

## **Design Patent's Ornamentality Requirement: All or Nothing At All - The Failings of Feature Filtration**

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One of the joys of practicing in the field of design law is the opportunity it provides to delve into the fascinating world of *design* itself. While no doubt a worthwhile endeavor on its own, a firm understanding of design as a discipline, including its historical movements and protagonists, is helpful, and perhaps necessary, to arrive at sound legal policy to protect designs. This notion is particularly true when attempting to work through legal issues presented by functionally-influenced design, often referred to as industrial design. To provide some context for this issue, I begin with a few famous quotes from three luminaries of Twentieth Century design:

“Good design makes a product useful.”

~Dieter Rams

“Design is a plan for arranging elements in such a way as best to accomplish a particular purpose.”

~Charles Eames

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“Whether it be the sweeping eagle in his flight  
or the open apple blossom the toiling work  
horse, the blithe swan, the branching oak, the  
winding stream at its base, the drifting clouds,  
over all the coursing sun, *form ever follows  
function*, and this is the law. Where function  
does not change form does not change. The  
granite rocks, the ever brooding hills, remain  
for ages; the lightning lives, comes into shape,  
and dies in a twinkling. As student of design  
law, this relationship of form and function has  
always inspired and troubled me—form for  
form’s sake is close to my heart, but I make  
objects and interactive systems that must  
function well.”

~Louis Sullivan

As highlighted by these quotes, usefulness, intended purpose, and function are the central guiding principles of industrial designers when arriving at their creations. As a result, industrial designs, by their very nature, involve an intertwined—and inseparable—relationship between aesthetics and function. Notwithstanding this truism, it seems advocates, courts and legal scholars continue on an uphill, unwinnable battle to somehow *separate* aesthetics and function, primarily in a quest to maintain a crisp divide between design rights and invention patents. However, positioning industrial designs on one side or the other of this illusory divide has spawned decades of confusing and contradictory decisions. As the appetite for appealing and useful designs has reached an all-time high, the law must rise to the occasion and develop sensible policies and corresponding framework to address the functionality conundrum.

“Functionality” is a general prohibition grossly applied across the field of design intellectual property (“Design IP”), which encompasses design patents, trade dress, and copyrights. Generally speaking, the functionality bar is viewed as a way to prevent Design IP from being used to secure a right to exclude others from functional ideas or concepts, which is strictly the province of utility patents. In design patent jurisprudence that prohibition is tied to the requirement of ornamentality; in copyright law, it is tied to the merger doctrine; and in trade dress law, it is tied to the nonfunctionality requirement. While the term “functionality” is often loosely used in each of the three IP regimes, the policies and underpinnings for the respective doctrines and requirements are quite different; indeed, the rights afforded by

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each regime are different, carrying different terms, qualifications and processes for protection, tests for infringement, and available remedies. It is wrong to assume that the functionality doctrines of each regime are interchangeable between the branches of Design IP.

In design patent jurisprudence, the notion of functionality has arisen in two distinct contexts – one proper and one not. The proper context is as a matter of statutory compliance with 35 U.S.C. § 171, the provision in the Patent Act setting forth the eligible subject matter for design patents. As will be discussed herein, § 171 does not use the term “non-functional,” but instead requires that the design be “ornamental.” The statute asks whether the *overall appearance* of the claimed design as a whole is “ornamental,” “novel” and “original.” Importantly, the statute is directed at the “design” as a whole, not at individual portions thereof. The statutory requirement of ornamentality, aligns with the policy goal of promoting the decorative arts, but also safeguards against design patent protection being used to monopolize functional ideas.

The second context regards attempts to exclude *individual visual features* (i.e. portions, aspects, elements, parts, etc.) of an overall claimed design. The efforts attempt to neatly divvy up designs into ornamental and functional bits, novel and non-novel bits, and even significant and insignificant bits. But designs cannot, and should not, be dissected into individual portions like this. A design is an amalgam – the net visual result of all of its parts. Filtering out elements leads to unwanted, and unintended consequence such as broadening the design patent claim beyond that which the patentee created, and the USPTO examined and granted. All portions of a claimed design, even those with appearances that are functionally driven, have a visual relationship with the other constituent parts, and ultimately the visual whole. Notably 35 U.S.C. § 171 (and TRIPS Article 25(1)) are not directed at screening functionality at the individual feature level; rather the inquiry is rightfully, and solely, focused on the “design” as a whole. Further, there is no principled policy reason to gut out individual visual portions from the overall claimed design. There are no independent rights afforded to individual features of an overall design patent claim and for this reason, it is impossible for the appearance of an individual feature of a whole, even if purely driven by functional consideration, to monopolize a functional idea. The “right to exclude” afforded by a design patent extends to the design patent claim *as a whole*, and not to any individual visual features thereof. No individual visual features of the overall claim should be filtered out. A design patent claim rises and falls on its overall appearance.

In this article, I set out to: (1) generate a better awareness of the proper, and limited role of functionality, in design patent jurisprudence, namely, statutory compliance with § 171; (2) establish that the “dictated solely by” standard is an appropriate test for statutory compliance with § 171, inasmuch as it is sufficiently shields against the unwanted monopolization of functional ideas via design patents; and (3) explain the wrongheadedness of filtering out individual visual features of a design patent claim, whether on grounds of functionality, novelty, or otherwise.

## I. STATUTORY COMPLIANCE WITH THE ORNAMENTALITY REQUIREMENT OF 35 U.S.C. § 171

### A. ORNAMENTALITY REGARDS THE CLAIMED DESIGN AS A WHOLE, NOT INDIVIDUAL FEATURES THEREOF

The issue of statutory functionality asks, and only asks, whether the design patent claim, *as a whole*, is eligible as statutory subject matter under the “ornamentality” requirement of 35 U.S.C. § 171. A challenge under § 171 is often referred to as a “functionality defense” (i.e., “Is the overall claimed design functional?”). However, to better track the statute, the operative question should be phrased more accurately as a “lack of ornamentality defense” (i.e., “Does the claimed design lack ornamentality?”). To better understand why, it is helpful to consider the relevant statutory framework for utility and design patents. Understanding this interplay allows us to better appreciate the gatekeeper role of ornamentality for design patents.

For utility patents, we look first to 35 U.S.C. § 101 for what is eligible subject matter; for design patents, we look to 35 U.S.C. § 171. Below is a side-by-side comparison of the two governing statutes:

**§ 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.

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

The statutory terms “useful” and “ornamental” are positive requirements necessitating an attribute (e.g., useful, ornamental), not negative requirements necessitating the *absence* of an attribute (e.g., nonuseful,

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nonornamental).<sup>2</sup> Thus, § 171 does not require that the claimed design be “devoid of usefulness”; in the same way, § 101 does not require the claimed invention to be “devoid of ornamentality.”<sup>3</sup> The statutory framework of the Patent Act rightfully recognizes that usefulness and ornamentality are not mutually exclusive characteristics. The statute comfortably accommodates the ideal that good design seamlessly melds form and function.

Further, § 171 does not require that *individual features* of a design must be “new, original and ornamental.” Instead, the requirement is directed at a “design,” as a whole.<sup>4</sup> For example, the statute is not interested in whether any particular feature of a design is novel; rather, the only inquiry is whether the design as a whole is novel. This makes sense as a design patent provides, and only provides, protection in the overall appearance of the claimed design. Design patents provide no independent protection for individual constituent portions of the whole. If a design patent claim is directed to an automobile body with four wheels, there are no independent design rights in the appearance of the wheels or a single wheel. Rather, the design right is directed to the overall appearance of the automobile body and the wheels. As a result, the monopoly concern is simply not present at the feature level.

Similar to the way § 101 does not specify a particular minimum amount or degree of usefulness needed for compliance, § 171 does not specify a particular minimum amount or degree of ornamentality. Instead, the gatekeeper requirements of §§ 101 and 171 simply necessitate that the claimed subject matter *is* “useful” for utility patents, and *is* “ornamental” for design patents.

Constructing tests for determining how much usefulness or ornamentality is needed to clear the statutory hurdles has been left to the judiciary. Generally speaking, and with reference to utility patents, the Supreme Court has interpreted the subject matter provisions of the Patent

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2. Contrast the design patent law’s positive requirement that the claimed design be “ornamental” with trademark law’s negative requirement that the mark be “nonfunctional.” See Elizabeth W. King, *The Trademark Functionality Doctrine*, Landslide, Sept./Oct. 2012, at 20.

3. See *Hupp v. Siroflex of Am., Inc.*, 122 F.3d 1456, 1460 (Fed. Cir. 1997) (“[T]he fact that the article of manufacture serves a function is a prerequisite of design patentability, not a defeat thereof. The function of the article itself must not be confused with ‘functionality’ of the design of the article.” (citing *Avia Grp. Int’l, Inc. v. L.A. Gear Cal., Inc.*, 853 F.2d 1557, 1563 (Fed. Cir. 1988) (distinguishing the functionality of the feature from the design of the feature))).

4. Notably, the sole inquiry of §171, which is directed at the design, and not features of the design, is consistent with the design functionality provision of TRIPS. Article 25(1) of TRIPS states: “Members may provide that such protection shall not extend to designs dictated essentially by technical or functional considerations.”

Act to be wide-reaching and inclusive, noting that the “subject-matter provisions of the patent law have been cast in broad terms to fulfill the constitutional and statutory goal of promoting ‘the Progress of Science and the useful Arts’ with all that means for the social and economic benefits envisioned by Jefferson.”<sup>5</sup> Specific to design patents, the Court in *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.* also articulated a broad standard for determining compliance with the ornamentality requirement:

Since 1842, Congress has also made protection available for ‘any new, original and ornamental design for an article of manufacture.’ 35 U.S.C. § 171. 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.<sup>6</sup>

Picking up on this general proclamation, the Federal Circuit has adopted a test that deems a design ornamental so long as the claimed design is not “dictated solely by” its function.<sup>7</sup> By framing the issue this way, the courts effectively *assume* that a design has enough ornamental quality to pass statutory muster, *unless* it is shown that the design is dictated solely by its function. In other words, the test asks did the designer exercise any independent judgment in arriving at the design or was the overall appearance dictated solely by the functional requirements of the design? For if the entire appearance was preordained by the functional requirements of the article of manufacturer, then, in fact, nothing was designed and no patent reward should grant.<sup>8</sup>

Notably, a second strain of case law for determining whether a design as a whole complies with § 171 has emerged from Federal Circuit *dicta*. This second strain seeks to tackle statutory functionality by employing a multifactor functionality test imported from trademark law.<sup>9</sup> Specifically, the

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5. *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 131 (2001) (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 315 (1980)).

6. 489 U.S. 141, 148 (1989) (emphasis added).

7. *See, e.g.*, *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396 (Fed. Cir. 1997); *Best Lock Corp. v. Ilco Unican Corp.*, 94 F.3d 1563 (Fed. Cir. 1996); *Lee v. Dayton-Hudson Corp.*, 838 F.2d 1186 (Fed. Cir. 1988); *Seiko Epson Corp. v. Nu-Kote Int’l, 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.”)

8. *See Hupp*, 122 F.3d at 1460 (“A design or shape that is entirely functional, without ornamental or decorative aspect, does not meet the statutory criteria of a design patent.”).

9. *See Berry Sterling Corp. v. Pescor Plastics, Inc.*, 122 F.3d 1452, 1456 (Fed. Cir. 1997) (*dicta*); *PHG Techs., LLC v. St. John Cos.*, 469 F.3d 1361, 1366 (Fed. Cir. 2006) (quoting *Berry*

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second strain states that when assessing statutory compliance with the ornamentality requirement of § 171:

considerations might include: whether the protected design represents the best design; whether alternative designs would adversely affect the utility of the specified article; whether there are any concomitant utility patents; whether the advertising touts particular features of the design as having specific utility; and whether there are any elements in the design or an overall appearance clearly not dictated by function.<sup>10</sup>

This multifactored trademark approach is neither doctrinally nor practically consistent with the prevailing “dictated solely by” design patent ornamentality standard; it is not a good fit in the design patent context and should be cast aside. First, the length of potential term of protection for trademarks is significantly longer than for design patents, thus warranting a more difficult standard for trademark rights; trademarks are potentially entitled to a perpetual term, whereas design patents are given a maximum term of 15 years.<sup>11</sup> Second, the multifactored trademark approach goes well beyond the simple and express language of the statute. (i.e., “Is the design ornamental?”). Third, by considering something that is the “best design” as a strike against patentability, the multifactored trademark approach is counter to the constitutional goal of incentivizing and rewarding (presumably good) design. Fourth, the multifactored trademark approach with its sweeping considerations injects unwanted uncertainty into the analysis. Fifth, the multifactored trademark approach disqualifies design protection beyond that needed to shield against the concern of monopolizing functional ideas and thus has the potential to thwart the progress of design.

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Sterling); *High Point Design LLC v. Buyers Direct, Inc.*, 730 F.3d 1301, 1316 (Fed. Cir. 2013) (citing *Berry Sterling* and *PHG Techs.*).

10. *Berry Sterling*, 122 F.3d at 1456; *see also* *Cheng v. AIM Sports, Inc.*, No. CV 10-3814 PSG (PLAx), 2011 U.S. Dist. LEXIS 42462 (C.D. Cal. Apr. 14, 2011).

11 35 U.S.C. § 173; See Manual for Patent Examination Procedure 1505 (“On December 18, 2012, the Patent Law Treaties Implementation Act of 2012 (PLTIA) was signed into law. The PLTIA among other things sets forth provisions implementing the 1999 Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs (“Hague Agreement”). These provisions (Title I of the PLTIA) took effect on May 13, 2015. As a result, U.S. design patents resulting from applications filed on or after May 13, 2015 have a 15 year term from the date of grant. However, patents issued from design applications filed before May 13, 2015 have a 14 year term from the date of grant.”)

Although it appears that the multifactored trademark approach has gained some traction, the vast majority of courts still continue to appropriately employ the “dictated solely by” test for statutory functionality.

B. THE ALTERNATIVE DESIGNS TEST STAYS TRUE TO DESIGN PATENT POLICY, WHILE ADEQUATELY GUARDING AGAINST MONOPOLY CONCERNS

With the “dictated solely by its function” test in place, the operative question becomes how does one establish that a design is *not* dictated solely by its function? According to prevailing Federal Circuit case law, proof of *alternative designs* is decisive evidence that a design is not dictated solely by its function.<sup>12</sup> The Federal Circuit has adopted and confirmed this logic:

We apply a stringent standard for invalidating a design patent on grounds of functionality: the design of a useful article is deemed functional where the appearance of the claimed design is dictated by the use or purpose of the article. [T]he 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*.<sup>13</sup>

This approach is employed, and referred to, elsewhere in the world as the “multiplicity of forms” approach.<sup>14</sup> In practice, it is true that the multiplicity of forms approach is quite easily met, and as explained below this is sensible

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12. *Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373, 1378 (Fed. Cir. 2002). While the more recent proclamation by *Rosco* uses a stringent test (i.e., “not the only possible form”), the Federal Circuit at times has articulated a slightly less rigid standard: “When there are *several ways* to achieve the function of an article of manufacture, the design of the article is more likely to serve a primarily ornamental purpose.” *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993) (emphasis added) (holding design for shoes was ornamental when there were other ways to perform the function of the shoe). While both the *Rosco* and *L.A. Gear* articulations look to the existence of alternative designs as the tell-tale sign of ornamentality, the *Rosco* approach guards against monopolizing a functional idea via design patent, while the *L.A. Gear* approach guards against oligopolizing a functional idea via design patent. Regardless of what minimum threshold of alternative designs is used, the test for ornamentality is rightfully quite permissive.

13. *Rosco*, 304 F.3d at 1378 (alteration in original) (emphasis added) (citations omitted) (internal quotation marks omitted); see also, *Seiko*, 190F.3d at 1368 (stating that a design is functional if it is “the only possible form of the article that could perform its function.”)

14. The multiplicity of forms theory has been followed by at least German, English, French, and Spanish courts. See Adolf Zemmann, *Functional Designs and Trademarks—Limits to the Scope of Protection*, Roadmap 13, <http://roadmap2013.schoenherr.eu/functional-designs-and-trademarks/> (last visited Sept. 4, 2014).



given the consideration at play; most articles of manufacture, even highly functional items, can take on many other forms and still perform their intended function. Accordingly, the risk that functional ideas are monopolized through design patents is quite low. For example, while a chair certainly is a functional item, a quick pass down the halls of your office will reveal a variety of chair designs—each sufficiently ornamental to satisfy the threshold gatekeeper requirement of § 171.<sup>15</sup>

So while the desire to guard against monopolizing functional ideas through design patents is certainly sound policy, practically speaking, it is a bit of a boogie man. The actual risk of monopolizing functional ideas through design patents is slim. This reality is supported by the fact that there are rarely lack of ornamentality rejections during USPTO examination, and only one published opinion from the Federal Circuit concluding that a design patent was invalid for failure to satisfy the ornamentality requirement of § 171.<sup>16</sup> The fact that few appearances are ineligible for protection is consistent with the nature of design, design rights and the purposes of a gatekeeper requirement.

The current prevailing approach, which uses alternative designs to determine ornamentality, wisely side-steps the hairy task of deciding whether a design is “ornamental enough.” The approach recognizes the reality that “beauty is in the eye of the beholder,” and thus it is futile for the law to qualitatively assess ornamentality, including the relative merit of design movements such as art Bauhaus, functionalism, art deco, minimalism,

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15. The same can be said for many seemingly “functional” items that are the subject matter of issued design patents. *See, e.g.,* *Tone Bros. v. Sysco Corp.*, 28 F.3d 1192 (Fed. Cir. 1994) (bottle for spices); *KeyStone Retaining Wall Sys., Inc. v. Westrock, Inc.*, 997 F.2d 1444 (Fed. Cir. 1993) (concrete block for retaining wall); *In re Klein*, 987 F.2d 1569 (Fed. Cir. 1993) (roof or siding shingle); *In re Webb*, 916 F.2d 1553 (Fed. Cir. 1990) (femoral hip stem prosthesis); *In re Cho*, 813 F.2d 378 (Fed. Cir. 1987) (bottle cap); *Litton Sys., Inc. v. Whirlpool Corp.*, 728 F.2d 1423 (Fed. Cir. 1984) (microwave oven); *In re Koehring*, 37 F.2d 421 (C.C.P.A. 1930) (concrete mixing truck).

16. *See Best Lock Corp. v. Ilco Unican Corp.*, 94 F.3d 1563 (Fed. Cir. 1996) (holding that design patent directed at the overall appearance of a key blade was not ornamental and thus the patent was invalid under § 171). Notably, *Best Lock* was a 2–1 panel decision. Judge Newman penned a provocative dissenting opinion challenging the majority’s conclusion that the key blade design was dictated by its function: “[T]he panel majority has misapplied 35 U.S.C. § 171 in holding that the arbitrary design of the key profile is ‘functional’ because it mates with its matching keyway. The design of the key profile is not removed from access to the design statute because the key fits a matching keyway. That two articles are designed in harmony does not deprive the design of access to the design patent law. The design of the key profile is not determined by the function of the key to fit the lock.” *Best Lock*, 94 F.3d at 1567 (Newman, J., dissenting).

maximalism, etc.<sup>17</sup> At the same time, the approach provides sufficient safeguards against the rare, but still unwanted, backdoor monopolization of functional ideas through design patent protection. Lastly, this approach leaves the door amply open to accommodate the boundary-pushing creativity of the world of design.

C. HYPOTHETICAL EXAMPLES OF STATUTORY COMPLIANCE WITH § 171  
– A WORKABLE TEST WITH PREDICTABLE RESULTS

Functionality concerns itself only with the design *as a whole*. This holistic approach is consistent with other tests in design patent jurisprudence, including those for infringement, novelty, nonobviousness, indefiniteness, written description; the *overall appearance*<sup>18</sup> of the design is all that matters.<sup>19</sup> The analyses do not, and should not, pass judgment on *individual portions* of a design's overall appearance. For example, even if an accused automobile design appropriated the front quarter panel design of a claimed automobile design, there is no infringement unless the overall appearance of the accused automobile is substantial the same in visual appearance as the overall appearance of the claimed automobile body. Similarly, the statutory functionality inquiry rightfully focuses on whether the *overall appearance* of the claimed design, as a whole, is dictated solely by the functional goals of the underlying article.<sup>20</sup>

A few examples show how the functionality analysis plays out in practice, often hinging on the scope of the design being *claimed*.

17. See, e.g., *Seiko*, 190 F.3d at 1368 (stating that to pass statutory muster a design need not “be aesthetically pleasing”; “an absence of artistic merit does not mean that the design is purely functional”).

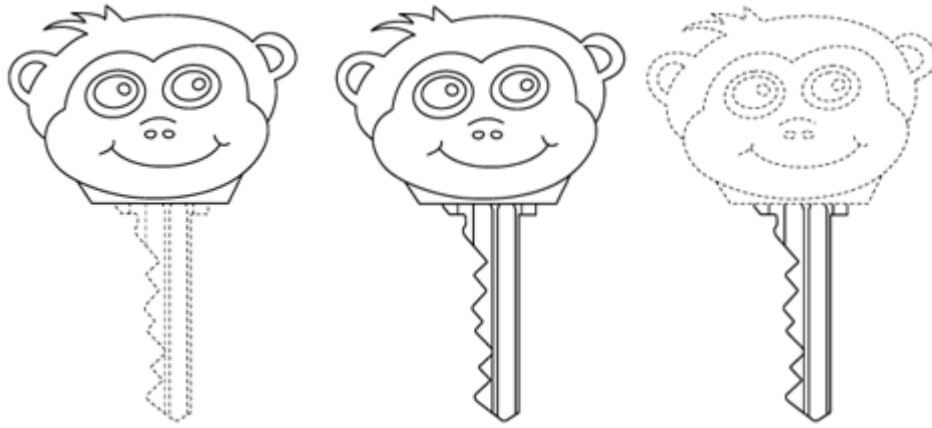
18. Note that when I refer to the design's overall appearance, I am referring to the overall appearance of the claimed design, not the overall appearance of the entire product.

19. See, e.g., *Crocs, Inc. v. Int'l Trade Comm'n*, 598 F.3d 1294, 1303 (Fed. Cir. 2010) (“[T]his court will uphold a finding of infringement. In other words, the deception that arises is a result of the similarities in the overall design, not of similarities in ornamental features in isolation. The ordinary observer test applies to the patented design in its entirety, as it is claimed.” (citations omitted) (internal quotation marks omitted) (citing *Braun, Inc. v. Dynamics Corp. of Am.*, 975 F.2d 815, 820 (Fed. Cir. 1992))). Contrast this holistic approach with copyright law where, for example, there can be infringement when only one chapter of a 20 chapter book is copied.

20. See, e.g., *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993) (“However, the utility of each of the various elements that comprise the design is not the relevant inquiry with respect to a design patent. In 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.”).

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Example 1.1

Example 1.2

Example 1.3

**Figure 1**

In Example 1.1, only the key head (i.e., the monkey head-shaped handle) is shown in solid lines and thus claimed. The key blade portion (i.e., the portion to be inserted into a mating keyhole) is shown in dotted lines and thus disclaimed. In Example 1.2, the entire key is claimed including its key head and key blade. In Example 1.3, the key head is disclaimed and only the key blade is claimed. As noted above, when assessing statutory functionality, the operative question is whether the overall appearance of the *claimed design*, *as a whole*, is dictated solely by function considerations.

In Example 1.1, the claimed design should pass “ornamentality” muster under § 171 because the claimed design cannot be said to be dictated by its function. A key head can operate without having the same overall appearance as the key head claimed in Example 1.1. Unquestionably, the key head could take on different appearances (a lion head? a different looking monkey head?). Put differently, there is no monopoly concern.

In Example 1.2, where the *combination* of the key head and key blade are claimed, the overall claimed combination cannot be said to be dictated solely by function. There is no monopoly concern. By modifying the shape of the key head, the overall appearance of the claimed combination is also necessarily modified. Fears that such a claim, left unfiltered, prevents others from using the shape of the key blade are unfounded. Providing protection for the whole key does not provide independent protection for the key blade. Others are free to use the key blade, so long as they do not use it with substantially the same key head. Simply put, there is no monopoly concern presented by the design claim of Example 1.2.

In Example 1.3, however, where *only* the key blade presents a tougher question. Here, providing protection for the shape of the key blade would arguably also provide protection for the singular functional solution of opening the mating key hole. Likely, there are no alternative designs that could perform substantially the same function. Assuming that the key blade is intended to access a specific key hole, and that no alternative appearances could achieve that function, the claimed design likely will not satisfy the ornamental requirement of § 171.

The results in each of these three examples are consistent with the legitimate policy concern of preventing the use of design patents to protect functional ideas. Specifically, providing design patent protection to Example 1.3 would provide an impermissible monopoly over the functional mating relationship between the key hole and key blade.<sup>21</sup> In contrast, in Example 1.2, when the ornamental key head is *combined* with the key blade, alternative designs for the key exist; any concerns about monopolizing the functional key blade are eliminated.

As show by these examples, the functionality test is directed at the claimed design, as a whole, not individual portions thereof. The prevailing multiplicity of forms approach, which relies on alternative designs, is an appropriate test as it (1) stays true to the language of the statute and spirit of a subject matter eligibility provision, (2) adequately safeguards against using design patents to monopolize functional ideas, and (3) brings reasonable and desirable certainty to an otherwise grey area of the law. . Thanks to express guidance from § 171 and the *Bonito Boats* Court, statutory functionality jurisprudence fairly speaking has stayed on target coalescing around a single (sensible) approach—the multiplicity of forms approach.

## II. NO INDIVIDUAL VISUAL FEATURES SHOULD BE FILTERED OUT OF THE OVERALL CLAIMED DESIGN

The second context where functionality has crept into the design patent law has been attempts to “filter” or “screen” out *individual visual features* from the otherwise ornamental whole. Typically efforts to filter out individual functional features are mounted under the guise of claim construction in an effort to rid the claimed design from functionality, hoping to leave only pure ornament behind. But as will be discussed herein, these “divide and conquer”

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21. Whether there are alternative designs available often hinges on how broadly or narrowly the function of the article of manufacture is defined. Here, if it is assumed that the key must engage a specific keyhole, it may very well be that the key blade can take only one form. (i.e. its form is dictated solely by its function). However, if the depicted key’s function was to serve as child’s toy, then there could be myriad design alternatives from which to choose.

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efforts inevitably lead to claim destruction; too often the “construed claim,” torn to bits and pieces, barely resembles the design claim created and applied-for by the designer, and examined and granted by the USPTO. Indeed, by filtering out elements, the construed claim often is *broader* than the claimed issued by the USPTO. The thrust behind these misguided efforts come from a variety of angles. Most commonly, the calls come from practitioners, academics and even judges borrowing concepts from copyright and trade dress law, areas of IP law with which they are most acquainted. While filtration may have a place in copyright or trade dress law (a debatable proposition left for another day) grossly importing those concepts into the design patent realm is ill-advised and should not be undertaken.

A. THE ARGUMENT AGAINST FILTRATION OF VISUAL ELEMENTS OF A CLAIMED DESIGN

1. *Feature Filtration Is Counter To The Bedrock Principle That Design Patents Protect the Overall Appearance of a Claimed Design.*

The “controlling consideration” of a design patent claim is the *overall appearance*, including the relative and spatial relationships of each and every solid line in the claim. As an overarching theme, design patent discourse should move away from element-by-element utility patent speak and refocus on the actual protected right—the overall appearance of the claimed design. As the U.S. Court of Customs and Patent Appeals succinctly stated: “[A] design is a *unitary thing* and *all of its portions are material* in that they contribute to the appearance which constitutes the design.”<sup>22</sup>

Design, in the view of the patent law, is that characteristic of a physical substance which, by means of lines, images, configuration, and the like, taken as a whole, makes an impression, through the eye, upon the mind of the observer. *The essence of a design resides, not in the elements individually, nor in their method of arrangement, but in the tout ensemble—in that indefinable whole that awakens some sensation in the observer’s mind.* Impressions thus imparted may be complex or simple; in one a mingled impression of gracefulness and strength, in another the impression of strength alone. But whatever the impression, there is attached in the mind of the observer, to object observed, a sense of

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22. *In re Blum*, 374 F.2d 904, 907 (C.C.P.A. 1967) (emphasis added); *see also* *Elmer v. ICC Fabricating, Inc.*, 67 F.3d 1571, 1577 (Fed. Cir. 1995) (holding that all solid lines shown in design patent drawings form part of the claimed design).

uniqueness and character.<sup>23</sup>

Thus, a design patent protects the *overall effect* of *all* of the depicted design elements, whether such elements are new or old, functional or ornamental, significant or insignificant.<sup>24</sup> Because it is the overall appearance that is protected, the traits and substance of any individual elements are irrelevant. This is precisely why in the novelty analysis, the novelty, or lack of novelty, of any particular element is not examined. All that matters is the novelty of the overall appearance of the claimed design. A fallacy of the feature filtration approach is that visual features reside in isolation. To the contrary, the visual appearance of every features, even those with appearances that are driven partly or exclusively by function, visually impacts, and interacts with, the remainder of the design.

That a particular portion of a design is functional, even if purely functional, should not matter. Protection extends to the entire overall appearance (including all contributing elements), so long as the *overall appearance* is not purely functional (i.e., “ornamental”). Indeed, the combination of two functional elements, even two purely functional elements, can yield an ornamental design; ornamentality can reside in the spatial relationships of the elements, the relative sizes of the elements, etc. Whether speaking of infringement or validity, what counts in design patent law is the *overall appearance* of the claimed design. The feature filtration approach, by removing certain visual elements of the whole, runs afoul of this principle.

Feature filtration does not only affect the infringement analysis. As we know from the more developed utility patent case law, it is axiomatic that the same claim construction that is used for infringement also must be used for validity.<sup>25</sup> You cannot exclude aspects of a claimed design when conducting an infringement analysis, and then in the next breath exclude the features when assessing validity. In any event, feature filtration should not be used in either context.

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23. *Pelouze Scale Co. v. Am. Cutlery Co.*, 102 F. 916, 918–19 (7th Cir. 1900) (emphasis added).

24. *See Int’l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1246 (Fed. Cir. 2009) (Clevenger, J., dissenting) (criticizing the majority for its “dissection of designs into component parts,” namely “significant” and “insignificant” elements, and noting that such dissections “prohibit assessment of designs as a whole, in violation of long-standing law, starting with *Gorham*”).

25. *See, e.g., Source Search Techs., LLC v. LendingTree, LLC*, 588 F.3d 1063, 1075 (Fed. Cir. 2009) (“As this court has repeatedly instructed in the past, ‘[i]t is axiomatic that claims are construed the same way for both invalidity and infringement.’” (quoting *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1330 (Fed. Cir. 2003))).

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While visual features should not be filtered out, it is proper to instruct the fact-finder that design protection is directed to the overall appearance of the claimed design and further that such protection does not extend to any functional attributes, concepts or characteristics embodied in the claimed design. When employed incorrectly, instead of excepting non-visual functional attributes, concepts or characteristics from protection, courts often use claim construction to coarsely lop off *visual* features, elements and portions from the claimed design that are considered “functional.” The correct approach maintains the sanctity of the claimed design; the incorrect approach corrupts it. No attempt should be made to factor out visual features, elements and portions of a claimed ornamental whole.

By way of example, take the trunk<sup>26</sup> in Figure 2 below that includes a lock to secure the trunk’s lid. As a matter of claim construction, the fact that the trunk is lockable (i.e. a functional attribute) should be wholly irrelevant to the design patent claim’s scope of protection.

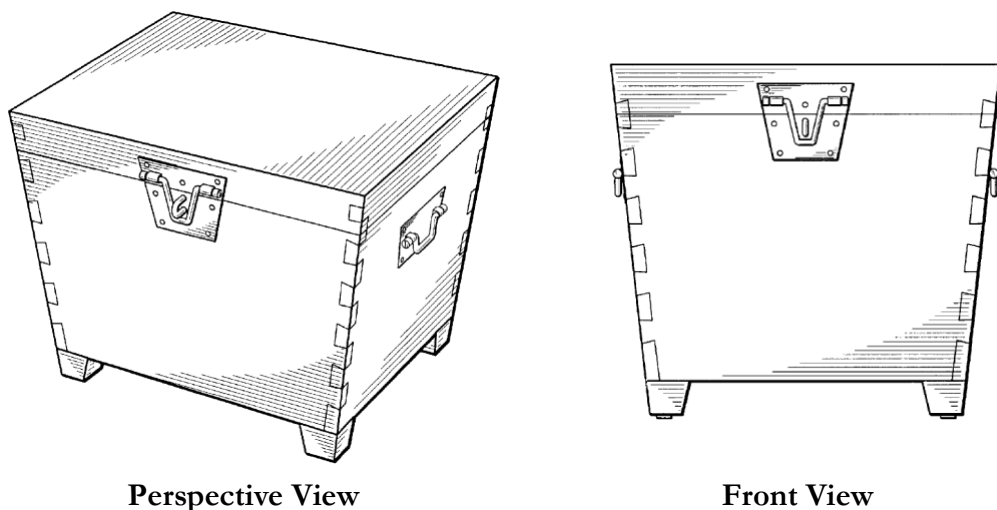


Figure 2

But while this functional attribute of the trunk should be of no moment, the lock’s depicted shape, size, and spatial relationship as it relates to the remainder of the trunk is claimed and thus part of the design’s scope of protection. This should be true even if the lock’s visual appearance were purely functional (which it is clearly not), because the depicted lock is but a

26. U.S. Patent No. D430,753 figs. 1–2 (filed Jan. 8, 1999).

portion of an ornamental claimed whole.<sup>27</sup> Regardless of whether the lock is functional or even purely functional, no attempt should be made to dissect out the appearance of the lock. Notably, with respect to utility patent claims, no effort is undertaken to identify and dissect out ornamental elements.<sup>28</sup> The same should be true with respect to design patents and functional elements—no effort should be made to identify and dissect out any functional elements. In both contexts, the patent protects the overall claim as issued, not the claim’s constituent elements in isolation.<sup>29</sup>

Design patent claim construction methodology that purports to separate functional and ornamental elements of the overall claimed design is wrongheaded. Like the now defunct point of novelty approach (which sought to separate out new and old elements),<sup>30</sup> the feature filtration approach (which seeks to separate out ornamental and functional elements) conflicts with the tenet that a design patent protects the overall appearance of the claimed design, and is fraught with logistical problems. Instead, claim construction functionality concerns could be addressed with an instruction to the fact-finder (whether judge or jury) that design patents only protect the appearance of the overall design depicted in the drawings, and not any

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27. See *Good Sportsman Mktg. LLC v. Li & Fung Ltd.*, No. 6:07-cv-395, 2010 U.S. Dist. LEXIS 65458 (E.D. Tex. June 29, 2010) (“The utility of individual elements is irrelevant to the question of functionality, as it is the design in its entirety that provides the basis for the patent.”).

28. Consider a utility patent claim directed at a resealable container where, among other things, the base is claimed to be cylindrical and the lid frustoconical. While the combination of the claimed shapes of the base and lid yield an ornamental appearance, no attempt is made in the utility patent context to factor out these constituent elements, regardless as to whether they are ornamental or purely ornamental. The same should hold true for design patent claim construction as it related to functional or purely functional elements.

28. For examples where the courts fell into the feature filtration trap, see *Poly-America, L.P. v. API Indus., Inc.*, No. 13-693-SLR, 2014 U.S. Dist. LEXIS 49618, at \*3 (D. Del. Apr. 10, 2014) (“[W]here a design contains both ornamental and functional features, it is proper to separate the functional and ornamental aspects because the scope of the design claim must be construed in order to identify the non-functional aspects of the design as shown in the patent. . . . [T]o the extent the . . . features identified above are considered functional, they should not be considered design elements that would be observed by the ordinary observer.” (internal quotation marks omitted)); *Keurig, Inc. v. JBR, Inc.*, No. 11-11941-FDS, 2013 U.S. Dist. LEXIS 73845, at \*22 (D. Mass. May 24, 2013) (dissecting out a “functional aspect of the patented design” and concluding that it “cannot be considered in the [infringement] comparison”); *Safco Prods. Co. v. Welcom Prods., Inc.*, 799 F. Supp. 2d 967, 977 (D. Minn. 2011) (articulating list of ornamental features); *Mag Instrument, Inc. v. JS Prods., Inc.*, 595 F. Supp. 2d 1102, 1108 (C.D. Cal. 2008) (“Assuming, for the sake of argument, that Plaintiff’s [patents] contain both functional and non-functional elements, the Court, in the usual course of issuing a claim construction order, will construe the challenged claims to identify the non-functional aspects of the design as shown in the patent.” (internal quotation marks omitted)); *Hsin Ten Enter. USA, Inc. v. Clark Enters.*, 149 F. Supp. 2d 60, 64–66 (S.D.N.Y. 2001) (making “determination of whether each element of the . . . patent is functional or non-functional”); *Butler v. Balkamp, Inc.*, 2014 U.S. Dist. LEXIS 122464, at \*4-5 (S.D. Ind. Sept. 3, 2014) (“[T]he ‘646 patent does not protect either the front or rear square drives of the tool handle because those aspects of the design are purely functional.”)

30. *Egyptian Goddess*, 543 F.3d 665 (abrogating the point of novelty test).



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functional attributes, purposes or characteristics embodied in the claimed design.

2. *Feature Filtration Is Unworkable.*

Moreover, any attempt to dissect and separate an overall design into elements is unworkable. Most often, and particularly with modern day design, the elements of a design are fully integrated into, and inseparable from, the overall design, making fool's errands of the feature filtration approach's identification and excision steps.<sup>31</sup> For example, consider a claim covering the ornamental handlebar depicted in Figure 3 below.<sup>32</sup> The claimed design is an example of the seamless melding of form and function. While a court might go through the feature filtration exercise, the reality is that it is impossible to meaningfully identify and surgically separate ornamental and functional elements.<sup>33</sup> In short, factoring out and ignoring functional portions is an artificial enterprise that not only can distort the claimed design, but also, practically speaking, is an unworkable approach.

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31. Copyright law has struggled for years with how to implement the separability doctrine, spawning a multitude of tests, one more confusing than the next. While the Supreme Court in *Star Athletica v. Varsity* sought to clean up the mess, truly it just served as a reset. Justice Thomas, ever the textualist, set forth a separability test that merely rephrases the statute. The most significant aspect of the opinion was that it wiped the slate clean from the many confusing and contradictory tests that had bounced around the regional circuits for decades. The sheer mess created by the copyright experience with feature filtration is reason alone to refrain from importing it into design law.

32. U.S. Patent No. D387,316 fig. 1 (filed May 29, 1996).

33. See *Carlini Enters.*, 2014 U.S. Dist. LEXIS 113941 (noting logistical difficulties in trying to separate out ornamental and functional elements in an overall design).

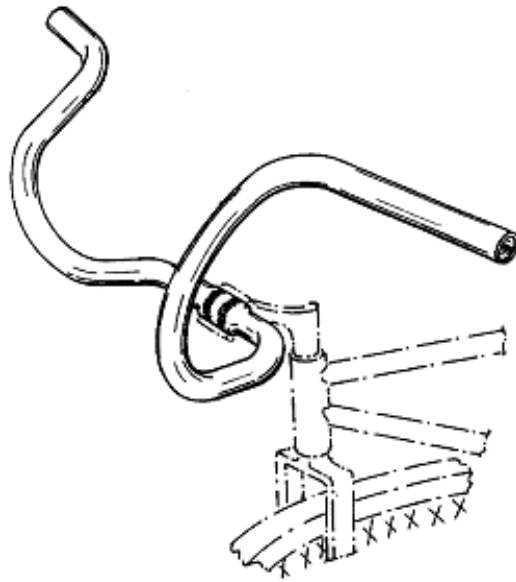


Figure 3

### 3. *Feature Filtration Undermines the Statutory Presumption of Validity.*

Factoring out functional elements of a claimed design risks undermining both the validity and enforceability of design patents. Once a design patent application emerges from USPTO examination, an issued design patent enjoys a presumption of validity, just like any other patent.<sup>34</sup>

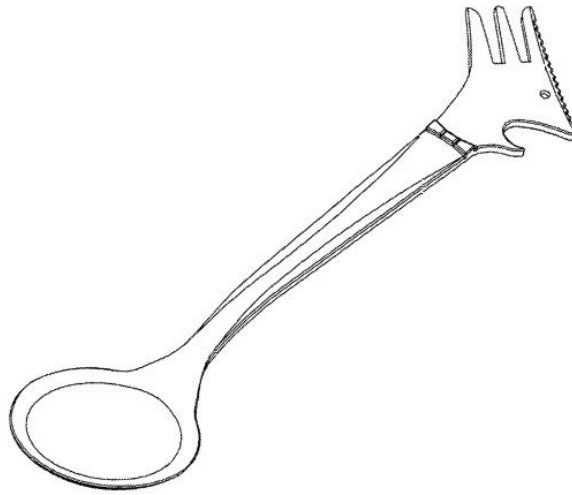
As an initial matter, at the USPTO, the patentability determination for a claimed design is premised solely on the *overall appearance* of the depicted design.<sup>35</sup> Yet, the presumption of validity and its underpinnings easily fall apart under the feature filtration approach because a judicially construed claim (with portions of the whole “factored out”) may be *fundamentally* different from the claim examined and issued by the USPTO. This conflict can be illustrated with a simple example.

34. See 35 U.S.C. § 282.

35. See U.S. Patent & Trademark Office, Manual of Patent Examining Procedure (MPEP) § 1503.02 (9th ed. June 2020) (“When the inconsistencies are of such magnitude that the *overall appearance* of the design is unclear, the claim should be rejected under 35 U.S.C. 112(a) and (b).” (emphasis added)); *id.* § 1504.01(c) (“ornamentality must be based on the *entire design*” (emphasis added)); *id.* § 1504.03 (“In determining patentability under 35 U.S.C. § 103(a), it is the *overall appearance* of the design that must be considered.” (emphasis added)).

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**Figure 4**

As shown in Figure 4 (above), a designer created, and secured a design patent on the overall appearance of the eating utensil as shown above.<sup>36</sup> Like most industrial design, the net visual appearance is driven by both aesthetic and utilitarian considerations. Some elements are driven mainly by function, others by aesthetics, and stills other by a bit of both. While the utensil, an article of manufacture, combines various functionalities, including a spoon, a fork, a knife and a can opener, care was given to creating the overall visual appearance of the item – the *tout ensemble*. During prosecution, the USPTO examined *the overall appearance* of the design for compliance with of § 171, including the ornamentality requirement. An ornamentality challenge under § 171 would most likely (and rightfully) fail as the overall appearance of the design cannot be said to be dictated by function alone; it is not hard to imagine other appearances for a utensil with the same or similar functionality. During claim construction under the feature filtration approach, however, several visual elements of the overall claim would be excised as being functional, including at least (1) the bowl of the spoon, (2) tines of the fork, (3) the serrated edge of the knife, and (4) can opener mouth. Filtration would leave behind a generic claim for only the handle, detached and isolated from the remainder of the utensil. Not only is this “filtered” claim scope not the design of the designer, it is not what the USPTO examined and granted. Is just the remaining handle itself novel? Nonobvious? Ornamental? Should the presumption of validity apply to a construed claim that has so little resemblance to the claim that was before the USPTO? Again, keep in mind that the USPTO only examined the *overall*

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36. See United States Patent, D876,907

*appearance* of the entire depicted design for patentability, not just the handle in isolation. This potential disparity in claim scope irreconcilably upsets the presumption of validity and its underpinnings. For this reason alone, the feature filtration approach should not be adopted.

It is true that filtration has been used in the context of copyright infringement claims, albeit with limited success and great confusion. But this does not provide reason for importing this practice into design patent law; there are fundamental differences between design patents and copyrights counseling against such practice. First, design patent are examined by the USPTO. There is a claim presented by the applicant that is substantively examined by the USPTO for statutory compliance. As noted above, once you filter out individual elements the underpinnings of the presumption of validity comes undone. Second, design patent are intended to protect articles of manufacture, which will necessarily possess some utilitarian purpose. This is not the case for copyright law, which has remained guarded at protected applied art, let alone industrial design. Third, the term of copyright is much longer than that of design, and thus as a matter of policy, the copyright law is less willing to include any functional driven aspects.

#### 4. *Feature Filtration Provides for Unwanted Piecemeal Invalidity Attacks*

Taken to its logical conclusion, the feature filtration approach could yield a result where, upon claim construction, each and every individual element of the design patent is found to be “functional.” For instance, and continuing with the spork example above, what if the court concludes that the handle is functional as well? Under these facts, the claim is whittled away to nothing, effectively neutering the enforceability of an issued design patent *without an invalidity challenge ever having been mounted*.

Of course, invalidity challenges are confronted with the demanding safeguards that cloak a presumptively valid design patent, including most importantly the “clear and convincing” evidence standard.<sup>37</sup> The feature filtration approach to functionality provides an unwanted backdoor validity attack made under the guise of claim construction where the lesser preponderance evidentiary standard applies.<sup>38</sup>

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37. See, e.g., *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993) (requiring clear and convincing evidence to invalidate design patent on grounds of functionality, and further noting that 35 U.S.C. § 282 includes a presumption of ornamentality).

38. This extreme example of feature filtration is not a mere hypothetical. District courts operating under the false belief that individual visual features having functionally driven appearances must be removed have gone so far as to filter every aspect of the claimed

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B. FEDERAL CIRCUIT JURISPRUDENCE EXPRESSLY PROHIBITS  
FILTRATION OF VISUAL FEATURES OF A DESIGN

Attempts to filter out functional features is not without a history in Federal Circuit case law.<sup>39</sup> After bottoming out in 2010 with its filtration heavy opinion in *Richardson v. Stanley Works, Inc.*, the Federal Circuit has bounced back with three forcefully written opinions holding that it is “legal error” to remove visual features from an overall claimed design. Despite the Federal Circuit’s seemingly clear jurisprudence, the urge to filter continues to percolate, including in the district courts and scholarship. It is helpful to review the key Federal Circuit functionality cases to understand the evolution of its functionality doctrine, and hopefully prevent reversion to its mistakes of yesteryear.<sup>40</sup>

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design. Notably, those courts did not invalidate the overall claim for lack of ornamentality under §171. See *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, No. 1:11-CV-871, 2014 WL 10212172, at \*9 (S.D. Ohio Jan. 22, 2014) (“[T]he shape and placement of the U-Shaped Trigger, Torque Knob, and Rounded Button elements of the Design Patents are all based on functional considerations and therefore all of these elements must be “factored out” of the claimed design.”)

39. See Jason J. DuMont & Mark D. Janis, *Functionality in Design Protection Systems*, 19 J. Intell. Prop. L. 261 (2012); Frederick L. Medlin, *Functionality of Individual Features in Design Patents: A New Role after Egyptian Goddess*, 77 Pat. Trademark & Copyright J. (BNA) 139 (2008); Perry J. Saidman, *Functionality and Design Patent Validity and Infringement*, 91 J. Pat. & Trademark Off. Soc’y 313 (2009); Perry J. Saidman & John Hintz, *The Doctrine of Functionality in Design Patent Cases*, 19 U. Balt. L. Rev. 352 (1989); Robert G. Oake, *Understanding Functionality in Design Patent Law*, Intell. Prop. Today, Oct. 2011. See *DePaoli v. Daisy Mfg. Co.*, No. 07-cv-11778-DPW, 2009 U.S. Dist. LEXIS 62057, at \*8–9 (D. Mass. July 14, 2009) (“It is not entirely apparent from this passage whether the Federal Circuit advocates resolving prosecution history and functionality issues through formal *Markman* claim construction, jury instructions, or some other means. On the one hand, the court refers to ‘guid[ing] the finder of fact’ in a manner ‘[a]part from attempting to provide a verbal description of the design,’ which suggests jury instructions may be the best avenue. On the other hand, the court’s parenthetical quotation from *OddzOn* suggests that these issues, or at least the question of functionality, may properly be addressed during claim construction.” (alterations in original) (citation omitted) (quoting *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 680 (Fed. Cir. 2008) (en banc))).

40. As an example of the confusion, in 2006 the Federal Circuit in *Amini Innovation Corp. v. Anthony California, Inc.*, quoted a Supreme Court *trademark* case as support for the legal principles governing design patent functionality. 439 F.3d 1365, 1371 (Fed. Cir. 2006) (quoting *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 851 (1982)). While the Federal Circuit has never repeated this obvious mistake, district courts have picked up on the language and perpetuated the gaffe. See *Keurig*, 2013 U.S. Dist. LEXIS 73845, at \*19 (“[T]he Federal Circuit defined functionality in the context of design patent interpretation. . . . [holding] ‘[a]n aspect 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.’” (quoting *Inwood Labs*, 456 U.S. at 850 n.10)); *Luv N’ Care, Ltd. v. Regent Baby Prods. Corp.*, 898 F. Supp. 2d 650, 654 (S.D.N.Y. 2012) (“An

1. *Lee v. Dayton-Hudson* (Fed. Cir. 1988)

The origins of the claim construction functionality doctrine fairly can be traced back to the 1988 decision in *Lee v. Dayton-Hudson Corp.*<sup>41</sup> There, the plaintiff-patentee had secured a design patent on a hand-held massage device (see fig. 5). The plaintiff-patentee argued that his design patent covered “a massage device wherein an elongated handle has two opposing balls at one end, and that the patent is perforce infringed by a massage device with that general configuration.”<sup>42</sup>

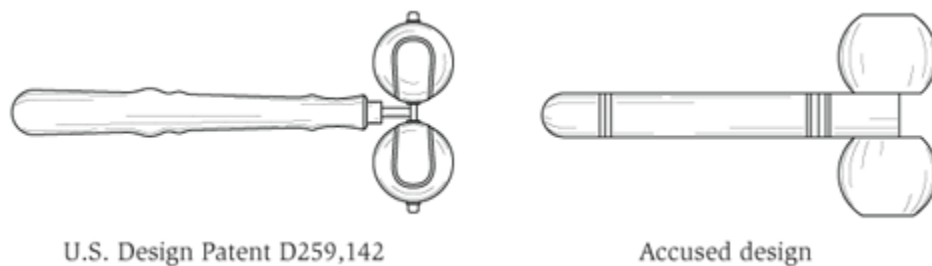


Figure 5

In explaining its holding of noninfringement, the Federal Circuit explained that the design patent did not protect the *general functional concept* of combining an elongated handle that has two opposing balls at one end to form a handheld massage device. It noted that infringement could not be premised upon the gross conceptual similarity between the patented and accused designs. The *Lee* Court concluded that “[d]esign patents do not and cannot include claims to the structural or functional aspects of the article.”<sup>43</sup> When placed in context, the *Lee* Court use of the term “aspects” refers to functional *attributes, purposes or characteristic*; it was not providing instructions to factor out *visual features, elements or portions of the overall claimed design*. Appropriately, the claimed design was limited to the specific expression of the functional concept as set forth in the patent drawings. Significantly, the court did not employ feature filtration approach going through an element-by-element analysis for each component (i.e., “Is the handle functional?” “Are the massage balls functional?”). Thus, the core teaching of *Lee* is simple and straightforward: design patents do not protect general concepts; they protect appearances of a concept as specifically depicted in the design patent

aspect 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.’” (quoting *Amini*, 439 F.3d at 1371).

41. 838 F.2d 1186 (Fed. Cir. 1988).

42. *Id.* at 1188.

43. *Id.*

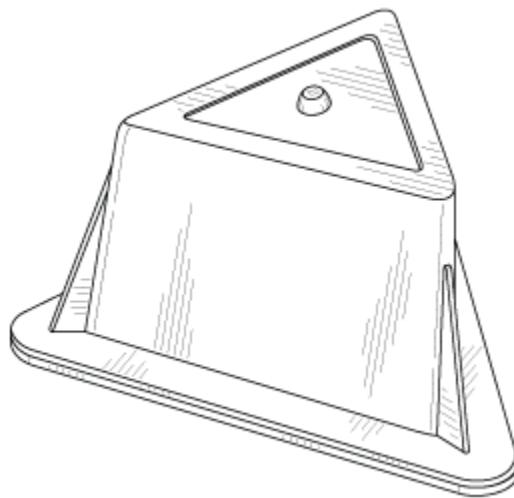
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drawings. As will be shown below with later case law, however, the *Lee* Court's use of the phrase "functional aspects" for functional *attributes, purposes or characteristics* soon drifted into meaning eliminating *visual features, elements or portions* of a claimed design. And from this word choice, the seeds for the feature filtration approach were sown.

2. *Elmer v. ICC Fabricating (Fed. Cir. 1995)*

In *Elmer v. ICC Fabricating, Inc.*, it was the design patentee (not the accused infringer) who argued that two elements depicted in its design patent drawings for a vehicle sign, namely, lateral support ribs and an injection molding protrusion, should be factored out of the claim because the elements were "functional" (see fig. 6).<sup>44</sup>



**Figure 6**

This was a convenient argument for the patentee because the accused product was missing these elements. Although it acknowledged the functional nature of these two elements, even pointing to detailed descriptions of the elements' function in a corresponding utility patent, the Federal Circuit flatly rejected the argument that the design patent claim should be construed to factor out the appearance of these elements.<sup>45</sup> The court pointed out that the depicted elements could have been disclaimed from the claimed design during prosecution had they been reduced to dotted

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44. 67 F.3d 1571 (Fed. Cir. 1995) (Lourie, J.).

45. *Id.* at 1577.

lines. Instead, the elements were depicted in solid lines and thus contributed to, and were part of, the claimed *overall* design.<sup>46</sup> Thus, *Elmer* stays true to the notion that the claimed overall appearance, including all constituent elements, whether ornamental or functional, is what a design patent protects. The *Elmer* rightly rejected the temptation to tinker with the overall claimed design by factoring out so-called functional elements. Simply put, if an element is shown in solid lines it is part of the overall claimed design.

### 3. *OddzOn Products v. Just Toys* (Fed. Cir. 1997)

In *OddzOn Products, Inc. v. Just Toys, Inc.*, however, the seeds for a feature filtration approach that were planted in *Lee* unfortunately seemed to be taking root.<sup>47</sup> Ambiguous usage of terms like “aspects,” “general features,” and “elements,” are mainly to blame. As shown in figure 7, *OddzOn* regarded a design patent directed to a football-shaped toy having a tailshaft and fins.

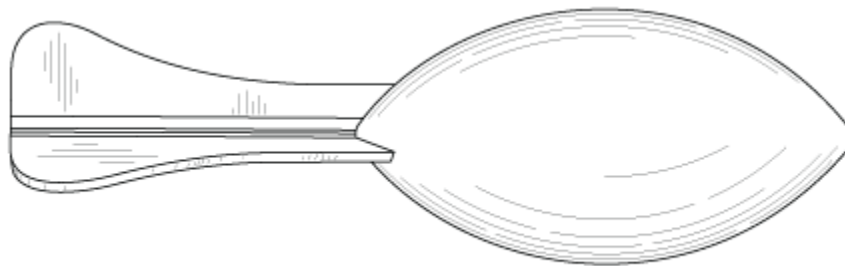


Figure 7

The Federal Circuit began its opinion by affirming the district court’s holding that the claimed design passed statutory muster as ornamental, as the claimed design’s overall appearance was not dictated solely by its function. In the context of discussing obviousness, and after noting the existence of several other alternative designs, the court sustained the validity of the patent:

Because the presence of a tailshaft and fins has been shown to be necessary to have a ball with similar aerodynamic stability to OddzOn’s commercial embodiment, such *general features* are functional and thus not protectable as such. . . .

46. *Id.* (holding that the patentee “effectively limited the scope of its patent claim by including those [functional] features in it”).

47. 122 F.3d 1396 (Fed. Cir. 1997) (Lourie, J.).



The existence of prior art simply showing a ball with a tailshaft and fins, without more, is not sufficient to render the patented design obvious. . . . *Because none of the prior art cited by Just Toys exhibits ornamental characteristics that are the same as or similar to OddzOn's design*, we conclude that the district court did not err in holding that the cited references would not have rendered the patented design obvious.<sup>48</sup>

Up until this point, the opinion appears sound as it excludes from protection “general features” of the design (i.e. attributes, purposes or characteristics). Then, in the context of infringement, the *OddzOn* court makes its crucial misstep by stating that “[a] design patent *only protects the novel, ornamental features* of the patented design.”<sup>49</sup> The court followed up that statement by adding: “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.”<sup>50</sup>

Based on both its statutory functionality and nonobviousness holdings, it appears that the *OddzOn* court clearly appreciated the fundamental distinction between unprotectable functional *attributes* of a claimed design (e.g., the general concept of a football-shaped toy with tailshaft and fins), and protectable overall ornamental appearances (e.g., the specific overall claimed design which is shown in the patent figures). Note, in parts of the opinion, the court, citing *Lee*, rightly refers to the unprotectable functional attributes as “general features.” However, the court later uses less qualified terms like “aspects” and “features.” As a result of these word choices, courts after *OddzOn* as part of claim construction wrongly engaged in divvying up design patents into perceived ornamental and functional features, elements and portions.

Bluntly, no matter how many times it is repeated in the case law that “a design patent *only protects the novel, ornamental features* of the patented design,” the *OddzOn* sound bite is still fundamentally wrong. It is unassailable that a design patent does not protect constituent elements of a claimed design, but rather protected the patented whole. Further, it is a truism that even if all constituent elements of a design are old, the overall appearance of the assemblage of those old elements can constitute a patentably novel

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48. *Id.* at 1404 (emphasis added).

49. *Id.* at 1405 (emphasis added).

50. *Id.* (emphasis added) (citing *Lee v. Dayton-Hudson Corp.*, 838 F.2d 1186, 1188 (Fed. Cir. 1988)). Note that identifying the non-functional elements of a design is no different than verbalizing the entire claimed design – a practice later expressly counseled against by the en banc Federal Circuit in *Egyptian Goddess*. See *Egyptian Goddess*, 543 F.3d at 679-80.

design.<sup>51</sup> Similarly, even if all constituent elements of a design are functional (even purely functional), the overall appearance of the assemblage of those functional elements can constitute a patentably ornamental design. Because design patents protect the overall claimed appearance, the individual novelty or ornamentality of the design's elements are irrelevant. An element-by-element assessment of ornamentality is not needed and contrary to the governing principles of design law.

#### 4. *Egyptian Goddess v. Swisa* (Fed. Cir. 2008)

In *Egyptian Goddess, Inc. v. Swisa, Inc.*, the *en banc* Federal Circuit made great strides toward improving design patent jurisprudence by eliminating the problematic point of novelty test and laying down a general rule discouraging courts from issuing claim constructions that verbally describe design patent claims.<sup>52</sup> The specific issue of claim construction functionality was not before the *en banc* court and was not briefed by the parties or the many amici curiae. Nevertheless, in addressing the general issue of claim construction for design patents, the *Egyptian Goddess* court, quoting the poorly worded *OddzOn* passage, suggested ways a trial court might assist the fact finder on issues that bear on patent scope. One suggestion was to distinguish “between those features of the claimed design that are ornamental and those that are purely functional.”<sup>53</sup> Apparently to track the stringent “dictated solely by” approach for statutory functionality, the *en banc* court inserted the modifier “purely” before the word “functional.”<sup>54</sup> While this modifier logically should greatly

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51. The United States Patent and Trademark Office (USPTO) has long granted design patents for novel combinations of old elements that create a nonobvious, ornamental visual appearance. *See, e.g.,* *Smith v. Whitman Saddle Co.*, 148 U.S. 674, 679 (1893) (“If, however, the selection and adaptation of an existing form is more than the exercise of the imitative faculty and the result is in effect a new creation, the design may be patentable.”); *Gen. Gaslight Co. v. Matchless Mfg. Co.*, 129 F. 137, 138 (2d Cir. 1904) (“[T]he principle, as applied to design patents, is *unassailable* that whenever ingenuity is displayed in producing something new, which imparts to the eye a pleasing impression, *even though it be the result of uniting old forms and parts*, such production is a meritorious invention and entitled to protections.” (emphases added)); *see also* *Litton Sys., Inc. v. Whirlpool Corp.*, 728 F.2d 1423, 1443 (Fed. Cir. 1984).

52. 543 F.3d 665 (Fed. Cir. 2008) (*en banc*); *see* Perry J. Saidman, *What Is the Point of the Point of Novelty Test for Design Patent Infringement?*, 90 J. Pat. & Trademark Off. Soc’y 401 (2008) (discussing the systemic problems with the point of novelty test and the implications of *Egyptian Goddess*).

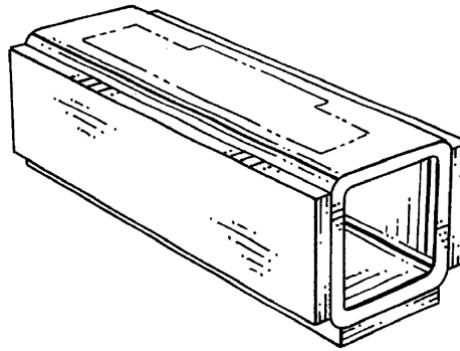
53. *Egyptian Goddess*, 543 F.3d at 680 (citing *OddzOn*, 122 F.3d at 1405).

54. The Federal Circuit has never provided guidance on what it means by “purely functional” features. *See* *ATI Indus. Automation, Inc. v. Applied Robotics, Inc.*, No. 1:09CV471, 2014 U.S. Dist. LEXIS 101413, at \*3 n.3 (M.D.N.C. July 25, 2014) (“The

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reduce the amount of so-called functional elements that courts might identify and excise, by citing *OddzOn*, the problematic feature filtration approach, whether intentionally or not, seemed to be further engrained in the case law. Significantly, and despite the citation to *OddzOn*, the feature filtration approach was not employed in *Egyptian Goddess*. In the opinion, there was no effort to exclude from protection the appearance of features of the design patent's claimed design that possess functional attributes, such as the finger nail buffer's buffing pads, square cross-section and hollow core.



**Figure 8**

Rather, all aspects of the finger nail buffer tool were included in the claim construction. *Egyptian Goddess* should not be interpreted as an endorsement of the feature filtration approach.

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Federal Circuit has used the language ‘dictated solely by function’ (or ‘governed solely by function’) in considering whether patented designs as a whole qualify as invalid as functional, but it has not applied the term when considering individual elements of a design.”). Given the absolute nature of “purely functional,” it would seem to reconcile with the “dictated solely by” standard. In other words, the “dictated solely by” standard that is employed to assess the overall appearance in statutory functionality (macro context) would also be used on an element-by-element approach in claim construction functionality (micro context). To be clear, while use of this strict standard in an element-by-element analysis might help to contain the reach of the problematic feature filtration approach, courts should completely refrain from element-by-element analyses.

### 5. *Richardson v. Stanley Works* (2010)

A few years later, and picking up on the loose language of *OddzOn* and *Egyptian Goddess*, the Federal Circuit in *Richardson v. Stanley Works, Inc.* more directly addressed the claim construction functionality issue, but the opinion left much uncertainty in its wake.<sup>55</sup> There, the plaintiff-patentee asserted that U.S. Patent No. D507,167 (the '167 patent) was infringed by certain Stanley carpentry tools (see fig. 9). After a bench trial, the district court found that none of the Stanley accused products<sup>56</sup> infringed the '167 patent.<sup>57</sup>



**Figure 9**

Similar to the holding in *Lee*, the district court, as part of claim construction, concluded that the '167 design patent did not provide a monopoly to the patentee for the general functional concept of combining a hammer-head, jaw, handle and crow-bar in a single tool.<sup>58</sup> The district court did not eliminate any visual features from the claimed design. To the contrary, all visual features were maintained: “The '167 patent does protect the ornamental aspects of Richardson’s design, which include, among other things, the standard shape of the hammer-head, the diamond-shaped flare of the crow-bar and the top of the jaw, the rounded neck, the orientation of the crow-bar relative to the head of the tool, and the plain, undecorated handle.” Thus, the district court rejected a feature filtration approach.<sup>59</sup>

On appeal, the Federal Circuit affirmed the district court’s claim construction and finding of noninfringement. In explaining its claim construction

55. *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288 (Fed. Cir. 2010).

56. U.S. Patent No. D507,167 fig. 2 (filed Jan. 9, 2004).

57. U.S. Patent No. D562,101 fig. 5 (filed Mar. 29, 2006).

58. *Richardson v. Stanley Works, Inc.*, 610 F. Supp. 2d 1046, 1050 (D. Ariz. 2009)

59. *Id.* The tool designs in *Richardson* are perfect examples of two articles of manufacture that embody the same functional attributes, yet have distinctly different ornamental appearances. Whether you prefer the appearance of Richardson’s design or Stanley’s design, both are *ornamental* under 35 U.S.C. § 171.

affirmance, the court used awkward language that some might interpret as endorsing the feature filtration approach. Citing *OddzOn* and *Egyptian Goddess*, the *Richardson* court stated that as part of design patent claim construction, a court is required to “separate” a design patent’s overall design into “purely functional” elements and “ornamental” elements, and then “factor out” (or “discount”) the former as unprotectable portions of the claimed design.<sup>60</sup> Specifically, the *Richardson* court, as part of claim construction, stated: “Richardson’s multi-function tool comprises several elements that are driven purely by utility. As the district court noted, elements such as the handle, the hammerhead, the jaw, and the crowbar are dictated by their functional purpose” (see fig. 10).<sup>61</sup>

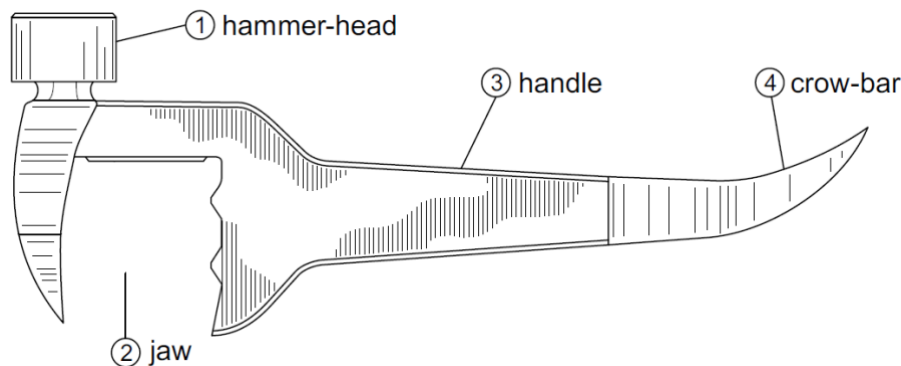


Figure 10

60. *Richardson*, 597 F.3d at 1292–94.

61. *Id.* at 1294. While the Federal Circuit states that the district court held the handle, the hammerhead, the jaw, and the crowbar are dictated by their functional purpose (and thus should be factored-out), this seems completely at odds with the express language of the district court opinion. The district court specifically pointed to the visual ornamental appearance of these elements as being protectable. (See *infra* end note 47). The district court excluded only the overall configuration of the handle, hammer-head, jaw, and crow-bar. *Richardson*, 610 F. Supp. 2d at 1050 (D. Ariz. 2009). (“The overall configuration of these four elements is dictated by the functional purpose of the tool and therefore is not protected by his design patent.”) While not as bad as the Federal Circuit’s extreme filtration, the district court’s approach is also problematic in that it fails to appreciate that the overall configuration is part and parcel with the overall design. The spatial relationships of the constituent elements, along with their individual shapes, orientations and aspect ratios, collectively produce the design. Besides, it is entirely unclear how an overall configuration can be dissected out while leaving anything meaningful behind. It should be noted here that in 2015, the Federal Circuit in *Apple v. Samsung* (discussed *infra*) recast its opinion in *Richardson* saying that it was not endorsing eliminating visual features, but rather stands for the unremarkable, but fundamental, tenet that design patent claims do not afford broad concept-level protection, but rather are limited to the particular claimed appearance.

The *Richardson* court stated that these “purely functional” elements were properly “factored out” from the protected design as part of claim construction. On its face, the court’s conclusion could be interpreted as leading to a bizarre result. Visually, and using broken lines to depict the “factored out” elements of the design, it can be illustrated by Figure 11 (beginning with the USPTO’s issued claim on the far left, and ending with the construed claim on the far right). Once factoring out is completed, it is entirely unclear what, if anything, is left. Using the feature filtration approach, the scope of the claim is altered to the point that it is effectively unenforceable. As explained below, this approach is wrongheaded.

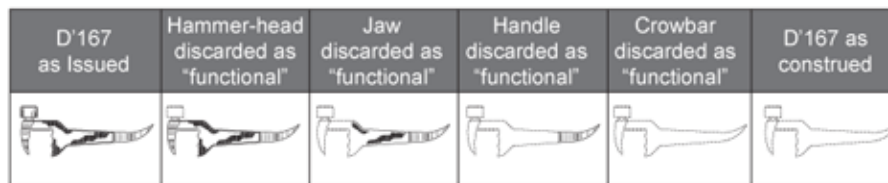


Figure 11

By affirming the district court’s claim construction (which rejected a feature filtration approach), but then using words that seemingly endorse a feature filtration approach (and that contradict the district court’s opinion), the *Richardson* court ramped the confusion up to a fever-pitch.<sup>62</sup> To be sure, Richardson’s ’167 design patent does not protect *any appearance* of a tool that combines a hammer, crowbar, handle, and jaw. Stated another way, the ’167 design patent does not grant exclusive rights for the general nature and purpose of a tool combining a hammer, crowbar, handle, and jaw. Instead, what is protected is the specific appearance of the overall design set forth in the ’167 patent figures, including the visual appearance of all elements and their spatial relationships to one another. Concerns about functionality could have been addressed with an adherence to the principle that design patents only protect the *appearance* of the overall design depicted in the drawings, and not any functional attribute, purpose or characteristic of the claimed tool.

62. See Christopher V. Carani, *Apple v. Samsung: Design Patents Take Center Stage*, Landslide, Jan./Feb. 2013, at 3.

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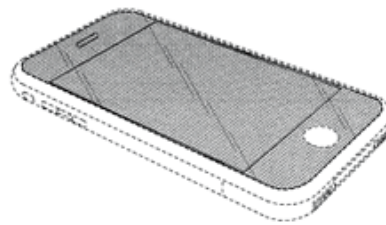
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6. *Apple, Inc. v. Samsung Electronics Co. (Fed. Cir. 2015)*<sup>63</sup>

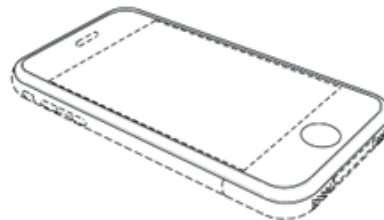
In 2015, the Federal Circuit weighed in on the design patent claims asserted in *Apple v. Samsung*, which had been called “the patent trial of the century.”<sup>64</sup> Apple sued its competitor Samsung, *inter alia*, for infringement of four design patents. (see Fig. 12).



U.S. Design Patent D604,305



U.S. Design Patent D618,677



U.S. Design Patent D593,087

63. *Apple, Inc. v. Samsung Elecs. Co.*, 786 F.3d 983 (Fed. Cir. 2015), *cert. granted in part*, 136 S. Ct. 1453 (2016), *and rev'd and remanded*, 137 S. Ct. 429 (2016) (emphasis added)(internal cites removed).

64. See, e.g., Ashby Jones & Jessica E. Vascellaro, *Apple v. Samsung: The Patent Trial of the Century*, July 24, 2012, Wall Street Journal, <http://www.wsj.com/articles/SB10000872396390443295404577543221814648592>; Philip Elmer-DeWitt, *Apple v. Samsung: The patent trial of the century starts today*, Fortune, July 30, 2012, <http://fortune.com/2012/07/30/apple-v-samsung-the-patent-trial-of-the-century-starts-today/>.

**Figure 12**

The jury found infringement on three of the four patents.<sup>65</sup> On appeal, the Federal Circuit affirmed-in-part, finding in relevant part that the three design patents (shown in Figure 14) were infringed and not invalid.<sup>66</sup> Without explicitly overruling *Richardson*, the Federal Circuit moved away from the *Richardson* decision by refusing to factor out any functional features of the overall designs, instead asserting that:

*But the claim construction in Richardson did not exclude those components in their entirety. Rather, the claim construction included the ornamental aspects of those components: “the standard shape of the hammer-head, the diamond-shaped flare of the crow-bar and the top of the jaw, the rounded neck, the orientation of the crow-bar relative to the head of the tool, and the plain, undecorated handle.” That construction was affirmed on appeal. As such, the language “dictated by their functional purpose” in Richardson was only a description of the facts there; it did not establish a rule to eliminate entire elements from the claim scope as Samsung argues. Our case law likewise does not support Samsung’s proposed rule of eliminating any “structural” aspect from the claim scope.<sup>67</sup>*

The Federal Circuit walked back from the troublesome language of *Richardson* calling for discounting, factoring out and ignoring visual elements. The court recast *Richardson* as standing for the fundamental tenet that design protect appearances, not any underlying functional properties, qualities or attributes.

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65. *Apple, Inc. v. Samsung Elecs. Co.*, 926 F. Supp. 2d 1079 (N.D. Cal. 2013).

66. *Apple, Inc. v. Samsung Elecs. Co.*, 786 F.3d 983 (Fed. Cir. 2015).

67. *Apple, Inc. v. Samsung Elecs. Co.*, 786 F.3d at 998.



7. *Ethicon Endo-Surgery, Inc. v. Covidien, Inc. (Fed. Cir. 2015)*<sup>68</sup>

Only a few after *Apple*, the Federal Circuit again rejected attempts by accused infringers to filter out visual elements of the overall claimed design on the basis functionality grounds. The court rejected the Ethicon asserted against its competitor Covidien four design patents directed to partial designs for ultrasonic shears. One of the four asserted design patents is shown in Figure 13 (left) as compared to one of the accused designs (right).

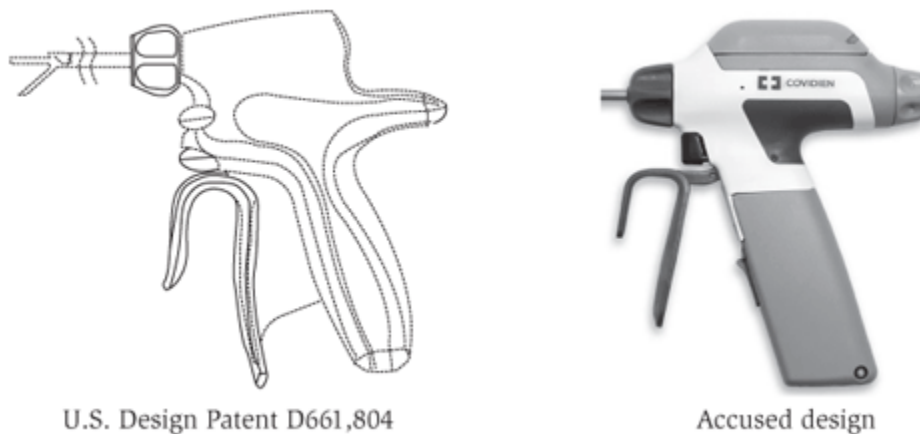


Figure 13

As part of claim construction, the district court found that the trigger, torque knob, and button must be ‘factored out’ under *Richardson*, as these features were all driven by functional considerations.<sup>69</sup> Thus, the district court held that the design patents were either invalid as being solely dictated by

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68. *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312 (Fed. Cir. 2015).

69. See *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, No. 1:11-CV-871, 2014 WL 10212172, at \*9 (S.D. Ohio Jan. 22, 2014) (‘[T]he shape and placement of the U-Shaped Trigger, Torque Knob, and Rounded Button elements of the Design Patents are all based on functional considerations and therefore all of these elements must be “factored out” of the claimed design.’)

functional, or in the alternative, not infringed because the design patents had no scope once the functional features were excluded.<sup>70</sup>

On appeal, the Federal Circuit reversed the district court's finding that Ethicon's patented designs were invalid as 'dictated by functional considerations.'<sup>71</sup> In conducting its analysis, the Federal Circuit correctly noted that it is the overall appearance of the claimed design that is at the center of the inquiry into whether a design is primarily ornamental, and *not* the functionality of each isolated feature.<sup>72</sup> The Federal Circuit also vacated the district court's claim construction that 'factored out' the functional portions of the designs, stating:

*Here, the district court found that the "U"-shaped trigger, the torque knob, and the rounded button claimed in various combinations by the Design Patents are dictated by function. For example, the "U"-shaped trigger operates the clamping arm of the ultrasonic shears. Its "open" design allows the user to exert higher input forces by employing multiple fingers, thus lessening hand fatigue and strain. Id. The torque knob and rounded button provide functional controls for the ultrasonic shears. Id. at 21. Their placement relative to the trigger offers ergonomic access, and the fluted shape of the torque knob permits a user to operate the knob with one finger. Id. We agree that the trigger, torque knob, and activation button elements of the underlying article have functional aspects. But the district court's construction of the Design Patents to have no scope whatsoever fails to account for the particular ornamentation of the claimed design and departs from our established legal framework for interpreting design patent claims.*

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70. *Id.* at \*9-\*10.

71. *Ethicon*, 796 F.3d at 1332.

72. *See id.* at 1329 ('We have also instructed that the overall appearance of the article – the claimed design viewed in its entirety – is the basis of the relevant inquiry, not the functionality of elements of the claimed design viewed in isolation.').

*Thus, although the Design Patents do not protect the general design concept of an open trigger, torque knob, and activation button in a particular configuration, they nevertheless have some scope—the particular ornamental designs of those underlying elements. We therefore vacate the district court's construction that the Design Patents cover "nothing." The scope of the Design Patents, although limited, encompasses the depicted ornamental aspects of certain combinations of the trigger, torque knob, and activation button elements of ultrasonic surgical shears, in specific relative positions and orientations.*<sup>73</sup>

Ultimately, the Federal Circuit affirmed the finding of non-infringement, but for the (legally correct) reason that the overall appearance of each of the claimed designs was not substantially the same as the overall appearance of the accused product.<sup>74</sup>

**8. *Sport Dimension, Inc. v. Coleman Co.* (Fed. Cir. 2016)<sup>75</sup>**

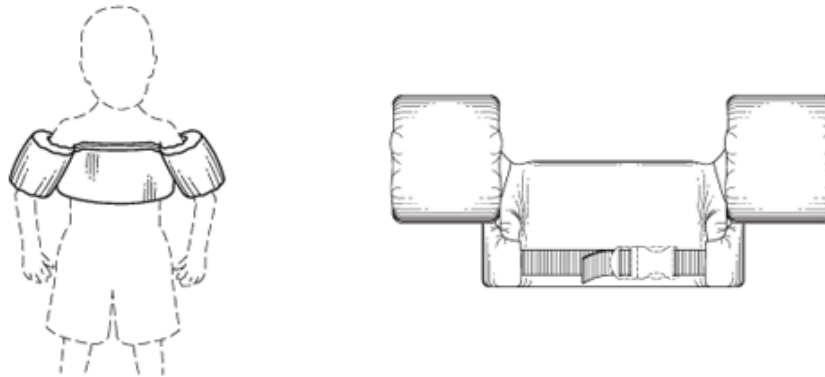
In *Sport Dimension*, for the third time in less than a year, the Federal Circuit held that eliminating visual elements of an overall claimed design constitutes legal error. *Sport Dimension* involved a design patent owned by Coleman directed to a personal flotation device (shown in Figure 14). The device had two armbands, a central torso harness and closure strap. The accused product (not shown) also incorporated these features with a similar look.

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<sup>73</sup>. *Id.* at 1334.

<sup>74</sup>. *See id.* at 1334 ('Here, there can be no genuine dispute that at the proper level of granularity, the claimed ornamental designs of the Design Patents are, as a whole, plainly dissimilar from the ornamental design of Covidien's accused ultrasonic shears. Therefore, we affirm the district court's grant of summary judgment of noninfringement of the Design Patents.').

<sup>75</sup>. *Sport Dimension, Inc. v. Coleman Co.*, 820 F.3d 1316 (Fed. Cir. 2016).



**Figure 14**

The district court – applying the feature-exclusion approach to claim construction – factored out the ‘functional aspects’ of the claimed design holding that:

‘The ornamental design for a personal flotation device, as shown and described in Figures 1–8, except the left and right armband, and the side torso tapering, which are functional and not ornamental.’

The district court reasoned that:

‘the armbands, the armband attachments, the shape of the armbands, the tapering of the armbands, and the tapering of the side torso were all elements that serve a functional rather than ornamental purpose in the D’714 patent.’

Based on this interpretation of the scope of the design right, the district court entered judgment of non-infringement. The design patentee appealed. Like in *Apple* and *Ethicon*, the Federal Circuit again rejected a feature-exclusion approach to functionality stating that ‘in no case did we entirely eliminate a structural element from the claimed ornamental design, even though that element also served a functional purpose.’ The Federal Circuit vacated the district court’s claim construction stating that:

‘even though we agree that certain elements of Coleman's design serve a useful purpose, we reject the district court's ultimate claim construction. The district court eliminated the armbands and side torso tapering from the claim entirely, so its construction runs contrary to our law. Here, as in *Ethicon*, ‘the district court's construction of the Design Patents to have no scope whatsoever fails to account for the particular ornamentation of the claimed design and departs from our established legal framework for interpreting design patent claims.’ Moreover, design patents protect the overall ornamentation of a design, not an aggregation of separable elements. *Richardson*, 597 F.3d at 1295 (noting that ‘discounting of functional elements must not convert the overall infringement test to an element-by-element comparison’). By eliminating structural elements from the claim, the district court improperly converted the claim scope of the design patent from one that covers the overall ornamentation to one that covers individual elements. Here, the district court erred by completely removing the armbands and side torso tapering from its construction.’

With the *Apple*, *Ethicon* and *Sports Dimension* decisions, the Federal Circuit has made it clear that features of an entire design will not be excluded from a design's scope of protection.<sup>76</sup> The focus of a comparison in design cases, whether for infringement or validity, must be on the overall appearance of the design right as issued. Highly functional design features may receive less attention in the eyes of the ordinary observer, similar to how old features are

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76. Although the Federal Circuit has made progress in clarifying the proper approach to determining the scope of protection, there is still more work to be done. See Jason J. Du Mont & Mark D. Janis, *Functionality in U.S. Design Patent & Community Design Law*, Indiana Legal Studies Research Paper No. 342, Research Handbook on Design Law, Forthcoming (April 30, 2016), available at SSRN: <https://ssrn.com/abstract=2773070> (‘While *Ethicon* and *Sport Dimension* seem likely to become the foundation for a new line of analysis on scope functionality, the Federal Circuit still has much work to do in refining both its validity and scope functionality tests.’).

treated. That said, exclusion of visual features of a claimed design constitutes legal error.<sup>77</sup>

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77. Despite this clear guidance from the Federal Circuit in the *Apple*, *Ethicon* and *Sports Dimension* decisions, district courts continue to analyze “functionality” inconsistently. While many district courts continue to properly decline to “factor out” functional aspects of a design. See *SZ DJI Tech. Co. v. Autel Robotics USA LLC*, No. CV 16-706-LPS, 2019 WL 6840357, at \*3 (D. Del. Dec. 16, 2019) (“The D’514 Patent does not attempt to claim functional elements; rather it claims a design that happens to have function. The design is not governed solely by function, as the design is not the only possible form of the article that could perform its function.”); *Graphic Packaging Int’l, LLC v. Inline Packaging, LLC*, No. 15CV03476-ECTLIB, 2019 WL 4786148, at \*5 (D. Minn. Oct. 1, 2019) (“This is a case where verbal elaboration construing the claimed designs is not necessary or helpful.”); *Lanard Toys Ltd. v. Toys “R” Us-Delaware, Inc.*, No. 3:15-CV-849-J-34PDB, 2019 WL 1304290, at \*12 (M.D. Fla. Mar. 21, 2019) (“In keeping with *Egyptian Goddess*, the Court will not attempt any further description of every ornamental feature and relies instead on the drawings above, with the understanding that the scope of the D#167 Patent is limited to the ornamental aspects of the design, and not the underlying functional design elements.”); *Daimler AG v. A-Z Wheels LLC*, 334 F. Supp. 3d 1087, 1102 (S.D. Cal. 2018) (“The Court finds that any further “verbal elaboration” in the claim is not “necessary or helpful” and adopts the proposed construction [the ornamental design for a front face of a vehicle wheel, as shown and described in FIGs. 1–4 of the ‘D211 Patent].”); *Hafco Foundry & Mach. Co., Inc. v. GMS Mine Repair & Maint., Inc.*, No. CV 1:15-16143, 2018 WL 2970754, at \*2-3 (S.D.W. Va. June 13, 2018) (“[A] design may embody functional features and still be patentable. . . . Based on the foregoing, GMS did not meet its burden to show by clear and convincing evidence that the ‘684 patent is dictated by functional considerations.”), *affirmed on other grounds and remanded*, *Hafco Foundry & Mach. Co., Inc. v. GMS Mine Repair & Maint., Inc.*, 953 F.3d 745 (Fed. Cir. 2020) (finding that the defendant’s particular functionality arguments, namely that there was no infringement when functional and prior art aspects were factored out of the claimed design, were not preserved for appeal); *Magnolia & Vine Inc. v. Tapestry, Inc.*, No. 17-CV-4382 (JNE/DTS), 2018 WL 2208316, at \*3 (D. Minn. May 14, 2018) (“Nothing in Magnolia and Vine’s amended complaint indicates that the stringent standard for invalidating a design patent due to functionality is satisfied with regard to the asserted design patents.”); *HFA, Inc. v. Trinidad/Benham Corp.*, No. 6:17-CV-00343-RWS, 2018 WL 1210880, at \*4 (E.D. Tex. Mar. 7, 2018) (“While the nested pans serve a functional purpose, that does not deem them excluded from the claim, particularly whereas here they are also ornamental in nature.”); *Auto. Body Parts Ass’n v. Ford Glob. Techs., LLC*, 293 F. Supp. 3d 690, 704 (E.D. Mich. 2018) (“In short, the ABPA has not persuaded the Court that the designs of the ‘299 and ‘685 patents are dictated by function.”), *aff’d*, 930 F.3d 1314 (Fed. Cir. 2019), *cert. denied*, No. 19-1002, 2020 WL 1124449 (U.S. Mar. 9, 2020); *Crocs, Inc. v. Effervescent, Inc.*, No. 06-CV-00605-PAB-KMT, 2017 WL 2787589, at \*14 (D. Colo. June 27, 2017) (“The Court finds that Dawgs’ proposed construction, which seeks to exclude ‘the existence of a heel strap and the connectors that attach the heel strap to the upper,’ would improperly eliminate features that contribute to the ornamental design of the ‘789 Patent.” (internal citation omitted)); *Fecon, Inc. v. King Kong Tools, LLC*, No. 1:16-CV-1137, 2017 WL 4869000, at \*5 n.5 (S.D. Ohio June 27, 2017) (denying defendants’ motion to dismiss where “[t]here are no facts before the Court that Plaintiff’s patented design is dictated solely by function.”); *Skechers U.S.A., Inc. v. Eliya, Inc.*, No. CV1602820SJOAGR, 2017 WL 3449594, at \*6 (C.D. Cal. Mar. 14, 2017) (“In sum, claim construction would not be helpful in determining the claim scope. The Asserted Patents’ claims are better represented by their respective illustrations and figures

than a written claim construction.”); *Equalia, LLC v. Kushgo LLC*, No. 216CV02851RFBCWH, 2017 WL 114084, at \*7 (D. Nev. Jan. 11, 2017) (“As a preliminary matter, the Court notes that however the function is defined . . . the Court finds that the overall design of the board is not dictated by its function.”). But cf. *See Corves, LLC v. Dillard's, Inc.*, No. 218CV08518RGKAFM, 2019 WL 8227455, at \*6 (C.D. Cal. Dec. 20, 2019) (“[T]he Court finds that the innermost ring of the D'370 patent is a functional rather than ornamental feature. The Court therefore construes the D'370 patent's claim as the ornamental design for an inflatable beverage holder, as shown in figures 1 through 6 of the D'370 patent, excluding the inner ring shape.”); *Static Media LLC v. Leader Assocs. LLC*, 395 F. Supp. 3d 982, 995 (W.D. Wis. 2019) (“[P]laintiff concedes as much by failing to dispute that the design patent at issue does not cover such functional elements as a seat cushion, seat back or panel, and foldable mechanism, but argues instead that certain aspects of those functional elements may be assigned protected, ornamental features.”); *Kao v. Snow Monster Inc.*, No. CV1708934RSWLJJSX, 2019 WL 2164192, at \*3 (C.D. Cal. May 16, 2019) (“[T]he mouth's size is functional in that its purpose is to accommodate the larger straws used for boba drinks, and a design patent infringement analysis should be construed to only the ornamentation of the product and not to the functional features.”); *Artskills, Inc. v. Royal Consumer Prod., LLC*, No. 3:17-CV-1552 (VAB), 2019 WL 1930751, at \*17 (D. Conn. May 1, 2019) (“Because the parties have identified no other features that could be ornamental, the Court finds it appropriate to limit the scope of claim construction to those four features [the configuration of linear segments of equal length, the shape and positioning of slots in the header panel, the size/shape of the rounded panel corners, and the width/length/shape of the header and adhesive panels].”); *Dyson, Inc. v. SharkNinja Operating LLC*, No. 14-CV-779, 2018 WL 1906105, at \*6 (N.D. Ill. Mar. 29, 2018) (noting that during claim construction, the design patents were construed as “the ornamental design of the drawings contained in the patents themselves for the '163 Patent and the '823 Patent and as the replacement drawings for the '010 Patent, subject to the functionality findings. The straight, pistol-grip handle, the long tube, and the low-profile floor unit are functional features that are not protected by the design patent; but the shape and ornamentation of those features are protected to the extent that they contribute to the overall ornamentation of the design. The spherical wheels are functional features that are not protected by the design patent, but the ornamentation of the spherical wheels [is] protected to the extent that it contributes to the overall ornamentation of the design.”), appeal dismissed, No. 18-1915, 2018 WL 5733514 (Fed. Cir. Aug. 1, 2018); *Boiling Point Grp., Inc. v. Fong Ware Co.*, No. 216CV01672RGKJEM, 2017 WL 2930838, at \*3 (C.D. Cal. Apr. 27, 2017) (“[T]he Court construes the claim as ‘the ornamental design for an apparatus for holding and heating a hot pot, as shown and described, excluding the functional aspects of the frustoconical bowl and of the prongs around the rim thereof to hold the hot pot in place,<sup>1</sup> and of openings to allow air flow.’”); *Snap-on Inc. v. Harbor Freight Tools USA, Inc.*, No. 16-C-1265, 2017 WL 44833, at \*3 (E.D. Wis. Jan. 4, 2017) (“In the present case, the claim consists of drawings, and I do not believe that a detailed verbal description of the claim is necessary or would be helpful. However, because many aspects of the design of a floor jack are functional, I will use claim construction to ‘factor out the functional aspects’ of the design.” (quoting *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1293 (Fed. Cir. 2010))).

C. HYPOTHETICAL EXAMPLES ILLUSTRATING PROBLEMS WITH  
FILTRATION OF INDIVIDUAL VISUAL ELEMENTS OF A CLAIMED  
DESIGN

Below are a series of hypotheticals that illustrate some of the fundamental problems with feature filtration in the design patent context. In this set of hypotheticals, the design patent is directed to an entire key, including both a key head and a key blade. Feature filtration can greatly impact the outcome of a case. As is seen in Examples 2.1A, 2.1B and 2.2 (infringement) and Example 2.3 (validity), excluding features can lead to undesirable outcomes.

In Example 2.1A and 2.1B of Figure 15 (below), an ordinary observer may not find that the overall appearances of the accused key products are substantially same as the asserted key design. Ultimately, the decision will be a quintessential fact question. If feature filtration is performed, and the key blade is filtered out, it would force a finding of infringement in both cases; the monkey key head of the accused products and design right are identical. A deep flaw in the feature filtration approach is revealed: by grossly removing portion of the whole design from the analysis, not only is the shape removed but also the relational information (e.g., orientation and size) between the removed and the remaining portions. A portion of a design cannot be eliminated without disrupting the remainder of the design.

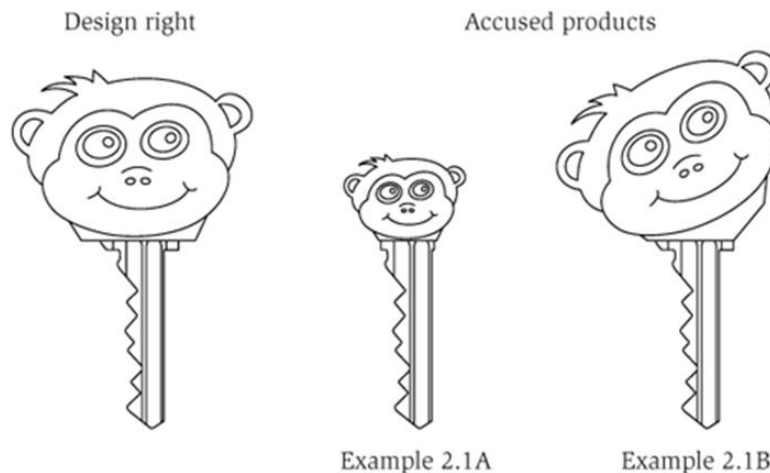


Figure 15

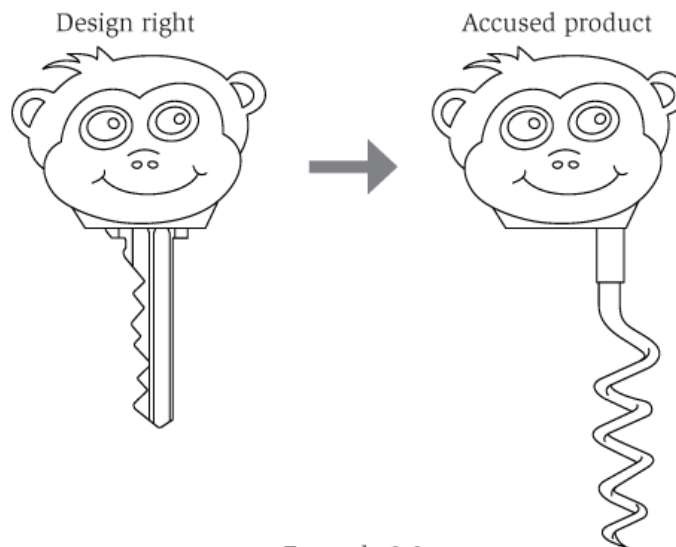


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Removing, *post hoc*, the key blade from the scope of protection of the key would have the unintended effect of broadening the design claim well beyond that for which the applicant applied. Here, the applicant's design was for the overall appearance of a key head of a certain size and orientation *relative to* a key blade of a certain size and orientation. The applicant did not apply for, nor did the USPTO examine and approve, a design right on just the key head. If the key blade were (erroneously) eliminated from the scope of protection, the design right holder *effectively* would be given a generic design right for a key head attached to anything.

In Example 2.2 of Figure 16 (below), the accused product has a corkscrew and is even more visually different than the accused keys of Examples 2.1A and 2.1B.



Example 2.2

**Figure 16**

Here again, if the key blade of Example 2.2 below is excluded from consideration, the remaining key head is identical to that of the accused product. A finding of infringement is a certainty, even though overall appearance of the key and corkscrew may be determined to be sufficiently different to avoid infringement. To begin, the appearance of the monkey head combined with the corkscrew is visually different from the appearance of the monkey key head combined with a key blade. Further, the corkscrew's long length and off-center alignment relative to the handle is visually different than the relationship between the short, centered key blade on the key head of the design right. Even if it is concluded that the shapes of the

key blade and corkscrew are dictated solely by function, their visual relationships with their respective handle are not. If the key blade and cork screw are excluded, these non-purely functional differences are also excluded and there necessarily would be a finding of infringement; the monkey handles are identical. Instead of removing the features, a fact finder should be left to decide whether the overall appearance of the accused corkscrew is substantially the same as the overall appearance of the asserted key design.<sup>78</sup>

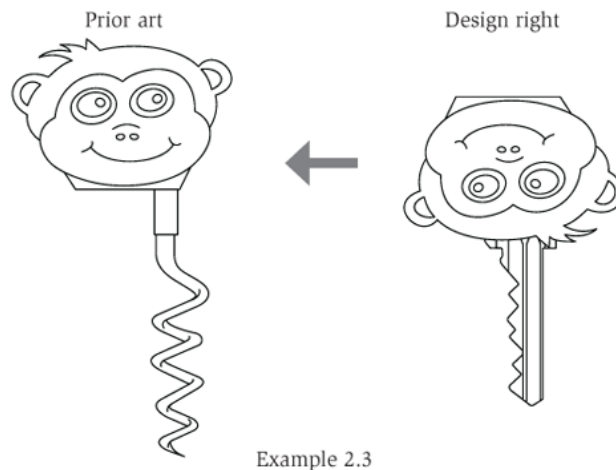
Example 2.3 in Figure 17 (below regards invalidity, not infringement. As noted *supra*, the scope of protection used for an infringement analysis must be the same as that for validity analysis. It is improper to use a broad scope for one analysis and then a narrow scope for another.

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78. The accused infringer may argue that there is no infringement because the design right is directed to a key, while the accused product is a corkscrew. This argument would likely fail as it focus on labels rather than the controlling consideration in design patent cases – appearances. While changing the key blade to a corkscrew does alter the overall appearance of the design, a fact finder could find that to an ordinary observer the accused design is substantially the same as the asserted design. However, at least in situations where the title (and thus claim language) supplies the only instance of an article of manufacture, it is possible that the title of the design right may limit the scope of protection, such that if the design is directed to a “Key” its scope may not extend to a cover a “Corkscrew.” See *Curver Luxembourg, SARL v. Home Expressions Inc.*, 938 F.3d 1334, 1340 (Fed. Cir. 2019); see also MPEP § 1503.01(I) (amended November 2015) (“The title of the design identifies the article in which the design is embodied by the name generally known and used by the public and may contribute to defining the scope of the claim.”); see also Sarah Burstein, *The Patented Design*, 83 Tenn. L. Rev. 161, 207 (2015) (“The patented design should not be conceptualized as a design per se. Nor should it be conceptualized as protecting only designs that are applied to the exact same product, used for the exact same purpose, as originally intended (or produced) by the patentee. Instead, the patented design should be conceptualized as the design as applied to a particular type of product.”) (emphasis in original).

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Example 2.3

**Figure 17**

For the reasons explained in Examples 2.1A, 2.1B and 2.2, the key blade should not be removed from the design's overall scope of protection. The overall appearance of the prior art corkscrew reference is compared to the overall appearance of the design right, in view of the remaining body of prior art. Under the relevant statutory provisions, the patented design may be invalid either for being anticipated by (lack of novelty), or for being obvious in light of the prior art reference. The determination will be a quintessential fact question. Here again, this is a far cry from the 'slam dunk' finding of invalidity that results when the key blade and cork screw are removed from consideration.

These examples illustrate the harmful effects of feature filtration, namely, the unwanted broadening of design patent claims.

### III. CONCLUSION

Design patents do not protect the functional attributes, purposes or characteristics of an article of manufacture, but rather only protect the overall appearance of the claimed design depicted in the drawings. Design patents protection incentivizes and stimulates the exercise of inventive faculty in improving the appearance of articles of manufacture, which in turn forwards the meritorious policy goal of promoting the decorative arts.

The ornamentality requirement of § 171 advances that goal, but also safeguarding against the rare, but possible, monopolization of functional ideas or concepts. The prevailing multiplicity of forms approach (1) stays

true to the language of the statute and spirit of a subject matter eligibility provision, (2) adequately safeguards against using design patents to monopolize functional ideas, and (3) brings reasonable and desirable certainty to an otherwise grey area of the law. To bring even more certainty to the issue, the Federal Circuit should confirm that this test should be used on an exclusive basis.

Regardless of what test is employed, it is the design as a whole that must meet the statutory requirements, not individual features thereof. The only relevant inquiry regards the design as a whole. Any attempts at feature filtration are unnecessary, fatally flawed and should be prohibited. Consistent with the Federal Circuit's recent opinions in *Apple*, *Ethicon* and *Sport Dimensions*, courts should continue to resist the urge to attempt to identify and filter out any individual features, elements or portions of the ornamental whole design.