

# FIXING FUNCTIONALITY IN DESIGN PATENT LAW

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## I. INTRODUCTION

Design patent is not a copyright-based system.<sup>1</sup> Though the proponents of design protection in the United States might originally have been inspired by the British extension of copyright to design,<sup>2</sup> design protection in this country was operationalized as a patent system.<sup>3</sup> Copyright has since expanded to also cover many types of design, but that has never changed the fundamental structure of design patent as a patent system. That's important because many of the challenges in design patent law are specifically the result of that

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1. Cf. Peter S. Menell & Ella Corren, *Design Patent Law's Identity Crisis*, 36 BERKELEY TECH. L.J. 1, 9 (2021) (describing design patent as a “copyright-based regime”).

2. *Id.* at 108–09. For a thorough account of the origins of design patent protection in the United States, see Jason J. Du Mont and Mark D. Janis, *The Origins of American Design Patent Protection*, 88 IND L.J. 837 (2013).

3. See Act of Aug. 29, 1842, ch. 263 sec. 3, 5 Stat. 543. The categories of copyright and patent were not as crystallized or distinct in the mid-nineteenth century, so it's not clear that the proponents the original design protection had a strong sense of what rode on the copyright/patent distinction. See Mark P. McKenna & Katherine J. Strandburg, *Progress and Competition in Design*, 17 STAN. TECH. L. REV. 1, 32–36 (2013); see generally BRAD SHERMAN & LIONEL BENTLY, *THE MAKING OF MODERN INTELLECTUAL PROPERTY LAW: THE BRITISH EXPERIENCE, 1760–1911* (1999) (demonstrating that the categories of intellectual property law were still emergent in the mid-nineteenth century and hadn't yet fully taken shape in modern form). But American law has never deviated from the design patent model, despite the difficulties that has entailed.

institutional design choice—they derive from our attempts to use concepts like invention and obviousness in relation to design.<sup>4</sup>

Of course, the fact that design patent is a patent system doesn't mean that we shouldn't worry about its relationship to utility patent law. Congress created a separate patent system for design because it believed design was different from the subject matter of utility patent law and therefore not readily protectable under that system (or any other then-existing intellectual property (IP) system). It would be odd to interpret design patent law's eligibility rules in ways that ignore that system's distinct role—either by making design patent redundant of utility patent or, even worse, by enabling parties to use design patent as a backdoor form of utility patent protection.<sup>5</sup>

The principle that IP systems should refuse protection to “useful” or “functional” features because those features are the exclusive province of utility patent law is what Kathy Strandburg and I have called the “utility patent supremacy principle.”<sup>6</sup> That principle manifests, in different forms, in every other area of IP. As we described, “each of [the other IP] systems subordinates its own policy goals to the dynamic competition goals of utility patent law, reserving to utility patent the responsibility for determining the circumstances under which utilitarian features may be copied by others.”<sup>7</sup> Deference to utility patent animates trademark law's functionality doctrine, for example, and several copyright doctrines, including the principle of *Baker v. Selden* and the useful articles doctrine.

As Menell and Corren thoroughly demonstrate in their important new piece, after some initial years in which courts and the U.S. Patent and Trademark Office (USPTO) vacillated between very different approaches to design patent eligibility,<sup>8</sup> Congress made clear that ornamentality was supposed to play this role in design patent law.<sup>9</sup> Ornamentality is meant to be juxtaposed with “utility” and therefore to distinguish design patent subject matter from utility patent. And at least on its face, that concept remains central to the definition of design patent subject matter to this day.<sup>10</sup>

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4. See McKenna & Strandburg, *supra* note 3, at 38–44 (describing the misfit of utility patent law's cumulative notions of Progress, particularly in its concept of nonobviousness, in the context of design).

5. *Id.*; see also Mark P. McKenna & Christopher Jon Sprigman, *What's In, and What's Out: How IP's Boundary Rules Shape Innovation*, 30 HARV. J.L. & TECH. 491, 516–23 (2017).

6. McKenna & Strandburg, *supra* note 3, at 18–19.

7. *Id.* at 19.

8. See Menell & Corren, *supra* note 1, at 14–21.

9. Act of May 9, 1902, ch. 783 sec. 4929, 32 Stat. 193.

10. See 35 U.S.C. § 171 (“Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor . . .”).

Because ornamentality should be design patent law's point of demarcation, I very much agree with Menell and Corren that we should pay a lot more attention to that requirement. Their central criticism of the modern iteration of that doctrine is that it does not exclude functional design features aggressively enough.<sup>11</sup> In my view, however, Menell and Corren actually identify two distinct but related problems. First is the fact that the Federal Circuit has reduced the concept of ornamentality to nonfunctionality: the only question courts and the USPTO ask in considering whether a design meets the statutory requirement of ornamentality is whether the design features are nonfunctional. The second problem is that the Federal Circuit defines functionality nearly exclusively in terms of the availability of alternative designs.

These are related but distinct problems. Ornamentality is not simply nonfunctionality; for configuration, at least, it is commonly the case that features are *both* ornamental and functional, just in different proportions.<sup>12</sup> And even where functionality is the right question, the availability of alternative designs need not, and should not, be its only measure.

## II. ORNAMENTALITY IS NOT MERELY NONFUNCTIONALITY

One of the central problems in IP law's treatment of design is its incorrect insistence that aesthetic value and functionality are opposites. Our various functionality doctrines do not simply determine whether features are functional or ornamental; they set the threshold at which we disqualify features because the balance between functionality and ornamentality tips too strongly in the direction of function.<sup>13</sup> Take, for example, the “knurling” design on the plaintiff's rifle scopes in *Leapers, Inc. v. SMTS, LLC*.<sup>14</sup>

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11. See Menell & Corren, *supra* note 1, at 125.

12. McKenna & Strandburg, *supra* note 3, at 46–48.

13. See, e.g., Chris Buccafusco & Mark A. Lemley, *Functionality Screens*, 103 VA. L. REV. 1293, 1313–16 (2017) (describing “threshold” screens and dual-nature features).

14. 879 F.3d 731 (6th Cir. 2018).

Figure 1: Knurling Designs in *Leapers, Inc. v. SMTS, LLC*



Knurling is texture that allows users to grip the rifle scopes more easily and to make fine-tuned adjustments.<sup>15</sup> The knurling design on Leapers’s rifle scopes was therefore unquestionably functional in a textbook sense—it was the feature that enabled users to adjust the scopes. And yet Leapers contended that its *particular* knurling pattern was not necessary for that function (it was not particularly more effective than alternatives) and was designed for an aesthetic purpose—“to make the scopes stand out from the competition.”<sup>16</sup>

What conclusion one thinks the court should have drawn in *Leapers* surely depends on the extent to which alternative designs ought to matter to functionality determinations (an issue I address below). The point here is the duality of design. Many designs, like the knurling in *Leapers*, are plausibly described in both functional and ornamental terms. The question isn’t really whether the features are functional or not; it’s whether we should care more about the functionality or ornamentality. When the Federal Circuit reduces ornamentality to nonfunctionality, it distorts the issue in design patent by taking ornamentality out of the equation.

For many years before the Federal Circuit gained exclusive jurisdiction over design patent cases, courts treated ornamentality as a meaningful concept distinct from nonfunctionality. Take, for example, *Theodore W. Foster & Bro. Co. v. Tilden-Thurber Co.*, in which the First Circuit suggested that some types of goods were categorically excluded from design patent protection “for want of reason to suppose that their appearance can ever really matter to anybody.”<sup>17</sup> According to that court, ornamentality requires that the design’s appearance

15. *Id.* at 733 (“Knurling can be found on a wide variety of everyday items such as door handles, coin edges, and bottle lids.”).

16. *Id.* at 738 (internal quotation marks omitted). The court found that argument plausible enough that a jury needed to make the call. *Id.*

17. 200 F. 54, 56 (1st Cir. 1912) (“Examples of this class are, besides horseshoe calks . . . , syringes, plates joining the ends of machine belts, and thill couplings . . . ; also ribbon spools for typewriting machines and insulating plugs. The shape or configuration of such articles can have value only in so far as it may make them more useful.” (citations omitted)).

be material. Extending that idea, several courts insisted that designs were ornamental only when the appearance of the article drove its sales.<sup>18</sup> Even some decisions of the Federal Circuit's predecessor required more than mere nonfunctionality, finding designs patentable only when the articles were aesthetically pleasing, or at least not ugly.<sup>19</sup> As those courts understood, ornamentality and functionality are not opposites, and we should put more affirmative content into the ornamentality requirement no matter how we reform functionality doctrine.

Menell and Corren suggest that courts stopped treating ornamentality as a meaningful requirement for the same reason that courts in copyright cases shied away from a more robust originality standard. Specifically, giving meaning to ornamentality would require courts to confront a series of hard questions: What does it mean for features to be “ornamental”? Is there an ornamentality threshold, and how would it be measured? From whose perspective do we judge ornamentality? Can ornamentality be judged objectively?<sup>20</sup>

Those are, to be sure, difficult questions. But they are not different in kind from the questions courts must answer to evaluate functionality: What does it mean for a feature to be functional? What is the functionality threshold? From whose perspective do we judge functionality? Menell and Corren's discussion often implies that those questions are easier or more objective than our experience with functionality in trademark law suggests.<sup>21</sup> In many trademark cases, there is at least an implicit dispute about how to characterize the function of the features at issue, and therefore what legal rules should apply. There is also a pervasive question about what constitutes a relevant and disqualifying function.

In the Second Circuit's recent decision in *Sulzer Mixpac AG v. A&N Trading Co.*, for example, the court considered the functionality of Mixpac's

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18. See Menell & Corren, *supra* note 1, at 38, 38 n.129 (citing cases).

19. See *In re Koehring*, 37 F.2d 421, 422 (C.C.P.A. 1930); *Contico Int'l, Inc. v. Rubbermaid Com. Prods., Inc.*, 665 F.2d 820, 825 (8th Cir. 1981) (“Perhaps it is too much to expect that a trash-can dolly be beautiful. It is enough for present purposes that it is not ugly . . .”). For a critical take on these cases, see Jason J. Du Mont & Mark D. Janis, *Functionality in Design Protection Systems*, 19 J. INTEL. PROP. L. 261, 267–68 (2012) (discussing a period of ornamentality jurisprudence involving “raw artistic judgments from the bench”).

20. Cf. *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251 (1903) (“It would be a dangerous undertaking for persons trained only to the law to constitute themselves final judges of the worth of pictorial illustrations, outside of the narrowest and most obvious limits.”). For a critical take on the standard interpretation of *Bleistein*, see Barton Beebe, *Bleistein, the Problem of Aesthetic Progress, and the Making of American Copyright Law*, 117 COLUM. L. REV. 319 (2017).

21. See Menell & Corren, *supra* note 1, at 134–36.

trade dress—its use of specific colors for mixing tips used by dentists to create impressions of teeth for dental procedures.<sup>22</sup> According to the court, those features were not essential to the use of the product; color-coded mixing tips and cartridges were not analogous to the dual-spring design at issue in *TrafFix*.<sup>23</sup> Nevertheless, the court held the features functional because the colors had an informational function: the mixing tips' colors “signif[ie]d] diameter, which in turn assist[ed] users with selecting the proper cartridge for their needs.”<sup>24</sup>

Though I agree with that conclusion, it demonstrates how difficult it can be to distinguish types of functionality. Why was signifying diameter a relevant function, and how did the court know the color-coding system sufficiently affected the cost or quality of the mixing tips to make the colors functional? More generally, are informational functions utilitarian or aesthetic functions? The answer to that question seems especially unclear when users rely on the informational content of aesthetic features to make physical use of the articles.<sup>25</sup> And yet, categorization is often critical in these cases because the legal rules are different depending on which type of functionality is at issue. If the colors at issue in *Sulzer Mixpac* served an aesthetic function, then the court should have considered alternative designs and determined whether exclusive use of the color coding would have put competitors at a “significant non-reputation-related disadvantage.”<sup>26</sup>

*Millennium Labs v. Ameritox* is another example.<sup>27</sup> That case involved the design of reports for presenting the results of urine tests. Does the layout and design of those reports serve a utilitarian function? An aesthetic one? The Ninth Circuit never answered that question and instead treated the traditional *Inwood* test and the non-reputation-related disadvantage test as two sequential steps in determining functionality.<sup>28</sup> In other words, it considered *both* whether the features were “essential to the use or purpose” of the reports or “affect[ed]

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22. 988 F.3d 174, 174 (2d. Cir. 2021).

23. *Id.* at 182–83.

24. *Id.* at 183.

25. Somewhat ironically, the Supreme Court's test for functionality comes from a case in which colors had this same sort of informational function. In *Inwood v. Ives*, the Supreme Court considered the potential functionality of the color of pills, which pharmacists relied on to differentiate types of medicine. 456 U.S. 844 (1982).

26. *TrafFix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 33 (2001) (“It is proper to inquire into a ‘significant non-reputation-related disadvantage’ in cases of esthetic functionality . . .”).

27. 817 F.3d 1123 (9th Cir. 2015).

28. *Id.* at 1129–31.

[their] cost or quality,” *and* whether there were alternatives available such that there would be no competitive disadvantage.<sup>29</sup>

This issue of what functions are relevant is not unique to trademark law—indeed, it is a persistent issue in the useful articles context in copyright. What qualifies as a “useful” article? Years of experience demonstrate that copyright has no theoretically consistent answer to that question.

Consider copyright’s differential treatment of apparel and toys. Apparel, even the most aesthetically rich sort, such as a designer dress, is treated as useful because it covers the body.<sup>30</sup> That’s true even though that’s not why anyone buys a designer dress—they buy it because of the way it looks. Toys, by contrast, serve the useful purpose of entertaining. Certainly, toys can be attractive, but most people don’t buy toys to look at them. They buy them so someone can play with them. But copyright often ignores that fact and doesn’t classify toys as useful articles.<sup>31</sup>

Costumes are another difficult case. On one hand, costumes seem merely to portray their appearance. On the other hand, costumes don’t just hang on the wall; they are meant to be worn and to transform the wearer into something else. You don’t wear a Batman costume just because it looks nice—you wear it to look like Batman. Does that make a Batman costume a useful article? According to the Copyright Compendium, fanciful costumes may be considered useful articles, but only because they serve the useful function of clothing the body.<sup>32</sup>

This question of what kinds of utility count in determining whether a pictorial, graphic, or sculptural (PGS) work should be classified as a useful article was also implicated in *Star Athletica*, where the question was what

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29. *Id.*

30. This paragraph is derived from McKenna & Sprigman, *supra* note 5, at 536.

31. *See* Compendium of U.S. Copyright Practices Chapter 910 [hereinafter Compendium] (noting that, “[a]s a general rule,” “toys, dolls, stuffed animals, and puppets, and other sculptural works” are “not considered useful articles for purposes of registration, because in most cases they merely portray their own appearance or the item the work represents”); *see also* *Gay Toys, Inc. v. Buddy L Corp.*, 703 F.2d 970, 973 (6th Cir. 1983) (“[A] toy airplane is merely a model which portrays a real airplane. To be sure, a toy airplane is to be played with and enjoyed, but a painting of an airplane, which is copyrightable, is to be looked at and enjoyed. Other than the portrayal of a real airplane, a toy airplane, like a painting, has no intrinsic utilitarian function.”). Of course, “in general” is not “never.” *See, e.g.*, *Lanard Toys Ltd. v. Novelty, Inc.*, 375 F. App’x 705, 710 (9th Cir. 2010) (“The determination [of] whether a toy is a pictorial, graphic, or sculptural work, and not an uncopyrightable ‘useful article’ is a fact-intensive one that must be decided on a case-by-case basis . . .”).

32. Compendium, *supra* note 31, at Chapter 911.

functions chevrons and other design features played in the context of cheerleading uniforms.<sup>33</sup>

Figure 2: Cheerleading Uniform Designs in *Star Athletica*



Though the Supreme Court ignored the issue, it divided the Sixth Circuit.<sup>34</sup> The majority of the Sixth Circuit panel concluded that the designs were not useful.<sup>35</sup> Speaking generally, the court held that, before addressing separability, a court should ask “[w]hat are the utilitarian aspects of the useful article?”<sup>36</sup> Here the example the court gave was telling: “the utilitarian aspect of a chair is to provide a place for a person to sit.”<sup>37</sup> The court felt compelled to focus

33. *Varsity Brands, Inc. v. Star Athletica, LLC*, 799 F.3d 468, 470 (6th Cir. 2015), *aff’d sub nom.* *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002 (2017).

34. *Varsity Brands*, 799 F.3d 468.

35. *Id.* at 493.

36. *Id.* at 487.

37. *Id.*



its inquiry at that level of generality because, under the statutory definition, “portray[ing] the appearance of the [useful] article” and “convey[ing] information” do not count as functions that make the article “useful.”<sup>38</sup> So, for example, masquerading is not a useful function because it involves only “portray[ing] the appearance of something (like a lion, ladybug, or orangutan).”<sup>39</sup> Turning to the cheerleading uniforms at issue, the majority described the relevant utilitarian functions simply as “cover[ing] the body, wick[ing] away moisture, and withstand[ing] the rigors of athletic movements.”<sup>40</sup> Identifying the wearer as a cheerleader did not count, so the claimed design features were separable from the utilitarian function.

The dissent disagreed, especially regarding the level of generality at which the majority described the function of the uniforms. As the dissent noted, the majority’s definition “could be used to describe all athletic wear.”<sup>41</sup> That wasn’t good enough for the dissent, because “[w]ithout stripes, braids, and chevrons, we are left with a blank white pleated skirt and crop top,” which the reasonable observer would not associate with cheerleading.<sup>42</sup> For the dissent, making clothing recognizable as a cheerleading uniform is a function, and the design was not separable from that function.<sup>43</sup>

It’s not important here whether the majority or dissent had the better view of the functions of cheerleading uniforms. The point is merely that rules for separating out “functional” matter all require determinations of which functions count, and every area of IP struggles in this respect. Notably, for all of their emphasis on functionality, Menell and Corren never define function—in fact, the paper uses the terms “function,” “utility,” “utilitarian,” and “useful” more or less interchangeably to refer to the features they want to exclude from design patent protection.<sup>44</sup> Since the paper is animated by channeling concerns,

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38. *Id.*; see 17 U.S.C. § 101 (“A ‘useful article’ is an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article or to convey information.”).

39. *Varsity Brands*, 799 F.3d at 488 (quoting *Chosun Int’l, Inc. v. Chrisha Creations, Ltd.*, 413 F.3d 324, 329–30 n.3 (2d Cir. 2005), *abrogated by* *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002 (2017)).

40. *Id.* at 490.

41. *Id.* at 495 (McKeague, J., dissenting).

42. *Id.*

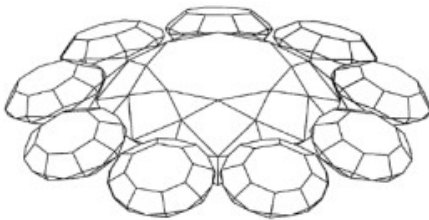
43. In their amicus brief to the Supreme Court, Chris Buccafusco and Jeanne Fromer argued that the chevrons and other features also served the function of affecting the perception of the wearer. See Brief of Professors Christopher Buccafusco and Jeanne Fromer as Amici Curiae in Support of Petitioner, *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002 (2017) (No. 15-866), 2016 WL 3971299; see also Christopher Buccafusco & Jeanne C. Fromer, *Fashion’s Function in Intellectual Property Law*, 93 NOTRE DAME L. REV. 51 (2017) (expanding on the argument).

44. See, e.g., Menell & Corren, *supra* note 1, at 1–2.

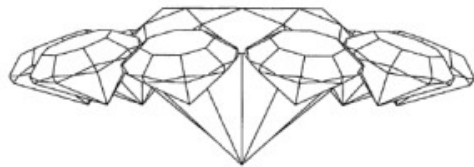
those terms appear to be shorthand for the subject matter of utility patent law, which the authors seek to exclude from design patent.<sup>45</sup> Menell and Corren suggest that matter can be characterized as having “technological” utility, but utility patent subject matter is not actually so straightforward.<sup>46</sup> One reason is that objects often look the way they do because of the laws of physics or engineering principles, and it can therefore be hard to know whether the features that produce those visual impressions should be deemed “technological.”<sup>47</sup>

Take, for example, the Southern District of New York’s decision in *Prestige Jewelry*.<sup>48</sup> In that case, *Prestige* argued that the claimed design of diamond jewelry was functional because, as the designer admitted, this arrangement “performed the best” in light box refraction tests, having “the best refraction.”<sup>49</sup>

**Figure 3: Diamond Jewelry Setting in *Prestige Jewelry***



**FIG. 1**



**FIG. 2**

The court rejected that argument, which it characterized as “incorrectly blur[ring] the distinction between ornamental and functional designs.”<sup>50</sup> The designer’s statements about the performance of the design “d[id] not change the fact that the ultimate purpose of the [patented] design is to have a pleasing appearance—a quintessentially ornamental purpose.”<sup>51</sup> That was true even though “[the] inventor experiment[ed] with alternative designs or use[d]

45. *See id.* at 129–30.

46. *See generally* McKenna & Sprigman, *supra* note 5.

47. *Id.* The material in the following paragraphs is derived in part from McKenna & Sprigman, *supra* note 5, at 518.

48. *Prestige Jewelry Int’l, Inc. v. BK Jewelry HK*, No. 11-CV-2930 (S.D.N.Y. Sept. 15, 2014).

49. *Id.* at 31.

50. *Id.*

51. *Id.*

rudimentary tools and tests.”<sup>52</sup> The design was “unquestionably ornamental,” according to the court, because it was “arranged solely to be pleasing to the eye.”<sup>53</sup>

But even if that arrangement of diamonds is properly considered design patent subject matter because its purpose is to be pleasing to the eye, the production of that visual impression is *also* the kind of utility that makes the arrangement utility patent subject matter. The USPTO has routinely issued utility patents on precisely this sort of invention, in some cases allowing design and utility patents on the exact same design.<sup>54</sup> Indeed, several of the pieces of prior art the *Prestige Jewelry* court considered were utility patents that claimed nothing more than the arrangement of diamonds in a setting.<sup>55</sup> This is not unique to jewelry either: there are many patented inventions the relevant utility of which is some visual or psychological appeal, including a method of producing imitation grill marks on food, imitation wood flooring, and an imitation hamburger.<sup>56</sup> And many cases have held that “the unique inventive contribution reflected in an ornamental design can be identical to the unique inventive contribution of a mechanical process.”<sup>57</sup>

Perhaps these kinds of inventions shouldn’t be subject to utility patent protection. But the fact that they are suggests that, as it currently operates, utility patent law is open to much more than the “technological” utility most ascribe to it. That’s a challenge if we expect design patent law to internalize utility patent law’s conception of its own subject matter. As Chris Sprigman and I previously argued, it’s hard to know what to keep *out* of design patent on channeling grounds if we aren’t clear about what belongs *in* utility patent.<sup>58</sup>

This is certainly not to say that channeling rules aren’t important, or that functionality should be irrelevant to design patent subject matter. It’s only to

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52. *Id.*

53. *Id.* at 31–32.

54. *See, e.g.*, U.S. Patent No. 7,146,827 (explaining that the claimed “mixed cut gemstone enables the appreciation of the desirable characteristics of a diamond in ways that prior art cuts do not allow.”); U.S. Design Patent No. 467,833.

55. *See* U.S. Patent No. 7,762,104.

56. *See, e.g.*, U.S. Patent No. 5,762,968 (method for producing imitation grill marks on food without using heat); U.S. Patent No. 5,899,038 (laminated flooring imitating wood); U.S. Patent No. 5,571,545 (imitation hamburger). The Federal Circuit’s predecessor found measuring cups marked with fractional cup gradations patentable subject matter because those markings helped alleviate the “mental strain” on cooks who were attempting to make fractional recipes. *Application of Miller*, 418 F.2d 1392, 1394 (C.C.P.A. 1969).

57. *Wahl v. Rexnord, Inc.*, 624 F.2d 1169, 1179 (3d Cir. 1980) (citing *Transmatic, Inc. v. Gulton Indus., Inc.*, 601 F.2d 904 (6th Cir. 1979)); *Ropat Corp. v. McGraw-Edison Co.*, 535 F.2d 378 (7th Cir. 1976); *Application of Thorington*, 418 F.2d 528, 536 (C.C.P.A. 1969).

58. *McKenna & Sprigman, supra* note 5, at 516–23.

say that functionality is not straightforward, and certainly no more straightforward than it would be to develop a positive vision of ornamentality. The Federal Circuit's reduction of ornamentality to nonfunctionality is one significant reason we see patented designs that are not ornamental in any sense that corresponds to common usage of that term.

### III. FUNCTIONALITY ISN'T JUST LACK OF ALTERNATIVES

Of course, the relationship between ornamentality and functionality depends a lot on how we measure functionality. On that issue, I agree with Menell and Corren that design patent law overemphasizes alternative designs. As we have seen in the trademark context, measuring functionality by reference to alternative designs nearly always means the features will be found nonfunctional, because there are almost always alternatives. That is especially true when the relevant function is defined at a high enough level of generality.

Here it's important to emphasize that the reason courts focus on alternatives in the trademark context is that those courts believe that functionality is fundamentally concerned with competitive necessity to copy and not with channeling protection of useful features to utility patent.<sup>59</sup> In its decision in *In re Morton-Norwich*, which was hugely influential in trademark law before *TrafFix*<sup>60</sup> and still has lingering influence, the Federal Circuit's predecessor described competitive need as the “crux” of functionality.<sup>61</sup> That way of thinking about functionality has long competed with the channeling view, and many courts—here most importantly, the Federal Circuit—continue to describe functionality in those terms.<sup>62</sup>

It cannot be a coincidence that the Federal Circuit's test for functionality in the design patent context is so similar to the one articulated in *Morton-Norwich*.<sup>63</sup> Nor can it be a surprise that, having embraced the *Morton-Norwich*

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59. See Mark P. McKenna, *(Dys)Functionality*, 48 HOUS. L. REV. 823, 825–26 (2011).

60. *TrafFix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23 (2001).

61. *In re Morton-Norwich Prods., Inc.*, 671 F.2d 1332, 1341 (C.C.P.A. 1982).

62. See *Valu Eng'g, Inc. v. Rexnord Corp.*, 278 F.3d 1268 (Fed. Cir. 2002); see also *McAirlaids, Inc. v. Kimberly-Clark Corp.*, 756 F.3d 307 (4th Cir. 2014).

63. *Compare Berry Sterling Corp. v. Prescor Plastics, Inc.*, 122 F.3d 1452, 1456 (Fed. Cir. 1997) (“As such, alternative designs join the list of other appropriate considerations for assessing whether the patented design as a whole—its overall appearance—was dictated by functional considerations. Other appropriate 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.”), with *In re Morton-Norwich*, 671 F.2d at 1340–41 (listing the following factors for evaluating functionality in the trade dress context: (1) the existence of a utility patent disclosing the

view of functionality, in practice the Federal Circuit became obsessed with alternative designs in design patent cases, notwithstanding nominal suggestions in a few cases that other factors were also relevant.<sup>64</sup> If the question is whether exclusive use of a claimed feature would put competitors at a disadvantage, it's natural to ask what alternatives are available to those competitors.

We should reject a primary focus on alternative designs in the design patent context for the same reasons we should reject it in the trademark context—because that focus misunderstands the purpose of the functionality doctrine. “Functionality . . . is not simply about competitive need for product features; it is also, even primarily, intended to police the boundary between trademark and [utility] patent law,” and between design patent and utility patent, “by channeling protection of useful product features exclusively to the [utility] patent system.”<sup>65</sup>

When functionality is understood in channeling terms, alternative designs become much less important. The question is whether the claimed features play a role in the function of the article, not whether there are other ways to achieve the function.<sup>66</sup> That there are other ways to achieve the function just means there are other functional designs.<sup>67</sup>

Many of the cases Menell and Corren identify as having embraced a more rigorous functionality rule are, in my view, simply asking the functionality question in this way: do the features play a role in the function of the article?<sup>68</sup>

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utilitarian advantages of the design; (2) advertising materials in which the originator of the design touts the design's utilitarian advantages; (3) the availability to competitors of functionally equivalent designs; and (4) facts indicating that the design results in a comparatively simple or cheap method of manufacturing the product).

64. See Menell & Corren, *supra* note 1, at 82–84.

65. See McKenna, *supra* note 59, at 827–28; see also McKenna & Strandburg, *supra* note 3, at 48–51.

66. See *Eppendorf-Netheler-Hinz GmbH v. Ritter GmbH*, 289 F.3d 351, 355 (5th Cir. 2002) (“Under this traditional definition, if a product feature is ‘the reason the device works,’ then the feature is functional. The availability of alternative designs is irrelevant.” (quoting *Traffix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 33–34 (2001))).

67. Cf. *Specialized Seating, Inc. v. Greenwich Indus., L.P.*, 616 F.3d 722, 727 (7th Cir. 2010) (“A design such as Clarin’s x-frame chair is functional not because it is the only way to do things, but because it represents one of many solutions to a problem. . . . What this says to us is that all of the designs are functional, in the sense that they represent different compromises along the axes of weight, strength, kind of material, ease of setup, ability to connect (“gang”) the chairs together for maximum seating density, and so on.”).

68. See, e.g., *Tupper Corp. v. Tilton & Cook Co.*, 113 F. Supp. 805, 805, 807 (D. Mass. 1953), *aff'd*, 209 F.2d 954 (1st Cir. 1954) (describing the “general shape and configuration” and “essential features” of the claimed design as being dictated by functional considerations);

It's notable in those cases just how conclusory the courts' judgments about the role of the claimed features were—the courts made little effort to characterize the relevant function or to explain why the features were dictated by those functions. Approaching the question at that level of abstraction allowed the courts to elide many of the hard questions about how to describe the functions of the articles.

The older cases are also notable for their focus on the role of individual elements in the overall function of the article rather than the precise shapes of the design features at issue. Those courts commonly asked whether the “general shape” of the article was dictated by functional considerations, or whether the “features” were dictated by function.<sup>69</sup> In evaluating those questions, courts often went feature by feature and asked merely whether the features related to the overall function of the article, abstracting away from the specific design characteristics of any of those features.<sup>70</sup>

In contrast, more recent design patent cases tend to focus on the precise *shapes* of the design features, usually with an emphasis on the overall design (the collection of features, not the function of individual features).<sup>71</sup> When courts consider whether the claimed design is “dictated by function,” they ask whether there are other designs that would produce that same overall function. If there are, then the design is not dictated by function. The older approach disqualifies designs when the features have a relationship to the function of the article; current doctrine disqualifies designs only when no other collection of specific design features could accomplish the same function.

Of course, a rule that considers whether design features play a role in an article's function requires a threshold: because many designs have both ornamental and functional value, the real question is *how much* of a role the

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Hueter v. Compco Corp., 179 F.2d 416, 417–18 (7th Cir. 1950) (describing the role of each feature in the claimed design but not considering alternative designs).

69. See, e.g., *Tupper Corp.*, 113 F. Supp. at 805; *Jones v. Progress Indus., Inc.*, 163 F. Supp. 824, 826 (D.R.I. 1958) (describing the general shape and configuration of the plaintiff's design as “obviously one dictated by functional requirements,” with reference to the “shape, size, and contour of the visor and lens section” of the claimed design for goggles, and “the recess for the nose, the curved lens, the ventilation ports and holes, the molded lip overhanging the lens at the front of the visor, the loops for receiving the head strap, the acute angle between the head and visor section, the heads of the detachable bolts”).

70. See, e.g., *Blisscraft of Hollywood v. United Plastics Co.*, 189 F. Supp. 333, 337 (S.D.N.Y. 1960), *aff'd in part, rev'd in part sub nom. Blisscraft of Hollywood v. United Plastics Co.*, 294 F.2d 694 (2d. Cir. 1961); *Tupper Corp.*, 113 F. Supp. at 806–07; *cf. Eppendorf*, 289 F.3d at 355 (“[I]f a product feature is ‘the reason the device works,’ then the feature is functional.” (quoting *Traffix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23, 34 (2001))).

71. See, e.g., *Apple, Inc. v. Samsung Elecs., Ltd.*, 786 F.3d 983 (Fed. Cir. 2015); *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312 (Fed. Cir. 2015).

features must play relative to the function of the article in order to be disqualified. Or, put somewhat differently, what must be the relative weight of the functional and ornamental aspects of the design for it to be considered functional?

In my view, there are good reasons for design patent law's functionality threshold to be different from trademark law's. One is that the availability of design patents, with their limited duration and narrow scope, partly justifies limitations on trade dress protection for product designs.<sup>72</sup> Another reason for having different thresholds is the fact modern designers often affirmatively seek to integrate form and function,<sup>73</sup> and aggressively disqualifying features that play any role in the function of an article would eliminate design patent protection for all such designs.<sup>74</sup>

Indeed, if Menell and Corren are serious about excluding from design patent protection all designs in which ornamentality and functionality are intertwined, then they are really rejecting protection for configuration (save, perhaps, busts and statues). That would indeed make design patent seem more like a species of copyright, since copyright would extend to essentially all of the remaining design patent subject matter. But it's notable that configuration has always been design patent subject matter, and the drafters of the original design patent statute believed that form of protection filled a gap precisely because configuration was *not* copyright or trademark subject matter.

It's true that a higher functionality threshold would be problematic without other doctrinal features that limited the availability and scope of design patent rights. More specifically, allowing protection of designs that have a greater proportion of functional matter requires a nonobviousness rule that meaningfully limits eligibility for protection<sup>75</sup> and infringement rules that emphasize the narrow scope of design patent rights. Requiring a very high degree of similarity between the accused product and the patented design would ensure, in cases in which features have both ornamental and functional

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72. *Cf.* Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 214 (2000) (noting that the availability of design patent protection for product designs ameliorates any unfairness in refusing protection for any designs that lack secondary meaning).

73. For a project currently in progress, Jessica Silbey and I have interviewed a wide range of designers to learn how they understand design practice and how they define excellent design. "Integration" is an extremely prominent theme. *See* Mark P. McKenna & Jessica Silbey, *Investigating Design* (Aug. 2, 2021) (unpublished manuscript) (on file with author).

74. That is the result for which Menell and Corren argue. *See* Menell & Corren, *supra* note 1, at 145.

75. *See* Sarah Burstein, *Visual Invention*, 16 LEWIS & CLARK L. REV. 169, 197 (2012) (criticizing the nonobviousness rule in design patent and offering suggestions for improving it).

value, that designs would be considered infringing only when they are similar in terms of their ornamental aspects.<sup>76</sup> Both the nonobviousness and infringement doctrines would be improved, as Menell and Corren suggest, with a renewed focus on the point of novelty—a concept courts used to employ in design patent cases precisely to draw attention to the features that made the design patentable.<sup>77</sup>

#### IV. MIND THE (DISAPPEARING) GAP

Beyond the many specific doctrinal questions Menell and Corren address, their article raises the hard question of how the legal system should respond when the conditions that led to the creation of particular legal rights no longer obtain.

Design patent law was created to fill a perceived gap—to offer protection for designs that were not protected by utility patent, copyright, or trademark law. But since the time of the original statute, both copyright and trademark have expanded significantly, and both now reach many forms of design. Indeed, design patent, copyright, and trademark now frequently overlap, enabling parties to use the various forms of protection cumulatively or as substitutes.<sup>78</sup> So what do we do with a system that was created to fill a gap that no longer exists?

One answer—the one Menell and Corren point toward,<sup>79</sup> and the one that Josh Sarnoff explicitly endorses<sup>80</sup>—is to eliminate the design patent system, or at least to alter the regime to make it much more like copyright. But that response represents a sort of copyright imperialism. Rather than accepting the expansion of copyright and eliminating design patent, we might instead reject the expansion of copyright and focus design patent on the niche it was meant to serve. Menell and Corren argue that copyright is preferable because it has better limiting doctrines, particularly in the rule of *Baker v. Selden* and the

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76. See Theodore W. Foster & Bro. Co., 200 F. at 56 (“Such a patent, indeed, would cover the new shape or configuration only in its ornamental and not in its merely useful aspect, nor would it be infringed by an article securing the same merely useful result through shape or configuration, *unless so nearly the same in appearance as to come within Gorham v. White.*”) (emphasis added).

77. See Mark A. Lemley & Mark P. McKenna, *Scope*, 57 WM. & MARY L. REV. 2197, 2261–65 (2016) (explaining the problems with *Egyptian Goddess’s* elimination of the point of novelty approach).

78. See Jeanne C. Fromer & Mark P. McKenna, *Claiming Design*, 167 U. PA L. REV. 123, 193–201 (2018).

79. See Menell & Corren, *supra* note 1, at 135–38.

80. Joshua D. Sarnoff, *Design Patents Are Theft, Not Just a “Fraud on the Public,” We Need Legislation to Restore Their Repair Rights*, 36 BERKELEY TECH. L.J. 169, 171 (2021).



abstraction/filtration rules copyright uses in some contexts at the infringement stage.<sup>81</sup> I'm not convinced.

For one thing, despite their repeated characterization of design patent as a copyright-based system and their argument for a separability doctrine in design patent law, Menell and Corren never engage with the actual law of separability in copyright. They present *Baker v. Selden* as the central copyright case—indeed they suggest that case organizes all of IP law.<sup>82</sup> But most design patent cases, if they were copyright cases, would not be analyzed under *Baker v. Selden*. They would be analyzed under *Star Athletica*,<sup>83</sup> which is entirely missing from Menell and Corren's analysis. Indeed, Menell and Corren cite *Star Athletica* only in a footnote and only for the purpose of criticizing scholars (and Justice Breyer) for suggesting that design patent law protects designs with functional characteristics.<sup>84</sup> There's some irony here, since, for all of design patent law's warts, copyright's separability doctrine is notoriously problematic, and *Star Athletica* has been roundly criticized.<sup>85</sup> The most trenchant criticisms—

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81. See Menell & Corren, *supra* note 1, at 119, 126.

82. Even assuming that suggestion is not meant to be taken literally but is instead a claim that the idea of *Baker v. Selden* (specifically its notion that copyright cannot be used to protect the sorts of things utility patent law protects) animates limitations in all the areas of IP, Menell and Corren's invocation of *Baker v. Selden* misses important differences in the way trademark law has traditionally treated unpatented designs. Until the latter half of the twentieth century, product design was categorically excluded as trademark subject matter. Nevertheless, narrower unfair competition remedies were often available when the defendant's conduct risked passing off. Those remedies typically were limited to labeling or packaging requirements and did not allow the plaintiff to control use of the design as such. Modern law now uses functionality doctrine as a substitute for those former rules, having assimilated unfair competition into trademark law proper. For a more complete description of this evolution, see Caitlin Canahai & Mark P. McKenna, *The Case Against Product Configuration Trade Dress*, in RESEARCH HANDBOOK ON TRADEMARK LAW REFORM 137 (Graeme Dinwoodie & Mark Janis eds., 2021).

83. *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1002 (2017).

84. Menell & Corren, *supra* note 1, at 73 n.266.

85. See, e.g., Rebecca Tushnet, *Shoveling a Path After Star Athletica*, 66 UCLA L. REV. 1216, 1218 (2019) ("The best I can say about the case is that my copyright students' situation has improved: Instead of having to learn up to nine incompatible approaches to copyright protection for useful articles, as in the past, they only have to learn one that's self-contradictory."); Barton Beebe, *Star Athletica and the Problem of Panaestheticism*, 9 U.C. IRVINE L. REV. 275 (2019); *From Shovels to Jerseys: A Guide to Apply Star Athletica v. Varsity Brands*, 166 U. PA. L. REV. ONLINE (2017), [https://scholarship.law.upenn.edu/penn\\_law\\_review\\_online/vol166/iss2/](https://scholarship.law.upenn.edu/penn_law_review_online/vol166/iss2/); Mark P. McKenna, *Knowing Separability When We See It*, 166 U. PA. L. REV. ONLINE 127 (2017).

including from Menell himself<sup>86</sup>—take *Star Athletica* to task for enabling copyright protection for functional features.<sup>87</sup>

Nor is it clear that we should prefer copyright's infringement rules. As Menell and Corren note, some copyright cases do indeed use filtration to focus protection on expressive features.<sup>88</sup> That approach is especially popular when parties claim copyright protection for software or other highly functional works. But many other cases, especially those involving visual works, embrace a “total look and feel” approach.<sup>89</sup> There's some uncertainty about which of those approaches would predominate in design cases, but there's some reason to think it would be the latter, especially given the difficulties determining which functions are relevant and the common exhortations to consider designs as a whole. The “total look and feel” approach would very likely result in much broader protection for designs than we see in the design patent context.

Design patent law has many challenges, and Menell and Corren very helpfully highlight its deficient enforcement of the ornamentality requirement. But given copyright law's approach to useful articles and its looser infringement standard, copyright isn't obviously a superior framework for dealing with design. And that's to say nothing of duration, which surely doesn't argue for copyright over design patent.<sup>90</sup> The best approach here may well be to address design patent's flaws directly, particularly by developing a more robust concept of ornamentality that doesn't reduce to nonfunctionality and that doesn't measure nonfunctionality solely by reference to alternative designs.

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86. See Peter S. Menell & Daniel Yablon, *Star Athletica's Fissure in the Intellectual Property Functionality Landscape*, 166 U. PA. L. REV. ONLINE 137 (2017).

87. *Id.* at 139 (“Taken together, the majority and dissenting opinions threaten substantial harm to the intellectual property system by recognizing protection for functionality outside of the strictures of *utility* patent law.”); see also Christopher Buccafusco & Jeanne C. Fromer, *Forgetting Functionality*, 166 U. PA. L. REV. ONLINE 119, 119 (2017) (arguing that *Star Athletica* “makes it substantially easier for copyright claimants to obtain protection for utilitarian aspects of designs, contrary to copyright statute and policy”).

88. See Menell & Corren, *supra* note 1, at 37 (discussing the seminal case establishing copyright's use of filtration, *Nichols v. Universal Studios*, 45 F.2d 119 (2d. Cir. 1930)).

89. See Lemley & McKenna, *supra* note 77, at 2235.

90. For works created on or after January 1, 1978, copyright endures for the life of the author plus 70 years, or for anonymous works, pseudonymous works, and works made for hire, copyright endures for 95 years from year of first publication or 120 years from the year of creation (whichever expires first). 17 U.S.C. §§ 302(a), (c). Design patents last 15 years from the date of issue. 35 U.S.C. § 173.