

DESIGN PATENT PERSPECTIVE: Understanding Functionality in Design Patent Law

PART 1



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If you litigate a design patent case, at some point you likely will encounter the concept of functionality. Don't be surprised if you experience some confusion when you do. The concept is often misunderstood, has not yet been fully developed by the courts, and is sometimes counterintuitive. A design is not functional just because it performs a function, and ordinary observers compare entire designs sometimes by only considering portions of them – after the functional elements are “factored out.” Functionality applies in both the design patent validity and infringement contexts, and its application is different in each. And it is never too early, either in the design or patent prosecution process, to begin thinking about functionality and the effect it may have on the ultimate enforceability of a design patent. Let's explore the concept of functionality and investigate the sources of confusion on our way to perhaps finding some keys to understanding.

The first potential source of confusion and a good place to start sorting things out is the United States Constitution, which is the basis of all U.S. patent rights. Article

1, Section 8, Clause 8 provides “[t]he Congress shall have the power . . . To Promote the Progress of Science and the useful Arts by securing for limited times to Authors and Inventors the exclusive right to their respective writings and discoveries.” Modern readers sometimes are confused by the terms “Science” and “useful Arts” and their relationship to the phrases “Authors and Inventors” and “writings and discoveries.” We presently think of “Science” as being more related to “discoveries,” and the term “useful Arts” now may seem like a bit of an oxymoron. But back in 1787, the term “Science” was understood as including all knowledge (not just scientific knowledge), and the term “useful Arts” referred to the work of artisans, or the technological arts, as opposed to the liberal arts.¹ In light of these eighteenth century definitions, the word choice and word order in the Constitution make sense.

The next potential source of confusion in a historical context is the presence of the term “useful” in the design patent statutes passed in 1842,² 1861,³ 1870,⁴ and 1874.⁵ For example, the first design patent statute passed in 1842 included the phrase “new and *useful* pattern, or print, or picture . . . fixed on any article of manufacture,” (emphasis added) and the 1874 statute included the phrase “new, *useful*, and original shape or configuration of any article of manufacture.” (emphasis added). Courts interpreted the statutory term “useful” as meaning “matters of ornament, in which the utility depends upon the pleasing effect imparted to the eye, and not upon any new function.”⁶ The term apparently was included “out of abundant caution, to indicate that things which were vicious and had a tendency to corrupt, and in this sense were not useful, were not to be covered by the statute.”⁷

But use of the term “useful” in the statutes led to confusion. Some courts understandably interpreted the term as it was used in the Constitution and failed

to distinguish between mechanical and aesthetic utility. These courts held that useful articles were patentable under the design statute regardless of whether they possessed ornamental characteristics.⁸ Due to this confusion, in 1902 the design patent statute was amended and the term “useful” was replaced with the term “ornamental.”⁹ The intent of the amendment was not to change the law, but to express more clearly what the law was.¹⁰

Following the 1902 amendment, courts interpreted the term “ornamental” in various ways, but in general, a design was considered ornamental if it appealed to the aesthetic emotions.¹¹ The United States Supreme Court has stated “[t]o qualify for protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone . . .”¹² But the Federal Circuit does not require a design to be aesthetically pleasing to be patentable.¹³ Rather, early on the Federal Circuit interpreted the term “ornamental” as characterizing a design that is not dictated by function alone. The approach of defining “ornamental” in terms of function explains why we focus on the term “functionality,” even though this term is found neither in the Constitution nor in the statutes.

It makes good sense to define the “ornamental” statutory requirement in terms of functionality. The purpose of design patent law is to promote the decorative arts.¹⁴ If a design is dictated solely by the function it performs, then the design is the result of functional necessity and not the result of decorative design choices made by a designer. Granting a patent to such a function-dictated design would not serve the purpose of promoting the decorative arts.¹⁵ Hold this concept in your mind, because it is a real key to unraveling some of the confusion surrounding functionality.

A continuing source of confusion, particularly those new to the doctrine of functionality, is that a design or design element can perform a function without being functional. The Federal Circuit has described the concept with this language: “[A] distinction exists between the functionality of an article or features thereof and the functionality of the particular design of such article or features thereof that perform a function.”¹⁶ Perhaps an easier way of understanding this concept is that it does not matter if a design or design element performs a function. Indeed, most do. What matters is whether a designer made

a decorative design choice not dictated by function when creating the design or design element. If so, then the decorative design choice indicates that the design or design element is ornamental because it is not dictated by functional considerations alone.¹⁷

Let's see how this concept of functionality works in the design patent validity context. To be struck down as invalid, a design patent must claim a design that is truly dictated solely by function. A case example is *Best Lock Corp. v. Ilco Unican Corp.*¹⁸ In this case the design patent was for a key blade, which is the portion of the key designed to fit into the matching front face of a key plug. The court held that since the key blade had to be designed to fit into the matching key plug, the design of the key blade was dictated solely by its function – because there simply were no decorative design choices to be made. The court found the design was not ornamental and held the patent invalid.¹⁹

Another source of confusion is whether the functionality of the design should be considered as a whole or element by element. The answer depends on whether the analysis is performed in the context of patent validity or patent infringement. In the Federal Circuit's first case addressing functionality in the context of patent validity, *Power Controls Corp. v. Hybrinetics, Inc.*,²⁰ the court appears to have endorsed an element-by-element approach. The court stated “[i]n determining whether a design is primarily functional, the purposes of the particular elements of the design necessarily must be considered.”²¹ However, in more recent cases, the court seems to have settled into an “as a whole” approach. In *L. A. Gear Inc. v. Thom McAn Shoe Co.*²² the court stated “[i]n determining whether a design is primarily functional or primarily ornamental the claimed design is viewed in its entirety, for the ultimate question is not the functional or decorative aspect of each separate feature, but the overall appearance of the article, in determining whether the claimed design is dictated by the utilitarian purpose of the article.”²³

With infringement, however, the approach is different. The first step in determining infringement is to construe the scope of the design patent claim. In *OddzOn Prods. v. Just Toys, Inc.*²⁴ the court held that “[w]here 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.”²⁵ This

approach was followed in *Richardson v. Stanley Works, Inc.*²⁶ where the court stated “when the design also contains ornamental aspects, it is entitled to a design patent whose scope is limited to those aspects alone and does not extend to any functional elements of the claimed article.”²⁷ The court approved a claim construction where the district court “factored out” the functional aspects of the claimed design.

Litigants often complain that the process of “factoring out” various design elements violates the requirement in *Gorham v. White*²⁸ that designs be considered as a whole when determining infringement. Litigants ask how a design can be considered as a whole when some of the design elements are being eliminated. The answer to this good question is two-fold. First, the design elements are being factored out during the process of claim construction and the *Gorham* “as a whole” comparative requirement applies only *after* the claim is construed. Second, design elements are not actually being eliminated, but rather are being “factored out.” This distinction requires some additional explanation.

In *OddzOn*, the patented design was a football with a tail and fins. The court determined that the function of the design was to travel like a thrown football, but to travel further than a regular football due to the greater stability provided by the tail and fins. The accused design also was a football with a tail and fins, but the particular shape was different. The court held that since a tail and fins were required to perform the identified function, the *general design similarity* of a football with tail and fins could not provide the basis for infringement. But the court did not completely eliminate the tail and fins from the analysis. Rather, the general design configuration of a tail and fins was “factored out” because it was dictated by function. When the court compared the *specific* overall designs in the patented and accused designs, the court found them to be substantially different, and held there was no infringement.

The court in *Richardson* used a similar approach. The court found that the general configuration of a multi-function tool design was dictated by the function it performed. The general design configuration then was factored out of the infringement analysis. When the court found that the overall appearance of the specific design features not dictated by function were substantially different in the patented and accused designs, the court found there was

no infringement. It is important to note that even though the functional aspects of the patented designs are being factored out in *OddzOn* and *Richardson*, comparison of the remaining ornamental features for the infringement determination is performed by observing the designs as a whole and not element by element – thereby satisfying the requirements of *Gorham*.

The concept of factoring out general design configurations dictated by function as part of the infringement determination predates creation of the Federal Circuit. An early and excellent explanation of the concept is contained in *Applied Arts Corp. v. Grand Rapids Metalcraft Corp.*²⁹ (“To hold that general configuration made necessary by function must give to a patented design such breadth as to include everything of similar configuration, would be to subvert the purpose of the law, which is to promote the decorative arts [footnote omitted] rather than to effectuate it.”).

Although the courts appear to agree on the general approach for determining functionality in both the invalidity and infringement contexts, many issues remain unresolved. For example, what is the specific standard for functionality? Should it be a strict “dictated by” standard, or should it include quality and cost considerations like in trade dress functionality? Are there principles for determining what the “function” of an article is, and should the function be determined broadly or narrowly? Is functionality a question of law for the court or a question of fact for the jury, and does it depend on whether functionality is being determined in the patent validity or patent infringement context? Should a court determine functionality during a claim construction hearing, when motions for summary judgment are being decided, or sometime during trial? Do the principles discussed in *Markman v. Westview Instruments, Inc.*³⁰ (that provide a rationale for courts to perform claim construction in utility patent cases) apply to the issue of functionality in design patent cases as well? And when a claimed design contains both ornamental and functional elements, how should the claim construction be expressed? Should the ornamental aspects be identified and described, should the functional aspects be identified and described, or should it be a combination of both?

Part 2 of this series on functionality will consider these unresolved issues. In the final part 3, we will explore ways litigants can strengthen their position on functionality

during the design process, prosecution process, and while battling it out in litigation.

ENDNOTES

1. See Malla Pollack, *What is Congress Supposed to Promote?: Defining “Progress” in Article I, Section 8, Clause 8 of the United States Constitution, or Introducing the Progress Clause*, 80 Neb. L. Rev. 754, 782 (2001).
2. Act of August 29, 1842, section 3.
3. Act of March 2, 1861, Section 11.
4. Act of July 8, 1870, Section 71.
5. Section 4929 of the Revised Civil Statutes, June 22, 1874.
6. *Rowe v. Blodgett*, 112 F. 61, 62 (2nd Cir. 1901).
7. *Westinghouse Electric & Mfg. Co. v. Triumph Electric Co.*, 97 F. 99, 102 (6th Cir. Ohio 1899).
8. Shoemaker, PATENTS FOR DESIGNS, 133 (1929).
9. Commissioner of Patents Allen recommended that the word “useful” be replaced with the word “artistic.” The Senate Committee on Patents changed the word “useful” to “ornamental.” See Kelsey Martin Mott, *The Standard of Ornamentality in Design Patent Law*, 48 American Bar Journal 548, 550 (June, 1962).
10. *Id.* at 16. The current statute 35 U.S.C. § 171 entitled “Patents for designs” states “[w]hoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title [35 USCS §§ 1 et seq.].
11. *Id.* at 113.
12. *Bonito Boats v. Thunder Craft Boats*, 489 U.S. 141, 148 (U.S. 1989).
13. *Seiko Epson Corp. v. Nu-Kote Int’l, Inc.*, 190 F.3d 1360, 1368 (Fed. Cir. 1999) (“Nor need the design be aesthetically pleasing.”).
14. *Avia Group International Inc. v. L. A. Gear California Inc.*, 853 F.2d 1557, 1563 (Fed. Cir. 1988).
15. *Id.*
16. *Id.*
17. When an article performs a function it is sometimes referred to as “de facto” functionality and when the design of an article is “dictated by function” it is sometimes referred to as “de jure” functionality. See Perry Saidman, *Functionality and Design Patent Validity and Infringement*, 91 JPTOS 313, 316 (May 2009).
18. 94 F.3d 1563 (Fed Cir. 1996).
19. Note, however, that *Best Lock Corp.* had a strong dissent by Judge Newman. 94 F.3d at 1567.
20. 806 F.2d 234 (Fed. Cir. 1986).
21. *Id.* at 239.
22. 988 F.2d 1117 (Fed. Cir. 1993).
23. *Id.* at 1123.
24. 122 F.3d 1396 (Fed.Cir.1997).
25. *Id.* at 1405.
26. 597 F.3d 1288 (Fed. Cir. 2010).
27. *Id.* at 1294.
28. 81 U.S. 511 (1872).
29. 67 F.2d 428, 430 (6th Cir. Mich. 1933)
30. 52 F.3d 967 (Fed. Cir. 1995).