional engineering considerations are a normal, often paramount, factor in designing a final product. That does not mean that such *de facto* functional features cannot also be ornamental, as pointed out elsewhere in this paper.²⁴

Here is a hypothetical example of how, under a narrow definition of "function", a

design patent could be held invalid. In *Elmer v. ICC Fabricating, Inc.*, 67 F.3d 1571 (Fed. Cir. 1995), the patented design was a "VEHICLE TOP SIGN HOLDER".²⁵



Suppose the evidence revealed that the fins at the corners of the sign holder needed to be shaped in the manner illustrated in order to minimize the amount of material used, while still providing the necessary support for the corners of the sign holder. Suppose further that the evidence showed that the small upper protrusion was the inevitable, indeed necessary result of using a particular state of the art injection-molding machine. And suppose the evidence further indicated that the designer had conducted a number of pre-market studies using various different configurations of the overall sign holder (e.g., square, octagonal, flat, etc.) and found that the only one that allowed consumers to see the messages on the sides of the sign from all angles, while minimizing the amount of material needed to support the sign, was indeed the equilateral triangular configuration that became the subject of the design patent. Assume also that engineers designed the dimensions of the sign holder, e.g., the footprint, so as to fit

²³ See *Brandir*, 834 F.2d at 1144.

²⁴ See section IV.A, *et seq.*

²⁵ U.S. Patent No. D290,620 (filed Apr. 29, 1985).

on top of any vehicle including the smallest of compact cars, and the height of the sign holder was dictated by the size of the particular store's sign as well as to minimize the amount of material used. And the horizontal lower flaps were necessary to stabilize and support the sign holder on the top of a vehicle. Perhaps also the particular dimensions of the lower flaps (length and width) were chosen to minimize the amount of material (an ever-present consideration) while providing the necessary stability. Were the trier of fact to adopt such a narrow definition of "function"²⁶ (perhaps even throwing in the fact that the sign was used exclusively for pizza delivery stores), it is much more likely than not that no alternatives exist that perform that specific function, and thus the design patent would be held *de jure* functional and invalid.²⁷

Another fundamental reason that the general function of the design rather than its specific function should control the functionality inquiry is because the claimed design is not limited by any of the detailed engineering specifications of the commercial product that embodies the claimed design. The vast majority of design patents, properly procured, do not mention the material used to create the design²⁸, or specific dimensions of the design²⁹, and, while properly disclosing the underlying article of manufacture, do not disclose the design of the product with which the claimed design is intended to

be used.³⁰ It is well established that limitations of the commercial embodiment of a claimed design should not be imported into the design patent specification or claim. See, e.g., *Berry Sterling Corp. v. Pescor Plastics*, 122 F.3d 1452, 1455 (Fed. Cir. 1997) ("[T]he design patent for an 'ornamental design for a container to fit a vehicle cup receptacle' contained 'no height or volume limitations, no requirements that the container fit in the majority of cup holders, and no stability limitations imposed by the claim.'").

In *PHG Tech's, LLC v. St. John Co's, Inc.*, 529 F. Supp. 2d 852 (M.D. Tenn. 2007), the accused infringer asserted a functionality defense to a design patent claiming the arrangement of labels on a medical label sheet. One theory of this defense was predicated on the argument that the configuration of the labels on the patented label sheet was dictated by the use of certain software to drive the printers that print the label sheets, i.e., if someone wanted to use a label sheet with a different configuration of labels, they would have to change the software so that the printer would print the labels. The accused infringer St. John argued: "The labels must be positioned [on the sheet] where the printer is programmed to print."

St. John cited the *Best Lock* case in arguing for the following rather broad proposition: "[t]here can be no doubt that the need to employ a particular patented design for purposes of compatibility with

²⁶ Accused infringers would likely argue that the definition of the "function" for a particular design is a matter of law for the court to determine under *Markman*.

²⁷ The general function posited by the patent owner of Elmer's sign is discussed in section IV.C., *infra*.

²⁸ For example, there was no mention in Elmer's design patent that his sign is made of plastic.

²⁹ While the relative dimensions of a claimed design, e.g., its height to length ratio, are part of the claim, the absolute dimensions are not.

³⁰ Indeed, Elmer's claimed vehicle top sign holder does not disclose, and is not limited by, the particular vehicle(s) with which it is to be used. To hold otherwise would subject the patent owner to far-fetched defenses such as 'the patent owner only uses the claimed design on compact cars, while we use ours only on full-sized sedans'.

a complementary product renders that design functional and precludes valid design patent protection". It contended that the configuration of PHG's label sheet is dictated solely by functional concerns because of the specific requirements of PHG's particular software, just as "[a]ny aesthetic appeal of the key blade design shown in the '636 patent" at issue in *Best Lock Corp.* was "the inevitable result of having a shape that it dictated solely by functional concerns." *PHG*, 529 F. Supp. 2d at 862.

The court did not agree with this argument, and held that PHG's design patent was valid, i.e., was not legally functional, reasoning:

[I]n this case, PHG has presented evidence that the design patents include no limitations as to the size of the label sheet, no requirement that the label sheet fit in a standard printer or be made from specific materials such as laser stock, and no specification that the label sheet be able to run through a high temperature laser printer. Thus, under *Berry Sterling Corp.*, the court is not to consider whether the patented designs can be used with any particular software or printer because there are no such limitations on the scope of PHG's design patents. Thus, as a matter of law, St. John cannot demonstrate that PHG's design patents are invalid on the ground that the labels must be

positioned specifically to work in combination with PHG's computer software. *PHG, Id.*

The logical extension of this line of reasoning is that since design patents are granted only on "designs for an article of manufacture,"³¹ i.e., *de facto* functional designs, and since the title and the claim of the design patent must identify the same article of manufacture,³² it is the title of the patent, and thus its claim, that properly defines the article of manufacture, and hence the function, for which alternate designs need to be identified to defeat a functionality defense.

Thus, in a previous example, if the title of the design patent on an electrical connector is ELECTRICAL CONNECTOR, then proof of alternate designs of electrical connectors that conduct electricity from a cable to a conductor would properly defeat a functionality defense.³³ In the example of Elmer's sign holder, where the title and claim of the design patent is VEHICLE TOP SIGN HOLDER,³⁴ then proof of alternate designs of sign holders that are used on vehicle tops would properly defeat a functionality defense. To find otherwise would effectively shut down the USPTO.

C. Trade Dress Functionality and Design Patent Functionality

Several recent Federal Circuit cases that address functionality in the context of

³¹ 35 U.S.C. § 171 (2007).

³² M.P.E.P. §1503.01(I) [R-5].

³³ This is borne out by the fact that the USPTO has issued over a thousand design patents on electrical connectors, see Class D13/147, all of which would be invalid if a narrow definition of "function" was used. Note also that the USPTO examines claimed designs for functionality, M.P.E.P. §1504.01(c) [R-5], and thus the thousands of presumptively valid electrical connector design patents have passed USPTO muster regarding functionality.

³⁴ See Elmer's U.S. Patent No. D290,620 (filed Apr. 29, 1985).

design patent validity illustrate confusion between trade dress functionality standards and design patent functionality standards. Thus far unchallenged, these cases also amply illustrate that bits and pieces of *dicta*, repeated and combined, make poor case law, advocacy and scholarship.

1. The Supreme Court Knows the Difference

The Supreme Court's seminal decision in *Inwood Laboratories* is an oft-quoted case for the definition of functionality.³⁵ But, the relevant portion of the *Inwood* case was about trademark functionality³⁶, and had nothing whatsoever to do with design patent functionality.

Why, one might well ask, should the functionality tests be different as between trademarks and design patents?

For one thing, the Supreme Court has itself distinguished between trademark functionality and design patent functionality. In a case decided 7 years after and without any reference to *Inwood*, the Court defined design patent functionality as follows: "To qualify for protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone." *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 148 (1989). The Federal Circuit and other courts have cited this definition with

approval in design patent cases on numerous occasions.³⁷

2. Reliance on *dicta* Makes Poor Law

*PHG Tech's LLC v. St. John Co's Inc.*³⁸ incorporated trade dress functionality standards into a design patent case without any discussion about the propriety of doing so.

PHG had a design patent on a medical label sheet that had eleven rows of labels with each row containing three labels.

In granting a preliminary injunction, the district court found that the claimed design was not dictated by function, i.e., the different sizes and arrangement of labels are primarily ornamental "because there are other ways to arrange different sizes of labels on an 8-1/2" x 11" sheet." *PHG*, 469 F.3d at 1364.

In vacating, the Federal Circuit said: "Our case law makes it clear that a full inquiry with respect to alleged alternative designs includes a determination as to whether the alleged "alternative designs would adversely affect the utility of the specified article". *PHG*, 469 F.3d at 1367. As for the "case law that makes it clear", the *PHG* court cited only *Berry Sterling Corp. v. Pescor Plastics, Inc.*³⁹

In *PHG*, the Federal Circuit also stated: "Our cases reveal a 'list of... considerations for assessing whether the patented

35 *Inwood Lab's Inc. v. Ives Lab's Inc.*, 456 U.S. 844, 851 n.10 (1982) ("A product feature is functional if it is essential to the use or purpose of the article or if it affects the cost or quality of the article.")

36 More particularly, the Court left undisturbed the finding that the color of pill capsules was functional to patients, i.e., they rely on color to differentiate their medicines, and thus such color is not protectable under the broad trademark definition of functionality, *Id.*

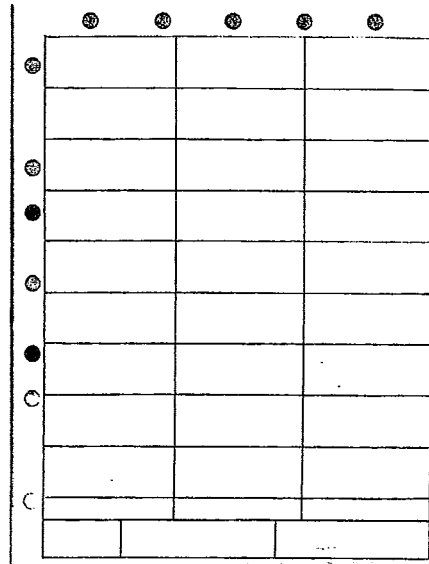
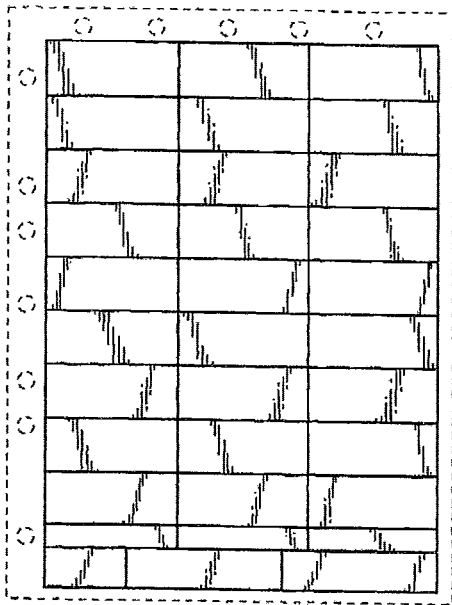
37 See *Best Lock Corp. v. ILCO Unican Corp.*, 94 F.3d 1563, 1566 (Fed. Cir. 1996); *Hupp et al. v. Siroflex of America, Inc.*, 122 F.3d 1456, 1460 (Fed. Cir. 1997); *Titan Tire Corp. v. Case New Holland, Inc.*, 2007 WL 2914513, *9 (S.D. Iowa 2007); *Superior Merchandise Co., Inc. v. M.G.I. Wholesale, Inc.*, 2000 WL 322779, *4 (E.D. La. 2000); *M & R Marking Sys., Inc. v. Top Stamp, Inc.*, 926 F. Supp. 466, 472 (D.N.J. 1996); *Krueger Intern., Inc. v. Nightingale Inc.*, 915 F. Supp. 595, 605 (S.D.N.Y. 1996); *Liqui-Box Corp. v. Reid Valve Co., Inc.*, 1990 WL 261394 (W.D. Pa. 1990).

38 469 F.3d 1361 (Fed. Cir. 2007).

39 122 F.3d 1452 (Fed. Cir. 1997)

PHG's U.S. Patent No. D263,836

Accused Design



design as a whole – its overall appearance – was dictated by functional considerations”. *PHG*, 469 F.3d at 1366. Yet *Berry Sterling* is the only Federal Circuit design patent case that has ever contained any such “list of considerations”, to wit:

1. whether the protected design represents the best design;
2. whether alternative designs would adversely affect the utility of the specified article;
3. whether there are any concomitant utility patents;
4. whether the advertising touts particular features of the design as having specific utility; and
5. whether there are any elements in the design or an [sic] overall appearance clearly not dictated by function. *Berry Sterling*, 122 F.3d at 1456.

There was no authority cited in *Berry Sterling* for the “list of considerations”, and thus the list is pure *dicta*, appearing at the very end of the decision after the substantive issues had been decided. The *PHG* court elevated this *dicta* into a rule of law which this author believes was ill-advised.

The “list of considerations” is eerily similar to commonly used trade dress factors for determining functionality. In *ex parte* prosecution of applications to register trade dress in the USPTO, the Trademark Manual of Examining Procedure (“T.M.E.P.”) states at § 1202.02(a)(v) [R-5]:

Trade dress is functional if it is essential to the use or purpose of a product or if it affects the cost or quality of the product. *Inwood Lab’s, Inc. v. Ives Lab’s, Inc.*, 456 U.S. 844, 850, 214 U.S.P.Q. (BNA) 1, 4 n.10 (1982).

A determination of functionality normally involves consideration of one or more of the following factors, commonly known as the “*Morton-Norwich* factors:”

- (1) the existence of a utility patent that discloses the utilitarian advantages of the design sought to be registered;
- (2) advertising by the applicant that touts the utilitarian advantages of the design;
- (3) facts pertaining to the availability of alternative designs; and
- (4) facts pertaining to whether the design results from a comparatively simple or inexpensive method of manufacture.

In re Morton-Norwich Prod’s, Inc., 671 F.2d 1332, 1340-1341 (C.C.P.A. 1982).

The T.M.E.P. goes into quite some detail concerning how an Examining Attorney should evaluate each of these factors, see T.M.E.P. §§1202.02(a)(v)(A)-(D).

Since the 2001 Supreme Court decision in *Traffix*,⁴⁰ the USPTO has moved more towards the using the *Inwood* definition of functionality rather than assessing the *Morton-Norwich* factors,⁴¹ presumably because it is much more difficult for an

applicant to overcome a functionality refusal under *Inwood’s* broad definition. Nevertheless, the *Morton-Norwich* factors remain alive and well as evidenced by the extensive treatment thereof in the T.M.E.P., as well as in numerous court cases.⁴²

In *PHG*, these trade dress standards for determining functionality have been adopted, without serious discussion, as the standards for determining functionality of design patents.

PHG’s “list of considerations” is attractive fodder for attacking design patents, both under the guise of the test for infringement and as an invalidity defense.⁴³ As a result of *PHG*, which has yet to be challenged in a subsequent Federal Circuit case,⁴⁴ patentees could be put to the test of not only defending charges that their proffered alternate designs do not adversely affect the utility of the claimed design, but that the claimed design is “the best design” (why would a design patentee *not* design, manufacture and sell the very best design she can?), that there are “concomitant utility patents” (obtaining a design patent and a utility patent on the same product to respectively protect ornamental and functional features is common practice), and that the patentee’s advertising “touts particular features of the design as having specific utility” (advertising for articles of

⁴⁰ *Traffix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23 (2001).

⁴¹ See T.M.E.P. § 1202.02(a)(v) [R-5].

⁴² See, e.g., *Fuji Kogyo Co., Ltd. v. Pacific Bay Int’l, Inc.*, 461 F.3d 675 (Fed. Cir. 2006); *Valu Eng’g, Inc. v. Rextord Corp.*, 278 F.3d 1268 (Fed. Cir. 2002); *New England Butt Co. v. Int’l Trade Com’n*, 756 F.2d 874 (Fed. Cir. 1985); *In re Dippin’ Dots Patent Litig.*, 249 F. Supp. 2d 1346 (N.D. Ga. 2003); *Maker’s Mark Distillery, Inc. v. Diageo N. Am., Inc.*, 2008 WL 4165456 (W.D. Ky. 2008).

⁴³ Fortunately, thus far only one reported decision, *Titan Tire Corp. v. Case New Holland, Inc.*, 2007 WL 2914513, at *9 (S.D. Iowa 2007), quotes the *PHG* “list”, although the court did not discuss any of the factors in the list in reaching its decision that the tire tread design in issue was not *de jure* functional based on “the plethora of alternative shapes of tire lug heads.”

⁴⁴ On remand, the district court in *PHG* found the patented design to be ornamental, not *de jure* functional, reasoning that: “... a myriad of medical label sheet designs could achieve the same functions that are achieved by the patented designs; that is, alternatives do not adversely affect the utility of the medical label sheet.” *PHG Tech’s, LLC v. St. Johns Co’s, Inc.*, 529 F. Supp. 2d 852 (M.D. Tenn. 2007).

manufacture routinely, and appropriately, tout utilitarian features). The last in the "list of considerations" is, in fact, the test for ornamentality: is the overall design clearly not dictated by function? How can this be a factor in the "list of considerations" to test for design patent functionality when it comprises the test itself?

Also, given that a design patent may be obtained on a design that has never been manufactured or sold, how would a court determine if such a design was the "best design," or whether alternate designs would adversely affect the utility of the claimed design?

A final piece of *dicta*, mentioned for the sake of completeness, appeared in *Amini Innovation Corp. v. Anthony California Inc.*,⁴⁵ where the Federal Circuit sloppily quoted the traditional *Inwood* trade dress functionality formulation, rather than the *Bonito Boats* design patent functionality formulation, in a design patent infringement case about a wood bed with carved ornamentation that had nothing whatsoever to do with the issue of functionality.

3. Should the Tests for Design Patent Functionality and Trade Dress Functionality Be the Same?

Is it appropriate that the functionality tests be the same for these two distinctly different forms of intellectual property?

No court has addressed this issue. Before assuming design patent functionality and trademark functionality should be

determined by using the same criteria, the arguments on both sides should be carefully considered in an appropriate case.

It is this author's view that the tests are properly different because the underlying policy rationales and scopes of design patent and trade dress protection are quite different. In short, it should be more difficult to prove functionality of a design patent compared to functionality for trade dress because the former is a statutory scheme for protecting new and original designs, for articles of manufacture that may never have been produced, for a limited (14 year) duration, while the latter is a common law based scheme of avoiding consumer confusion for a design in actual use, that need be neither new nor original, that must be a distinctive source indicator as proven by secondary meaning, and that, with continued use in commerce, can last for an unlimited duration and therefore logically must not hinder competition in perpetuity.

Fundamentally, since an article of manufacture (the *sine qua non* of design patent protection) inherently has *de facto* functional features, what self-respecting lawyer cannot mount a good argument (previously limited to trade dress cases) that a particular feature affects the cost or quality of the design, or is essential to the use or purpose of the design?⁴⁶ Such a standard for design patent functionality would reduce design patents to sitting ducks for alleged infringers.⁴⁷

⁴⁵ 439 F.3d 1365, 1371-72 (Fed. Cir. 2006).

⁴⁶ *Inwood Lab's Inc. v. Ives Lab's Inc.*, 456 U.S. 844 (1982).

⁴⁷ Those who may say that trade dress designs are sitting ducks for alleged infringers because of the functionality doctrine are partially correct, especially since the Supreme Court's *TrafFix* decision, *supra* note 40, that in addition to affirming *Inwood's* broad functionality definition, *supra* note 35, also found that disclosure of a feature in a utility patent (which happens often) constitutes strong evidence of functionality.

IV. Design Patent Infringement: The Ornamental/Functional Dichotomy

Identification of ornamental and functional features of a claimed design in the infringement phase is only necessary in extraordinarily exceptional circumstances that would only rarely, if ever, arise in practice.

A review of the origin of this ornamental/functional dichotomy will be helpful in understanding this somewhat complex issue.⁴⁸

A. The Origin of the Problem

To understand where the courts went astray, for indeed they have, one must first examine the so-called *Read* test from the initial case that purportedly supports parsing functional and ornamental features prior to performing the *Gorham* infringement test.

Read Corporation v. Portec, Inc., 970 F.2d 816 (Fed. Cir. 1992), was based on the unstated but erroneous premise that a design patent cannot protect a product having features that perform a function. As noted previously, this is an absurd conclusion because all industrial designs have ubiquitous, inherent *de facto* functional features. The detriment to the design patentee in claiming those *de facto* functional features is that they may limit the scope of the resulting overall design⁴⁹.

In *Read*, the defendant Portec took the position in the district court that Read's

patented design was invalid based on *de jure* functionality. The district court in *Read*, in denying Portec's JNOV motion to that effect, had it exactly right:

We do not deny that the Read device performed a function. Nevertheless, its overall design was a choice made by the inventor who could have arranged the functioning parts in other, different designs. It is the "overall aesthetics of the various components and the way that they are combined" which constitute the "design" and which validly may be patented.

Read Corp. v. Portec, Inc., 748 F. Supp. 1078, 1099 (D. Del. 1990).

In other words, the entire discussion of functionality in the district court was in the context of an invalidity defense – the word "functional" was not mentioned in the same sentence as "infringement". The court affirmed the jury verdict of validity and infringement.

On appeal to the Federal Circuit, the defendant Portec, perhaps stung by the impeccable logic of the district court concerning validity, attacked the jury's verdict of infringement by arguing that the only features in common between the patented and accused designs were functional, that Mr. Read had testified as such⁵⁰, and that Read had submitted no evidence concerning ornamental features. *Read*, 748 F. Supp. at 825. The only evi-

⁴⁸ Portions of this author's previous article *The Dysfunctional Read Test: Missing the Mark(man) Regarding the Test for Design Patent Infringement*, 90 J. PAT. & TRADEMARK OFF. SOC'Y 533 (July, 2008) are partially repeated here, but have been updated in accordance with the expanded analysis presented in this article.

⁴⁹ See the *Elmer* case, discussed in Section IV.C., *infra*.

⁵⁰ Mr. Read quite naturally testified that the features of his design were *de facto* functional, and of course they were. His material screening device was, after all, an industrial design, an article of manufacture. This qualifies his device for a design patent, rather than disqualifies it. It is a common but unsuccessful tactic for an accused infringer to prove (usually via the expert testimony of an engineer) that all of the elements of a claimed design perform a function, to which the proper response is: So what?

Read's U.S. Patent No. D263,836

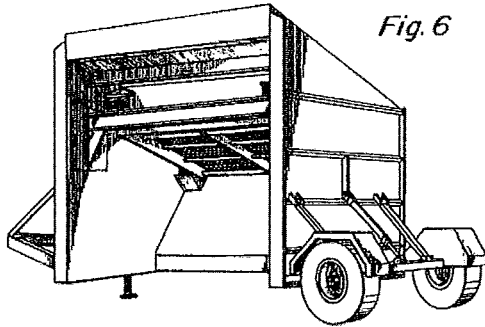
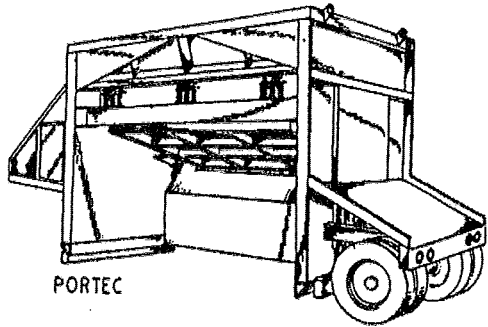


Fig. 6

Accused Design



PORTEC

dence relied upon by Read at trial to prove infringement was Mr. Read's answer "Yes" to the question of whether the *Gorham* test was satisfied.

Perhaps unhappy with the dearth of testimony concerning the ornamental features in Mr. Read's material screening device, the Federal Circuit chided Read for "misperceiving the holding of *Gorham*" and then made its notorious and ill-advised pronouncement:

In *Gorham*, however, there was no preliminary issue respecting what the ornamental features of the design in issue were. The *Gorham* design patent claimed only the scroll work on the handle portion of table flatware.... Thus, all elements forming the claimed design were ornamental. Where this is not the case, that is, a design is composed of functional as well as ornamental features, to prove infringement a patent owner must establish that an ordinary person would be deceived by reason of the common features in the

claimed and accused designs which are ornamental. *Id.*

There are several problems with this pronouncement, which unfortunately has since been cited in design patent cases too numerous to count, including *Egyptian Goddess*.⁵¹ First, there is never "a preliminary issue" concerning identification of the ornamental features of a claimed design. What is ornamental is the overall appearance of the claimed design⁵²; the PTO has said so by issuing the design patent, and unless successfully challenged by an invalidity defense, remains so.

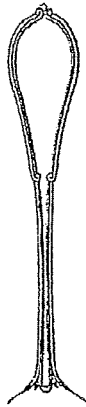
Second, *Gorham*'s silverware is not purely ornamental. *Gorham*'s claimed handle design performed the rather obvious function of enabling one to hold the silverware. A purely ornamental design, devoid of function, is more like a work of art, and can hardly be classified as an article of manufacture.

Third, and perhaps most significantly, it is illogical in most cases to suggest that there exists a special class of designs that

⁵¹ *Egyptian Goddess*, *supra*.

⁵² 35 U.S.C. §171.

Gorham's U.S. Patent No. D1,440



are composed of *de facto* functional and ornamental features⁵³; again, by its very nature, an industrial design inherently includes a plethora of *de facto* functional features. The task is not to identify the existence of *other* features that are ornamental; the pertinent inquiry is whether those *de facto* functional features are *themselves* ornamental (*i.e.*, not *de jure* functional) because their general functions⁵⁴ could indeed be embodied in other, different-looking ways. In other words, all functional features are *themselves* ornamental as a matter of law⁵⁵, unless it is the rare case that there is no other way to make them look while retaining their general function. Even in such a rare case, the *de jure* functional elements are still part and parcel of the overall claimed ornamental design.

The Federal Circuit's unfortunate suggestion in *Read* that functional and ornamental features needed to be parsed, never before stated in any design patent case, thereafter became another overused and distracting element of proof in design patentees' infringement cases, wielded heavily by accused infringers, yet serving no policy or jurisprudential purpose.

By means of this one illogical paragraph in this one unfortunate case, functionality morphed from a validity issue into an infringement "defense", *i.e.*, that the patentee had to somehow identify and separate functional features from ornamental features prior to proving its case in chief. This so-called *Read* test is therefore a rather loose, indeed shaky lynchpin for the proposition of parsing ornamental and functional design features prior to performing the ordinary observer infringement test.

B. You Can't Use a Design Patent as a Utility Patent to Protect Functional Ideas

Let's delve a little deeper, to make the infirmity of the *Read* test even more apparent. The only case cited by the court in *Read* for its ornamental/functional pronouncement was *Lee v. Dayton Hudson*, 838 F.2d 1186 (Fed. Cir. 1988). However, the *Lee* court never suggested that ornamental and functional features of a claimed design need to be identified prior to performing the test for infringement. In contrast, the *Lee* court affirmed the notion

⁵³ There are fairly rare cases where an ornamental feature does not perform any function whatsoever, such as when it consists of surface decoration. See, *e.g.*, *In re Daniels*, 144 F.3d 1452 (Fed. Cir. 1998).

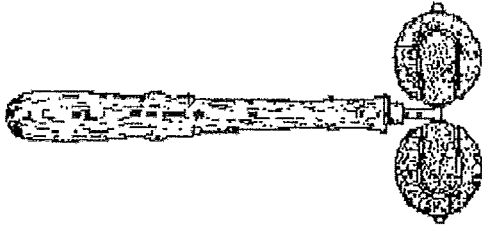
⁵⁴ See Section III.B., *supra*.

⁵⁵ As were Elmer's fins and protrusion. *Elmer, supra*. See discussion, *infra* at section IV.C.

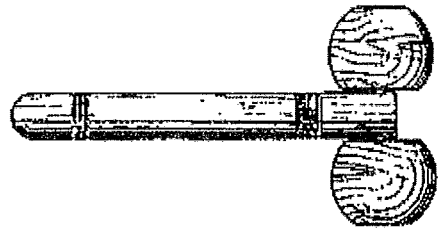
⁵⁶ 287 F.2d 192 (C.C.P.A. 1961).

⁵⁷ 328 F.2d 1020 (C.C.P.A. 1964).

Lee's U.S. Patent D259,142



Accused Design



that functionality is an invalidity defense by citing and quoting a string of functionality validity decisions, including the seminal C.C.P.A. decisions of *In re Garbo*⁵⁶ and *In re Carletti*.⁵⁷

But the court's overarching discussion in *Lee* was in response to the patentee's argument, oft made by those who have claimed too narrowly, that his design patent protected the concept of his design, rather than the way his design looked. The court confirmed the tautology that a design patent cannot be used to protect the general function or concept embodied in a particular design: "...a design patent is not a substitute for a utility patent." *Lee*, 838 F.2d at 1189. In a long series of decisions in which a design patentee attempted to wield its design patent as a utility patent, courts have likewise uniformly and quite properly held that the idea or concept embodied in a design patent cannot be used to stop a different-looking design that embodies the same idea⁵⁸ (this is akin to the idea/expression dichotomy in copyright law). In each of these cases,

including *Lee*, the court was essentially saying the same thing to the overreaching patentee: your design patent does not and cannot protect the concept or general (or specific) function of your product; the accused design, to infringe, must *look like* your overall patented design.

It is a stretch, to say the least, to move from this fundamental legal concept to one that requires delineation between functional and so-called non-functional features prior to determining infringement.

As aptly held by the *Elmer* court, and affirmed in *Egyptian Goddess*,⁵⁹ the bedrock test for design patent infringement is the same (whether the claimed design includes novel, old, ornamental or functional elements): the appearance of the accused design must be substantially the same overall as the patented design in the eye of an ordinary observer. *Egyptian Goddess* augmented the *Gorham* ordinary observer test by allowing consideration of the prior art, and thus of novel features, so that even that rare visually dominant *de jure* functional feature can be taken into

58 See *N.Y. Belting & P. Co. v. N.J. Car Spring & R. Co.*, 53 F. 810 (2d Cir. 1892), *Kruttschnitt v. Simmons*, 118 F. 851 (S.D.N.Y. 1902), *Ashley v. Samuel C. Tatum, Co.*, 186 Fed. 339 (2d Cir. 1911), *Applied Arts Corp. v. Grand Rapids Metalcraft Corp.*, 67 F.2d 428 (6th Cir. 1933), *Keystone Retaining Wall Sys. Inc. v. Westrock, Inc.*, 997 F.2d 1444 (Fed. Cir. 1993), *Elmer v. ICC Fabricating, Inc.*, 67 F.3d 1571 (Fed. Cir. 1995), *Sun Hill Industries, Inc. v. Easter Unlimited, Inc.*, 48 F.3d 1193, 1197 (Fed. Cir. 1995), *Oddz-On Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396 (Fed. Cir. 1997).

59 *Egyptian Goddess*, 543 F.3d at 678.

account during infringement analysis, as will be discussed below.

The lack of any logical or legal need to delineate between functional and ornamental design features prior to performing the *Gorham* infringement test is the reason that the court's pronouncement in *Egyptian Goddess* to the contrary is off the mark. But in all fairness, this question was not at issue in the *Egyptian Goddess* case, and presumably the court will in an appropriate case analyze this issue with the clarity it displayed in dispatching the point of novelty test in *Egyptian Goddess*.

C. Elmer Gets It Right

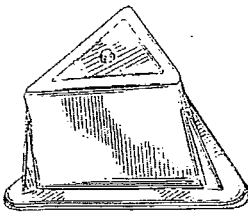
As a practical matter, it is really not all that difficult for an accused infringer or prospective knock-off artist to avoid infringement altogether by leaving out or sufficiently changing claimed *de facto* functional features to such an extent that its product does not look substantially the same overall as the patented design.

This was clearly demonstrated in the *Elmer* case - the first *Markman* case that construed a design patent claim. As noted previously, the patentee included in its overall claimed design, a triangular sign holder for mounting on the top of a vehicle, fins at each of the corners of the

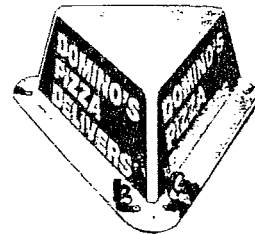
triangle, plus a protrusion extending from the top of the sign holder. The patentee would dearly have loved the Federal Circuit to excise from its infringement analysis his *de facto* functional features of the fins and protrusion, because the accused design did not have those visual features. In fact, the *Elmer* plaintiff argued that the fin and protrusion elements shown in solid lines in his drawings were indeed functional, rather than ornamental, and should therefore not be included in the claim. The court rejected this argument, saying that the patentee could have omitted those allegedly functional features from its patent application drawings, but did not do so, and thus effectively limited the scope of its patent claim by including those features in it. *Elmer, supra*, at 1577.

The court held that a design patent claim is limited in scope to the entirety of what is contained in solid lines in the patent application drawings themselves. *Id.* Extending the logic of this rule, it should be clear that a design patentee claims the entirety of all features shown in solid lines in her drawings, regardless of whether such features are new, old, ornamental, *de facto* or *de jure* functional.

Elmer's U.S. Patent No. D290,620



Accused Design



D. Functionality of Individual Features

Regarding individual design features of an overall design, it is very difficult, as a practical matter, to identify any *de facto* functional design feature whose function cannot be performed by an alternate design⁶⁰. If the functional attributes of a particular feature of the claimed design can be manifested by other features that don't look like it, then that feature is *ipso facto* not a *de jure* functional feature, i.e., it is ornamental, and must be considered part and parcel of the design's overall appearance.

The analysis is only slightly different for that rare claimed design that includes a *de facto* functional feature that is also a *de jure* functional feature⁶¹. Even though an individual feature of an overall claimed design may in a rare instance be incapable of being embodied by a different-looking feature, and thus itself be *de jure* functional, such a feature should still not be parsed from the infringement analysis. For one thing, this is because the test for design patent infringement does not compare individual features, but rather requires the accused design to be substantially the same overall as the patented design. And the overall ornamental appearance of a claimed design may be composed of individual features that are themselves orna-

mental, novel, old, *de facto* functional, and/or *de jure* functional. A patentee claims such features at her peril, since all claimed visually significant features affect the scope of protection. Validity and infringement are not predicated on the novelty, non-obviousness, or functionality of each individual feature; it is the overall claimed design that matters. The PTO examined and allowed the entire claimed design, with all such features. And it is the entire claimed design that must be deemed substantially the same overall as the accused design in order for infringement to be made out.

Anyone is entitled to use by itself a *de jure* functional feature extracted from an overall claimed design, unless that feature is protected by a utility patent.

Elmer's design consisted entirely of *de facto* functional features whose appearances are in fact protected, but *only* as part of the overall claimed design, not individually. The fins and protrusion of Elmer are unquestionably *de facto* functional, i.e., they perform certain general functions. The fins give extra support at the corners of the triangular sign holder, and the protrusion was presumably formed as a result of the molding of the sign holder.⁶² But, as explained above, a *de facto* functional feature whose function can be

⁶⁰ This is true for the same reason that it is difficult as a practical matter to identify an entire claimed design that is dictated solely by functional considerations. Indeed, only one published Federal Circuit case has done so, *Best Lock*, *supra*, and under limited factual circumstances (an alleged "must fit" situation). The premise of *Best Lock* has been seriously questioned, see the cogent dissent of Newman, J., *Best Lock*, 94 F.3d at 1567, and Christopher J. Gaspar, *The Federal Circuit Locks Down the Ornamentality Requirement: Best Lock v. Ilco Unicam*, 23 J. CORP. L. 179 (Fall, 1997), in which that author demonstrates that the majority in *Best Lock* lost sight of the difference between *de facto* and *de jure* functional.

⁶¹ For one thing, it is rare because it is difficult, as noted previously, to even identify a *de facto* functional feature whose general function cannot be embodied by a different looking feature. For another, it would be foolish for a patentee to claim *de jure* functional features - an enlightened patentee would put such features in broken lines to indicate that they form no part of the claimed design. See note 64, *infra*.

⁶² The car-top sign itself is, of course, *de facto* functional since the sides of the sign carry a commercial message, and the triangular shape permits the commercial message to be seen regardless of the viewpoint of the observing consumer.

embodied by other, different looking designs is by definition ornamental. The function of Elmer's particular fins and particular protrusion could undoubtedly be embodied in a multitude of different-looking ways and still perform the same general functions.

For *de facto* functional features that are not also *de jure* functional, such features are by definition ornamental; as such, substantial similarity can indeed, in fact must, be founded on such ornamental features in combination with any other purely ornamental features (e.g., surface decoration) that may be part of a claimed design. Thus, if a defendant shows that substantial sameness results only from common *de facto* functional features, it is of no moment since such common *de facto* functional features are themselves ornamental, unless there is no other way to embody them.

E. de jure Functional Features of an Overall Claimed Design

In those rare instances where an overall claimed design actually includes a *de jure* functional feature, despite the fact that such feature is part and parcel of the overall claimed design, it is fair to ask whether substantial similarity with an accused design is based *only* upon such *de jure* functional feature. Such an occasion would be even more rare than the already

rare occasion when a *de jure* functional feature is itself part of the patented design - so rare that it is only hypothetical; no reported decision exists. If substantial similarity with an accused design is based *only* upon such a *de jure* functional feature, then that feature must be a dominant visual part of the patented design, so dominant that it dwarfs other *de facto* or purely ornamental features in the eye of an ordinary observer. Although one can perhaps conceive of a hypothetical situation where this would be true⁶³, it is highly unlikely to occur as a practical matter.⁶⁴

One would think that such a visually dominant *de jure* functional feature would give rise to a legitimate invalidity challenge based on functionality. But it is still presumably possible, in that now rarest of rare circumstances, that even a visually dominant *de jure* functional feature would be insufficient to render the overall claimed design invalid.

Thus, in those rarest of rare circumstances when substantial similarity is based *only* on a common *de jure* functional feature, an accused infringer should logically be allowed to raise that as a defense to infringement. Why? Because anyone is entitled to make and sell a product whose *only* visual similarity to a claimed design is a common *de jure* functional feature (unless, of course, such feature is protected by a utility patent).

⁶³ The standard hypothetical is a claimed design that consists of a bowling ball having a surface ornamentation that covers only a very small portion of its exterior surface. The spherical shape of the bowling ball is dictated solely by function assuming that no other shape would roll down a bowling alley. Thus, the presumably dominant visual portion of the claimed design, its spherical shape, is *de jure* functional, even though the entire claimed design might be judged ornamental by virtue of the very small surface ornamentation.

⁶⁴ The bowling ball hypothetical of the previous note is very unlikely to occur in reality because a patentee would be foolish to claim the spherical shape in solid lines, subjecting his design patent not only to an invalidity challenge based on prior art (assuming bowling balls are old), but another invalidity challenge based on an overall design that is dictated solely by function. Whether or not such challenges are successful is beside the point; an informed patentee would be well advised to claim his design wisely, by putting dominant *de jure* functional elements in broken lines, to avoid having to expend substantial financial resources to defend against prior art and functionality validity challenges.

The question then becomes how should such a defense be properly raised? Does this require the court to identify and parse ornamental and *de jure* functional features under *Markman* prior to performing the test for infringement? For the answer to this, we need look only to the *Egyptian Goddess* decision.

F. Egyptian Goddess Sheds Light on Functionality As a Defense to Design Patent Infringement

1. Should There Be A "Point of Functionality" Test?

Egyptian Goddess excised from design patent law the point of novelty test that required the patentee to prove which features of his design are novel, and are then found in the accused design. Thus, *Egyptian Goddess* unquestionably removed from the court any supposed *Markman* procedure for parsing novel and non-novel features as a matter of law. Moreover, *Egyptian Goddess* removed the burden from the patentee of proving its point of novelty, placing the burden of production of "comparison prior art" upon the accused infringer.⁶⁵

Taking a page from *Egyptian Goddess*, it would be similarly improper to impose a requirement for the court to parse ornamental and functional features as a matter of law, even in those rarest of rare circumstances when a *de jure* functional feature visually dominates the overall claimed design to such an extent that substantial similarity is based solely thereon. Further

following the logic of *Egyptian Goddess*, it would be improper to impose such a requirement upon the patentee during its infringement case in chief.

If a patentee is required to identify ornamental and functional features prior to its infringement case in chief, i.e., under *Markman*, it would result in a rather pointless but heated pre-infringement battle where a defendant would be positing that identified *de facto* functional features were actually *de jure* functional features, while the patentee would be positing just the opposite, i.e., that such *de facto* functional features did not rise to the rare level of being also *de jure* functional.⁶⁶

If such a requirement is imposed not during *Markman* but during the patentee's case in chief, the case law might further devolve into a reverse "point of functionality" test where the patentee is required to prove first that its *de facto* functional features are not also *de jure* functional, and if it loses that battle, then prove that each such *de jure* functional feature is not found in the accused design, and if it loses that battle, then prove that such *de jure* functional feature does not so visually dominate the claimed and accused designs that substantial sameness is based solely thereon.

For one of the major reasons that the point of novelty test was dispatched by the Federal Circuit in *Egyptian Goddess*, a "point of functionality" test would also constitute a back door attack on validity by allowing and encouraging an accused

⁶⁵ *Egyptian Goddess*, 543 F.3d at 678-79.

⁶⁶ This is similar to the jockeying that took place prior to *Egyptian Goddess* where the patentee would put forward a point of novelty that was found in the accused design, while the accused infringer did the opposite – formulate a point of novelty that was not found in the accused design. This sort of gamesmanship had been well recognized in the courts. See, e.g., *Bush Indus., Inc. v. O'Sullivan Indus., Inc.*, 772 F. Supp. 1442 (D. Del. 1991) ("We find that Bush's formulations of the points of novelty in its designs are not only vague but also slippery...[The point of novelty method used by Bush] is the shopping list approach, since a shopping list will be rewritten for each trip depending on what the shopper needs at the time.").

infringer to posit that the *de facto* functional features of the claimed design are *de jure* functional, in effect attacking the validity of the patent during the infringement phase under the lower preponderance of evidence standard of proof, rather than the higher clear and convincing evidence standard of proof necessary to invalidate a patent.

It would also be a waste of judicial resources for a court during *Markman* claim construction to make such a determination⁶⁷ since, as noted above, it would be exceptionally rare for a claimed design to be so dominated by a *de jure* functional feature that substantial similarity would be predicated solely thereupon.⁶⁸

2. If Not A "Point of Functionality" Test, Then What?

Conceding that an accused infringer nevertheless ought to have an opportunity to prove that substantial similarity is based *only* upon common *de jure* functional features, how should this be done?

The answer again can be found in *Egyptian Goddess* where the court, in dispatching the point of novelty test, made the following findings significant to this discussion:

1. The ordinary observer test is the sole test for determining design patent infringement, *Egyptian Goddess*, 543 F.3d at 678;
2. The ordinary observer is deemed to view the differences between the

patented design and the accused product in the context of the prior art, *Id.* at 676;

3. Examining the novel features of the claimed design can be an important component of the comparison of the claimed design with the accused design and the prior art, *Id.* at 678; and
4. If an accused infringer elects to rely on so-called comparison prior art as part of its defense to a claim of infringement, the burden of production of that prior art is on the accused infringer, *Id.* at 678-79.

Once again, in that rarest of rare circumstances described above, an accused infringer should be allowed to rely on the infringement defense that substantial similarity is only due to similarity of a *de jure* functional feature by producing evidence that tends to prove that a visually dominant *de facto* functional feature in issue cannot be embodied by any other dissimilar feature. The patentee would presumably oppose such a defense by presenting evidence tending to prove that such a feature is merely *de facto* functional; evidence that establishes that there are alternate features, different looking features, that perform the same general function, such that the alleged *de jure* functional feature is in fact ornamental. If it loses that battle, the patentee could then take the position that any *de jure* functional feature does not so dominate the overall claimed design

⁶⁷ This is in line with the Federal Circuit's de-emphasis on verbalization of a claimed design as part of *Markman* claim construction. See *Egyptian Goddess*, 543 F.3d at 679.

⁶⁸ No reported case supports this hypothetical situation.

such that substantial similarity is based solely thereon.

To avoid the currently popular specter of an accused infringer relying upon engineers to testify as to the massive *de facto* functional qualities of the claimed design (which are always by definition present), and thereby diverting everyone's attention from the appearance thereof,⁶⁹ the accused infringer, to prove *de jure* functionality, should be limited to producing visual evidence of the following two types: (i) prior art, and (ii) contemporaneous (non-prior) art. The latter is appropriate regarding the issue of functionality since if such a feature is *de jure* functional, it matters not that it may only have been *de jure* functional at a certain point in time – it must remain *de facto* functional throughout its life, i.e., both before and after its creation, in order to ward off an attack as being *de jure* functional. And if the visual evidence is not in the prior art, e.g., it is only in contemporaneous art, it means that the alleged *de jure* functional feature is itself novel.

One might ask why the infringer should be limited to visual evidence? Is not expert testimony required that explains the function of the design, and whether there are any alternatives for performing that function? The answer is that it is the general function of the article of manufacture that controls. Thus, if one is considering alternate designs of an electrical connector, engineering testimony is not necessary to establish that the function of an electrical connector is to conduct

electricity from a cable to another conductor. Any designs that accomplish this general function will qualify as alternates, as discussed in Section III.B., *supra*. If no alternate designs exist that can conduct electricity from a cable to another conductor, the *de jure* nature of the claimed design will be apparent. Given that expert engineering testimony is unnecessary to establish the general *de facto* quality of the claimed article of manufacture, i.e., it is evident on its face, it is only the appearance of the design and features thereof that matters. That is, the question really is: does the prior or contemporaneous art visually establish that the general function can or cannot be performed by other, different-looking designs?

In sum, the alleged infringer can legitimately take the position that the alleged dominant *de jure* functional feature is visually found either in the prior art, or not (i.e., is novel).

3. *Egyptian Goddess to the Rescue*

Interestingly, the framework of *Egyptian Goddess* provides tools to handle either situation. If the evidence of *de jure* functionality is in the prior art, *Egyptian Goddess* already mandates that the ordinary observer is deemed to view the differences between the patented design and the accused product in the context of the prior art. And if the alleged *de jure* functional feature is novel, i.e., is not found in the prior art but only in contemporaneous art, *Egyptian Goddess* already mandates that examining the novel features of the

⁶⁹ To add insult to injury, courts have frequently used the inventor's own testimony about the (inevitable) *de facto* functional features of the claimed design to invalidate the patent based on functionality. See *Power Controls*, *supra* note 3; *Eldon Indus., Inc. v. Vanier Mfg., Inc.*, 923 F.2d 869 (unpub., Fed. Cir. 1990); *Five Star Mfg., Inc. v. Ramp Lite Mfg., Inc.*, 4 Fed. Appx. 922, 923 (unpub., Fed. Cir. 2001).

claimed design can be an important component of the comparison of the claimed design with the accused design.

Thus, no special procedure, or modification of the *Egyptian Goddess* infringement test, is necessary to allow design patent litigants to take into account those rarest of rare circumstances where: (i) a *de facto* functional feature may also be *de jure* functional; (ii) the *de jure* functional feature forms a visually dominant part of the claimed design; and (iii) substantial similarity with an accused design is predicated *only* upon such *de jure* functional feature. The procedure is already set forth in *Egyptian Goddess*: visually compare the patented design, the accused design and the prior art – this will itself establish whether the alleged *de jure* functional feature is old, or novel, or exists at all.

The accused infringer would likely provide the trier of fact with visual evidence that tends to show such feature is *de jure* functional, i.e., evidence that establishes that the *de facto* functional feature in issue cannot be embodied by any other dissimilar feature. To the contrary, the patentee would likely present to the trier of fact visual evidence tending to prove that such a feature is merely *de facto* functional, i.e., evidence that establishes that there are alternate features, different looking features, that perform the same general functions. This visual evidence would be in the form of prior and/or contemporaneous art, which would also determine whether the alleged *de jure* functional feature is old, or novel, thereby comporting with *Egyptian Goddess*' mandate to view substantial similarity in the context of the prior art. There would also be an issue of fact concerning whether any *de facto* feature that is also determined to be *de jure*

functional dominates the claimed design to such an extent that substantial similarity is based solely thereon.

This would place functionality on the same footing as lack of novelty – both are primarily invalidity defenses, but nevertheless may be taken into account in appropriate limited circumstances in determining infringement, but certainly not determined as a matter of law in the *Markman* phase.

The visual nature of the *Egyptian Goddess* mandate of comparing the claimed design, the accused design, and the prior art can thus be heeded in all situations.

V. Conclusion

Regarding design patent validity, this article has pointed out the critical importance of understanding the meanings of the words “functional” and “function”, and the dangerous recent trend towards adopting trade dress functionality standards into design patent jurisprudence, converting an objective and easily applied test for alternate designs into a complex set of factual inquiries from which no design patent would be safe.

This article has also demonstrated the illogic of parsing ornamental and so-called functional features of a claimed design prior to performing the test for design patent infringement. Closely examined, and understanding the difference between *de facto* and *de jure* functional, it is clear that such parsing is unwarranted. Further, identification of functional features in the infringement phase is only necessary in those extraordinary limited factual circumstances, so rare that not a single reported decision can be found to support it, where a *de jure* func-

tional element so dominates a claimed design that substantial similarity is based solely thereon.

Relying on confusing and misunderstood case law, and the trade dress definition of functionality, one commentator has taken the position: "[t]he combination of this broader definition of functionality with the recognition that identification of functional features is properly part of claim construction, and that such features are deleted from the ordinary observer's comparison, may give new life to func-

tionality of features as a defense in design patent cases."⁷⁰

As hopefully made clear in this article, such an argument is based upon confusion between *de facto* and *de jure* functional features, relies upon *dicta* on top of *dicta* on top of *dicta*, is already taken into account by the design patent infringement analysis announced in *Egyptian Goddess*, and perhaps most importantly, makes no sense in the real world of industrial design patent protection.

70 F. Medlin, *Functionality of Individual Features in Design Patents*, 77 PAT. TRADEMARK & COPYRIGHT J. 139, 144 (December 5, 2008).