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The Role of the Non-Functionality Requirement in Design Law

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The Role of the Non-Functionality Requirement in Design Law

Orit Fischman Afori*

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INTRODUCTION

Industrial design law protects the appearance of useful articles. A key requirement for eligibility is that functional features of the design cannot receive protection.[1] This requirement pursues an important public interest objective, "namely that a shape whose essential characteristics perform a technical function and [are] chosen to fulfill that function may be freely used by all."[2] The requirement is fundamental in design law, and it exists in many legal jurisdictions, although it manifests itself differently in each system. Regardless of the form the non-functionality requirement takes, applying it poses severe difficulties, because it is difficult (and sometimes impossible) to draw a clear line between functional and non-functional features. Consequently, this area of law tends to be complex, which in turn creates greater uncertainty. The purpose of this Article, therefore, is to examine the drawbacks of the non-functionality requirement and to propose a mechanism for applying the requirement that may make it more workable.

I. THE NON-FUNCTIONALITY REQUIREMENT

One of the requirements for receiving design protection is that such protection will not cover functional elements of the article.[3] In this Part, I will present a short overview of the requirement in different legal systems.

Functional elements, in a strict sense, are those features included in the article or device which enable it to perform its

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[1] *See* Richard G. Frenkel, *Intellectual Property in the Balance: Proposals for Improving Industrial Design Protection in the Post-TRIPS Era*, 32 LOY. L.A. L. REV. 531, 534 (1999) ("Because copyright law protects only the aesthetic and creative expression of authors, the protected features of design—the parts that would be created by an artist or author—must be physically or conceptually separable from the product's features.").

[2] *See* Case C-299/99, Koninklijke Philips Elecs. NV v. Remington Consumer Prods. Ltd., 2002 E.C.R. I-05475, ¶ 80.

[3] It should be noted that under the TRIPS agreement, this requirement is voluntary. *See* Agreement on Trade-Related Aspects of Intellectual Property Rights art. 25(1), Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C [hereinafter TRIPS Agreement] ("Members may provide that such protection shall not extend to designs dictated essentially by technical or functional considerations.").

intended function.[4] The basic justification for the non-functionality requirement is that the external appearance of the article—and not its functional aspect—is protected in design law.[5] The function of the article or device is covered by patent law,[6] which establishes extensive thresholds in order to balance, on the one hand, creating incentives for the development of new inventions[7] against, on the other hand, securing maximum benefits for the public.[8] The aim of industrial design law, however, is not to encourage the development of new technologies, but rather to encourage the development of their external appearance.[9] Accordingly, the threshold for eligibility refers only to appearance, without consideration of the functional elements, so as not to undermine the delicate balance established in patent law.[10] Therefore, technical features which are not protected by patent law are open to all, and thus the public's interest is promoted.[11] This is a fundamental principle of design law, and it is maintained regardless of the manner in which designs are protected.

A. The Non-Functionality Requirement in U.S. Law

In the United States, there are currently three major legal routes for protecting industrial designs: copyright law,[12] patent law[13] and trademark law,[14] all of which normally provide protection only to

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4 See *infra* Part II for a discussion of what exactly functional elements are.

5 Orit Fischman Afori, *Reconceptualizing Property in Designs*, 25 CARDOZO ARTS & ENT. L.J. 1105, 1107 (2008).

6 *See* 35 U.S.C. § 102 (2006).

7 *See id.*

8 *See* Bonito Boats, Inc. v. Thundercraft Boats, Inc., 489 U.S. 141, 148–49 (1989) ("Sections 102(a) and (b) operate in tandem to exclude from consideration for patent protection knowledge that is already available to the public. They express a congressional determination that the creation of a monopoly in such information would not only serve no socially useful purpose, but would in fact injure the public by removing existing knowledge from public use.").

9 *See id.* at 148 ("To qualify for protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone, and must satisfy the other criteria of patentability.").

10 *See id.*

11 *See supra* note 8 and accompanying text.

12 *See generally* 17 U.S.C. § 102(a)(5) (2006).

13 *See generally* 35 U.S.C. §§ 102–03, 171.

14 *See generally* 15 U.S.C. §§ 1114, 1125.

non-functional features. Since there are inherent complexities in applying the non-functional requirement, all of these intellectual property regimes must address this issue.

1. Copyright Law

Of the three legal routes for protecting industrial designs, copyright law is the most complex.[15] Currently, the Copyright Act provides protection for designs by including "applied art" in the subject matter of the Act and by including the requirement that the protected features are non-functional:

> "Pictorial, graphic, and sculptural works" include two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans. Such works shall include works of artistic craftsmanship insofar as their form but not their mechanical or utilitarian aspects are concerned; the design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified separately from, and are capable of existing independently of, the utilitarian aspects of the article.[16]

This route for protecting applied art through copyright law reflects codification of the Supreme Court's 1954 landmark decision in *Mazer v. Stein*,[17] which granted copyright protection to statues of dancing figures despite their industrial use as lamp bases.[18] Soon after *Mazer*, the U.S. Copyright Office adopted new regulations that introduced the concept of "separability" into

[15] *See* Fischman Afori, *supra* note 5, at 1018–22 (summarizing the copyright path for protecting industrial design in the United States).
[16] 17 U.S.C. § 101.
[17] 347 U.S. 201 (1954).
[18] *See id.* at 218.

American copyright law.[19] Under these regulations, the standard for copyrighting applied art was whether "the shape of a utilitarian article incorporates features such as artistic sculpture, carving, or pictorial representation, which can be identified separately and are capable of existing independently as a work of art."[20] Thus, the non-functionality doctrine has, in American copyright law, turned into a test of "separability,"[21] which not only prohibits protection of functional features, but also requires that those non-functional protected features be separated from the functional aspects of the object.[22] The problem that this creates is obvious: non-functional features that cannot be separated from the functional ones are deprived of protection.[23] This outcome cried out for a judicial resolution of the problem through a creative interpretation of the "separability" test, since many worthy designs combine functional and non-functional components in a non-separable way. Courts have therefore developed two tests for measuring the separation between "artistic" and "utilitarian" features: a physical test, and a conceptual test.[24] The physical test simply asks whether the ornamental element can be separated from the functional device or component.[25] For example, registration was precluded for lighting

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[19] *See* 37 C.F.R. § 202.1 (2009).

[20] Fischman Afori, *supra* note 5, at 1119 (citing 37 C.F.R. § 202.10(c)).

[21] *See, e.g.*, 17 U.S.C. § 101 ("[T]he design of a useful article, as defined in this section, shall be considered a pictorial, graphic, or sculptural work only if, and only to the extent that, such design incorporates pictorial, graphic, or sculptural features that can be identified *separately from, and are capable of existing independently of, the utilitarian aspects of the article*." (emphasis added)); Pivot Point Int'l, Inc. v. Charlene Prods., Inc., 372 F.3d 913, 922–32 (7th Cir. 2004); Brandir Int'l, Inc. v. Cascade Pac. Lumber Co., 834 F.2d 1142, 1143–49 (2d Cir. 1987); Carol Barnhart Inc. v. Econ. Cover Corp., 773 F.2d 411, 414–19 (2d Cir. 1985); Esquire, Inc. v. Ringer, 591 F.2d 796, 803–05 (D.C. Cir. 1978).

[22] Fischman Afori, *supra* note 5, at 1121.

[23] *Id.*

[24] For the physical test, see *Esquire*, 591 F.2d at 803–05. For the conceptual test, see *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989, 993 (2d Cir. 1980).

[25] *See* Robert C. Denicola, *Applied Art & Industrial Design: A Suggested Approach to Copyright in Useful Articles*, 67 MINN. L. REV. 707, 730–31 (1983). Denicola criticizes the physical test derived from *Mazer v. Stein* and relies on legislative history to argue that Congress conceived of a more abstract conceptual test in § 101:

> Because *Mazer* provided the focal point for the congressional analysis, it is tempting to approach the separability test in essentially physical terms. In *Mazer*, the dancing figures at issue could be

fixtures since all of the design elements were directly related to the useful functions of the article and the fixtures did not contain elements, either alone or in combination, which were capable of existing independently as a copyrightable pictorial, graphic, or sculptural work apart from the utilitarian aspect.[26]

By contrast, the conceptual test asks whether there is a potential aesthetic purpose for the design as a whole, which is different from the functional one.[27] One such example is a belt buckle that is worn for ornamentation other than on the waist.[28] In the case in question, the court stated that

> the primary ornamental aspect of the . . . buckles is conceptually separable from their subsidiary utilitarian function. This conclusion is not at variance with the expressed congressional intent to distinguish copyrightable applied art and uncopyrightable industrial design. . . . [T]hese buckles may be considered jewelry, the form of which is subject to copyright protection.[29]

"While the physical separation test reflects a narrow, literal interpretation of the statute, the conceptual separation test is

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> physically separated from the utilitarian objects into which they had been incorporated by the twist of a socket and a sharp tug on an electric cord. Reliance on this simplistic notion of physical separation, however, is misplaced. The legislative history unequivocally indicates that pictorial works adorning useful articles are entitled to copyright, yet the pattern dyed into a bolt of cloth or painted on a china cup cannot be physically detached from the object itself. In addition, some features of utilitarian objects that *can* be physically separated are clearly *not* intended to fall within the scope of copyright. An ordinary television cabinet may be physically removed from the set itself, yet protection will not be forthcoming. Physical separability is a poor touchstone, inaccurate as a descriptive concept, and devoid of normative implications. The legislative history acknowledges the necessity of a more esoteric approach, referring at one point to "some element that, physically *or conceptually*, can be identified as separable."

Id. at 730 (emphasis in original) (quoting H.R. REP. NO. 1476, at 55 (1976)).

26 *See, e.g.*, *Esquire*, 591 F.2d at 798.

27 *See Kieselstein-Cord*, 623 F.2d at 993.

28 *See id.*

29 *Id.* (citations omitted).

broader" and allows for extensive protection of industrial designs through copyright.[30] As a result, there has been considerable criticism of the "separability" criterion as unclear, impossible to carry out, arbitrary, and subject to manipulation.[31] A recent article summarizing the ongoing debate over the conceptual separability test concluded that the "separability [test] has caused conflict among circuits even twenty-five years after Congress codified the doctrine. This suggests that the currently available tests are both confusing and unable to effectively determine the copyrightability of useful articles."[32]

2. Patent Law

Patent law also provides for the protection of designs through a specially-tailored "design patent right."[33] This provision is intended to fill the gap between copyright and patent protection and encourage the development of decorative arts.[34] To this end, an additional requirement of an ornamental design[35] was added to the standard patent requirements of novelty[36] and non-obviousness,[37] provided that the "ornamentality" was not dictated by functional considerations.[38] At the same time, the utility

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[30] Fischman Afori, *supra* note 5, at 1121.

[31] *See* PAUL GOLDSTEIN, COPYRIGHT, PRINCIPLES, LAW AND PRACTICE § 2.5.3(b)–(c) (Little, Brown & Co. 1989); MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.08(B)(3) (2005); Eric Setliff, *Copyright and Industrial Design: An "Alternative Design" Alternative*, 30 COLUM. J.L. & ARTS 49, 63 (2006); s*ee also* J.H. Reichman, *Design Protection After the Copyright Act of 1976: A Comparative View of the Emerging Interim Models*, 31 J. COPYRIGHT SOC'Y 267, 350–65 (1983) (explaining that the separability framework was rendered ineffective by the absence of a special design law).

[32] *See* Barton R. Keyes, *Alive and Well: The (Still) Ongoing Debate Surrounding Conceptual Separability in American Copyright Law*, 69 OHIO ST. L.J. 109, 111 (2008).

[33] 35 U.S.C. § 171 (2006).

[34] ROBERT P. MERGES, PETER S. MENELL & MARK A. LEMLEY, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 357 (Supp. 2006) (internal citation omitted); *see also* DONALD S. CHISUM, CHISUM ON PATENTS § 1:1.04(1) (2005).

[35] 35 U.S.C. § 171 (stating that "[w]hoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefore, subject to the conditions and requirements of this title").

[36] *Id.* § 102.

[37] *Id.* § 103(a).

[38] CHISUM, *supra* note 34, § 1.04[2][c]; *see also* 35 U.S.C. § 171.

requirement, which is otherwise compulsory for patents,[39] was dropped.[40] Thus, unlike "regular" inventions, a patent-covering design consists of aesthetic features, such as "surface ornamentation,"[41] although most other patentability requirements are maintained.[42] The result is that design patents protect only the ornamental aspects and not the functional aspects of the design,[43] leading to the same problem that we saw in copyright law: how are ornamental aspects distinguishable from the functional aspects in a product whose design incorporates both? Consequently, when aesthetics and function merge, patent design protection does not offer full protection for many designs.[44] For example, a design patent was registered for the ornamental design of a golf glove,[45] a chair,[46] and a jewelry ring.[47] A design patent was also issued for the original Coca-Cola bottle.[48] The question in all such registered design patents is how the ornamental feature can be separated from the functional features, and how such separation will affect the protection given to the design patent as a whole.

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[39] 35 U.S.C. § 101 ("Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.").

[40] *See id.* § 171; CHISUM, *supra* note 34, § 1.04[2][c].

[41] MERGES ET AL., *supra* note 34, at 357.

[42] 35 U.S.C. § 171; CHISUM, *supra* note 34, § 1.04[2][c].

[43] *See* L.A. Gear, Inc. v. Thorn McAn Shoe Co., 988 F.2d 1117, 1123 (Fed. Cir. 1993).

[44] *See* Anne Theodore Briggs, *Hung Out to Dry: Clothing Design Protection Pitfalls in United States Law*, 24 HASTINGS COMM. & ENT. L.J. 169, 169–71 (2002) (arguing that clothing design is often viewed as a useful art and thus denied design protection); Ralph S. Brown, *Design Protection: An Overview*, 34 UCLA L. REV. 1341, 1356–57 (1987) (stating that design patents are often held invalid based partly on the subjective nature of the validity inquiry); Frenkel, *supra* note 1, at 534, 555–58 (describing various problems with design patents, including the hurdles encountered when applying a conceptual separability test); Regan E. Keebaugh, *Intellectual Property and the Protection of Industrial Design: Are Sui Generis Protection Measures the Answer to Vocal Opponents and a Reluctant Congress?*, 13 J. INTELL. PROP. L. 255, 260–63 (2005) (arguing that the non-obviousness and non-functionality requirements of design patents prevent protection from being given to designs).

[45] U.S. Patent No. D308,436 (filed Sept. 22, 1986) (issued June 12, 1990).

[46] U.S. Patent No. D371,251 (filed July 28, 1995) (issued July 2, 1996).

[47] U.S. Patent No. D302,954 (filed Sept. 21, 1987) (issued Aug. 22, 1989).

[48] U.S. Patent No. D48,160 (issued Nov. 16, 1915).

3. Trademark Law

The third route for protecting designs in the U.S. is through trademark law, or a trade dress claim. Trade dress is "the appearance of a product when that appearance is used to identify the producer" or the origin of goods.[49] The trade dress may include the product's exterior design.[50] The use of this third route for design protection has become increasingly popular and troublesome because unlike the other two routes of protection, it potentially allows for a limitless period of protection.[51] Courts approve trademark protection for a product's design if it acquires sufficient distinctiveness (secondary meaning) in order to function as a trademark.[52] In other words, the design must function as a means to identify the origin of goods.[53]

Another important requirement for protection of a trademark in general is that the mark does not contain functional elements.[54] The non-functionality requirement was first developed in common law,[55] and was finally codified as part of federal trademark law in

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[49] *See* Publ'ns Int'l, Ltd. v. Landoll, Inc., 164 F.3d 337, 338 (7th Cir. 1998).

[50] *See* Ambrit, Inc. v. Kraft, Inc., 812 F.2d 1531, 1541 (11th Cir. 1986) (explaining that the trade dress at issue is the packaging of ice cream bars).

[51] *See* Graeme B. Dinwoodie, *Reconceptualizing the Inherent Distinctiveness of Product Design Trade Dress*, 75 N.C. L. REV. 471, 478–79 (1997); Graeme B. Dinwoodie, *The Death of Ontology: A Teleological Approach to Trademark Law*, 84 IOWA L. REV. 611, 624 (1999) [hereinafter Dinwoodie, *The Death Of Ontology*]; Judith Beth Prowda, *The Trouble with Trade Dress Protection of Product Design*, 61 ALB. L. REV. 1309, 1324–25 (1998) (explaining several problems that arise when using trade dress to protect products designs).

[52] *See* Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 212 (2000) ("The attribution of inherent distinctiveness to certain categories of word marks and product packaging derives from the fact that the very purpose of attaching a particular word to a product, or encasing it in a distinctive packaging, is most often to identify the source of the product.").

[53] *See id.*; Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 768 (1992); J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 7.25 (4th ed. 2006).

[54] *See* 15 U.S.C. § 1125(a)(3) (2006) ("In a civil action for trade dress infringement under this chapter for trade dress not registered on the principal register, the person who asserts trade dress protection has the burden of proving that the matter sought to be protected is not functional."); *see also* Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159, 164 (1995).

[55] JEROME GILSON, GILSON ON TRADEMARKS § 2A.04[1] (2009).

1998.[56] The codification of the non-functionality requirement was written broadly, so as to encompass the range of definitions that had been provided by courts.[57] The analysis of functionality by a court requires it to determine whether the word, term, symbol, or device is "essential to the use or purpose of the article or if it affects the cost or quality of the article."[58] This analysis can cause considerable complications when it comes to protecting design as a trademark because of the difficulty in distinguishing between the function of a product's design as an aspect that is intended to attract customers to the product itself, and its function as an indication of the product's source of origin.[59] In fact, only designed trademarks which could be separated from the designed device could reach this test of both not being "essential to the use or purpose of the article" and not affecting "the cost or quality of the article."[60] As a result, the unintended consequence of this analysis is that if the purpose of a design is achieved, and the design is unique and enjoys success in the market and therefore acquires the ability to function as an indication of source of origin, then it would be deprived of protection because the design had affected the cost of the product. However, if the design fails, in the sense that it has no market success, then though it may be acknowledged as a trademark from the functionality test's perspective, it will not develop the ability to function as an

[56] *See* Trademark Law Treaty Implementation Act, Pub. L. No. 105-330, tit. II, § 201(a)(4), 112 Stat. 3064, 3070 (1998) (codified as amended at 15 U.S.C. § 1064(3) (specifying the requirements for trademark protections as including non-functionality)).

[57] *See* GILSON, *supra* note 55, § 2A.04[1] (discussing Congress's attempt to unify the various functionality tests that had existed within the circuit courts).

[58] TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 24 (2001).

[59] *See* Dinwoodie, *The Death of Ontology*, *supra* note 51, at 624.

[60] *See id.* at 639. For example, a design of a lemon press may present a considerable development of the aesthetic appearance of lemon presses in general, and hence be sold for a higher price. At the same time, it could function as an indication of its source of origin due to its substantial success in the market. Under the functionality requirement, which includes a parameter of effect on the cost or quality of the article, the design of such a press will not be protected as a trademark, since there is no separable symbol apart from the product's design. For an example of this scenario, see Alessi, Juicy-Salif, Citrus-Squeezer, http://www.alessi.com/en/2/110/kitchen-accessories/psjs-juicy-salif-citrus-squeezer (last visited Mar. 18, 2010).

indication of source of origin and therefore will not function as a trademark.[61]

The clash between the non-functionality requirement and the function of the product's appearance in enhancing the market value of the product was at the heart of trade dress cases decided by the Supreme Court. The Supreme Court held that there are two tests for determining functionality as it applies in trade dress cases: the traditional test,[62] and the competitive necessity test.[63] In *TrafFix Devices, Inc. v. Marketing Displays, Inc.*,[64] the Court referred to the traditional test (*utilitarian functionality*), according to which a proposed mark 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."[65] In *Qualitex Co. v. Jacobson Products Co.*,[66] the Court referred to the competitive necessity test (*aesthetic functionality*), according to which a product design is functional "because of its aesthetic value only if it confers a significant benefit that cannot practically be duplicated by the use of alternative designs."[67] This second test will be further discussed below.

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[61] *See* Pagliero v. Wallace China Co., 198 F.2d 339, 343 (9th Cir. 1952) ("If the particular feature is an important ingredient in the commercial success of the product, the interest in free competition permits its imitation in the absence of a patent or copyright. On the other hand, where the feature or, more aptly, design, is a mere arbitrary embellishment, a form of dress for the goods primarily adopted for purposes of identification and individuality and, hence, unrelated to basic consumer demands in connection with the product, imitation may be forbidden where the requisite showing of secondary meaning is made. Under such circumstances, since effective competition may be undertaken without imitation, the law grants protection." (footnotes omitted)); *see also* RESTATEMENT (FIRST) OF TORTS § 742 cmt. a (1938) (indicating that "[w]hen goods are bought largely for their aesthetic value, their features may be functional because they definitely contribute to that value and thus aid the performance of an object for which the goods are intended").

[62] *See infra* notes 64–65 and accompanying text.

[63] *See infra* notes 66–67 and accompanying text.

[64] 532 U.S. 23 (2001).

[65] *Id.* at 24 (quoting Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159, 165 (1995)).

[66] 514 U.S. 159 (1995).

[67] *Id.* at 170 (quoting RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 17 cmt. c (1993)).

B. The Non-Functionality Requirement in English Law

The situation in England is even more complicated than in the United States, as industrial designs may be protected by any one of five methods: three routes under domestic legislation, covering registered designs,[68] unregistered designs,[69] and copyright;[70] and two E.U. protections, covering registered and unregistered designs.[71] All these routes share the same basic rule that no protection is granted to functional features. For example, article 7(1) of the Design Directive provides that "[a] design right shall not subsist in features of appearance of a product which are solely dictated by its technical function."[72] Similar provisions forbidding protection of functional elements have been introduced into national legislation.[73]

With regard to the protection of designs through trademarks, the Trade Mark Directive also specifies that there can be no protection of "the shape of goods which is necessary to obtain a technical result."[74] This rule has been applied by courts through the same legal analysis that is employed with respect to industrial designs, namely by asking whether "the shape of the product [is] attributable only to the technical result" and whether there are other shapes which can obtain the same technical result.[75] However, the European Court of Justice ("ECJ") in *Koninklijke Philips Electronics v. Remington Consumer Products Ltd.*[76] held that the ability to achieve the same technical result by other shapes does not necessarily lead to the conclusion that the shape is not

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68 *See* Registered Designs Act, 1949, 12, 13 & 14 Geo. 6, c. 88, § 1 (Eng.).

69 *See* Copyright, Designs, and Patents Act, 1988, c. 48, § 226 (Eng.).

70 *See id.* § 1.

71 *See* Council Directive 98/71, art. 7(1), 1998 O.J. (L 289) 31 (EC).

72 *Id.*; *see also id.* at art. 7(2) ("A design right shall not subsist in features of appearance of a product which must necessarily be reproduced in their exact form and dimensions in order to permit the product in which the design is incorporated or to which it is applied to be mechanically connected to or placed in, around or against another product so that either product may perform its function.").

73 *See, e.g.*, Registered Designs Act, 1949, 12, 13 & 14 Geo. 6, c. 88, § 1C(1) (Eng.).

74 Council Directive 89/104, art. 3(1)(e), 1989 O.J. (L 40) 3 (EC).

75 Case C-299/99, Koninklijke Philips Elecs. NV v. Remington Consumer Prods. Ltd., 2002 E.C.R. I-05475, ¶¶ 74–83.

76 Case C-299/99, 2002 E.C.R. I-05475.

functional, and therefore a design's registration may still be rejected.[77]

II. INQUIRIES INTO THE NON-FUNCTIONALITY REQUIREMENT

At first blush, the review of the current legal situation both in the U.S. and in England leads to the conclusion that the non-functionality requirement is fundamental for the protection of designs. However, a more probing inquiry into the requirement reveals some complications which are hard to overcome. In the following section, I will review some of these complications, all of which stem from the fact that the term "functionality" is both broad and vague.

The first complication stems from the fact that the term "functionality" does not have a clear and unequivocal definition: if functional features are to be deprived of protection, then the law should define (or at least explain) what "functionality" means with respect to design features.[78]

The second complication stems from the nature of industrial design as typically integrating function and aesthetics into one entity, with the result that either protection over functional features will be permitted or protection over aesthetical features will be prohibited. Both outcomes are contrary to the basic principle of industrial design law, which is to protect the aesthetical external appearance of articles without protecting their functional features.[79]

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[77] *Id.* ¶ 84 ("In the light of those considerations, the answer to the fourth question must be that Article 3(1)(e), second indent, of the Directive must be interpreted to mean that a sign consisting exclusively of the shape of a product is unregistrable by virtue thereof if it is established that the essential functional features of that shape are attributable only to the technical result. Moreover, the ground for refusal or invalidity of registration imposed by that provision cannot be overcome by establishing that there are other shapes which allow the same technical result to be obtained."); *see also* Amp, Inc. v. Utilux Pty Ltd, [1971] F.S.R. 572, 576 (H.L.) (U.K.).

[78] The *Qualitex* case is an example of the unclear language used by courts in defining the term "functionality." *See generally* Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159 (1995).

[79] *See supra* note 1 and accompanying text. An illustrative example may be the design of the lemon press described *supra* note 60, or other different kitchen appliances, such as coffee makers or food processors.

The third complication is the unclear weight of aesthetics in the legal analysis. If aesthetics are a function, then it is clear that the non-functionality requirement is tautological in the context of industrial design law because the whole purpose of this law is to provide protection for a product's aesthetic, as opposed to its technical features. Therefore, in such a case, the definition of the term "functional" needs to be narrowed to refer only to technical-physical functions, rather than including all features that serve a purpose.

A. What Is a Functional Design?

Because "functionality" is a vague term that lends itself to a number of definitions, the basic principle of rejecting protection for functional features is itself unclear. The question is, therefore, how non-functional design should be defined. As explained above, the English law follows the Directive's language, which states the test as whether the design is "solely dictated by its technical function."[80] This definition indicates that functionality should be examined from a *technical* point of view. However, this test for assessing non-functionality of designs opens a whole range of legal and theoretical questions relating to the "solely dictated" aspect of the test. When should it be concluded that a design is "solely dictated" by technical requirements? If a wholly functional article can be formed in a variety of shapes, is its design solely dictated by its function?[81] After all, since there are several effective options for shaping the article, then the choice that is ultimately made could be based on non-technical considerations, whether aesthetic (which design would be more appealing to the eye) or economic (which design would be cheaper). The House of Lords discussed this issue in *Amp, Inc. v. Utilux Pty Ltd*[82] and concluded that "solely dictated" by technical-functional features means that the designer decided on the shape of the article solely on the basis of whether the article would function in that manner, without

[80] Council Directive 98/71, art. 7(1), 1998 O.J. (L 289) 31 (EC).

[81] MARTIN HOWE & A.D. RUSSELL-CLARKE, RUSSELL-CLARKE ON INDUSTRIAL DESIGNS 38–40 (Sweet & Maxwell 2005) ("Where a shape is adopted by a designer upon the sole requirement of functional ends, *i.e.* to make the article work and not to appeal to the eye, then the provision excludes it from statutory protection.").

[82] [1971] F.S.R. 572 (H.L.) (U.K.).

considering its aesthetic appeal.[83] This did not mean, however, that there were no other pure technical-functional possible designs for the same article.[84] In other words, according to the House of Lords, the question of "solely dictated" by technical-function features is a subjective test which examines whether the designer had in mind only technical considerations in contrast to aesthetical considerations.[85]

This test echoes the subjective test in *King Features Syndicate, Inc. v. O & M Kleeman, Ltd.*,[86] which held that, in establishing whether a design of a doll should be regarded as a copyrighted work or an industrial design, the intent of the designer was determinative.[87] But the subjective intent of the creator or designer is a weak test, since it can be easily manipulated.[88] Nor does it serve any of the goals underlying intellectual property law.[89] Whether a design is "solely dictated" by functional features should depend on an objective test that can be judged solely on the basis of the design itself. The fact that many designs are commissioned, whether in the context of employment relations or not,[90] further complicates matters if the test for functionality is the subjective intent of the designer; it raises the additional question of whether it is the commissioner's or the designer's intent that is relevant. Lord Reid himself admitted in *Amp, Inc.* that the ambiguity and controversy surrounding the eligibility of designs "has centered around the word 'dictated' which is a metaphorical word out of a place in a statutory definition."[91] It should be mentioned that in an earlier decision the House of Lords called for an objective test, according to which the relevant question should not be the designer's intention but the effect on subsequent designers and the

[83] *See id.* at 583.
[84] *See id.*
[85] *See id.*
[86] [1941] A.C. 417 (H.L.) (U.K.).
[87] *Id.* at 429.
[88] For example, how can one tell whether the designer of a screwdriver had in mind only technical goals in choosing the exact lines of the device or whether some lines were chosen also (or only) for aesthetic reasons. *See* U.S. Patent No. D340,633 app. A (filed Jan. 21, 1992) (issued Oct. 26, 1993).
[89] *See* Fischman Afori, *supra* note 5, at 1166–68.
[90] *See id.* at 1167.
[91] *See* Amp, Inc. v. Utilux Pty Ltd, [1971] F.S.R. 572, 578 (H.L.) (U.K.).

effective possibilities to use other alternatives in achieving the same functional outcome.[92] Two decades later, in 2002, the ECJ similarly held that where the essential functional characteristics of the shape of a product are attributable solely to the technical result, the registration of that shape is precluded, "even if that technical result can be achieved by other shapes."[93] However, the ECJ refrained from construing any instructive test, whether subjective or objective, for such judicial conclusion.[94]

It seems, then, that the question of whether a design can be regarded as "solely dictated" by functional criteria when it is merely one chosen from among a number of possibilities, each one of which is capable of delivering the same functional goal, is ultimately a question of proportionality. This question should be determined by the courts (or other relevant tribunal) by asking whether the overall impression from the shape of the object suggests a technical or an aesthetic basis for the choice. This "eye of the judge" test is a common one in design law, and it is often the ultimate test for eligibility.[95] This test has no definable measurements and reflects the underlying preference for common law by deciding on a case-by-case basis, according to the judge's reading of the specific facts of the case.

B. Separating Function from Aesthetics

Separating the functional features of a design from its non-functional ones is an even more complicated task. The question discussed above was how to treat cases in which a functional

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[92] *See* Stratford Auto Components Ltd. v. Britax (London) Ltd., [1964] R.P.C. 183, 189–90 (H.L.) (U.K.) ("It is of course true that the designer's intention may greatly assist the court in its investigation of the result consequent upon the adoption of his manner of its performance, and in many of the cases . . . proof of intention to monopolise a function has been accepted as sufficient to establish the non-registrability of the features designed to secure that result. . . . None the less, as I read this sub-section, the test to be applied is an objective one, namely whether or not the function to be subserved by the article to which the design is applied imposes such control upon the freedom of the manufacturer as in substance to leave him no option but to adopt a feature or features appearing in the representation of the registered design . . . ." (internal citation omitted)).

[93] Case C-299/99, Koninklijke Philips Elecs. NV v. Remington Consumer Prods. Ltd., 2002 E.C.R. I-05475, ¶ 83.

[94] *See id.* ¶¶ 73–85.

[95] *See* HOWE & RUSSELL-CLARKE, *supra* note 81, at 37–42.

design was motivated by obtaining a technical result but where there were other possibilities for achieving the same technical result. The answer presented is that there can be several purely functional designs for the same technical goal, and the fact that non-functional *considerations* led a person to choose one of the technical possibilities does not negate the design's purely functional nature. A related, overriding question is, then, how the law should treat cases in which choosing one of the purely functional designs was made due to non-functional features which are *integrated* with the functional shape: are the non-functional features swallowed into the functional nature? Or do the functional features become protectable because they are merged into the non-functional features?

This overriding difficulty in applying the non-functionality requirement stems from the fact that many contemporary designs combine functional and aesthetical elements, and it is impossible to separate the two. These designs follow the "Form-Follows-Function" artistic school and the philosophy of functionalism which originated in the 1920s,[96] and which still dominates contemporary design.[97] According to functionalism, the best designs are those in which the appearance springs truly from the structure and is a logical expression of it.[98] However, achieving a visual effect by eliminating ornamentation must not be confused with failing to consider visual effect entirely. Functionalism is concerned specifically with aesthetics; these aesthetics, though, *are merged with the function*.[99] Thus, the requirement for not protecting functional elements becomes highly problematic

[96] Setliff, *supra* note 31, at 62.

[97] An example of a contemporary design which follows the "Form-Follows-Function" philosophy is Philippe Starck's lemon press "Juicy Salif," produced by Alessi in 1990. *See* Posting of Angie to Introduction to Design, *Philippe Starck—Juicy Salif*, http://introtodesign.blogspot.com/2008/06/philippe-starck-juicy-salif.html (June 24, 2008); *supra* note 60. Other examples are the many registered designs for chairs. *See, e.g.*, U.S. Patent No. D514,835 (filed Jan. 19, 2005) (issued Feb. 14, 2006).

[98] Setliff, *supra* note 31, at 62 ("According to this Functionalist philosophy, the usual character of any product was best determined by the internal logic of its construction and mechanism." (internal quotations omitted)).

[99] *See* AUSTRALIAN LAW REFORM COMM'N, REPORT 74: DESIGNS § 2.12 (1992), *available at* http://www.austlii.edu.au/au/other/alrc/publications/reports/74.

because it is not possible to separate physically the functional features from the non-functional features.

There are several models for dealing with this problem of merged functional and non-functional features of a design. One model is to preserve the rule rejecting protection of non-functional features, and when the features are merged, to provide no protection to the design as a whole. This is the American model, which is governed by the separability test,[100] as described above, and which is justly criticized as impossible to carry out, arbitrary, and subject to manipulation.[101] Another model is the English one, which allows registration of merged designs.[102] However, this model also has its shortcomings; courts have limited the possibility of registering these kinds of designs when doing so would impede the design freedom of future designers by leaving no viable options for alternative designs.[103] The problem created by such a court-made rule is clear: on what basis, other than subjective impression, is a judge to decide that a design which merges aesthetic appeal and functionality has met the threshold requirement of limiting future options for designers? Such a decision can always be criticized as arbitrary.

C. Are Aesthetics Also a Function?

Another complication stemming from the non-functionality requirement becomes apparent when we delve into the meaning of the term "aesthetics" in the context of useful articles. One may ask what considerable efforts and investments made in the external appearance (as opposed to the underlying technology) of articles are intended to achieve. The answer is that aesthetics reflect an added value, covering everything from personal enjoyment to

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[100] *See supra* Part I.A.1.

[101] *See supra* notes 31–32 and accompanying text.

[102] *See In re* Wingate's Registered Design, (1935) 52 R.P.C. 126, 131 (Ch.) (U.K.) ("[S]o long as the design, qua design, is something which makes an appeal to the eye and is new or original, it is properly a subject matter of registration . . . notwithstanding that it also involves a method of construction which may be entitled to protection as a patent.").

[103] *See* Stratford Auto Components Ltd. v. Britax (London) Ltd., [1964] R.P.C. 183 (H.L.) (U.K.); HOWE & RUSSELL-CLARKE, *supra* note 81, at 95–96.

social status indicators.[104] All these values contribute something real to the product and justify the consumers' choices to buy it. Therefore, it is arguable that aesthetics have a function in themselves.[105] Another way of thinking about this is to redefine the concept of "function." If we accept the definition of function as "a way for achieving an aim,"[106] though, then aesthetics is indeed a function.[107] Rejecting the idea of aesthetics as a "function" implies a narrow definition of "function" as *technical function* or even *physical function*. This is in fact the way the E.U. Design Directive understands the term in the context of industrial design law, as it uses the words "technical-function."[108] Because aesthetics do not have a technical or a physical function, they are not a function as the term is used in industrial design law. As discussed above, however, aesthetics cannot be easily separated from the technical or physical features of the article.

The development of the trade dress claim in U.S. law exemplifies an attempt to determine whether aesthetics should be considered a function. Trade dress, as explained above, refers to the design or appearance of goods (or services).[109] Courts were concerned that the product's dress is functional, either in the strict technical or broad aesthetic sense, and accordingly developed the concept of *aesthetic functionality*. Whereas strict functionality examines whether the dress adds something to the *use* of the article

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[104] *See* JULES STUYCK, PRODUCT DIFFERENTIATION IN TERMS OF PACKAGING PRESENTATION, ADVERTISING, TRADE MARKS, ETC. 6–7, 10–11 (Kluwer 1983); *see also* Fischman Afori, *supra* note 5, at 1110–15.

[105] *See* GOLDSTEIN, *supra* note 31, § 2.5.3(c) ("[P]urchasers of artistically designed useful articles typically have two motives: to use the article and to enjoy its design. A consumer who pays $662 for an ornamental belt buckle clearly wants something that will do more than hold up his pants.").

[106] Function could be defined as "the natural action or intended purpose of a person or thing in a specific role." The Free Dictionary, Function, http://www.thefreedictionary.com/function (last visited Feb. 5, 2010).

[107] *See* HOWE & RUSSELL-CLARKE, *supra* note 81, at 42–44 ("Provided that the shape is capable of giving to the article to which it is applied a definite individuality of appearance, which renders it distinguishable from the 'fundamental' or unadorned form of the article, it will be registrable as a design even though some mechanical advantage necessarily follows from the shape in question.").

[108] Council Directive 98/71, art. 7(1), 1998 O.J. (L 289) 31 (EC).

[109] *See supra* notes 49–53 and accompanying text.

(i.e., *utilitarian functionality*),[110] aesthetic functionality examines whether the dress, in addition to its ability to function as a trademark, makes the article more appealing.[111] Aesthetic functionality applies when the appearance of a product has a significance that is not easily duplicated by substitute designs.[112] A good example of aesthetic functionality is given in the Restatement (Third) of Unfair Competition:

> A is the first seller to market candy intended for Valentine's Day in heart-shaped boxes. Evidence establishes that the shape of the box is an important factor in the appeal of the product to a significant number of consumers. Because there are no alternative designs capable of satisfying the aesthetic desires of these prospective purchasers, the design of the box is functional . . . .[113]

Until 2001, the approach adopted by the courts was that when articles were bought largely for their aesthetic value, their features could be functional because they contributed to their value and affected their cost, thus furthering the purpose for which the articles were intended.[114]

In *TrafFix*, however, the Supreme Court somewhat narrowed this approach by explaining that aesthetic and utilitarian functionalities must be distinguished from each other.[115] *TrafFix* involved an expired utility patent for a road sign, which had special features that enabled the sign to withstand strong winds.[116] Since the utility patent had expired, the plaintiff tried to pursue a trade dress claim against a competitor that had copied its design.[117] The

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[110] *See supra* note 65 and accompanying text.

[111] *See supra* notes 104–06 and accompanying text.

[112] MCCARTHY, *supra* note 53, § 7:79. For a thorough review of the aesthetic functionality doctrine, see GILSON, *supra* note 55, § 2A.04(5).

[113] RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 17 cmt. c., illus. 8 (1995); *see* Bonazoli v. R.S.V.P. Int'l, Inc., 353 F. Supp. 2d 218, 226 (D.R.I. 2005) (finding that the plaintiff's heart-shaped measuring spoons were functional).

[114] *See* Pagliero v. Wallace China Co., 198 F.2d 339, 343 (9th Cir. 1952); *see also* RESTATEMENT (FIRST) OF TORTS § 742 cmt. a (1938).

[115] TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 33 (2001).

[116] *See id.* at 25.

[117] *Id.* at 26.

Supreme Court held that with respect to the design of the product no trade dress could be invoked;[118] those specific features were the same ones that had been included in the utility patent claim, which were therefore inherently functional.[119] The term for which protection over a utility patent was granted could not be stretched through a trade dress claim because it would undermine the legislature's intent to limit the term of protection over functional features.[120] At the same time, the Court also held that "in a case where a manufacturer seeks to protect arbitrary, incidental, or ornamental aspects of features of a product found in the patent claims, such as arbitrary curves in the legs or an ornamental pattern painted on the springs, a different result might obtain."[121] In other words, the Supreme Court adopted a narrow understanding of the term "functional," as including features of the type included in a utility patent, while excluding ornamental features from the functionality umbrella. In effect, the Supreme Court decided that, for purposes of industrial design, aesthetics *are not* a function. The decision thus narrows the functionality test because it invalidates both the competitive necessity test and the effect on the cost of the article test.[122]

This could have resulted in a flood of trade dress cases seeking to protect ornamental features added to utilitarian products, which would have undermined the Supreme Court's declared policy not to allow over-extension of trade dress.[123] Nevertheless, *TrafFix* did not refer to the inability to separate the ornamental or aesthetics of a design from its utilitarian functional features. It thus may be understood as allowing trade dress protection only when the ornamental part can be separated from the functional elements, therefore closing the floodgates of the trade dress route.[124] In reality, however, in a number of cases after *TrafFix*,

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[118] *See id.* at 30.
[119] *See id.* at 32.
[120] *See id.* at 34–35.
[121] *Id.* at 34.
[122] *See* Kerry S. Taylor, TrafFix Devices, Inc. v. Marketing Displays, Inc., 17 BERKELEY TECH. L.J. 205, 217 (2002).
[123] *TrafFix*, 532 U.S. at 29; Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 213 (2000).
[124] *See* Taylor, *supra* note 122, at 219.

courts did recognize a trade dress claim in cases of merged ornamental and utilitarian features,[125] and consequently the precise boundaries of the trade dress route are unclear.[126]

Thus, even if there is a clear rule that aesthetics are not a function, and functionality in industrial design law is narrowly interpreted to mean technical, physical, or utilitarian function, there is still a fundamental problem in the actual application of the non-functional requirement. This is because the aesthetics of an article often merge with its technical, physical, and utilitarian features. Given the limitless range of possible designs, a bright-line rule cannot be formulated. This is the fundamental obstacle in industrial design law, which has resulted in considerable ambiguity and in an illogical development of this branch of intellectual property law. Yet, it is clear that it is not possible to drop the non-functionality requirement because it is critical for separating patent law from industrial design law.

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[125] *See, e.g.*, Eco Mfg. v. Honeywell, 357 F.3d 649, 653 (7th Cir. 2003) (affirming the district court's determination that the shape of the trademark holder's round thermostat would likely be found functional at trial on the merits, and therefore declining to issue a preliminary injunction that would block the competitor from bringing its product to market; however, the court did not reject the possibility that in a final decision the functional trade dress may be protected due to the court's factual finding of mixed ornamental features); Logan Graphic Prods. Inc. v. Textus USA Inc., 67 U.S.P.Q.2d 1470, 1473 (N.D. Ill. 2003) ("Because the *TrafFix* decision dealt with trade dress protection sought for the exact mechanism covered by an expired utility patent, and because the features sought to be protected here are not covered by expired patents, the *TrafFix* decision is not controlling. However, that does not mean that Logan is relieved of the burden of showing that the features it seeks to protect are non-functional. . . . The magistrate judge recognized that Logan retained this burden and found that Logan met its burden."); Metrokane, Inc. v. Wine Enthusiast, 160 F. Supp. 2d 633, 638 (S.D.N.Y. 2001) ("The structure of the Rabbit corkscrew is clearly derived from that of the expired Screwpull utility patent. . . . However, dicta in the *Traffix* decision suggest that a party seeking trade dress protection can overcome the functionality presumption. . . . The Rabbit corkscrew fits this narrow exception.").

[126] This instability in identifying the ornamental and utilitarian features is demonstrated in one of these cases, in which the Seventh Circuit held with respect to a design of a thermostat that potentially "what was once functional may half a century later be ornamental." *Honeywell*, 357 F.3d at 653.

III. A PROPOSED SOLUTION FOR EASING THE PROBLEM STEMMING FROM THE NON-FUNCTIONALITY REQUIREMENT

For over a century, industrial design laws have created confusion by trying to make a clear distinction between functional and non-functional aspects of design.[127] The question is whether there is a way to resolve this problem and make the non-functionality requirement more workable. The proposal presented here is a pragmatic one. Since it is impossible to define accurately when a design is purely functional, and since the problem of designs that combine both function and aesthetics is acute, it might be more practical not to resolve the problem at the registration stage, but rather to postpone it to a later stage, when a case of infringement is brought before a court. Thus, whenever the question of the functionality of a design is raised and the answer is not clear-cut, the design will nonetheless be registered. Should, however, the registration of the design be challenged in court in an infringement claim, the court will determine which features of the design are indeed protected. This proposed method has a number of significant advantages which will be discussed below.

First, this method should not have a chilling effect with respect to innovative/creative endeavor. One possible objection to the proposed method of registering these functional designs is that doing so would hinder the innovative/creative market; designers might avoid using the functional features of the registered design, on the assumption that registration reflects conclusive protection.[128] This problem can be easily solved by attaching a reservation to the registration, stating that the registered design raises a question of functionality, which will be decided by the

[127] Non-functionality first appeared as a requirement in the English design law from 1919, which limited registration of mechanical contrivances. *See* Patent and Designs Act, 1919, 9 & 10 Geo. 5, c. 80, art. 93 (Eng.) ("Design means only the features of shape, configuration, pattern, or ornament applied to any article by any industrial process or means, whether manual, mechanical, or chemical, separate or combined, which in the finished article appeal to and are judged solely by the eye; but does not include any mode or principle of construction, or anything which is in substance a mere mechanical device."); *see also* HOWE & RUSSELL-CLARKE, *supra* note 81, at 35–45.

[128] But to some extent this claim can be raised against the current legal situation too because some functional designs are nonetheless registered, due to the problematic definition of "functional design."

court. Thus, registration of partially functional designs will not hinder innovative/creative efforts. This kind of reservation accords with the existing system which already provides for "notes" with respect to limitations or clarifications attached to registered intellectual property rights.[129] According to this practice, the eligibility of registered intellectual property rights can be challenged at any time up to the end of the statutory period of protection, and a clarification with respect to such legal possibility will be attached to the design's registration.[130] It is well known that competitors challenge the validity of registered rights indirectly, by simply using or copying the needed features and reserving the argument over eligibility to the courts.[131]

Moreover, in many jurisdictions there is no real prosecution of designs, and the registration of designs can be characterized more accurately as a deposition system.[132] This scheme of deposition instead of prosecution has also been adopted in the E.U. registration system[133] and by the Hague International Registration System.[134] The deposition system is aimed at achieving probative goals, which promotes more certainty in the relevant market. However, it is not intended to function as a constitutive registry of proprietary rights. Thus, in a deposition system, the mere act of

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[129] *See* Council Directive 98/71, art. 11, 1998 O.J. (L 289) 31–32 (EC).

[130] *Id.* at art. 11(9).

[131] For example, in cases of a license to use a patent, the licensee can simply stop paying the royalties. In such cases, the patent's validity often arises as a defense to an infringement suit against the licensee for breach of contract. Due to this practice, patent owners insert a "no-challenge" clause in the license agreements, according to which the licensee undertakes not to challenge the patent. *See* M. Natalie Alfaro, *Barring Validity Challenges Through No-Challenge Clauses and Consent Judgments:* Medmmune*'s Revival of the* Lear *Progeny*, 45 HOUS. L. REV. 1277, 1278–82 (2008).

[132] *See* Fischman Afori, *supra* note 5, at 1141 ("Accepting this as the main purpose of a design registration system means that deposit rather than comprehensive examination suffices: there is no waste of resources, and the designer can market the design immediately after creating it; registration will serve as a means to prove originality, non-copying or prior use.").

[133] *See* Council Directive 98/71, art. 11, 1998 O.J. (L 289) 31–32 (EC).

[134] *See* Geneva Act of the Hague Agreement [of 6 November 1925] Concerning the International Registration of Industrial Designs art. 10(1), art. 14(1), July 2, 1999 (extending the Hague Agreement Concerning the Deposit of Industrial Designs of 1934, amended in 1960).

registration does not imply that the registered design is valid, and its eligibility is subject to a court's examination at any time.[135]

There are many other advantages to reviewing the functionality of a design in the context of an infringement claim. As stated above, there is no clear test for whether a design is eligible or not, other than the "eye of the judge" test.[136] This test is arbitrary by nature, and consequently, the whole system of industrial design law suffers from uncertainty. Yet, as mentioned above, in practice the validity of registered rights is usually challenged by simply using or copying the needed features and reserving the argument of validity as a defense in court. Therefore, an indirect challenge of intellectual property rights eligibility is subject to a case-by-case determination, according to the judges' best understanding, and thus does not suffer from a different level of uncertainty than any other case discussed by a common law court. The common law system, by nature, creates a mechanism which calls for shifting complicated decisions which are derived from a factual basis to the courts.[137] Such a case-by-case resolution is the traditional common law method and is less disruptive than advance determination of eligibility with respect to proprietary rights.

Generally speaking, this kind of solution is common in intellectual property law and particularly in copyright law. The most problematic questions in copyright law, such as eligibility, scope of rights, exceptions, and limitations, where clear and certain rules are impossible to formulate, are resolved by applying an open standard on a case-by case basis in the courts.[138] This pragmatic

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[135] *See* Council Directive 98/71, art. 11, 1998 O.J. (L 289) 31–32 (EC).

[136] *See* HOWE & RUSSELL-CLARKE, *supra* note 81, at 35–37, 39.

[137] *Compare* Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 767 (1992) (holding that the trade dress of a restaurant found to be inherently distinctive may be protected under section 43(a) of the Lanham Act without proof that the trade dress has secondary meaning), *with* Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 215 (2000) (holding that, "in an action for infringement of unregistered trade dress under section 43(a) of the Lanham Act, a product's design is distinctive, and therefore protectable, only upon a showing of secondary meaning").

[138] For example, the fundamental threshold for acknowledging copyright is "originality," however this threshold is not defined by statute. Courts therefore develop different mechanisms and tests for applying the threshold on a case-by-case basis. *See* Elizabeth F. Judge & Daniel Gervais, *Of Silos and Constellations: Comparing Notions of Originality in Copyright Law*, 27 CARDOZO ARTS & ENT. L.J. 375, 377–78 (2009)

approach should be used in the industrial design realm as well. The non-functionality requirement could therefore function as an open standard to be applied on a case-by-case basis.

Thus, in light of the difficulty stemming from the non-functionality requirement, specifically when it is impossible to decide in advance whether a design's features are functional, this decision should be assessed in the context of *a specific* use. It may be that with respect to a specific counter-claim some features would be held as functional and in another different case would be held as non-functional. Putting the question of the functionality of a specific design in a concrete factual situation and discussing a competitor's need to use a concrete feature of the design may help explain a court's decision which in any case is based on the "eye of the judge" test. Courts may ask for evidence regarding the need to use particular features of a registered design, and accordingly consider whether there are effective alternatives for designing the article.[139] In this way, the test is focused on specific competing needs and is not theoretical, and the specific competitor will enjoy a legal response to his or her specific need. In other words, the decision whether a feature is or is not functional would be made on a practical, rather than a theoretical, basis, based on evidence that is provided on whether protection for a design would close off practical alternatives for future designers.

Finally, this proposal has the merit of eliminating the "all or nothing" consequences of the non-functionality requirement: the decision is always made in a specific context of a competing use, and future designers may re-open the question, leading to a different result, whether due to technological developments or

("Under the orthodox interpretation of originality for purposes of copyright law, there are four different families of standards, speaking broadly, which, ranged from most restrictive to most generous, are the European Union's ('E.U.') personal intellectual creation, the United States's *Feist* minimal degree of creativity, Canada's CCH standard of non-mechanical and non-trivial exercise of skill and judgment, and the United Kingdom's skill and labour standard.").

[139] For example, with respect to the screwdriver design patent discussed *supra* note 88, if another designer wishes to use the same lines of the edge of the handle for a different working tool, the court will need to focus only on that specific feature and examine its degree of functionality in light of the specific need to combine such feature in another product.

simply due to differences in the facts at issue. There is no a priori rejection of eligibility due to some functionality merged with the appearance of the design, and each case-by-case decision does not necessarily block future decisions with a different result because all decisions are referring only to the specific factual situation at stake. Indeed, such decision will be eventually an in personam one.

For all these reasons, shifting the non-functionality requirement to an open standard rule that is determined on a case-by-case basis would be a pragmatic solution to the unending debate over how to apply the non-functionality requirement.

CONCLUSION

Industrial design law protects the appearance of useful articles but not the functional features of the design.[140] This non-functionality requirement is a key element of design protection, and it is in fact a universal feature of such laws. Its underlying rationale involves the desire to avoid undermining patent law provisions, which under certain strict conditions provide protection of functional elements.[141]

In practice, however, the non-functionality requirement is difficult to apply. Three major reasons for these difficulties are explored in this Article: the first is that it is hard (or perhaps even impossible) to determine definitively that a design feature is purely functional.[142] The second is that contemporary design tends to combine functional and aesthetic elements, with the result that it is often impossible to separate between the two.[143] The question then becomes whether the design as a whole should be deprived of protection. The third reason is that functionality is an abstract concept that covers everything from the narrow meaning of "serving a technical goal"[144] to the broader (and vaguer) one of

[140] 17 U.S.C. § 101 (2006); *see supra* text accompanying note 16.
[141] 35 U.S.C. §§ 101–03.
[142] *See supra* Part II.
[143] *See supra* notes 104–06 and accompanying text.
[144] *See supra* Part II.A.

"achieving a purpose."[145] To the extent that functionality is understood broadly, it could reasonably be argued that aesthetics are also a function. This broad reading of the non-functionality requirement would empty it of meaning, however. Consequently, a more narrow understanding of the term "functional" is preferable—one that circumscribes functionality within technical and physical aspects.

After analyzing the various difficulties that arise from the non-functionality requirement, the Article discusses a proposed solution, under which non-functionality would no longer be simply treated as a threshold requirement for eligibility for design protection. Instead, in cases that are not clear-cut, the issue would be left to courts to resolve when claims of actual design infringement are brought. This is because a court would be better placed to determine whether a particular feature of the design was functional or not on a case-by-case basis in the context of a competing use. Such decisions would avoid the "all or nothing" rule of rejecting registration of functional designs and would accord with the rule allowing challenges to the eligibility of registered intellectual property rights at all times, whether directly or indirectly. The non-functionality requirement would thus function as an open standard norm, similar to many other intellectual property doctrines that are employed when it is impossible to impose a single rule to cover a virtually limitless range of factual possibilities.

[145] *See supra* Part II.B.