
THE LAW OF LOOK AND FEEL

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ABSTRACT

Design—which encompasses everything from shape, color, and packaging to user interface, consumer experience, and brand aura—is the currency of modern consumer culture and increasingly the subject of intellectual property claims. But the law of design is confused and confusing, splintered among various doctrines in copyright, trademark, and patent law. Indeed, while nearly every area of IP law protects design, the law has taken a siloed approach, with separate disciplines developing ad hoc rules and exceptions. To address this lack of coherence, this Article provides the first comprehensive assessment of the regulation of consumers’ aesthetic experiences in copyright, trademark, and patent law—what we call “the law of look and feel.” We canvas the diverse ways that parties have utilized (and stretched) intellectual property law to protect design in a broad range of products and services, from Pac-Man to Louboutin shoes to the iPhone. In so doing, we identify existing doctrines and principles that inform a normatively desirable law of look and feel that courts and Congress should extend throughout IP law’s protection of design. We argue that design law should protect elements of look and feel but remain sensitive to eliminating or mitigating exclusive rights in response to evolving standardization, consumer expectations, and context. Notably, our normative conception of design protection sometimes departs quite starkly from how courts have expansively conceptualized look and feel as protectable subject matter. Going further, we argue that the new

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INTRODUCTION

Design is the currency of modern consumer culture and increasingly the subject of intellectual property claims.¹ Apple, the world's biggest company, owes its value largely to design.² Notably, where courts once rebuffed Apple's claim to own a popular graphical user interface, today design-related claims lead to billion-dollar judgments in Apple's favor.³

1. Cf. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 350–53 (1967) (arguing that private property rights emerge and evolve in response to increases in resource value).

2. Peter Burrows, *Apple v. Samsung: Can Look and Feel Be Patented?*, BLOOMBERG BUSINESSWEEK (Aug. 1, 2012), <https://web.archive.org/web/20130602083741/http://www.businessweek.com/news/2012-08-01/apple-v-samsung-can-look-and-feel-be-patented> (“Of the 359 patents listing Apple’s late co-Founder Steve Jobs as an inventor, 86 percent are for design.”).

3. *Compare* Apple Comput., Inc. v. Microsoft Corp., 35 F.3d 1435, 1442 (9th Cir. 1994), with Amended Verdict Form at 15–16, *Apple Inc. v. Samsung Elecs. Co.*, 920 F. Supp. 2d 1079 (N.D. Cal. 2013) (No. 11-CV-01846), 2012 WL 3635337, *aff’d in part and rev’d in part*, 786 F.3d 983 (Fed. Cir.

Global litigation between Apple and Samsung over the design of smartphones and tablets has been a watershed development, bringing to light the enormous importance of look and feel as both a driver of market value and a subject of intellectual property protection.⁴ Today, design—which includes everything from shape, color, and packaging to user interface, consumer experience, and brand aura—is attracting unprecedented attention.⁵ Indeed, in the 2016–2017 term the Supreme Court decided two cases concerning the intricacies of design protection, one involving design patent damages and the other the copyrightability of ornamental features of useful articles.⁶

But the law of design is confused and confusing. It is splintered among various doctrines in copyright, trademark, and patent law. Indeed, while nearly every area of IP law protects aspects of design, the law has taken a siloed approach, with separate disciplines developing ad hoc rules and exceptions. To make matters worse, different disciplines within IP use similar terms and concepts—for example, functionality and consumer confusion—but apply them in wholly different, even contradictory ways. In the *Apple Inc. v. Samsung Electronics Co.* litigation, for example, the Federal Circuit found Apple’s trade dress not protectable because it is functional in numerous ways. But then the court found the very same

2015), *rev’d*, 137 S. Ct. 429 (2016).

4. See Susanna Monseau, *The Challenge of Protecting Industrial Design in a Global Economy*, 20 TEX. INTELL. PROP. L.J. 495, 501 (2012) (emphasizing the importance of design in the modern economy); Paul Elias, *Apple’s Victory Could Mean Fewer Phone Options*, SEATTLE TIMES (Aug. 25, 2012), <http://www.seattletimes.com/nation-world/apples-victory-could-mean-fewer-phone-options> (describing litigation between the two companies in South Korea, Germany, Japan, Italy, the Netherlands, Britain, France, and Australia); Nick Wingfield, *Jury Awards \$1 Billion to Apple in Samsung Patent Case*, N.Y. TIMES (Aug. 24, 2012), <http://www.nytimes.com/2012/08/25/technology/jury-reaches-decision-in-apple-samsung-patent-trial.html>. In March 2013, Judge Lucy Koh reduced Samsung’s damages by almost half, noting that jurors had not followed her instructions in calculating damages. See Paul Elias, *Samsung’s \$1B Bill in Apple Case Reduced by \$450M*, ASSOCIATED PRESS (Mar. 1, 2013), http://www.apnewsarchive.com/2013/Samsung%27s_%241B_bill_in_Apple_case_reduced_by_%24450M/id-0ff9328d74164a1b8087126b7f72bc7c. Apple received injunctions against Samsung in Australia and Germany. Florian Schmidt-Bogatsky et al., *Apple v. Samsung Dispute Plays Out in Germany, Australia, and Japan*, 82 PAT., TRADEMARK & COPYRIGHT J. 847 (2011).

5. See Tim Brown & Roger L. Martin, *Design for Action*, HARV. BUS. REV., Sept. 2015, at 56, 57, <https://hbr.org/2015/09/design-for-action> (describing expansion of design to encompass strategy and complex systems within organizations).

6. *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1007 (2017) (holding that an element of a useful article may be eligible for copyright protection if it can be perceived as a separate two- or three-dimensional work of art and it would qualify as protectable subject matter if imagined separately from the useful article); *Samsung*, 137 S. Ct. at 432 (holding that the relevant “article of manufacture” for determining design patent infringement damages may be an entire product or part of a product). We discuss these cases *infra* notes 239, 332–338, 385 and accompanying text.

designs protectable under design patent law, which only protects nonfunctional elements, because design patent doctrine defines functionality differently.⁷ This paradoxical result should give pause. Although Congress and the courts may appear to have carefully calibrated protection within each separate doctrinal area, they may not have adequately considered *the simultaneous application of other types of protection*. Without an overarching understanding of and approach to design protection, the cumulative effect of overlapping exclusive rights is likely to lead to overprotection. Scholarship, too, has focused on design protection in distinct areas of law. But it has failed to see that there is a larger edifice being created on these stilts. Like blind men feeling different parts of the elephant, we fail to recognize the elephant standing in front of us.

This Article provides the first comprehensive assessment of the regulation of consumers' aesthetic experiences in copyright, trademark, and patent law—what we call “the law of look and feel.” We canvas the diverse ways that parties have utilized (and stretched) intellectual property law to protect design in a broad range of products and services, from Pac-Man to Louboutin shoes to the “feel of the 1970s” captured in Marvin Gaye’s music, from the décor of Mexican restaurants to Apple’s technologies of “pinch to zoom,” “bounce-back,” and “slide to unlock.” In so doing, we identify existing doctrines and principles that inform a normatively desirable law of look and feel that provides graduated protection for design. In particular, we reveal that most areas of IP law have developed limiting principles that usefully cabin protection of look and feel in response to evolving standardization, consumer expectations, and context. This is occurring largely without forethought, cobbled together as parties seek on the one hand to expand design protection, and on the other to articulate limitations and exceptions. We distinguish this implicit, normatively desirable law of look and feel from the manner in which some courts have expressly used the term “look and feel” to justify expansive intellectual property protection of design. Going further, we argue that the new enclosure movement of design, if not comprehensively reformed and grounded in theory, can in fact erode innovation, competition, and culture itself.

7. *Apple*, 786 F.3d at 993, 995. See Christopher Buccafusco & Jeanne C. Fromer, Fashion’s Function in Intellectual Property Law 36 (on file with authors) (“What ‘functional’ means in the context of design patent law seems less stringent—and putting more of a thumb on the scale in favor of protectability—than in copyright and trademark laws.”).

We define look and feel broadly. To begin, we adopt a definition that accords with how design theorists conceptualize design writ large, which is more capacious than how courts have used the term “look and feel” in judicial opinions. Look and feel, as we understand it, both harkens back to the longstanding philosophical study of “aesthetics” as well as includes the contemporary conception of design in the emergent liberal art of “design thinking.” In his *Lectures on Aesthetics*, Hegel referred to aesthetics as “the science of sensation, of feeling.”⁸ Today, commerce has come to appreciate the profound importance of aesthetics for market success. “Aesthetics,” Virginia Postrel writes, “is why you buy something.”⁹ As with Apple’s iPhone, look and feel blends beauty and utility, integrating form and function.¹⁰ At the level of artifact, look and feel includes elements such as shape, color, style, layout, packaging, and overall visual appearance. At a more conceptual level, it encompasses intangible qualities such as modes of interaction, aesthetic experience, brand aura,¹¹ and *zeitgeist*.¹² Consider the example of the upscale youth fashion retailer Abercrombie & Fitch. Abercrombie’s look and feel extends well beyond its name, logos, and even store layouts. Entering an Abercrombie store is a total sensory experience,

8. 1 G.W.F. HEGEL, HEGEL’S AESTHETICS: LECTURES ON FINE ART I (reprint 1988) (T.M. Knox trans., 1975). See also *id.* at 32 (“[F]ine art is meant to arouse feeling, in particular the feeling that suits us, pleasant feeling.”). Alexander Baumgarten coined the term “aesthetics” in 1735, developing the “science of perception” or the “science of sensible cognition.” Paul Guyer, *18th Century German Aesthetics*, STAN. ENCYCLOPEDIA OF PHIL. (Mar. 3, 2014), <https://plato.stanford.edu/archives/win2016/entries/aesthetics-18th-german>.

9. VIRGINIA POSTREL, THE SUBSTANCE OF STYLE: HOW THE RISE OF AESTHETIC VALUE IS REMAKING COMMERCE, CULTURE, AND CONSCIOUSNESS 8 (2003).

10. As one commentator puts it, the purpose of design is to create things that “mak[e] life easier and more enjoyable.” Alice Rawsthorn, *What Defies Defining, but Exists Everywhere?*, N.Y. TIMES (Aug. 17, 2008), <http://www.nytimes.com/2008/08/18/arts/18iht-DESIGN18.1.15325667.html>.

11. See Janice M. Mueller & Daniel Harris Brean, *Overcoming the “Impossible Issue” of Nonobviousness in Design Patents*, 99 KY. L.J. 419, 436 (2011) (“Designers are concerned with the consumer’s complete relationship with the designed object or product.”). Such emphasis on brand aura is particularly important given that consumers tend to rely more on global attitudes toward brands—rather than specific brand attributes—when evaluating new products. Mark A. Lemley & Mark P. McKenna, *Owning Mark(et)s*, 109 MICH. L. REV. 137, 160 (2010). See also Deven R. Desai, *From Trademarks to Brands*, 64 FLA. L. REV. 981, 1021–25 (2012) (discussing use of trade dress to protect overall brand image and aura).

12. G.W.F. HEGEL, PHENOMENOLOGY OF SPIRIT 32 (A.V. Miller trans., 1977) (elaborating transformation from individual subjective spirit to objective spirit). See Orit Fischman Afori, *Reconceptualizing Property in Designs*, 25 CARDOZO ARTS & ENT. L.J. 1105, 1106 (2008) (“Design has become much more than superficial styling concerned with surface appearance, but rather integrates technology, aesthetics and social values . . .”). See also Paul Redding, *Georg Wilhelm Friedrich Hegel*, STAN. ENCYCLOPEDIA OF PHIL. (Aug. 4, 2015), <https://plato.stanford.edu/archives/spr2016/entries/hegel> (defining *Zeitgeist*) (“‘Geist’ can be translated as either ‘mind’ or ‘spirit’, but the latter, allowing a more cultural sense, as in the phrase ‘spirit of the age’ (‘Zeitgeist’), seems a more suitable rendering for the title.”).

from the scent of a distinct and familiar cologne in the air to the scantily clad “models” who sell both clothes and an image.¹³ Abercrombie laboriously creates an overall brand aura of youthful fantasy that evokes a certain time and place, and it has sought to protect that image—which includes human models—as “trade dress.”¹⁴ To what extent does IP law protect this expansive view of look and feel, and what are the economic, social, and cultural implications of such protection?¹⁵

Adapting familiar principles to a novel context, we argue that exclusive rights in look and feel that are not sufficiently attentive to standardization, consumer expectations, and context may undermine innovation and cultural cohesion. In a variety of ways, intellectual property law is skeptical of strict exclusive rights over standards, whether they are expressive, linguistic, or technological. Copyright does not allow exclusive rights in stock and necessary expressions, trademark does not extend to generic words embodying linguistic conventions, and patent law mitigates exclusive rights on technological platforms engendering significant social reliance. In similar fashion, we develop a conception of look and feel as *zeitgeist*—an aesthetic or cultural standard that objectively expresses the spirit of an age.¹⁶ Extending principles of intellectual property law, we argue that when particular forms of look and feel become our lexicon and central to our shared meaning and understanding of a certain time and place, they should come to belong to the culture at large. As we show, doctrines from copyright (*scènes à faire* and merger) and trademark (distinctiveness, genericide, and functionality) already recognize this dynamic nature of design as *zeitgeist* and relax exclusive rights accordingly. Our comprehensive view of the law of look and feel reveals areas of design law, notably design patents, that fail to incorporate this

13. See Stacy Perman, *Abercrombie's Beefcake Brigade*, TIME (Feb. 14, 2000), <http://www.time.com/time/magazine/article/0,9171,996083,00.html> (“Gap peddles clothes, but Abercrombie & Fitch sells a Technicolor teen lifestyle—one of the reasons it is the brand of the moment.”).

14. *Abercrombie & Fitch Stores, Inc. v. Am. Eagle Outfitters, Inc.*, 280 F.3d 619, 624 (6th Cir. 2002). Abercrombie is not the only company to market the “look” of its employees as its trade dress. See *HI Ltd. P'ship v. Winghouse of Fla., Inc.*, 347 F. Supp. 2d 1256, 1258 (M.D. Fla. 2004) (offering argument that the Hooters restaurant chain's well-endowed waitresses were protectable trade dress).

15. For its part, Abercrombie has been repeatedly challenged for marketing an image that is racially exclusive and chauvinist. In 2005, a federal district judge approved a settlement requiring Abercrombie to pay \$40 million to several thousand minority and female plaintiffs who claimed that Abercrombie's hiring practices and marketing image were racially discriminatory. Consent Decree at 47, *Gonzalez v. Abercrombie & Fitch Stores, Inc.*, Nos. 03-2817 SI, 04-4730, 04-4731 (N.D. Cal. Apr. 11, 2005), <http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1022&context=condec>.

16. See *supra* note 12.

dynamic view of design.

The Article unfolds in four parts. Part I briefly introduces the rise of look and feel as a driver of market value and subject of intellectual property claims. Part II examines existing doctrines and identifies an overarching, normatively desirable law of look and feel. Our review of various intellectual property regimes within the United States¹⁷ reveals limitations in copyright, trademark, and utility patent doctrine that usefully constrain protection of design in response to standardization, consumer expectations, and context. But the review of the law reveals an alarming result: these limitations are largely absent from design patent law. Part III turns from doctrine to theory. We consider utilitarian, moral, and information-cost theories of intellectual property protection, concluding that they counsel for a limited right in design at best. Additionally, we consider design theory (called “design thinking”), which, while providing some justification for exclusive rights in look and feel, generally favors wide access to designs to foster communal appreciation, follow-on creativity, and democratic inclusiveness. Part IV applies these doctrinal and theoretical insights to suggest reforms to the law of look and feel. While offering prescriptions for several branches of IP and applications to the design cases recently decided by the Supreme Court, we argue in particular for bold changes to design patent law, from its subject matter to its standard for infringement and method for assessing remedies. We seek to bring balance to this jejune area of law by incorporating and tailoring limitations from other, more mature fields of intellectual property.¹⁸

I. THE RISE OF LOOK AND FEEL

Look and feel has come to occupy a central position in the modern economy. Whereas companies have long sought to differentiate their products based on price, quality, technological features, or other traditional metrics, increasingly they are seeking to create broader, all-encompassing experiential landscapes that create a deep and unique bond with consumers.¹⁹ Apple’s enormous success—attributable in significant part to

17. Cf. GRAEME B. DINWOODIE & MARK D. JANIS, *TRADE DRESS AND DESIGN LAW* 3 (2010) (providing elaborate discussion of design protections under international law).

18. See *id.* (“[V]isual imagery has become predominant in modern culture. Accordingly, the pressure is mounting to provide an adequately balanced scheme of design protection.”).

19. The rise of look and feel has coincided with a strong emphasis on branding. According to one study, 72% of consumers would pay a 20% premium over the price of the closest competitive brand. SCOTT M. DAVIS, *BRAND ASSET MANAGEMENT: DRIVING PROFITABLE GROWTH THROUGH YOUR BRANDS* 5 (2002). Average brands engender loyalty, and more famous brands inspire even more. Mark A. Lemley & Mark P. McKenna, *Is Pepsi Really a Substitute for Coke? Market Definition in Antitrust*

user-friendly interfaces, aesthetically pleasing product design, and a company-wide ethos of “cool”—illustrates the enormous value of look and feel in contemporary times: “Apple has become the most valuable company by creating products that stand out for design and ease of use, stemming from scores of smaller innovations, such as rubberbanding, rather than epic underlying technology breakthroughs.”²⁰ Apple’s products are perceived to be rare, and to confer social distinction on its users, even while they are ubiquitous and mass produced.²¹

In surprising ways, firms have also sought to enhance the look and feel of consumer products not usually associated with design. PepsiCo’s CEO, Indra Nooyi, emphasizes that “‘design’ has a voice in nearly every important decision that the company makes”—from how customers snack on a chip to the way a machine dispenses soda.²² Mass Mutual life insurance used design thinking to develop a campaign to appeal to younger customers.²³ Large companies such as IBM,²⁴ Procter & Gamble, Steelcase, and Ford routinely consult IDEO, a leading design firm that advocates for holistic “design thinking.”²⁵ “Design thinking began as a way to improve the process of designing tangible products. But that’s not where it will end,” wrote Tim Brown and Roger Martin in a recent issue of the *Harvard Business Review*.²⁶ “[D]esign thinking principles have the potential to be even more powerful when applied to managing the intangible challenges involved in getting people to engage with and adopt innovative new ideas and experiences.”²⁷ Two decades ago, Lee Kun-Hee, then chairman of Samsung Group, concluded that the company needed to develop design

and IP, 100 GEO. L.J. 2055, 2086 (2012).

20. Burrows, *supra* note 2. Rubberbanding refers to the appearance of “stretching” slightly beyond the end of a document when scrolling on a smart phone or tablet. *See id.*

21. Barton Beebe, *Intellectual Property Law and the Sumptuary Code*, 123 HARV. L. REV. 809, 823–24 (2010).

22. Adi Ignatius, *How Indra Nooyi Turned Design Thinking into Strategy: An Interview with PepsiCo’s CEO*, HARV. BUS. REV., Sept. 2015, at 80, 81, <https://hbr.org/2015/09/how-indra-nooyi-turned-design-thinking-into-strategy>.

23. *See Helping Young Adults Make Smart Money Decisions*, IDEO (Oct. 2014), <https://www.ideo.com/case-study/helping-young-adults-make-smart-money-decisions>.

24. Steve Lohr, *IBM’s Design-Centered Strategy to Set Free the Squares*, N.Y. TIMES (Nov. 14, 2015), <https://www.nytimes.com/2015/11/15/business/ibms-design-centered-strategy-to-set-free-the-squares.html> (noting IBM’s hiring of 1,000 designers and its effort to train management in “design thinking”).

25. Chris Luebke, *Design Is Our Answer: An Interview with Leading Design Thinker Tim Brown*, ARCHITECTURAL DESIGN, July–Aug. 2015, at 34, 34.

26. Brown & Martin, *supra* note 5, at 64.

27. *Id.*

expertise, “which he believed would become ‘the ultimate battleground for global competition in the 21st century.’”²⁸ Cutting-edge designs of Samsung televisions conscientiously sacrificed technical functionality to bolster look and feel, thus achieving great commercial success.²⁹ Designers now help “visualize the future of the entire company.”³⁰ More generally, high technology firms that once consulted designers to develop hardware (such as the shape of a smartphone) now routinely enlist them to create the look and feel of software.³¹

Not surprisingly, the rise of look and feel as a source of market value has also encouraged firms to protect it as intellectual property.³² Indeed, the *Apple v. Samsung* litigation “represents a coming out party for design rights in general.”³³ In contexts as diverse as websites³⁴ and fashion,³⁵ companies have been looking for new ways to assert exclusive rights over design. In particular, litigation over smartphones and tablets has brought increased attention to design patents.³⁶ Apple’s business strategy reflects this trend. Tellingly, while 2.7% of patents granted to technology companies are design patents, they comprise 13.4% of Apple’s 5,452 patents.³⁷ Indeed, Apple’s litigation with Samsung represents a new model for intellectual property disputes in which design patents, alongside technology-oriented utility patents, play a prominent role.³⁸ In the litigation, Apple sought \$2.5 billion in damages, or \$31 for each infringing device sold by Samsung. Notably, Apple ascribed \$24 of that \$31 to damages based on Samsung’s infringement of design patents.³⁹ Recent years have seen a surge in the annual number of registrations for design patents at a pace that exceeds

28. Youngjin Yoo & Kyungmook Kim, *How Samsung Became a Design Powerhouse*, HARV. BUS. REV., Sept. 2015, at 72, 74, <https://hbr.org/2015/09/how-samsung-became-a-design-powerhouse>.

29. *Id.* at 77.

30. *Id.* at 74.

31. Brown & Martin, *supra* note 5, at 58.

32. Christopher V. Carani, *Apple v. Samsung: Design Patents Take Center Stage*, 5 LANDSLIDE 25, 31 (2013) (“Simply put, looks matter. Once a company reaches that conclusion, and then invests in good design, it is a natural conclusion that it will want to protect, and if need be enforce, its designs.”).

33. *Id.* at 25.

34. JEFFREY H. MATSUURA, *MANAGING INTELLECTUAL ASSETS IN THE DIGITAL AGE* 87 (2003).

35. C. Scott Hemphill & Jeannie Suk, *The Law, Culture, and Economics of Fashion*, 61 STAN. L. REV. 1147, 1150 (2009).

36. Clare O’Connor, *Fashion’s ‘Apple Vs. Samsung’: Spanx Patent War Could Change How Brands Fight Copycats*, FORBES (Apr. 10, 2013, 1:57 PM), <http://www.forbes.com/sites/clareoconnor/2013/04/10/fashions-apple-vs-samsung-spanx-patent-war-could-change-how-brands-fight-copycats>. See also Lohr, *supra* note 24.

37. Burrows, *supra* note 2.

38. *Id.*

39. *Id.*

those for utility patents.⁴⁰ Even indigenous peoples, wary of cultural appropriation and design piracy, seek legal recognition and remuneration for distinctive look and feel. The community of Santa Maria Tlahuitoltepec in Mexico, for example, recently demanded reparations from French designer Isabel Marant after accusing Marant of plagiarizing the Oaxacan design of a Tlahuitoltepec blouse.⁴¹

The increasing importance of look and feel, along with increasing assertions of exclusive rights over design, has significant implications for competition and consumer welfare. As Mark Lemley and Mark McKenna describe, product differentiation based on intellectual property exclusion, combined with brand loyalty, creates conditions where small price increases will not deter consumer purchasing.⁴² Apple's brand aura, combined with an integrated intellectual property strategy to protect its designs, means that in some sense Apple does not compete against Samsung (or any other technology company) but is the sole player in its own market.⁴³ Thus, even though an Apple iPhone and Samsung Galaxy may appear to be quite interchangeable, design features, brand stickiness, and intellectual property protection of look and feel may render them ineffective substitutes.⁴⁴ This result provides significant market power to firms exercising exclusive rights over look and feel. As we will see, beyond economic effects, exclusive rights over look and feel also reduce cultural cohesion, as one rights holder can become the gatekeeper to a broad aesthetic standard.

40. Beebe, *supra* note 21, at 863.

41. Naomi Larsson, *Inspiration or Plagiarism? Mexicans Seek Reparations for French Designer's Look-Alike Blouse*, GUARDIAN (June 17, 2015, 9:48 AM), <http://www.theguardian.com/global-development-professionals-network/2015/jun/17/mexican-mixe-blouse-isabel-marant>. Accusations of cultural appropriation of indigenous, South American, African, and Asian designs are denounced on Twitter and social media with #mycultureisnotcouture. See, e.g., #My Culture Is Not Couture, TOP TEA (May 30, 2015), <http://thetoptea.com/my-culture-is-not-couture>; Morgan Majesty, *Let's Talk About It: My Culture Is Not Couture*, SECRETS THAT SELL (July 13, 2015), <https://secretsthatsell.wordpress.com/2015/07/13/my-culture-is-not-couture>.

42. Lemley & McKenna, *supra* note 19, at 2057.

43. Cf. *id.* (illustrating a similar dynamic with Pepsi and Coke); Justin Hughes, *Cognitive and Aesthetic Functionality in Trademark Law*, 36 CARDOZO L. REV. 1227, 1283–84 (2015) (“[T]he exclusive rights of trademark law are intended to foster product differentiation but at some point product differentiation arguably creates distinct markets that are de facto controlled by trademark holders.”).

44. See Lemley & McKenna, *supra* note 19, at 2081–82.

II. THE LAW OF LOOK AND FEEL

This Part examines the myriad ways in which parties have utilized intellectual property law to protect look and feel. In a variety of ways—some rather surprising—parties are employing copyrights, trademarks, and patents to assert exclusive rights over design. While some of these attempts fall within the heartland of traditional doctrine, parties have also stretched and bent doctrinal contours. There is a dynamic element to this trend, and this Part will show how various doctrines are shifting, in some cases to expand protection of look and feel. In so doing, we identify an emergent law of look and feel that arises from limiting principles in copyright, trademark, and patent law that constrain protection of look and feel based on standardization, consumer expectations, and context. Notably, this Article distinguishes this emergent, normatively desirable law of look and feel from the overly expansive way in which courts have actually used the term “look and feel” to justify protection of design. It further shows that these valuable safeguards are conspicuously absent from design patent law.

A. COPYRIGHTS

Copyright law has long protected look and feel, at times quite expansively.⁴⁵ For example, in a 1970 case involving greeting cards that arranged familiar text and illustrations in an original manner, the Ninth Circuit held that the infringer had appropriated the “total concept and feel” of the copyrighted cards.⁴⁶ The court later held that McDonaldland characters infringed the “total concept and feel” of a copyrighted children’s television program featuring similar characters.⁴⁷ Around the same time, the Second Circuit acknowledged the propriety of considering “total concept and feel” when comparing a copyrighted children’s book and an allegedly infringing children’s magazine story,⁴⁸ though it declined to find infringement in that case.⁴⁹ Copyright law’s protection of look and feel in these cases has an expansive, holistic character, reflecting an

45. The Supreme Court has long held that copyright is not confined to “works of the fine arts” and that it also extends to articles of mass manufacture. *Mazer v. Stein*, 347 U.S. 201, 213 (1954). See Ralph S. Brown, *Design Protection: An Overview*, 34 UCLA L. REV. 1341, 1344–45 (1987).

46. *Roth Greeting Cards v. United Card Co.*, 429 F.2d 1106, 1110 (9th Cir. 1970).

47. *Sid & Marty Krofft Television Prods., Inc. v. McDonald’s Corp.*, 562 F.2d 1157, 1167 (9th Cir. 1977). See Alfred C. Yen, *A First Amendment Perspective on the Idea/Expression Dichotomy and Copyright in a Work’s “Total Concept and Feel,”* 38 EMORY L.J. 393, 410 (1989) (characterizing *Roth* and *Krofft* as implying “a potentially massive restructuring of the distinction between idea and expression”).

48. *Reyher v. Children’s Television Workshop*, 533 F.2d 87, 91 (2d Cir. 1976).

49. *Id.* at 92–93.

impressionistic conception of a work's totality rather than emphasizing individual elements. Barton Beebe has analogized it to protection against dilution of a distinctive style rather than more narrow protection against substitutive copying.⁵⁰ Viewed in this light, protection for total concept and feel can be rather broad and abstract.⁵¹

Copyright law's holistic protection of look and feel is perhaps best illustrated by cases involving video games and software.⁵² For example, the makers of Pac-Man obtained a preliminary injunction against the makers of the allegedly infringing K.C. Munchkin "gobbler" video game after the Seventh Circuit ruled that the defendant's game had captured the "total concept and feel" of Pac-Man.⁵³ Additionally, in *Atari Games Corp. v. Oman*, the D.C. Circuit ruled that even if the individual elements of a video game screen were not copyrightable, the screens as a whole and the way in which they interact with each other or with sound effects may be.⁵⁴ The court emphasized similarities in "the flow of the game as a whole,"⁵⁵ thus further reflecting the impressionistic, evocative nature of copyright's protection of look and feel.

In *Whelan Associates, Inc. v. Jaslow Dental Laboratory, Inc.*, the Third Circuit articulated a sweeping conception of protectable expression in the software context, noting that "everything that is not necessary to [a work's] purpose or function" is protectable.⁵⁶ Under this (controversial) formulation, discretionary elements of software and related visual

50. Beebe, *supra* note 21, at 862.

51. See Yen, *supra* note 47, at 397, 428 ("[T]otal concept and feel' protection is unconstitutional unless copyright doctrine contains a meaningful limit on how far such protection can go."); See *v. Durang*, 711 F.2d 141, 144 (9th Cir. 1983) (holding that infringement may arise from the "mood evoked by [a] work").

52. See *Broderbund Software, Inc. v. Unison World, Inc.*, 648 F. Supp. 1127, 1137 (N.D. Cal. 1986) (defining the look and feel of a user interface as "the sequence of the screens and the choices presented, the layout of the screens, and the method of feedback to the user"); Gregory J. Wrenn, Comment, *Federal Intellectual Property Protection for Computer Software Audiovisual Look and Feel: The Lanham, Copyright, and Patent Acts*, 4 HIGH TECH. L.J. 279, 283 (1990); MATSUURA, *supra* note 34, at 75.

53. *Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 620 (7th Cir. 1982). See also *Data E. USA, Inc. v. Epyx, Inc.*, 862 F.2d 204, 208 (9th Cir. 1988).

54. *Atari Games Corp. v. Oman*, 979 F.2d 242, 244 (D.C. Cir. 1992) (citing *Stillman v. Leo Burnett Co.*, 720 F. Supp. 1353, 1361 (N.D. Ill. 1989) ("[S]ynergy of . . . nonprotectible elements in [television] commercial creates a whole that is greater than the sum of its parts.")).

55. *Id.* at 245.

56. *Whelan Assocs., Inc. v. Jaslow Dental Lab. Inc.*, 797 F.2d 1222, 1236 (3rd Cir. 1986) (emphasis original). See Yen, *supra* note 47, at 413 (critiquing the extremely limited conception of unprotectable idea arising from *Whelan*).

displays—such as the wording of a menu command, the layout of icons on a screen, and other elements of look and feel—may constitute protectable expression.⁵⁷ Along these lines, in *Broderbund Software, Inc. v. Unison World, Inc.*, the Northern District of California noted “the eerie resemblance between the screens” of the protected and allegedly infringing programs, concluding that “the sequence of the screens and the choices presented, the layout of the screens, and the method of feedback to the user are all substantially similar.”⁵⁸ Furthermore, in *Lotus Development Corp. v. Paperback Software International*, the District of Massachusetts ruled that the user interface of Lotus 1-2-3, a popular spreadsheet program, comprised copyrightable expression.⁵⁹ The court noted that the particular expression of the menu structure reflected conscious design choices and was not essential to the function of the spreadsheet.⁶⁰ This expansive approach to protection may be highly problematic, however, as “programmers who want to avoid duplicating the ‘total concept and feel’ of other programs face tremendous uncertainty in figuring out just what it is they should try to avoid copying.”⁶¹

Of course, copyright’s protection of look and feel extends well beyond the realm of software, video games, and graphical user interfaces. In a recent high-profile case in the music industry, the estate of Marvin Gaye prevailed against pop stars Pharrell Williams and Robin Thicke in a copyright infringement suit involving the “feel” of a 1970s song.⁶² A federal jury found that Thicke’s 2013 hit song “Blurred Lines” copied elements of Gaye’s 1977 song “Got to Give It Up.” Thicke argued that any similarities between the songs arose from evoking a particular era and feeling rather than actually imitating specific musical themes.⁶³ Williams acknowledged that he had been “channeling that feeling, that late-70s feeling,”⁶⁴ and his lawyers accused Gaye of improperly asserting

57. See Michael Risch, *Functionality and Graphical User Interface Design Patents*, 17 STAN. TECH. L. REV. 53, 75 (2013). It should be noted that *Whelan* has been roundly criticized in the academic literature. See Pamela Samuelson, *Functionality and Expression in Computer Programs: Refining the Tests for Software Copyright Infringement* 9 (UC Berkeley Pub. Law Research, Working Paper No. 2667740, 2015), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2667740.

58. *Broderbund Software, Inc. v. Unison World, Inc.*, 648 F. Supp. 1127, 1137 (N.D. Cal. 1986).

59. *Lotus Dev. Corp. v. Paperback Software Int’l*, 740 F. Supp. 37, 67 (D. Mass. 1990).

60. *Id.*

61. Yen, *supra* note 47, at 431.

62. Ben Sisario & Noah Smith, ‘*Blurred Lines*’ Infringed on Marvin Gaye Copyright, Jury Rules, N.Y. TIMES (Mar. 10, 2015), <https://www.nytimes.com/2015/03/11/business/media/blurred-lines-infringed-on-marvin-gaye-copyright-jury-rules.html>.

63. *Id.*

64. Victoria Kim, *Pharrell Williams Denies ‘Blurred Lines’ Copied Marvin Gaye Song*, L.A. TIMES (Mar. 5, 2015, 6:26 AM), <http://www.latimes.com/local/lanow/la-me-ln-blurred-lines-trial->

“ownership of an entire genre, as opposed to a specific work.”⁶⁵ Nevertheless, the jury awarded \$7.3 million to Gaye’s family,⁶⁶ and the result has engendered significant controversy over the expansive reach of copyright.

Turning to visual media, the Sixth Circuit held that stripes, chevrons, zigzags, and color blocking imprinted on cheerleader uniforms are not functional⁶⁷ and constitute protectable expression.⁶⁸ On appeal, the Supreme Court ruled that such features of useful articles may be copyrighted if they can be perceived as works of art separate from the useful article and would qualify as protectable pictorial, graphical, or sculptural works if imagined separately.⁶⁹ Furthermore, in 2015 the Ninth Circuit ruled against a maker of Batmobile replicas that sold for upwards of \$90,000 to avid car collectors, holding that only copyright holder DC Comics has the right to exploit fans’ insatiable desire to acquire memorabilia with the look and feel of Batman.⁷⁰

Although this survey illustrates copyright law’s expansive protection of look and feel, a deeper analysis reveals several important limitations that, we argue, contribute to a less-recognized, normatively desirable law of look and feel.⁷¹ Such limitations can either foreclose protection altogether for a work or constrain the scope of protection such that the standard for infringement becomes “virtual identity” rather than the easier-to-satisfy standard of “substantial similarity.” First, the idea-expression dichotomy confines copyright protection only to the particularized, expressive elements of a work rather than to its underlying ideas.⁷² For example, the

pharrell-williams-20150304-story.html.

65. Eriq Gardner, *Robin Thicke Sues to Protect ‘Blurred Lines’ from Marvin Gaye’s Family*, HOLLYWOOD REP. (Aug. 15, 2013, 6:13 PM), <http://www.hollywoodreporter.com/thr-esq/robin-thicke-sues-protect-blurred-607492>.

66. Sisario & Smith, *supra* note 62.

67. *See* Varsity Brands, Inc. v. Star Athletica, LLC, 799 F.3d 468, 470–71, 475 (6th Cir. 2015), *aff’d*, 137 S. Ct. 1002 (2017).

68. *Id.* at 492. *See* Barry Werbin, *Sixth Circuit Reversal in Varsity Brands v. Star Athletica*, ENT., ARTS & SPORTS LAW BLOG (Aug. 21, 2015, 9:48 AM), http://nysbar.com/blogs/EASL/2015/08/sixth_circuit_reversal_in_vars.html.

69. *Star Athletica*, 137 S. Ct. at 1007.

70. *DC Comics v. Towle*, 802 F.3d 1012, 1027 (9th Cir. 2015), *cert. denied*, 136 S. Ct. 1390.

71. *See* Apple Comput., Inc. v. Microsoft Corp., 35 F.3d 1435, 1438 (9th Cir. 1994) (enumerating a non-exhaustive list of limiting doctrines including “originality, functionality, standardization, *scènes à faire*, and merger”).

72. *See* Baker v. Selden, 101 U.S. 99, 99 (1879). As we have seen, however, narrow conceptions of “ideas” can leave significant room to copyright protectable “expression.” *Whelan Assocs., Inc. v. Jaslow Dental Lab. Inc.*, 797 F.2d 1222, 1234–35 (3rd Cir. 1986).

Ninth Circuit has applied the idea-expression dichotomy to reject infringement based on general similarities—inhering at the level of ideas—between two lines of dinosaur toys.⁷³ The related doctrine of merger holds that when there is only a limited number of ways to express a particular idea, idea and expressions *merge*, resulting in those expressions receiving no or limited protection.⁷⁴ A related constraint is the useful article doctrine, which prohibits copyright protection on useful or functional aspects of any work.⁷⁵ In *Brandir International, Inc. v. Cascade Pacific Lumber Co.*, the Second Circuit denied the copyrightability of the familiar (and aesthetically pleasing) undulating “U” design for a bicycle rack because it arose in part from functional considerations.⁷⁶

A final limitation is the *scènes à faire* doctrine, which limits protection of standard or stock expressions necessary to the treatment of a given idea.⁷⁷ Notably, the *scènes à faire* doctrine is sensitive both to social reliance and the dynamic evolution of such reliance; an expression can *become* nonprotectable *scène à faire* if it becomes so widely adopted that it is necessary to tell a particular kind of story or audiences come to expect it.⁷⁸ In short, through a variety of doctrinal mechanisms, copyright law regulates the protection of expression, including look and feel, in response to standardization, consumer expectations, and context.⁷⁹ Thus, copyright law offers potentially broad protection for look and feel, while also recognizing exceptions to protection when aesthetic features become standard or necessary for communicating and promoting shared meaning.

Indeed, courts have invoked these doctrines to limit copyright

73. *Aliotti v. R. Dakin & Co.*, 831 F.2d 898, 903 (9th Cir. 1987). *See* Yen, *supra* note 47, at 411–12.

74. *See* *Apple Comput., Inc. v. Franklin Comput. Corp.*, 714 F.2d 1240, 1253 (3d Cir. 1983); *Morrissey v. Procter & Gamble*, 379 F.2d 675, 678–79 (1st Cir. 1967); ROBERT P. MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 481 (6th ed. 2012).

75. *See* 17 U.S.C. § 102(b) (2012).

76. *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1143–44 (2d Cir. 1987) (noting that aesthetic elements of a useful article are only eligible for copyright if they are physically or conceptually separable from the article). *But see* *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1014 (2017) (abandoning the distinction between physical and conceptual separability).

77. *See, e.g.*, *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339, 1363 (Fed. Cir. 2014); *Walker v. Time Life Films, Inc.*, 784 F.2d 44, 50 (2d Cir. 1986); *Reyher v. Children’s Television Workshop*, 533 F.2d 87, 92 (2d Cir. 1976) (declining to find infringement because similarities existed at the level of *scènes à faire*); Peter Lee, *The Evolution of Intellectual Infrastructure*, 83 WASH. L. REV. 39, 59–62 (2008).

78. *See* Lee, *supra* note 77, at 82–83.

79. *See, e.g.*, *Comput. Assocs. Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 707–10 (2d Cir. 1992) (holding that in the influential abstraction-filtration-comparison test for infringement, courts should filter out elements dictated by efficiency and external factors such as prevailing standards).

protection of look and feel in a variety of contexts. For example, in *Frybarger v. International Business Machines Corp.*, the Ninth Circuit considered an infringement suit involving two video games with similar displays and main characters.⁸⁰ Invoking the idea-expression dichotomy as well as the concept of expressive necessity, the court ruled that “each of the similar features constitutes a basic idea of the videogames” and is “indispensable, or at least standard, in the treatment of a given [idea].”⁸¹ Because of the indispensable nature of the similar elements, infringement could only arise from virtually identical copying, which was lacking.⁸²

Courts have even imposed constraints on protecting look and feel against Apple. Decades before its suit against Samsung, Apple sued Microsoft for allegedly infringing Apple’s copyrighted graphical user interface (GUI).⁸³ Apple asserted, among other claims, that Microsoft Windows had appropriated the “total concept and feel” of its interface.⁸⁴ Invoking the merger doctrine, however, the Ninth Circuit observed that the ideas inhering in Apple’s desktop icons only admitted of a small number of possible expressions, thus resulting in very “thin” copyright protection.⁸⁵ Citing the *scènes à faire* doctrine, the court noted limited design options for displaying multiple windows at the same time, namely a tile system and overlapping windows. Drawing on consumer expectations, the court observed that “overlapping windows have been the clear preference in graphic interfaces,” thus undercutting Apple’s claim that Microsoft’s mere use of this design scheme constituted infringement.⁸⁶ Finally, invoking the useful article doctrine, the court ruled that the movement of icons in Apple’s GUI “exemplifies an essentially functional process,” thus weighing toward “thin” protection of such expression.⁸⁷ Based in part on widespread reliance on windows-based interfaces and consumer expectations, the court held that the look and feel of Microsoft’s products did not infringe Apple’s displays.⁸⁸

80. *Frybarger v. Int’l Bus. Machs. Corp.*, 812 F.2d 525, 529 n.2 (9th Cir. 1987).

81. *Id.* at 530 (quoting *Atari, Inc. v. N. Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 616 (7th Cir. 1982)).

82. *Id.*

83. See Paul M. Barrett, *Apple vs. Samsung: The Longer View*, BLOOMBERG (Aug. 30, 2012), <https://www.bloomberg.com/news/articles/2012-08-30/apple-vs-dot-samsung-the-longer-view>.

84. *Apple Comput., Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1442 (9th Cir. 1994).

85. *Id.* at 1444.

86. *Id.*

87. *Id.*

88. See Lee, *supra* note 77, at 84. Cf. Risch, *supra* note 57, at 58 (“[W]here the design becomes a de facto standard in an industry, courts may be more likely to allow others to use it.”).

Other courts have also considered social reliance and the “indispensability” of particular expressions in rejecting copyright protection for look and feel. In *Lotus Development Corp. v. Borland International, Inc.*, Lotus accused Borland of infringing the copyright in the “menu command hierarchy” of Lotus’s popular 1-2-3 spreadsheet program.⁸⁹ The First Circuit, however, ruled that Lotus’s menu command represented an uncopyrightable “method of operation.”⁹⁰ Considering functionality and consumer reliance, the court observed that it would be “absurd” to require users who were familiar with Lotus 1-2-3 to learn different methods for performing identical functions in Borland’s spreadsheet.⁹¹ In his concurrence, Judge Boudin explicitly noted that much of the value of a creative work, such as a suite of spreadsheet commands, may reside in the effort that *users* have put in to mastering it rather than its intrinsic creative merit.⁹² Here, the status of Lotus’s menu command hierarchy as a standard interface helped weigh against protecting it with copyright.⁹³ In sum, copyright applies important limiting principles to protecting look and feel.⁹⁴ Copyright doctrine may eliminate or narrow protection of certain works to further the interests of expressive necessity and consumer expectations, both of which may evolve over time.

Commentators have also recognized that standardization should limit protection in other areas of look and feel. In the music context, the refusal to recognize “sound-alike” protection for copyright owners allows follow-on artists to mimic emergent styles and to develop musical genres.⁹⁵ In fashion, which is subject to vigorous debates regarding copyrightable subject matter,⁹⁶ it is well established that “standard features of a design—a pinstripe, say, or an A-line silhouette—are not copyrightable.”⁹⁷ Scott Hemphill and Jeannie Suk have influentially argued for extending

89. *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 49 F.3d 807, 810 (1st Cir. 1995).

90. *Id.* at 815. See 17 U.S.C. § 102(b) (2012); Risch, *supra* note 57, at 76.

91. *Lotus*, 49 F.3d at 817–18.

92. *Id.* at 819–20 (Boudin, J., concurring).

93. See Risch, *supra* note 57, at 85.

94. Although functionality and standardization have historically represented valuable safeguards in copyright, there has been some erosion of these doctrines. See *Oracle Am., Inc. v. Google Inc.*, 750 F.3d 1339, 1372 (Fed. Cir. 2014) (citing *Practice Mgmt. Info. Corp. v. Am. Med. Ass’n*, 121 F.3d 516, 520 n.8 (9th Cir. 1997)) (eschewing the notion that copyrighted works lose their protection upon becoming popular or the effective industry standard), *cert. denied*, 135 S. Ct. 1021 (2015).

95. See 17 U.S.C. § 114(b) (2012).

96. See, e.g., Hemphill & Suk, *supra* note 35, at 1150; Kal Raustiala & Christopher Sprigman, *The Piracy Paradox: Innovation and Intellectual Property in Fashion Design*, 92 VA. L. REV. 1687, 1688 (2006).

97. Hemphill & Suk, *supra* note 35, at 1187.

copyright-like protection to fashion.⁹⁸ Notably, however, they recognize the value of allowing producers and consumers to participate in and draw from current trends and common themes.⁹⁹ As such, they propose a limited exclusive right that prohibits close copying but allows for “other activities that produce, enable, and comprise trends.”¹⁰⁰ This limited right would encourage the creation of new and innovative designs—even within a general trend—and would protect “inspiration, adaptation, homage, referencing, or remixing.”¹⁰¹ In this way, participation in trends, which is a form of standardization, may justify only narrow exclusive rights.

B. TRADEMARKS AND TRADE DRESS

Trademarks and trade dress also protect look and feel,¹⁰² though they are also subject to certain limitations. To begin with, the subject matter of trademark law is broad—trademark protection extends much farther than just words and symbols, from the name Nike to its omnipresent “swoosh.” The federal Lanham (Trademark) Act of 1946 liberally defines a trademark as “any word, name, symbol, or device” that identifies the source of a product or source.¹⁰³ In the landmark 1995 case of *Qualitex Co. v. Jacobson Products Co.*, the Supreme Court famously stated that “almost anything at all that is capable of carrying meaning” can be trademarkable subject matter.¹⁰⁴ Today, everything from shape¹⁰⁵ (such as the Coca-Cola bottle) to color¹⁰⁶ (consider the famous Tiffany’s blue box) to packaging

98. *Id.* at 1153.

99. *Id.*

100. *Id.*

101. *Id.* This pattern is consistent with what Barton Beebe recognizes as a psychological need for individuals to achieve “optimal distinctiveness” by aligning with certain groups and differentiating from others. Beebe, *supra* note 21, at 819–20 (quoting Marilyn B. Brewer, *The Social Self: On Being the Same and Different at the Same Time*, 17 PERSONALITY & SOC. PSYCHOL. BULL. 475, 475 (1991)).

102. See J.H. Reichman, *Design Protection and the Legislative Agenda*, 55 L. & CONTEMP. PROBS. 281, 289 (1992) (“In reality, the federal appellate courts soon began to transform section 43(a) of the Lanham Act into a judge-made design law that afforded product configurations indefinite protection as unregistered appearance trade dress.”).

103. 15 U.S.C. § 1127 (2012).

104. *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 162, 174 (1995).

105. *Kellogg Co. v. Nat’l Biscuit Co.*, 305 U.S. 111, 121–22 (1938) (holding pillow shape of shredded wheat biscuit could be trademarkable unless found to be functional). The Court ultimately denied protection to the pillow shape after finding the shape was functional, that is, that the shape affected the cost or quality of the article. *Id.* See also Hughes, *supra* note 43, at 1232.

106. *Qualitex*, 514 U.S. at 161–62 (holding green-gold color of dry cleaning pads trademarkable). See also *Wolf Appliance, Inc. v. Viking Range Corp.*, 686 F. Supp. 2d 878, 894 (W.D. Wis. 2010) (holding red-colored knobs on “high end” cooking range by Wolf as potentially trademarkable subject matter).

and the “total image” of a product or service can receive protection under the trademark laws as “trade dress.” In *Two Pesos, Inc. v. Taco Cabana, Inc.*, the Supreme Court affirmed the sweeping view that the protectable trade dress of a Mexican restaurant potentially included “the shape and general appearance of the exterior of the restaurant, the identifying sign, the interior kitchen floor plan, the decor, the menu, the equipment used to serve food, the servers’ uniforms and other features reflecting on the total image of the restaurant.”¹⁰⁷ Indeed, these nonverbal features that comprise look and feel are often “the most potent elements” of a brand.¹⁰⁸ In general, trade dress doctrine has significant potential to protect look and feel, as it “involves the total image of a product and may include features such as size, shape, color or color combinations, texture, graphics, or even particular sales techniques.”¹⁰⁹ Many aspects of look and feel have been subject to trademark protection. For example, Converse recently filed almost two dozen lawsuits asserting trade dress infringement of its iconic Chuck Taylor sneakers by knockoffs.¹¹⁰ In the digital world, trade dress theories can justify protecting the appearance and style of online content.¹¹¹

While trademark law opens the door wide with respect to subject matter, just as we saw with copyright, the law recognizes several doctrinal and policy limitations that make broad assertion of exclusive rights in color, shape, and “total image of the business” difficult in practice. The first limitation is the requirement of distinctiveness. In order to acquire trademark protection, a mark must be “distinctive”—that is, it must signal the source of a product or service, and not the product or service itself.¹¹² In *Kellogg Co. v. National Biscuit Co.*, the Supreme Court ruled that the name “shredded wheat” was no longer protectable as a means of describing the cereal because it had become generic, or “the term by which the biscuit in

107. *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 764 n.1 (1992). *See also* 15 U.S.C. § 1125(a)(3) (2012) (expressly allowing for protection of unregistered distinctive trade dress that is not functional).

108. DINWOODIE & JANIS, *supra* note 17, at 42.

109. *Two Pesos*, 505 U.S. at 764 n.1 (quoting *John H. Harland Co. v. Clarke Checks, Inc.*, 711 F.2d 966, 980 (11th Cir. 1983)). *But see* *Abercrombie & Fitch Stores, Inc. v. Am. Eagle Outfitters, Inc.*, 280 F.3d 619, 630–31 (6th Cir. 2002) (“The aura about a product, the cachet that ownership or display of it creates, and the kind of appeal it has to certain consumers do not dress a good in trade.”).

110. Rachel Abrams, *Converse Sues to Protect Its Chuck Taylor All Stars*, N.Y. TIMES (Oct. 14, 2014), <https://www.nytimes.com/2014/10/15/business/converse-sues-to-protect-its-chuck-taylor-all-stars.html>.

111. MATSUURA, *supra* note 34, at 82.

112. *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4, 8 (2nd Cir. 1976) (requiring distinctiveness for trademark protection and establishing the spectrum of trademark distinctiveness, breaking trademarks into classes which are accorded differing degrees of protection).

pillow-shaped form is generally known by the public.”¹¹³ Genericide recognizes that over time, the public may come to acquire rights in a mark by appropriating a term into ordinary language.¹¹⁴ The doctrine eliminates rights when marks become standard signifiers for entire product categories and do not signify a particular source of that product. Genericide accommodates consumer expectations and considers the context in which words are used. For example, in *Bayer Co. v. United Drug Co.*, a federal court recognized that while patients had come to refer to acetylsalicylic acid as “aspirin” in a generic fashion, the technical term was more popular with medical professionals.¹¹⁵

Generic words do not receive trademark protection because they are abstractions that do not signify a particular source. Abstraction and a lack of distinctiveness can also be fatal to trade dress protection.¹¹⁶ In recent years, the Supreme Court has created an additional doctrinal hurdle to trade dress protection for color¹¹⁷ and product design,¹¹⁸ holding that to receive protection these forms of trade dress require a showing of “secondary meaning”—that is, a demonstration that the mark signals source and is not merely descriptive or decorative. In *Wal-Mart Stores, Inc. v. Samara Brothers, Inc.*, a case involving knock-offs of children’s clothes with decorative appliqués, the Supreme Court reasoned that unlike word marks and product *packaging*, which often have no other purpose but to identify the source of an item, product design usually just makes an item more attractive to a consumer.¹¹⁹ As the Court argued, “Consumers are aware of the reality that, almost invariably, even the most unusual of product designs—such as a cocktail shaker shaped like a penguin—is intended not to identify the source, but to render the product itself more useful or more appealing.”¹²⁰ In adopting a heightened standard for distinctiveness for both color and product design, the Court has repeatedly acknowledged the

113. *Kellogg Co. v. Nat’l Biscuit Co.*, 305 U.S. 111, 116 (1938).

114. See Deven R. Desai & Sandra L. Rierson, *Confronting the Genericism Conundrum*, 28 CARDOZO L. REV. 1789, 1790 (2007); Lee, *supra* note 77, at 57–59.

115. *Bayer Co. v. United Drug Co.*, 272 F. 505, 510 (S.D.N.Y. 1921).

116. See, e.g., *Abercrombie & Fitch Stores, Inc. v. Am. Eagle Outfitters, Inc.*, 280 F.3d 619, 638 (6th Cir. 2002) (“[N]o designer should have a monopoly on designs regarded by the public as the basic form of a particular item.”); *Landscape Forms, Inc. v. Columbia Cascade Co.*, 113 F.3d 373, 381 (2d Cir. 1997) (insisting on specificity in design elements asserted as trade dress and observing that general styles, themes, and ideas are not protectable as trade dress).

117. *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 163–64 (1995).

118. *Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205, 216 (2000).

119. *Id.* at 213.

120. *Id.*

value of competitive use of attractive designs and design features.

Functionality¹²¹ is another potent bar to trademark and trade dress protection.¹²² Federal trademark law recognizes two kinds of functionality: utilitarian and aesthetic.¹²³ The modern formulation for utilitarian functionality was affirmed in *TrafFix Devices, Inc. v. Marketing Displays, Inc.*¹²⁴ The question was whether a “dual-spring design” for steadying outdoor road signs in adverse weather could constitute protectable trade dress after utility patents on the design expired. The Court said no, articulating that a feature is functional and thus not protectable when it “is essential to the use or purpose of the article or if it affects the cost or quality of the article.”¹²⁵ In addition, the Court also recognized a feature as functional where the “exclusive use of [the feature] would put competitors at a significant non-reputation-related disadvantage.”¹²⁶ Thus, even though the dual-spring design might signal source for consumers, it could not receive trade dress protection because it was functional.

The functionality bar serves a number of purposes. First, it helps police the borders between trademark law and patents. Patents preclude making or using protected features without authorization. Trade dress law, on the other hand, exists primarily to reduce consumer confusion, not to prevent reproduction more generally, and must “subsist with the recognition that in many instances there is no prohibition against copying goods and products . . . unless an intellectual property right such as a patent or copyright protects an item.”¹²⁷ In *TrafFix*, the Court made overlapping protection of useful features more difficult without precluding it altogether by holding that a prior patent “has vital significance” in determining functionality.¹²⁸ The functionality bar thus promotes access to standard product features to competitors after the expiry of relevant patents.¹²⁹

121. See generally Mark P. McKenna, *(Dys)functionality*, 48 HOUS. L. REV. 823, 858–60 (2011).

122. 15 U.S.C. § 1052(e)(5) (2012) (barring registration of mark that “comprises any matter that, as a whole, is functional”); *id.* § 1125(a)(3) (barring protection for unregistered trade dress that is “functional”). See Hughes, *supra* note 43, at 1231–41.

123. *Christian Louboutin S.A. v. Yves Saint Laurent Am. Holdings, Inc.*, 696 F.3d 206, 217 (2d Cir. 2012) (“The ‘functionality’ of a mark can be demonstrated by, *inter alia*, showing that the mark has either traditional ‘utilitarian’ functionality or ‘aesthetic’ functionality.”) (citations omitted).

124. *TrafFix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23, 29–31 (2001).

125. *Id.* at 32 (quoting *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 165 (1995)). This is often referred to as the “Inwood formulation” for functionality. See *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 850 n.10 (1982).

126. *TrafFix*, 532 U.S. at 24 (quoting *Qualitex*, 514 U.S. at 165).

127. *Id.* at 29.

128. *Id.* (“A utility patent is strong evidence that the features therein claimed are functional.”).

129. See Lauren Fisher Kellner, *Trade Dress Protection for Computer User Interface “Look and*

Second, the bar on functional trade dress recognizes that in some contexts, elements of look and feel may often serve functional purposes. The Court in *Qualitex* observed that in some industries, color may be source-signaling and not functional, as was the case with green-gold dry-cleaning pads.¹³⁰ In other contexts, such as the case of medicines, color can be functional, indicating information to patients about the type of medication and the dosage. Courts note that coloring a generic drug the same as the brand name drug can help improve patient compliance—yet another factor that points to a finding of functionality.¹³¹

Notably, functionality served as a bar to trade dress protection in the *Apple v. Samsung* litigation. On appeal, the Federal Circuit reversed findings that Samsung infringed Apple's protected trade dress, ruling that elements of look and feel such as rounded corners were functional because they made it easier to slide a phone in and out of a pocket.¹³² The Federal Circuit affirmed a broad definition of functionality in the trade dress context, citing that a "product feature need only have *some* utilitarian advantage to be considered functional."¹³³ The court recognized that limiting trademark protection to "nonfunctional" trade dress helped promote "a fundamental right to compete through imitation of a competitor's product."¹³⁴

In addition to utilitarian functionality, the Supreme Court has recognized that aesthetic features of a product or service that make a product more pleasing to the eye may be inappropriate for exclusive rights if protection "would put competitors at a significant non-reputation-related disadvantage."¹³⁵ The doctrine of aesthetic functionality recognizes, as the

Feel", 61 U. CHI. L. REV. 1011, 1023 (1994) (arguing that standardization of graphical user interfaces would prevent them from being protected as distinctive trade dress).

130. *Qualitex*, 514 U.S. at 159.

131. See, e.g., Signe H. Naeve, *Heart Pills Are Red, Viagra Is Blue . . . When Does Pill Color Become Functional? An Analysis of Utilitarian and Aesthetic Functionality and Their Unintended Side Effects in the Pharmaceutical Industry*, 27 SANTA CLARA COMPUT. & HIGH TECH. L.J. 299, 310 (2011).

132. *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 992 (Fed. Cir. 2015), *rev'd*, 137 S. Ct. 429 (2016). See also Andrea Peterson, *Apple v. Samsung Case Shows the Difficulty of Protecting Designs*, WASH. POST (May 18, 2015), <https://www.washingtonpost.com/news/the-switch/wp/2015/05/18/apple-v-samsung-case-shows-the-difficulty-of-protecting-designs>.

133. *Apple*, 786 F.3d at 991 (emphasis in original) (quoting *Disc Golf Ass'n v. Champion Discs, Inc.*, 158 F.3d 1002, 1007 (9th Cir.1998)).

134. *Id.* (emphasis omitted) (quoting *Leatherman Tool Grp., Inc. v. Cooper Indus., Inc.*, 199 F.3d 1009, 1011–12 (9th Cir.1999)).

135. *Qualitex*, 514 U.S. at 165 (citing *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 850 n.10 (1982)). See also Hughes, *supra* note 43, at 1228 (noting that this conception of functionality applies to both utilitarian and aesthetic features).

Seventh Circuit eloquently put it, that in some cases, “[b]eauty is function.”¹³⁶ For example, in *Abercrombie & Fitch Stores, Inc. v. American Eagle Outfitters Inc.*, the Sixth Circuit denied Abercrombie trade dress protection for its in-store layout and business method of hiring attractive college students as salespeople, holding that exclusive rights in those features would unfairly hinder competition.¹³⁷ Some courts and commentators have recently questioned the continuing viability of aesthetic functionality, largely because of the difficulty of cabining it.¹³⁸ Nonetheless, federal appeals courts and the Supreme Court have repeatedly acknowledged the doctrine as a limitation on trade dress protection. In a highly publicized case between celebrity French shoe designer Christian Louboutin and rival Yves Saint Laurent (YSL), Louboutin sought to prevent YSL from copying his signature red outsoles on ladies’ high heels.¹³⁹ Though the court ultimately decided the case on other grounds, the Second Circuit affirmed the continuing vitality of the aesthetic functionality doctrine.¹⁴⁰ In dicta, the court acknowledged the difficulty of distinguishing between “aesthetic function and branding success” and thus advocated a “highly fact-specific” analysis to determine aesthetic functionality.¹⁴¹

In the case of Samsung’s copycat tablets and cellphones that closely resemble Apple’s iPad and iPhone in look and feel, trade dress law would

136. *W.T. Rogers Co. v. Keene*, 778 F.2d 334, 343 (7th Cir. 1985). *See also id.* at 346 (“A feature can be functional not only because it helps the product achieve the objective for which the product would be valued by a person indifferent to matters of taste, charm, elegance, and beauty, but also because it makes the product more pleasing to people not indifferent to such things.”).

137. *Abercrombie & Fitch Stores, Inc. v. Am. Eagle Outfitters, Inc.*, 280 F.3d 619, 644 (6th Cir. 2002) (“Forbidding clothiers to use college students to sell garments to or for college-age people indubitably prevents them from effectively competing in the market for casual clothing directed at young people.”).

138. The Ninth Circuit first recognized the doctrine of aesthetic functionality as a basis to deny trademark protection in the case of *Pagliero v. Wallace China Co.*, 198 F.2d 339, 342–43 (9th Cir. 1952), which allowed competitors to use floral design patterns, similar to plaintiff’s, on china. But the reasoning has been criticized for potentially invalidating any attractive design feature on the ground that the design is why consumers want the product. *See, e.g.*, *Christian Louboutin S.A. v. Yves Saint Laurent Am., Inc.*, 778 F. Supp. 2d 445 (S.D.N.Y. 2011), *rev’d*, *Christian Louboutin S.A. v. Yves St. Laurent Am. Holding, Inc.*, 696 F.3d 206, 221–22 (2nd Cir. 2012).

139. *Louboutin*, 696 F.3d at 224–25 (holding that Louboutin was entitled to trademark protection for the distinctive use of red on the sole of a high-end women’s shoe when the main body of the shoe had a contrast color (that is, not red)). The narrow ruling left YSL to be found not infringing, because YSL’s shoe was monotone with a red body and sole. Thus, the appeals court did not ultimately reach the issues of aesthetic functionality or confusion. *Id.* at 228.

140. *Id.* at 221–22 (“[I]t is clear that the combined effect of *Qualitex* and *TrafFix* was to validate the aesthetic functionality doctrine . . .”).

141. *Id.* at 222.

offer Apple limited protection. Even if Apple could show secondary meaning in the minimalist design and shape of the iPad and iPhone, it would have to contend with the bars on utilitarian and aesthetic functionality. The latter may be particularly potent if Samsung could show that consumers desire a look like Apple's products but do not particularly care who manufactures that look and feel. That is, the minimalist, sleek and "cool" design pioneered by Apple has now become an industry standard, and it would unduly limit competition to grant exclusive rights in such design absent a patent.

The final limit on look and feel protection in trade dress law that we consider is the test for infringement. The *sine qua non* of trademark protection is preventing consumer confusion in the marketplace. Trade dress law takes a context-sensitive approach when determining infringement. That is, even though individual features in two competitors' trade dress may be the same, courts will consider whether the overall look and feel is confusingly similar.¹⁴² The emphasis on gestalt impression allows competitors to share many individual features without a finding of trade dress infringement. In addition, courts will often find that the prominent placement of distinctive logos on similar or even identical trade dress minimizes a likelihood of consumer confusion.¹⁴³ This constrained approach to infringement again allows for widespread competitive uses of similar product shape, color, and style so long as the overall impressions created are distinct, or the products are well marked with distinctive logos.

C. UTILITY PATENTS

In surprising ways, utility patents also protect many aspects of look and feel. Although such protection is most often associated with design patents, utility patents can operate at a meta level, protecting the functional technology that underlies how a product looks, feels, and operates.¹⁴⁴ This is the case, for example, with utility patents that cover software defining graphical user interfaces. Again, this phenomenon is perhaps best illustrated in the *Apple v. Samsung* litigation itself. In the first trial, Apple accused Samsung of infringing three utility patents concerning the look and feel of Apple's computing devices.¹⁴⁵ Apple's patented software covered:

142. *Best Cellars Inc. v. Grape Finds at Dupont, Inc.*, 90 F. Supp. 2d 431, 443 (S.D.N.Y. 2000).

143. *Conopco, Inc. v. May Dep't Stores Co.*, 46 F.3d 1556, 1568 (Fed Cir. 1994).

144. *See MATSUURA*, *supra* note 34, at 79.

145. *See Apple Inc. v. Samsung Elecs. Co.*, 920 F. Supp. 2d 1079, 1098-1109 (N.D. Cal. 2013), *aff'd in part and rev'd in part*, 786 F.3d 983 (Fed. Cir. 2015), *rev'd*, 137 S. Ct. 429 (2016).

(1) the “bounce-back” function triggered when a user scrolls to the end of a screen or list;¹⁴⁶ (2) one-finger scrolling of pages and two-finger “pinch to zoom”;¹⁴⁷ and (3) the “tap to zoom” function that allows users to tap a screen to enlarge and recenter an electronic document.¹⁴⁸ While some of these features are quite functional, particularly those that enable zooming, they also contribute to a sleek, modern user experience that increases the overall aesthetic pleasure of these products. Along these lines, the “bounce-back” feature both signals the end of a digital page as well as enhances the sensory experience of interacting with an electronic document on a handheld device.¹⁴⁹ In the second trial, Apple accused Samsung of infringing several patents, including a patent on a touchscreen device that “unlocks” when a user contacts a specified image and slides it to another location.¹⁵⁰ While this is a functional technology, “Apple considered this feature so core to the Apple iPhone user experience that it opened the first iPhone ad with imagery illustrating the operation of this ‘slide to unlock’ feature.”¹⁵¹ In short, this technological mechanism—covered by a utility patent—protected a valuable element of look and feel.

Examples abound of utility patents protecting look and feel. AT&T patented a method of entering information into fields on a computer screen without using a keyboard,¹⁵² a technology that has significant ramifications for user interfaces in applications such as Microsoft Outlook and Windows Mobile.¹⁵³ Other patents cover a combination of software in conjunction with methods of doing business. In one prominent case, Amazon.com asserted a patent on “one-click” purchasing in an infringement suit against Barnes & Noble.¹⁵⁴ While this technology is clearly functional because it expedites online purchases, it also serves aesthetic purposes by contributing to a streamlined shopping experience on Amazon.com. More directly, the Patent and Trademark Office (USPTO) has granted utility patents on functional items that have primarily aesthetic appeal, such as a garbage bag

146. U.S. Patent No. 7,469,381 (filed Dec. 14, 2007).

147. U.S. Patent No. 7,844,915 (filed Jan. 7, 2007).

148. U.S. Patent No. 7,864,163 (filed Sept. 4, 2007).

149. Of course, making such interactions more convenient or even enjoyable also enhances functionality. See U.S. Patent No. 7,469,381 (filed Dec. 14, 2007) (“[I]t has become a significant challenge to design a user interface that allows users to easily interact with a multifunction device.”).

150. U.S. Patent No. 8,046,721 (filed June 2, 2009).

151. *Apple Inc. v. Samsung Elecs. Co.*, 801 F.3d 1352, 1356 (Fed. Cir. 2015), *modified on reh’g* by 809 F.3d 633 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 2522 (2016).

152. U.S. Patent No. 4,763,356 (filed Dec. 11, 1986).

153. See *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1317 (Fed. Cir. 2009).

154. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1346–47 (Fed. Cir. 2001); U.S. Patent No. 5,960,411 (filed Sept. 12, 1997); see MATSUURA, *supra* note 34, at 78.

painted to look like a jack-o'-lantern when filled with trash.¹⁵⁵

While utility patent protection is quite “categorical” in that it lacks many of the constraints of other intellectual property doctrines, it contains some notable limitations. First, patent law’s protection of look and feel is limited to the extent that it only covers functional technologies rather than purely aesthetic elements.¹⁵⁶ Thus, utility patents could not directly protect the audiovisual display of a graphical user interface, which is a wholly aesthetic element. Relatedly, patentable subject matter¹⁵⁷ doctrine has emerged as an important, and evolving, limitation on protecting look and feel. A particularly thorny issue has been the extent to which patentable subject matter extends to business methods and software, which can produce virtual designs that embody look and feel. Over the past several decades, courts have narrowed the patent eligibility of software,¹⁵⁸ including software that defines aspects of look and feel.¹⁵⁹ Recently, however, the Federal Circuit upheld the validity of a patent claiming a software program that retains the look and feel of one website when importing and displaying content from another.¹⁶⁰ While there has been some pushback against software patents, technologies that generate a particular look and feel can still constitute patentable subject matter.

Another important limitation on patent law arises not from the scope of protection but from remedies analysis. The patent statute allows courts to award an injunction upon a finding of infringement.¹⁶¹ Although the Federal Circuit developed a practice of virtually automatically granting injunctions to patentees,¹⁶² the Supreme Court ruled in *eBay Inc. v.*

155. See *In re Dembiczak*, 175 F.3d 994, 996 (Fed. Cir. 1999).

156. See 35 U.S.C. § 101 (2012).

157. See *id.* (defining patentable subject matter as “any new and useful process, machine, manufacture, or composition of matter” as well as improvements thereof).

158. Compare *State St. Bank & Trust Co. v. Signature Fin. Grp., Inc.*, 149 F.3d 1368, 1375 (Fed. Cir. 1998), with *In re Comiskey*, 554 F.3d 967, 981–82 (Fed. Cir. 2009) (en banc) (denying the patent eligibility of claims covering a system of mandatory arbitration that were not tied to a machine), and *In re Bilski*, 545 F.3d 943, 956 (Fed. Cir. 2008) (en banc) (holding that for a process to be eligible for patenting, it must be tied to a machine or effectuate some transformation), *aff’d on other grounds sub nom. Bilski v. Kappos*, 561 U.S. 593 (2010).

159. See, e.g., *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1371 (Fed. Cir. 2015) (denying the patent eligibility of a process for customizing the content of a web page based on a user’s profile and navigation history).

160. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1248–49 (Fed. Cir. 2014). The prior proceeding even involved claim construction of the term “look and feel,” which appears in each of the asserted claims. *Id.* at 1250.

161. See 35 U.S.C. § 283 (2012).

162. See *MercExchange, L.L.C. v. eBay, Inc.*, 401 F.3d 1323, 1339 (Fed. Cir. 2005), *vacated*, 547

MercExchange, L.L.C. that courts must apply a four-factor equitable test to determine the appropriateness of injunctive relief.¹⁶³ Empirical studies show that although courts continue to grant injunctions in the vast majority of cases, injunctions are less likely after *eBay*, particularly for so-called patent trolls.¹⁶⁴ Importantly, social reliance on continued use of an infringing technology has also factored against granting an injunction. Thus, to the extent that a particular technology becomes standard or necessary for widespread downstream use, such factors weigh against enjoining infringement.¹⁶⁵ More broadly, courts have considered the role of patented technologies in interoperability standards in denying injunctive relief—particularly where patentees have committed to license such technologies on a fair, reasonable, and nondiscriminatory basis.¹⁶⁶

The law of patent infringement damages also mitigates utility patents' protection of look and feel. The patent statute states that "the court shall award the claimant damages adequate to compensate for the infringement."¹⁶⁷ This notion of adequacy assumes special importance in the context of complex, integrated products composed of multiple patented components, such as smartphones or semiconductors.¹⁶⁸ Under the so-called "entire market value rule," a patentee may recover damages based on the entire value of a product containing a patented component only when that patented component is the primary driver of consumer demand for that

U.S. 388 (2006).

163. See *eBay*, 547 U.S. at 391 ("A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction.").

164. Christopher B. Seaman, *Permanent Injunctions in Patent Litigation After eBay: An Empirical Study*, 101 IOWA L. REV. 1949, 1952–53 (2016).

165. See *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 442–43 (E.D. Tex. 2006) (denying injunctive relief to patentee z4 based in part on widespread reliance on continued use of infringing Microsoft products). But see *Apple Inc. v. Samsung Elecs. Co., Ltd.*, 801 F.3d 1352, 1360 (Fed. Cir. 2015) (holding that patentees need only show that patented features "impact consumers' decisions to purchase" accused devices to satisfy the irreparable harm prong of the *eBay* analysis), *modified*, 809 F.3d 633 (2015).

166. See Steven M. Amundson, *Recent Decisions Provide Some Clarity on How Courts and Government Agencies Will Likely Resolve Issues Involving Standard-Essential Patents*, 13 CHI.-KENT J. INTELL. PROP. 91, 101–06 (2013); Mark A. Lemley, *Ten Things to Do About Patent Holdup of Standards (and One Not to)*, 48 B.C. L. REV. 149, 167 (2007) (suggesting that courts may consider applying the *eBay* factors to deny injunctions in cases of standards-based patent holdup).

167. 35 U.S.C. § 284 (2012).

168. See, e.g., Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 2010–17 (2007).

product.¹⁶⁹ Where that is not the case, courts should apportion damages based on the contribution of the patented component to the overall value of the product.¹⁷⁰ Thus, for instance, if the patented “bounce-back” function triggered when scrolling to the end of a screen contributes marginally to the overall value of a smartphone, then infringement of that patent should result in relatively low damages. In this sense, damages for patent infringement are attentive to context and should roughly correlate with the economic value of a patented feature within a broader product.

Indeed, courts have invoked context and proportionality to reduce damages from infringing patents covering look and feel. For example, in *Lucent Technologies, Inc. v. Gateway, Inc.*, Lucent held a patent covering a method of inputting data into fields on a computer screen without using a keyboard, such as by utilizing an on-screen graphical calendar.¹⁷¹ The patent covered a technological method for achieving a certain look and feel for software applications, and Lucent asserted this patent against, among other accused products, the on-screen “date-picker” function in Microsoft Outlook.¹⁷² The jury found infringement and awarded a considerable sum in damages. However, the Federal Circuit noted that it would have been erroneous to grant damages based on the entire value of an infringing software suite, such as Microsoft Outlook, given that the patented feature (the date-picker function) “is but a very small component of a much larger software program.”¹⁷³ As such, the district court had not properly applied the so-called “entire market value rule.”¹⁷⁴ Based on the proportion of value attributable to a particular look-and-feel mechanism, the Federal Circuit significantly reduced damages.

D. THE OUTLIER: DESIGN PATENTS

Of course, protecting look and feel falls more directly within the realm of design patents, which cover “any new, original and ornamental design for an article of manufacture.”¹⁷⁵ Because design patents have not received nearly as much scholarly attention as other forms of intellectual property,

169. See *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 901 (Fed. Cir. 1986).

170. Otherwise, exclusive rights on the component could allow the patentee to hold up production of the entire integrated product. *Cf. Apple, Inc. v. Motorola Inc.*, 869 F. Supp. 2d 901, 914 (N.D. Ill. 2012) (discussing holdup based on a patented component).

171. See *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1308 (Fed. Cir. 2009).

172. See *id.* at 1317.

173. *Id.* at 1337.

174. *Id.*

175. 35 U.S.C. § 171 (2012).

this Part provides a somewhat extended overview of such protection.¹⁷⁶ Design patents arose in 1842 based on a perceived lack of protection for ornamental designs.¹⁷⁷ They are subject to much of the same requirements as utility patents,¹⁷⁸ such as novelty and nonobviousness,¹⁷⁹ although those requirements differ somewhat in the design patent context.¹⁸⁰ In addition, a design must be “original” to be patented, which is often understood as analogous to the copyright meaning of that term.¹⁸¹ Regarding subject matter, design patents are intended to protect ornamental features rather than function itself,¹⁸² very early, the Supreme Court emphasized that design protection encompasses “not so much utility as appearance.”¹⁸³ The scope of protection is defined by a single claim, which is often expressed as a short phrase and one or several drawings.¹⁸⁴ Notably, the standard for infringement for design patents differs from that for utility patents.¹⁸⁵ Under the design patent statute, infringement arises when a party: “(1) applies the patented design, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or (2) sells or exposes for sale any article of manufacture to which such design or colorable imitation has been applied”¹⁸⁶

In 1871, the Supreme Court influentially interpreted the standard of infringement in *Gorham Co. v. White*:

[I]f, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to

176. See Monseau, *supra* note 4, at 528–29.

177. See Afori, *supra* note 12, at 1122 (observing that design patents were intended to fill a gap between copyrights and utility patents); Thomas B. Hudson, *A Brief History of the Development of Design Patent Protection in the United States*, 30 J. PAT. OFF. SOC’Y 380, 380–81 (1948).

178. See 35 U.S.C. § 171.

179. See *Durling v. Spectrum Furniture Co.*, 101 F.3d 100, 103 (Fed. Cir. 1996) (“[T]he ultimate inquiry . . . is whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.”).

180. See Matthew A. Smith, *Design Patents 57–74* (Dec. 17, 2012) (unpublished comment), http://patentlyo.com/media/docs/2012/12/2012-12-17_design_patents.pdf.

181. See *id.* at 52; *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 346 (1991) (defining an “original” work as one that is independently created and exhibits a modicum of creativity).

182. Not surprisingly, defining “ornamental” has proven quite controversial. See Jason J. Du Mont & Mark D. Janis, *Functionality in Design Protection Systems*, 19 J. INTEL. PROP. L. 261, 264–69 (2012).

183. *Gorham Co. v. White*, 81 U.S. 511, 524 (1871).

184. Design patent attorneys typically omit a substantial amount of detail in their drawings to maximize the scope of exclusive rights. Perry J. Saidman, *The Ten Commandments of Design Patent Protection*, INNOVATION, Fall 1990, at 21, 22.

185. Compare 35 U.S.C. § 289 (2012), with § 271.

186. *Id.* § 289.

purchase one supposing it to be the other, the first one patented is infringed by the other.¹⁸⁷

In emphasizing consumer deception, this standard for infringement is somewhat reminiscent of the consumer confusion standard from trademark and trade dress law.¹⁸⁸ Turning to remedies, design patent law incorporates all of the remedies available for infringement of utility patents.¹⁸⁹ In addition, design patents have a unique provision allowing a patentee to recover a defendant's "total profit" based on infringement.¹⁹⁰

Historically, design patents have covered everything from the ornamental handles of silverware¹⁹¹ to the shape of saddles¹⁹² to the modernist design of a microwave oven.¹⁹³ In contemporary times, the significance of design patents had been somewhat limited to certain niche industries, such as shoes and furniture.¹⁹⁴ More recently, however, design patents have increased in importance, due in part to a 2008 en banc Federal Circuit opinion that made it easier to prove design patent infringement.¹⁹⁵ While design patents have not historically played a prominent role in fashion—due in part to the frequency of seasonal rotations—they are increasingly protecting handbags, sunglasses, lingerie, yoga pants, and shapewear.¹⁹⁶ In the technology sector, design patents have been

187. *Gorham*, 81 U.S. at 528.

188. See Monseau, *supra* note 4, at 530. Compare *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1295 (Fed. Cir. 2010) (holding that a design patent is infringed if "an ordinary observer, familiar with the prior art designs, would be deceived into believing that the accused product is the same as the patented design"), with *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1407–08 (Fed. Cir. 1997) (requiring a plaintiff in a trade dress cause of action to show that "the asserted trade dress (1) is not functional, (2) is inherently distinctive or has acquired distinctiveness through a secondary meaning, and (3) is likely to cause confusion with the defendant's products").

189. See 35 U.S.C. § 171, § 284 (2012).

190. *Id.* § 289. See generally *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429 (2016) (interpreting this provision); Carani, *supra* note 32, at 30.

191. See *Gorham*, 81 U.S. at 511.

192. See generally *Smith v. Whitman Saddle Co.*, 148 U.S. 674 (1893) (holding no infringement of a saddle patent).

193. *Litton Sys., Inc. v. Whirlpool Corp.*, 728 F.2d 1423, 1426–27 (1984) (holding valid a design patent claiming the design of a microwave oven).

194. See Brown, *supra* note 45, at 1356 ("[D]esign patent remains a Cinderella who never goes to the ball."); Edward R. Ergenzinger Jr., *The American Inventor's Protection Act: A Legislative History*, 7 WAKE FOREST INTELL. PROP. L.J. 145, 149 (2006) ("Except for certain fields such as the furniture industry, a design patent is typically worthless when attempting to commercialize a product.").

195. See *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 672 (Fed. Cir. 2008) (en banc) (eliminating the "point of novelty" test as an independent requirement of proving infringement); George C. Lewis, *Design Patents, a Tool Being Redesigned for the 21st Century*, PATENT, TRADEMARK & COPYRIGHT J., Oct. 26, 2012, at 2.

196. See O'Connor, *supra* note 36. See, e.g., Complaint at 2–4, *Lululemon Athletica Canada Inc.*

particularly important for protecting graphical user interfaces as “surface ornamentation.”¹⁹⁷ Whereas firms previously protected GUIs with copyrights, they have become a prominent subject of design patent protection.¹⁹⁸

Design patents have been particularly important in protecting the look and feel of computing devices.¹⁹⁹ For example, in *Apple v. Samsung*, Apple accused Samsung of infringing four design patents covering: (1) the minimalistic face of an iPhone, front speaker slot, and edge-to-edge glass of the front display;²⁰⁰ (2) the minimalistic face of an iPhone, home button, and rounded corners;²⁰¹ (3) the layout of Apple’s graphical user interface, including a grid of home screen icons with a band of “permanent” apps at the bottom;²⁰² and (4) the basic design of an iPad, including flat front and back surfaces, rounded corners, a thin bezel, an edge-to-edge front glass display, and a generally minimalistic aesthetic.²⁰³ Notably, these design patents cover both physical as well as virtual aspects of look and feel, meaning both the physical shape of various devices as well as the GUIs that consumers use to interact with them. Apple’s \$1.05 billion jury verdict against Samsung, some of which is attributable to design patent infringement, suggests that firms will place even greater emphasis on design patents going forward.²⁰⁴

Interestingly, design patents possess some important limitations

v. Calvin Klein, Inc., No. 1:12-cv-01034-UNA (D. Del. Aug. 13, 2012) (accusing Calvin Klein of violating Lululemon’s design patents in multi-waistband yoga pants).

197. See generally *Ex Parte* Strijland, No. 92-0623 (B.P.A.I. Apr. 2, 1992) (noting that properly claimed icons may be protectable subject matter); *Ex parte* Donoghue, No. 92-0543 (B.P.A.I. Apr. 2, 1992) (suggesting that icons on a computer screen could be subject to design patent protection).

198. See Risch, *supra* note 57, at 54.

199. See Beebe, *supra* note 21, at 863 (“Design patents have proved to be especially important in the high-technology consumer goods sector because such high-technology is not often clearly demonstrable except through the goods’ outer appearance.”).

200. U.S. Patent No. D618,677 S (filed Nov. 18, 2008). The USPTO subsequently invalidated the D’677 patent on obviousness grounds. Jeff John Roberts, *Apple, Rounded Corners and the New Debate over Design Patents*, FORTUNE, (Aug. 19, 2015), <http://fortune.com/2015/08/19/apple-patents-rounded-corners>.

201. U.S. Patent No. D593,087 S (filed Jul. 30, 2007).

202. U.S. Patent No. D604,305 S (filed June 23, 2007).

203. U.S. Patent No. D504,889 S (filed Mar. 17, 2004).

204. See Daniel Fisher, *Apple’s Samsung Victory Shows Patents Aren’t Just for Inventions Any More*, FORBES (Aug. 27, 2012, 2:53 PM), <http://www.forbes.com/sites/danielfisher/2012/08/27/apples-samsung-victory-shows-patents-arent-just-for-inventions-any-more>. As noted, this award has subsequently been reduced. See *supra* note 4. In the sixteen years between 1999 and 2015, the number of issued design patents increased substantially, from 14,732 to 25,986. *U.S. Patent Statistics Chart Calendar Years 1963-2015*, USPTO (Apr. 15, 2017, 2:52 PM), http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm.

relative to copyrights, trademarks, and utility patents. First, compared to copyrights and trademarks, the process of obtaining a design patent involves considerable time and expense; as with utility patents, design patents are only granted after substantive examination by the USPTO, a process that can take several years and several thousand dollars to complete.²⁰⁵ Second, the substantive standards of obtaining a design patent are relatively high compared to copyright and trademark. The thresholds necessary to obtain a copyright (originality) and trademark (distinctiveness) are quite low compared to the originality, ornamentality, and nonobviousness demanded of design patents.²⁰⁶ Finally, another clear limitation of design patents is their relatively short term of protection. Design patents last for fifteen years,²⁰⁷ which is far less than the potential terms of copyrights (the life of the author plus seventy years)²⁰⁸ and trademarks (as long as the mark distinctively identifies a source)²⁰⁹ and even shorter than the term for utility patents (twenty years from the date of filing).²¹⁰ All of these limitations tend to constrain the exclusionary power of design patents.

That being said, design patents lack many of the limiting principles of other branches of intellectual property that mitigate protection of look and feel. First, design patents feature a relatively narrow conception of functionality. Due to the statutory requirement of ornamentality, design patents are not intended to cover designs that, when considered in terms of their overall appearance, are functional.²¹¹ Although there are divergent lines of precedent,²¹² most opinions define a functional design as one that is

205. See Monseau, *supra* note 4, at 530. Cf. Mueller & Brean, *supra* note 11, at 451–52 (“[T]he square peg of design was forced into the round hole of the utility patent system with its associated complexities and costs, where it remains today.”).

206. See 35 U.S.C. § 171 (2012); Durling v. Spectrum Furniture Co., Inc., 101 F.3d 100, 103 (Fed. Cir. 1996) (providing a framework for nonobviousness analyses for design patents).

207. 35 U.S.C. § 173 (2012).

208. 17 U.S.C. § 302 (2012).

209. 15 U.S.C. §§ 1058–1059 (2012).

210. 35 U.S.C. § 154 (2012).

211. See 35 U.S.C. § 171.

212. Most opinions espouse a categorical test that characterizes a design as functional when it is wholly “dictated by” functional considerations. See Du Mont & Janis, *supra* note 182, at 281; Risch, *supra* note 57, at 63. A minority of opinions, however, define functionality based on a balancing test inquiring whether a design is “primarily functional.” See, e.g., PHG Techs., LLC v. St. John Cos., 469 F.3d 1361, 1366–67 (Fed. Cir. 2006) (“Our cases reveal a ‘list of . . . considerations for assessing whether the patented design as a whole—its overall appearance—was dictated by functional considerations,’ including: 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

dictated by function.²¹³ The Supreme Court has ruled that “[t]o qualify for protection, a design must present an aesthetically pleasing appearance that is *not dictated by function alone*.”²¹⁴ Because it is relatively easy to find *some* nonfunctional motivation for a design (even a design that incorporates functional elements), it is relatively easy to avoid the functionality bar in the design patent context. In copyright, however, an aesthetic element of a useful article is protectable only if it is separable from the functional aspects of a work (along with satisfying other criteria).²¹⁵ This is a difficult standard of functionality to satisfy, for design elements must arise from “artistic judgment exercised *independently* of functional influences” in order to be separable and thus protectable.²¹⁶ The default rules are thus switched in these regimes: in design patents, a design must be thoroughly dictated by function in order to be functional, while in copyright, *any* functional consideration renders an expression functional.

Design patent law also possesses a narrower conception of functionality than trademark law.²¹⁷ Recall that in the trade dress context, a “product feature need only have *some* utilitarian advantage to be considered functional”²¹⁸ and thus nonprotectable. In the design patent context, however, a design may be comprised entirely of functional elements yet not be considered functional as a whole.²¹⁹ This divergence in definitions means that a design may be functional (and nonprotectable) in the trademark sense but nonfunctional (and protectable) in the design

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.”) (emphasis original); *Amini Innovation Corp. v. Anthony Cal., Inc.*, 439 F.3d 1365, 1371 (Fed. Cir. 2006) (applying a trademark definition of functionality in a design patent case). *See also* Perry J. Saidman, *Functionality and Design Patent Validity and Infringement*, 91 J. PAT. & TRADEMARK OFF. SOC’Y 313, 314 (2009); Christopher V. Carani, *Design Patent Functionality: A Sensible Solution*, LANDSLIDE, Nov.–Dec. 2014, 19, 20–21.

213. *See, e.g.*, *Rosco, Inc. v. Mirror Lite Co.*, 304 F.3d 1373, 1378 (Fed. Cir. 2002) (“[T]he 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.’”) (quoting *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993)).

214. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 148 (1989) (emphasis added).

215. *See Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002, 1007 (2017).

216. *Brandir Int’l, Inc. v. Cascade Pac. Lumber Co.*, 834 F.2d 1142, 1145 (2d Cir. 1987) (emphasis added). *See* Robert C. Denicola, *Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles*, 67 MINN. L. REV. 707, 743–47 (1983).

217. *See* Smith, *supra* note 180, at 12–13. Again, this discussion focuses on the majority “dictated by” standard rather than the balancing test for design patent functionality. *See supra* note 212.

218. *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 991 (Fed. Cir. 2015) (emphasis in original), *rev’d*, 137 S. Ct. 429 (2016).

219. *See* Carani, *supra* note 212, at 22.

patent sense.²²⁰ Recall that in *Apple v. Samsung*, the Federal Circuit reversed Apple's trade dress infringement claims, finding the look and feel of the iPhone improved usability and durability and was thereby functional. As discussed above, given the narrow conception of functionality in design patent law, a design as a whole may be protectable even if it contains functional elements. Beyond that, the Federal Circuit in the same case ruled that functional elements should not be "ignored" in the context of design patent claim construction and infringement analysis.²²¹ The stark differences in the way trade dress and design patent law define functionality have created a paradoxical result where design patents protect as nonfunctional elements that trade dress would deem functional and thus nonprotectable.

In addition, design patent's conception of functionality is highly categorical and inward looking, and it lacks the dynamic sensitivity to consumer expectations and market competition inherent in trademark law's conception of functionality. This dynamism is most evident in trademark's approach to "aesthetic functionality,"²²² a concept lacking in design patent law. As discussed above, several courts have noted that the appearance of a product may be functional and thus not protectable under trademark if the design is why people buy the product, rather than just an indicator of source.²²³ Thus, if the design of an iPhone or iPad signals "cool" rather than "Apple," and constitutes a look and feel that consumers want regardless of the source of the product, then under a theory of aesthetic functionality, Apple could not get trade dress protection for this minimalist design. But design patent law lacks any recognition that appearance alone may be functional. Furthermore, there is little recognition in design patent law that design can *become* functional based on evolving expectations of the public.

220. See *Apple*, 786 F.3d at 991.

221. See *id.* at 998. Compared to "statutory" or "validity" functionality discussed above, see *supra* notes 212–213, this case addressed the use of functionality in design patent claim construction. See Carani, *supra* note 212, at 20 (distinguishing between statutory functionality and claim construction functionality). Older cases suggested that courts should "factor[] out" functional elements when construing claims, which is a predicate for infringement analysis. See *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1293 (Fed. Cir. 2010). More recent cases, including *Apple v. Samsung*, have signaled a retreat from this stance, holding that courts should not separate nonfunctional elements of a claimed design during claim construction. See *Sport Dimension, Inc. v. Coleman Co.*, 820 F.3d 1316, 1320–21 (Fed. Cir. 2016); *Apple*, 786 F.3d at 998.

222. See Brown, *supra* note 45, at 1367–68.

223. See *supra* Part II.B.

Design patent law's lack of sensitivity to evolving standards is also evident in its broad approach to nonobviousness. In theory, nonobviousness (which applies to both utility and design patents) operates as a dynamic threshold of patentability, creating a higher and higher bar as the prior art evolves. However, it is relatively easy to establish nonobviousness for design patents versus utility patents. In order to find a design obvious, "one must find a single reference . . . the design characteristics of which are basically the same as the claimed design."²²⁴ Then, "other references may be used to modify [the primary reference] to create a design that has the same overall visual appearance as the claimed design."²²⁵ This is a difficult bar to satisfy, and it departs from obviousness in the utility patent context, which does not insist on starting with a single technology that is "basically the same" as the claimed invention. Furthermore, in the design patent context, "secondary references may only be used to modify the primary reference if they are 'so related [to the primary reference] that the appearance of certain ornamental features in one would suggest the application of those features to the other.'"²²⁶ This notion of combining references is reminiscent of a debate that raged for years in the utility patent context over whether one must show some "teaching or suggestion or motivation" (TSM) to combine references in the prior art to demonstrate that some claimed invention was obvious.²²⁷ In 2007, the Supreme Court in *KSR International Co. v. Teleflex Inc.* rejected a strict application of the so-called "TSM test," noting that implicit motivations and industry trends could be used to combine references, thus rendering a particular invention obvious.²²⁸ While *KSR* made it more difficult to establish nonobviousness for utility patents, courts have not applied this new rule as fastidiously in the design patent context,²²⁹ suggesting that it is easier to demonstrate nonobviousness for design patents compared to utility patents.²³⁰ Design patent law thus constrains an important requirement of patentability that is sensitive to the evolving state of the art.

224. *Durling v. Spectrum Furniture Co.*, 101 F.3d 100, 103 (Fed. Cir. 1996) (quoting *In re Rosen*, 673 F.2d 388, 391 (C.C.P.A. 1982) (internal quotes omitted)).

225. *Id.*

226. *Id.* (quoting *In re Borden*, 90 F.3d 1570, 1575 (Fed. Cir. 1996)).

227. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). *See also* Peter Lee, *Patent Law and the Two Cultures*, 120 *YALE L.J.* 2, 35–39, 51–56 (2010).

228. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 415–22 (2007).

229. *See Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372, 1384–85 (Fed. Cir. 2009); Mueller & Brean, *supra* note 11, at 507–11; Smith, *supra* note 180, at 69.

230. *See Risch, supra* note 57, at 71–72 ("This two-step test is limiting in two ways: a) it stacks the deck in favor of validity by requiring that one piece of prior art is *basically the same* as the patented design, and b) it only allows combination upon specific suggestion.").

Finally, in important ways, the damages available for design patent infringement can be significantly higher than those available in other fields of intellectual property. In copyright law, apportionment of damages is a well-established principle.²³¹ For an integrated work (such as a movie), damages for unauthorized use of copyrighted content (such as a song) will be limited to the contribution of that content to the overall value of the work.²³² Apportionment of damages also applies to utility patents; as noted above, in the context of integrated products that infringe several utility patents, courts apportion damages based on the rough economic contribution of a patented component to the broader product.²³³ This is consistent with the general damages provision of the patent act, which applies to both utility and design patent infringement.²³⁴ However, there is an additional damages statute, applicable only to design patent infringement, that provides that a design patent infringer “shall be liable to the owner to the extent of his *total profit*, but not less than \$250.”²³⁵ The Federal Circuit has repeatedly affirmed that “Section 289 explicitly authorizes the award of total profit from the article of manufacture bearing the patented design.”²³⁶ Under this interpretation, design patentees may recover an infringer’s “total profit” even where the infringed design accounts for very little of the economic value of the broader product, such as for design features that contribute marginally to the value of a smartphone. Such a situation may lead to “outlandish” results.²³⁷ As Mark Lemley has pointed out, this lack of apportionment may vastly

231. See 17 U.S.C. § 504(b) (2012).

232. *Sheldon v. Metro-Goldwyn Pictures Corp.*, 309 U.S. 390, 402 (1940) (“Both the Copyright Act and our decisions leave the matter to the appropriate exercise of the equity jurisdiction upon an accounting to determine the profits ‘which the infringer shall have made from such infringement.’”); Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 309 (1988).

233. See *supra* Part II.C.

234. See 35 U.S.C. § 284 (2012) (“Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer . . .”).

235. *Id.* § 289 (emphasis added). See *Nordock, Inc. v. Sys., Inc.*, 803 F.3d 1344, 1352 (Fed. Cir. 2015), *vacated*, 137 S. Ct. 589 (2016); *Catalina Lighting, Inc. v. Lamps Plus, Inc.*, 295 F.3d 1277, 1290 (Fed. Cir. 2002).

236. *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 1001–02 (Fed. Cir. 2015), *rev’d*, 137 S. Ct. 429 (2016). See *Nordock, Inc.*, 803 F.3d at 1354; *Nike, Inc. v. Wal-Mart Stores, Inc.*, 138 F.3d 1437, 1448 (Fed. Cir. 1998) (interpreting § 289 to require “the disgorgement of the infringers’ profits to the patent holder, such that the infringers retain no profit from their wrong”).

237. Roberts, *supra* note 200. See Steve Lohr, *Samsung’s Patent Loss to Apple Is Appealed to Supreme Court*, N.Y. TIMES (Dec. 14, 2015), <https://www.nytimes.com/2015/12/15/technology/apple-samsung-supreme-court-patent-case.html> (describing Samsung’s arguments that the legal framework of design patents “is outdated for the modern digital world”).

overcompensate design patentees and impose undue costs on infringers.²³⁸ Notably, the Supreme Court has recently reversed the Federal Circuit and held that the relevant “article of manufacture” for determining design patents can be an entire product or part of a product.²³⁹ While the Supreme Court’s reversal is a promising development, it did not provide much guidance regarding how exactly to define the relevant article of manufacture in particular cases, thus leaving significant room to lower courts to define the scope of design patent infringement damages going forward.

* * *

Across copyright, trademark, and utility patent law, an emergent law of look and feel has evolved that mitigates exclusive rights in look and feel based on considerations of standardization, consumer expectations, and context. For instance, copyright law does not allow exclusive rights over standard expressions, trade dress law recognizes that appearance alone may be functional, and utility patent law apportions damages based on the contribution of a patented feature to the overall value of a broader product. Although arising in ad hoc fashion, this law of look and feel recognizes that designs that become standard cultural expressions or expected features of products should not always be subject to strict exclusive rights. This emergent law of look and feel also runs counter to the overly expansive way that some courts—primarily in the copyright context—have expressly used the term “look and feel” to justify broad exclusive rights. These safeguards are notably absent or muted in design patent law, a deficiency to which this Article will soon return.

III. ASSESSING THE LAW OF LOOK AND FEEL

This Part builds upon the previous doctrinal discussion to identify and assess theoretical justifications for protecting look and feel with intellectual property rights. First, we consider intellectual property theory. Building upon and extending our analysis of design patents in previous work,²⁴⁰ this Part considers whether and to what extent theories underlying copyrights, trademarks, and patents can justify exclusive rights in design. Second, we move beyond intellectual property law to consider design theory. Freed from the strictures of legal doctrine and theory, we note that designers

238. Mark A. Lemley, *A Rational System of Design Patent Remedies*, 17 STAN. TECH. L. REV. 221, 223 (2013).

239. *Samsung*, 137 S. Ct. at 434–36.

240. Peter Lee & Madhavi Sunder, *Design Patents: Law Without Design*, 17 STAN. TECH. L. REV. 277, 288–301 (2013).

themselves identify significant interests in maintaining wide access to design. We conclude that theoretical arguments in favor of protecting look and feel are equivocal and counsel for limited protection at best.

A. INTELLECTUAL PROPERTY THEORY

1. Incentives to Create

In the United States, the dominant theoretical basis for most intellectual property—including copyrights and patents—is to maintain incentives to create.²⁴¹ In economic terms, the information at the heart of intellectual assets, from the GUI of a software application to the shape of an iPhone, is nonrivalrous and nonexcludable,²⁴² which suggests that it is easy to appropriate by outside parties. Accordingly, under the traditional narrative, exclusive rights are necessary to prevent unauthorized copying and maintain incentives to create. Under this rationale, copyrights and patents (including design patents²⁴³) may provide some marginal incentive to develop new forms of look and feel.

Notably, the utilitarian objective of maintaining incentives to create has never been a persuasive justification for trademarks and trade dress. As Mark Lemley has observed, “[w]e don’t protect trademarks to encourage the creation of more trademarks, and so the incentive rationale for intellectual property will not work here.”²⁴⁴ Trademark law exists to reduce the information costs of finding particular sources of goods and services in the marketplace—not to encourage the creation of new logos, aesthetic experiences, and brand auras, no matter how viscerally compelling they may be. To the extent that trademarks and trade dress help protect and thus encourage the creation of new forms of look and feel, this is an ancillary

241. Raustiala & Sprigman, *supra* note 96, at 1688; Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1031 (2005); Hughes, *supra* note 232, at 303–04; *see also* U.S. CONST. art. I, § 8, cl. 8. (authorizing Congress to offer exclusive rights on writings and discoveries “[t]o promote the Progress of Science and useful Arts”).

242. *See* Peter Lee, *The Accession Insight and Patent Infringement Remedies*, 110 MICH. L. REV. 175, 191–92 (2011) (noting that technical information is nonrival and nonexcludable, thus satisfying the criteria of a public good).

243. *See* *Gorham Co. v. White*, 81 U.S. 511, 524 (1871) (“[Design patents] were plainly intended to give encouragement to the decorative arts.”).

244. Mark A. Lemley, *The Modern Lanham Act and the Death of Common Sense*, 108 YALE L.J. 1687, 1694 (1999). *See* William M. Landes & Richard A. Posner, *Trademark Law: An Economic Perspective*, 30 J.L. & ECON. 265, 268–73 (1987). *Cf.* ROBERT P. MERGES ET AL., *INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE* 525 (1997) (observing that the theoretical justification for trademarks differs from that of other fields of intellectual property law).

byproduct of the primary objective of reducing consumer search costs.

The incentives justification for exclusive rights on look and feel is subject to two significant critiques, one theoretical and the other empirical. First, given the accretive nature of creation, any incentives rationale for exclusive rights in design also suggests limiting those rights.²⁴⁵ Creativity and innovation are cumulative, in which parties routinely build upon prior intellectual creations to produce new ones.²⁴⁶ To the extent that those assets are subject to exclusive rights, intellectual property rights can hamper subsequent innovation. The theoretical literature shows that exclusive rights can introduce dynamic inefficiency through blocking access to a key intellectual resource²⁴⁷ or creating anticommons regimes²⁴⁸ and thickets²⁴⁹ in which parties have to clear multiple rights in order to innovate. This is also true in the design realm, particularly if exclusive rights inhere at the relatively abstract level of look and feel as courts have used that term in copyright cases. For instance, a copyright on the look and feel of Pac-Man can effectively foreclose the production of the K.C. Munchkin video game, even though the latter is aesthetically different.²⁵⁰ In the realm of “sound and feel,” the victory of Marvin Gaye’s estate in its copyright infringement suit against Robin Thicke and Pharrell Williams suggests that expansive protection of moods, feelings, and zeitgeist may chill future musical creation.²⁵¹ Patents on a method for entering data into a computer without using a keyboard can frustrate Microsoft’s ability to design a “date-picker” function for Outlook.²⁵² In short, any incentives theory for copyrights, utility patents, and design patents must consider the importance of *limiting*

245. Afori, *supra* note 12, at 1153.

246. See, e.g., Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5 J. ECON. PERSPECTIVES 29, 29 (1991); Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 966 (1990) (“To say that every new work is in some sense based on the works that preceded it is such a truism that it has long been a cliché, invoked but not examined.”); William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 332 (1989).

247. Cf. Christopher D. Hazuka, *Supporting the Work of Lesser Geniuses: An Argument for Removing Obstructions to Human Embryonic Stem Cell Research*, 57 U. MIAMI L. REV. 157, 198 (2002).

248. Cf. Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCIENCE 698, 698 (1998).

249. Cf. Carl Shapiro, *Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard Setting*, in 1 INNOVATION POLICY AND THE ECONOMY 119, 119 (Adam B. Jaffe et al. eds., 2001).

250. See *supra* note 53 and accompanying text. Cf. Yen, *supra* note 47, at 427 (“In light of such a threat [of copyright infringement], it would not be surprising if a number of future authors never proceeded with their projects.”).

251. Sisario & Smith, *supra* note 62; Roberts, *supra* note 200.

252. See *supra* notes 171–174 and accompanying text.

exclusive rights to promote follow-on innovation.

Second, the incentives theory of exclusive rights is subject to significant empirical critique, particularly in the realm of design. Although it is clear that design is an increasingly important source of value in the economy,²⁵³ it is not clear that exclusive rights are necessary to promote new designs. Here, the dynamics of the fashion industry are illustrative. As Kal Raustiala and Christopher Sprigman describe, that industry has experienced significant innovation even in the absence of effective copyright protection for new designs.²⁵⁴ Indeed, industry dynamics suggest continual investment in developing new designs: “People flock to ideas, styles, methods and practices that seem new and exciting, and then eventually the intensity of that collective fascination subsides, when the newer and hence more exciting emerge on the scene.”²⁵⁵ While industry incumbents aggressively assert another type of intellectual property right—trademark—to protect their brands,²⁵⁶ rampant copying of the latest designs is an ingrained “fact of life.”²⁵⁷ Indeed, Raustiala and Sprigman argue that *copying helps drive faster cycles of creativity and innovation* in the fashion industry.²⁵⁸

Here, the economics of innovation in various industries are highly relevant. In the utility patent realm, commentators often point to the pharmaceutical industry as the “poster child” for justifying exclusive rights.²⁵⁹ Given that it costs upwards of \$2.6 billion to develop and win marketing approval for a new drug,²⁶⁰ exclusive rights are necessary to prevent freeriding by competitors and to maintain incentives to invent. Similarly, a Hollywood blockbuster can cost hundreds of millions of dollars to produce yet be copied for a trivial expense. It is an empirical

253. See, e.g., Monseau, *supra* note 4, at 501–02.

254. Raustiala & Sprigman, *supra* note 96, at 1775 (arguing that despite the lack of design protection in the U.S., “the fashion industry continues to create new designs on a regular basis”). *But see* Hemphill & Suk, *supra* note 35, at 1170–84.

255. Hemphill & Suk, *supra* note 35, at 1149.

256. Raustiala & Sprigman, *supra* note 96, at 1691.

257. *Id.*

258. *Id.* at 1722 (arguing that “induced obsolescence” predicated on widespread copying hastens innovation in fashion design).

259. See, e.g., Richard A. Posner, *Why There Are Too Many Patents in America*, ATLANTIC (July 12, 2012), <https://www.theatlantic.com/business/archive/2012/07/why-there-are-too-many-patents-in-america/259725>.

260. See *Cost to Develop and Win Marketing Approval for a New Drug is \$2.6 Billion*, TUFTS CTR. FOR STUDY DRUG DEV. (Nov. 18, 2014), http://csdd.tufts.edu/news/complete_story/pr_tufts_csdd_2014_cost_study.

question as to whether the cost of developing new forms of look and feel is prohibitively expensive in the absence of exclusive rights, but it seems likely that the cost of developing new designs is very different from the cost of developing pharmaceuticals or movies.

Even if generating new designs requires significant investments, however, incentives other than exclusive rights provide robust motivation for their creation. This, again, is an empirical question. As we have previously argued, “market incentives, such as natural competitive imperatives to differentiate and enhance one’s products, first-mover advantage, and the search for the elusive (and commercially valuable) designation of being ‘cool’ all motivate investments in design without the need for formal exclusive rights.”²⁶¹ Likewise, in the copyright realm, many authors derive substantial benefits—including psychological, institutional, and financial—independent of enforcing exclusive rights.²⁶² Business method and software patents, in which industry players enjoy significant nonpatent incentives to invent, engender similar critiques.²⁶³

2. Incentives to Develop and Disseminate

Beyond encouraging initial creation, copyrights and patents have also been justified as providing incentives to develop and disseminate existing creations. Here again, applying this theory to protecting look and feel provides a limited justification at best. The role of exclusive rights in promoting development and dissemination has received the most elaboration in the patent context; under the “incentive to innovate” view of patents, exclusive rights help motivate not just the creation of a new invention but also all the research, development, and marketing necessary to put that invention to practical use.²⁶⁴ This incentive to innovate is related to Edmund Kitch’s “prospect theory,” in which patents are justified based on the social efficiencies of allowing a single patentee to rationally coordinate the development of a technological prospect.²⁶⁵ Though originating in the context of utility patents, prospect theory (and incentives

261. Lee & Sunder, *supra* note 240, at 291–92. Cf. Kellner, *supra* note 129, at 1014 (noting that copyrights are not necessary to create new computer interfaces, as the market provides robust incentives for manufacturers to do so); Samuelson, *supra* note 57, at 53 (noting non-copyright incentives driving software development).

262. Landes & Posner, *supra* note 246, at 331.

263. See MERGES, *supra* note 244, at 151–53, 955–1004.

264. Rebecca S. Eisenberg, *Patents and the Progress of Science: Exclusive Rights and Experimental Use*, 56 U. CHI. L. REV. 1017, 1037 (1989).

265. *Id.* at 1040–41; Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265, 267–71 (1977).

to innovate and disseminate more broadly) has also justified copyrights. Under this reasoning, copyrights provide an incentive to not only create an original expression but also to develop it (and related derivative works) into marketable products.²⁶⁶

However, prospect theory—and incentives to develop and disseminate more broadly—provides rather weak justification for intellectual property rights. In their classic article, Robert Merges and Richard Nelson draw from empirical studies to argue that competition—rather than allocation of a broad exclusive right to a single firm—best maximizes development of an intellectual asset.²⁶⁷ Similarly, Mark Lemley observes that “[t]he argument that a single company is better positioned than the market to make efficient use of an idea should strike us as jarringly counterintuitive in a market economy.”²⁶⁸ In the realm of look and feel, it is not clear that allocating exclusive rights to a particular design paradigm—such as rounded corners on a tablet—to a single party would lead to the optimal development and dissemination of that intellectual asset.

As applied to look and feel, the incentive to develop narrative is also subject to empirical challenge. Unlike a pharmaceutical drug, which requires significant investment to bring to market, a new design requires less investment to move from the drawing board to a consumer product.²⁶⁹ Furthermore, while the copyright in the *Harry Potter* books plays the (arguably) salutary role of enabling a single line of movies as derivative works, it is difficult to justify exclusive rights in design because they enable a single firm to control the development of a particular look and feel.

Indeed, given the relatively low development costs of look and feel, exclusive rights are more likely to frustrate rather than promote broad dissemination of such aesthetic assets, thus compromising important public interests. There is significant value to providing wide access to not only technologies and expressive works, but also manifestations of look and

266. See, e.g., Shyamkrishna Balganes, *Foreseeability and Copyright Incentives*, 122 HARV. L. REV. 1569, 1621–22 (2009); Michael Abramowicz, *A Theory of Copyright's Derivative Right and Related Doctrines*, 90 MINN. L. REV. 317, 355–56 (2005); Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 1047 (1997).

267. Robert P. Merges & Richard R. Nelson, *On the Complex Economics of Patent Scope*, 90 COLUM. L. REV. 839, 872–73 (1990).

268. Mark A. Lemley, *Ex Ante Versus Ex Post Justifications for Intellectual Property*, 71 U. CHI. L. REV. 129, 135 (2004). *But see* Landes & Posner, *supra* note 246, at 354–55 (providing justifications for copyrights extending to derivative works).

269. *Cf.* Hemphill & Suk, *supra* note 35, at 1189.

feel. Indeed, theorists going as far back as John Dewey argue that there is a popular interest in aesthetic experience.²⁷⁰

There is a democratic as well as distributive interest at play here, for Forever 21 and Ikea help bring beauty and a modern look and lifestyle to ordinary people, not just the ruling classes.²⁷¹ Historically, sumptuary laws helped reinforce social distinctions by delineating who could use certain designs and fashions, a function now played in some sense by intellectual property law.²⁷² However, the use of exclusive rights to shore up these distinctions has received significant normative critique.²⁷³ Expansive protection of look and feel may even chill speech, thus compromising First Amendment interests in freedom of expression.²⁷⁴ Given the relatively low development costs of new forms of look and feel, a strong interest in allowing wide access to designs counsels for limited protection at best.

3. Labor Theory and Fairness

Similarly, theories of fairness can only partially justify intellectual property protection of look and feel. At the outset, one should acknowledge that fairness has not played a prominent role in justifying intellectual property in the United States, which has largely subscribed to a utilitarian rationale aimed at enhancing incentives to create.²⁷⁵ Nonetheless, notions of fairness, particularly based on a Lockean theory of natural rights, have some purchase.²⁷⁶ Within a normative conception of Lockean labor theory, the exercise of one's labor to produce an intellectual work justifies some sort of property rights over that work.²⁷⁷ In this regard, one of Apple's primary litigation tactics was to play up its persona as a creative innovator in contradistinction to Samsung, a "slavish" copycat.²⁷⁸ Notably, natural

270. JOHN DEWEY, *ART AS EXPERIENCE* 39 (1934).

271. Beebe, *supra* note 21, at 837.

272. *Id.* at 813.

273. *Id.* at 878–87.

274. Yen, *supra* note 47, at 425.

275. See *Feist Pubs., Inc. v. Rural Telephone Serv. Co.*, 499 U.S. 340, 349 (1991); *Graham v. John Deere Co.*, 383 U.S. 1, 8–9 (1966). *But see* *Mazer v. Stein*, 347 U.S. 201, 219 (1954) ("Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.").

276. See ROBERT P. MERGES, *JUSTIFYING INTELLECTUAL PROPERTY* 31–68 (2011); Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 284 (1970) ("The theory that authors have a natural right to the fruit of their labors is an ancient one.").

277. See Hughes, *supra* note 232, at 296–97. *But see* Mark A. Lemley, *Faith-Based Intellectual Property*, 62 UCLA L. REV. 1328, 1339 (2015) (distinguishing between a natural rights theory of property, where Locke's writings have been most influential, and attempts to apply such a theory to intellectual property).

278. Carani, *supra* note 32, at 25 ("Apple's narrative at trial was concise and consistent:

rights theory provided some of the rationale for design patents, whereby a designer could obtain property rights over a design through the exercise of his or her creative labor.²⁷⁹ Indeed, the first design patent statute explicitly limited protection to those who invented or produced new, original designs by “industry, genius, efforts, and expense.”²⁸⁰

However, any theory of fairness must recognize intrinsic limitations on protecting look and feel. In particular, Lockean labor theory must recognize some proportion between contribution and reward.²⁸¹ As (then professor) Stephen Breyer observed, “simply to speak of ‘fruits of one’s labor’ does not show that the author should be paid more than his persuasion cost [to engage in some creative work] or how much more he should be paid.”²⁸² In this light, the manner in which courts historically construed the specialized damages statute for design patents—which allowed a patentee to recover profits based on an entire product that contains a relatively minimal infringing feature²⁸³—appears to be highly unfair. Furthermore, any natural rights justification for intellectual property rights must also accommodate Locke’s proviso, which cautions that propertization must leave “enough and as good left in common for others.”²⁸⁴ Where, for instance, a firm develops a particular look and feel that becomes a socially expected standard with no adequate noninfringing substitutes, Locke’s proviso would counsel for relaxing exclusive rights.²⁸⁵ More broadly, “fairness demands some recognition of the important role of consumers and the public at large in contributing to the value of new designs.”²⁸⁶

Samsung’s newfound success was the result of its ‘slavish copying’ of Apple’s world famous product designs.”).

279. See generally MERGES, *supra* note 74, at 2–3.

280. Patent Act of 1842, 5 Stat. 543, 543–45 (1842). See also *Smith v. Whitman Saddle Co.*, 148 U.S. 674, 679 (1893) (“There must be something akin to genius—an effort of the brain as well as the hand.”). This Article does not explore in depth a “personhood” theory of intellectual property, by which intellectual creations are seen as extensions of a creator’s persona, thus justifying exclusive rights. See Breyer, *supra* note 276, at 289–300; Hughes, *supra* note 232, at 330–31. Such a justification has traditionally had little purchase in intellectual property law in the United States. See Hughes, *supra* note 232, at 351–52.

281. See ROBERT NOZICK, ANARCHY, STATE, AND UTOPIA 174–78 (1974).

282. Breyer, *supra* note 276, at 286.

283. See *supra* notes 235–238 and accompanying text.

284. JOHN LOCKE, THE SECOND TREATISE OF GOVERNMENT § 27 (Thomas P. Peardon ed., 1952).

285. See Hughes, *supra* note 232, at 297–98.

286. Lee & Sunder, *supra* note 240, at 299. Cf. Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533, 1588 n.277 (1993) (“[E]ven standard intellectual products . . . will be beneficial only if someone

4. Lowering Search Costs and Reducing Consumer Confusion

While the previous discussion has focused on theories primarily relevant to copyrights and patents, it is also helpful to consider whether theories informing trademark law can justify protecting look and feel. Trademark law draws from several rationales,²⁸⁷ but courts and commentators primarily justify trademarks as mechanisms for reducing search costs. Trademarks such as Nike's swoosh lower the information costs of finding goods and services in a crowded marketplace. Accordingly, trademark infringement protects not against all unauthorized uses of a mark, but only against uses of marks that produce a likelihood of consumer confusion. For instance, unauthorized use of a competitor's mark in an advertisement featuring a side-by-side comparison will not constitute trademark infringement in the absence of consumer confusion. Notably, the original standard for design patent infringement is rather similar,²⁸⁸ as it considers whether an ordinary observer would be deceived when choosing between the patented and accused designs.²⁸⁹

However, trademark law's interest in lowering search costs and reducing consumer confusion provides a poor justification for protecting look and feel. As the Supreme Court recognized in *Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, consumers generally perceive product design as making a product more useful or appealing, rather than signaling the specific maker of that product.²⁹⁰ Indeed, protecting look and feel would not be very effective in advancing the goals of trademark:

[T]he benefits of trademark protection for product design features are quite low—consumers are likely to have several other indicators by which they can identify the source of the product at issue (packaging, brand names, etc.), so protection of the product design itself often has relatively little marginal source-identifying value.²⁹¹

Furthermore, functionality poses a formidable challenge to any trademark-based justification for protecting look and feel. Functionality

appreciates them; labor is never the only source of value, even for Locke.”).

287. For example, there are inflections of tort and deterrence rationales in trademark law, particularly due to its origins in state-law doctrines prohibiting unfair competition. See *MERGES*, *supra* note 74, at 765.

288. Smith, *supra* note 180, at 12 (“Design patents mimic (and modify) certain concepts from trademark / trade dress law, making the two forms of protection at least abstractly related.”).

289. See *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1295 (Fed. Cir. 2010) (articulating the design patent infringement standard as whether “an ordinary observer, familiar with the prior art designs, would be deceived into believing that the accused product is the same as the patented design”).

290. *Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205, 213 (2000).

291. Lemley & McKenna, *supra* note 19, at 2103.

doctrine holds that non-reputation-related product features that drive purchasing decisions are inappropriate for trademark protection, even if those features can also signal source. As noted, the dual-spring design of a roadside sign holder is not eligible for trademark protection because it is functional, even though it can also indicate source.²⁹² Granting trademark rights to functional features would create an undue competitive advantage, as other firms would be prohibited from offering a non-reputation-related feature that consumers desire. This notion applies not only to utilitarian functionality but also to aesthetic functionality. For instance, in *Deere & Co. v. Farmhand, Inc.*, a district court invoked aesthetic functionality to deny John Deere's attempt to claim its particular shade of green as protectable trade dress.²⁹³ The court observed that farmers desired aesthetic consistency between John Deere equipment and implements used with such equipment. Even though this shade of green was highly associated with John Deere, granting exclusive rights to this color would confer an undue competitive benefit to John Deere, thus disadvantaging other farm equipment manufacturers.²⁹⁴ Similarly, even if consumers associated design elements such as a flat face and rounded corners with Apple, if consumers came to desire or expect those features for reasons other than associations with Apple, those features should assume a functional status and not receive protection.

Furthermore, even if trademark law protects elements of look and feel, the protection should be inherently limited due to the likelihood of confusion standard for infringement. Given this standard, third parties' unauthorized use of a protected mark in a manner that is not likely to produce consumer confusion should not lead to infringement. For instance, even if two products have a similar look and feel, packaging, logos, and the circumstances of purchase may all mitigate the possibility of consumer confusion, thus preventing liability.

B. DESIGN THINKING

Moving beyond the legal realm, design theory also casts doubt on the propriety of strong exclusive rights in look and feel. To elaborate this critique, one must first understand design theorists' expansive notion of design. Here we focus in particular on contemporary design theory, known

292. *Traffix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23, 35 (2001).

293. *Deere & Co. v. Farmhand, Inc.*, 560 F. Supp. 85, 98 (S.D. Iowa 1982), *aff'd*, 721 F.2d 253 (8th Cir. 1983).

294. *Id.* at 98. *See Hughes, supra* note 43, at 1248–49.

as “design thinking.” Design thinking posits a broad conception of design, not simply as packaging and decoration, but as “human-centered” innovation that meets the needs of users—including needs we did not know we had. According to Tim Brown of IDEO, the best designers create whole new experiences, lifestyles, and *ways of being in the world*. So focused, design thinking spans multiple disciplines, from engineering to applied art to management. As Brown writes:

Great design satisfies both our needs and our desires. Often the emotional connection to a product or an image is what engages us in the first place. Time and again we see successful products that were not necessarily the first to market but were the first to appeal to us *emotionally and functionally*. In other words, they do the job and we love them. The iPod was not the first MP3 player, but it was the first to be delightful. Target’s products appeal emotionally through design and functionally through price—simultaneously.²⁹⁵

Thus, design does not merely refer to products or objects—that is, the artifact view, focused on the shape or color of a product. Rather, design theory suggests a broad, conceptual understanding of design as creation of new modes of being and new social relations. The best designs please aesthetically and functionally, arousing feelings and connections to brands and communities, while also being more affordable and efficient to make and use. Starbucks was one of the first companies to understand design in this conceptual way: Starbucks is not about the coffee.²⁹⁶ Steve Jobs perfected design thinking at Apple. Jobs said that in designing Apple products, he sought to imitate the design of the Eichler home in which he grew up in Northern California. For Jobs, Eichler homes embodied great design because they were simple, clean, elegant, and did not cost much—exactly what Jobs says “was the original vision for Apple. That’s what we tried to do with the first Mac. That’s what we did with the iPod.”²⁹⁷ Jobs’ products were aesthetically pleasing and delightful *because of their utility*. They “emphasized rationality and functionality by employing clean lines and forms.”²⁹⁸ Furthermore, like Eichler homes, simplicity increased the “capability for mass production.”²⁹⁹ (Think Ikea.)

295. Tim Brown, *Design Thinking*, HARV. BUS. REV., June 2008, at 84, 92 (emphasis added), <https://hbr.org/2008/06/design-thinking> (“As more of our basic needs are met, we increasingly expect sophisticated experiences that are emotionally satisfying and meaningful.”).

296. See generally BRYANT SIMON, EVERYTHING BUT THE COFFEE: LEARNING ABOUT AMERICA FROM STARBUCKS (2009).

297. Walter Isaacson, *Keep it Simple*, SMITHSONIAN MAG., Sept. 2012, at 42, 45.

298. *Id.*

299. *Id.*

We have already noted that as companies increasingly recognize how aesthetics drive market success, it is no surprise that firms have attempted to commercialize and protect design as intellectual property.³⁰⁰ IDEO “has racked up more than 1,000 patents since 1978 and won 346 design awards since 1991, more than any other firm. The design-thinking process underpins the company’s nearly \$100 million in annual revenue.”³⁰¹

However, while the march toward greater propertization by commercial entities is understandable, design theory cautions against overly strict rights in look and feel. Beyond economic factors, design thinking posits that access to contemporary aesthetic trends is an important element of self-actualization and defining one’s relationship to society. As noted, in the fashion realm, sumptuary laws historically allowed only elites to wear certain designs and fabrics, thus allowing them to “demarcate themselves as a group from the lower classes.”³⁰² Nowadays, however, such stratified exclusivity conflicts with a strong democratic interest in allowing wide access to fashions and designs. Indeed, one conception of fashion is that it reflects the popular zeitgeist—the spirit of the times.³⁰³ Participation in design trends is not just a consumer choice or unreflective imitation of the masses but a “means of individual expression through which people partake in collective movement and the spirit of the times.”³⁰⁴ Indeed, there are psychological and social dimensions to being “in fashion”³⁰⁵ that constrained access to design may frustrate. Design theory views design dynamically, where the look and feel of people, products, and services come to be one and the same as culture itself. Under this cultural view, market products and services become lifestyles and ways of thinking—the lexicons and shared meaning that make culture tick.³⁰⁶

Design theory’s elaboration of the complex functionality of design—enhancing efficiencies for mass production, ease of use, and aesthetic pleasure all at once—further counsels against exclusive rights in design thinking. Notably, it was this recognition that Apple’s iPhone and iPad employed beauty in the service of “ease of use” that led the Federal Circuit

300. See *supra* Part II.

301. Linda Tischler, *Ideo’s David Kelley on “Design Thinking,”* FAST CO.: CO.DESIGN (Feb. 1, 2009, 5:00 AM), <https://www.fastcodesign.com/1139331/ideos>.

302. Hemphill & Suk, *supra* note 35, at 1156. See also Beebe, *supra* note 21, at 819–24.

303. Hemphill & Suk, *supra* note 35, at 1158.

304. *Id.* at 1163.

305. *Id.* at 1160.

306. See MADHAVI SUNDER, FROM GOODS TO A GOOD LIFE: INTELLECTUAL PROPERTY AND GLOBAL JUSTICE 10 (2012) (describing shared meaning as “what makes culture tick”).

last year to overturn trade dress protection in Apple's designs. Finding that "every single element" in Apple's unregistered trade dress improved ease of use and functionality, from "pocketability" and "durability" to maximizing the display for users and making touch operations more convenient, the Federal Circuit concluded it was "thus clear that the unregistered trade dress has a utilitarian advantage."³⁰⁷ Under trade dress analysis, even the designs of an Apple iPhone's home-screen icons could not be protected because they "promote usability."³⁰⁸ The court concluded that to the extent that "Apple pursued both 'beauty' and functionality in the design of the iPhone," exclusive rights through trademark were not appropriate.³⁰⁹ Trade dress's capacious view of functionality—recognizing both utilitarian functionality and aesthetic functionality—allows for regulation of protection in light of changing consumer expectations, standardization, and context. Design patent law, in contrast, does not adequately recognize that in some contexts, form is function. This allowed a paradoxical result: the court affirmed design patents in these very same Apple designs, despite acknowledging their functional nature.³¹⁰

Design thinking reveals the fundamentally interdisciplinary nature of design, thus further complicating its protection through intellectual property. In an early, influential article, Richard Buchanan identified as the "wicked problem[] of design thinking" its insistence on "the impossibility of rigid boundaries between industrial design, engineering, and marketing."³¹¹ Buchanan proposed using design to solve "extraordinarily persistent and difficult challenges."³¹² In copyright (merger and the useful article doctrine), trademark (functionality), and utility patent law (no protection for abstract ideas), doctrines usefully limit protection of works in the interstices of business, industrial arts, and expression. The expansive concept of design thinking suggests the need for limits for design protection, as well, by highlighting the ways that design implicates business methods, systems thinking, operating systems, utility, expression, and social status all at once. "There's no longer any real distinction

307. *Apple Inc. v. Samsung Elecs. Co.*, 786 F.3d 983, 993 (Fed. Cir. 2015) ("[T]he evidence showed that the iPhone's design pursued more than just beauty. Specifically, Apple's executive testified that the theme for the design of the iPhone was: [']to create a new breakthrough design for a phone that was beautiful and simple and *easy to use*'], *rev'd*, 137 S. Ct. 429 (2016).

308. *Id.* at 995. We compare the court's legal analysis of "functionality" under design patent law *supra* notes 165–166.

309. *Apple*, 786 F.3d at 994.

310. *Id.* at 998–99.

311. Richard Buchanan, *Wicked Problems in Design Thinking*, 8 DESIGN ISSUES 5, 20 (1992) (emphasis omitted).

312. Brown & Martin, *supra* note 5, at 58.

between business strategy and the design of the user experience,” said Bridget van Kralingen, the senior vice president of IBM Global Business Services.³¹³ Given the holistic, multidisciplinary, interrelated nature of design systems, exclusive rights in one domain may hamper the emergence of a whole that could have been greater than the sum of its parts.³¹⁴

The potential for design to address broader social challenges also counsels against strict exclusive rights in look and feel. Design theorists focus not only on the business benefits of design (which are important), but also on the environmental and social impact of design.³¹⁵ Today governments aim for “design to tackle some of the big issues in the world, from security and health to the environment and supporting communities.”³¹⁶ This view of design thinking as user centered and focused on problem solving again highlights the utilitarian nature of design.³¹⁷ “Designers” are not decorators, but rather problem solvers,³¹⁸ and even “problem finders.” Their role is to develop empathy and immerse themselves in communities to discover users’ challenges and needs and how to best solve their problems.³¹⁹ While utility patents for truly extraordinary invention may be justified, exclusive rights in design in the absence of such showing may hamper the process of discovery as well as access to the solutions it produces.

Consideration of the broad social benefits of design that creates new standards of communication, socialization, and business—like the iPhone and iPad, for example—suggests that we should be wary of exclusive rights in such innovation. Access to design can symbolize inclusivity, modernity,

313. Jon Kolko, *Design Thinking Comes of Age*, HARV. BUS. REV., Sept. 2015, at 1, 6, <https://hbr.org/2015/09/design-thinking-comes-of-age>.

314. *Cf. id.* at 1, 4 (“Think about how much tougher it is to reinvent a health care delivery system than to design a shoe.”).

315. Luebke, *supra* note 25, at 39.

316. Mat Hunter, *What Design Is and Why It Matters*, CREATIVE INDUSTRIES: NEWS & VIEWS, <http://www.thecreativeindustries.co.uk/uk-creative-overview/news-and-views/view-what-is-design-and-why-it-matters>.

317. Lohr, *supra* note 24.

318. Tischler, *supra* note 301 (quoting IDEO Founder David Kelley) (“We moved from thinking of ourselves as designers to thinking of ourselves as design thinkers. We have a methodology that enables us to come up with a solution that nobody has before.”).

319. Grace Chao, *Behind the Sticky Notes: Design Thinking*, STAN. DAILY (May 15, 2015), <http://www.stanforddaily.com/what-is-design-thinking/> (“[Design thinking] highlights problem *finding* as much as it does problem solving. It is a human-centered design process: one that encourages designers to observe users in the authentic context of their lives and ‘empathize,’ or experience the same problems that their users are experiencing.”).

and “cool”³²⁰ (by having), and exclusivity, anachronism, and social outcaste (by not having). The profound social, economic, and psychological impacts of design call for a more flexible standard. In the final section, we return to the levers used in intellectual property laws outside of design patents that promote access to new industry and societal standards, help meet consumer expectations, and take context into consideration, to posit a more self-conscious, holistic approach to design law that may better promote the dual goals of incentivizing the benefits of design while allowing widespread distribution of those benefits.

IV. REFORMING THE LAW OF LOOK AND FEEL

In this Part, we draw upon intellectual property doctrine and theory, as well as design theory, to propose reforms to the legal protection of look and feel. We argue for sustaining protection for look and feel but appropriately limiting it. Our proposals draw upon existing doctrinal safeguards in copyright, trademark, and patent law that selectively mitigate exclusive rights based on considerations of standardization, consumer expectations, and context. At bottom, we seek to shore up existing safeguards and implement them where they are currently lacking. In particular, we find a distressing lack of flexibility in design patent law, a relatively immature doctrinal area that could benefit from the sophistication of its intellectual property siblings.³²¹

There is an additional reason to consider the law of look and feel as an integrated whole. In large part, copyright, trademark, and patent law have developed in siloes, perhaps with the understanding that most works would primarily fall within one field of intellectual property protection. Indeed, there are longstanding doctrinal rules that tend to shunt protection of a work (or elements of that work) into one area of protection but not another.³²² However, in practice, a single product is often subject to

320. In ruling that Samsung’s Galaxy did not infringe patents on Apple’s iPad, Britain’s Court of Appeal noted that Samsung’s products “are not as cool” as Apple’s. Raphael Satter, *UK Court Sides with Samsung in Apple Suit*, U.S. NEWS (Oct. 18, 2012), <http://www.usnews.com/news/technology/articles/2012/10/18/uk-court-sides-with-samsung-in-apple-suit>.

321. *Cf.* Risch, *supra* note 57, at 59 (“[C]ourts hearing design patent cases should consider the same economic factors that are critical to copyright—substitution, customers, and competitors—when assessing design patent protection.”). Of course, some argue against applying doctrines from one area of IP law to another, including in the context of design patent law. *See, e.g.*, Du Mont & Janis, *supra* note 182, at 302 (questioning the importation of trademark functionality analysis into design patent functionality analysis).

322. *See, e.g.*, *Louis de Jonge & Co. v. Breuker & Kessler Co.*, 182 F. 150, 152 (E.D. Pa. 1910) (ruling that a painting could be protected under copyright or design patent law, but not both), *aff’d*, 191 F. 35 (3d Cir. 1911), *aff’d*, 235 U.S. 33 (1914).

multiple, overlapping intellectual property regimes.³²³ This is particularly the case with designed objects that embody look and feel. Although Congress and the courts may appear to have carefully calibrated protection within each of these doctrinal areas, they may not have adequately considered the simultaneous application of other types of protection. The cumulative effect of overlapping exclusive rights is likely to lead to overprotection, thus counseling strict attention to limitations and exceptions.

An important consideration in building greater flexibility into the legal protection of look and feel is *where* to locate such flexibility along the continuum spanning protectability, infringement, and remedies. A further complicating factor is that some doctrinal “policy levers”³²⁴ operate as binary switches (e.g., doctrines that determine protectable or nonprotectable subject matter) while others represent more granular mechanisms for calibrating the scope of protection (e.g., rules to widen or narrow claim scope). This Part suggests shoring up and introducing safeguards sensitive to standardization, consumer expectations, and context within several doctrines spanning protectability, infringement, and remedies.³²⁵

A. PROTECTABILITY

First, turning to protectable subject matter, doctrines covering look and feel should strengthen and implement mechanisms to mitigate exclusive rights in response to standardization of designs and evolving consumer expectations.³²⁶ As a preliminary matter, we argue that the expansive way that copyright courts have expressly used the term “look and feel” or “total concept and feel” is overly broad and abstract, which tends to unduly expand the scope of protection. Additionally, as described above, both copyright and trademark law limit protection for expressions

323. See, e.g., Hughes, *supra* note 43, at 1269 (“[T]he subject matter of design patents can often also be protected by copyright: double protection is arguably the norm . . .”); Afori, *supra* note 12, at 1118 (defending overlapping protection of design by multiple IP regimes).

324. Cf. Dan. L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1638–75 (2003) (discussing policy levers in the utility patent context).

325. Cf. Mark A. Lemley & Mark P. McKenna, *Scope*, 57 WM. & MARY L. REV. 2197, 2271 (2016) (arguing that rather than cabin protectability (including subject matter), infringement, and remedies, “[c]opyright, trademark and design patent should seek to emulate patent law in adopting an integrated, pretrial determination of the proper scope of the IP right”).

326. Mitigating protection in light of standards and consumer expectations could, depending on context, operate to completely eliminate protection or narrow the scope of protection so as to render infringement less likely.

and marks that become indispensable or standard because of widespread social adoption and reliance.³²⁷ In copyright, mechanisms such as merger and the *scènes à faire* doctrine preclude protection of expressions that are or become “standard.” In this regard, early graphical user interface decisions such as *Apple Computer, Inc. v. Microsoft Corp.* appropriately employed the *scènes à faire* doctrine to deny copyright protection on tiled displays and overlapping windows, which had become the standard approach for organizing a computer desktop.³²⁸ Importantly, this doctrine recognizes both that “standard” assets are inappropriate for strict exclusive rights and that once-protected expression can become standard over time.³²⁹ These doctrines can usefully eliminate exclusive rights on look and feel on the rare occasion³³⁰ that they come to embody consumer expectations, standard expressions, or the spirit of the times.³³¹

A conscious approach to design protectability focusing on standardization, consumer expectations, and context can help us to reconsider a design copyright case recently decided by the Supreme Court, *Star Athletica, L.L.C. v. Varsity Brands, Inc.*,³³² which considered whether the stripes and chevron designs on a cheerleading uniform are copyrightable subject matter. The Sixth Circuit held that the useful article doctrine did not preclude copyright protection of these design elements because the stripes and chevrons are unrelated to the functionality of the uniform. But the court defined the function of the uniform too narrowly, as merely to “cover the body, wick away moisture, and withstand the rigors of athletic movements,” and to “permit the wearer to cheer, jump, kick, and flip.”³³³ In so doing, the court ignored the context of these designs. In contrast, both the district court and the dissent at the appeals court recognized that stripes and chevrons serve an additional function here unlike in other areas of clothing, and that is to identify the wearer *as a*

327. See *supra* notes 77–101, 113–115, and accompanying text.

328. *Apple Comput., Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1444 (9th Cir. 1994).

329. See Lee, *supra* note 77, at 83–85. Cf. Hughes, *supra* note 232, at 320 (“Yet widespread use of something, like columns and vaulted ceilings, has another effect: it makes a particular idea *appear* to be a basic truth or process. At some point, one hardly can imagine the larger social organization without the lesser object.”).

330. Cf. Landes & Posner, *supra* note 246, at 352 (“The probability that a particular display format will become the industry standard is small.”).

331. Hughes, *supra* note 232, at 322 (“One rule of thumb is that the more generally required by society an idea is, the more important and less subject to propertization it becomes.”).

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

333. *Varsity Brands, Inc. v. Star Athletica, LLC*, 799 F.3d 468, 487, 490–91 (6th Cir. 2015), *aff’d*, 137 S. Ct. 1002 (2017).

cheerleader.³³⁴ A more particularized assessment of functionality that focuses on the role of garment designs in context is attentive to consumer expectations regarding look and feel and the dynamic way that, over time, designs may become standard, or “uniform.”

The Supreme Court took yet another approach. The majority upheld the copyright in the uniform designs, saying that the stripes and chevrons could be imagined as separate two-dimensional works of art that were copyrightable in their own right.³³⁵ But in his dissent, Justice Breyer argued that the majority’s approach was wrong to conclude that the design elements of the uniform could be conceived separately from their context as cheerleading uniforms: without the designs, the uniforms ceased to be uniforms.³³⁶ In addition to context, Justice Breyer expressed concern about too easily awarding copyright to fashion design, which could harm competition in the fashion industry.³³⁷ He warned of the need to “put[] design copyrights in their rightful place;” otherwise, they would create monopolies on useful articles, like cheerleading uniforms.³³⁸

Analogously, trademark and trade dress law should maintain robust safeguards to exclude standard design elements—which at some point may have signaled source—from protectability. Several doctrines can provide this valuable safety valve. The first is distinctiveness. In trade dress law, product *packaging* that is common or a mere refinement of common ornamentation is not inherently distinctive.³³⁹ Thus, such manifestations of “standard” look and feel should not be eligible for protection. Furthermore, product *design* is never inherently distinctive.³⁴⁰ The Supreme Court has recognized that product design can ultimately signal source (and thus

334. *See id.* at 491 (quoting lower court’s conclusion that “without team colors stripes, chevrons, and similar designs,” the object in question “is not recognizable as a cheerleading uniform”); *id.* at 495 (McKeague, J., dissenting) (“Clothing provides many functions, but a uniform at its core identifies its wearer as a member of a group.”).

335. *Star Athletica*, 137 S. Ct. at 1011 (“The ultimate separability question, then, is whether the feature for which copyright protection is claimed would have been eligible for copyright protection as a pictorial, graphic, or sculptural work had it originally been fixed in some tangible medium other than a useful article before being applied to a useful article.”).

336. *Id.* at 1030–31 (Breyer, J., dissenting).

337. *Id.* at 1031 (“Can the design features (the picture, the graphic, the sculpture) be physically removed from the article (and considered separately), all the while leaving the fully functioning utilitarian object in place? If not, can one nonetheless conceive of the design features separately without replicating a picture of the utilitarian object? If the answer to either of these questions is ‘yes,’ then the design is eligible for copyright protection. Otherwise, it is not.”).

338. *Id.* at 1033.

339. *See, e.g.,* *Seabrook Foods, Inc. v. Bar-Well Foods, Ltd.*, 568 F.2d 1342, 1344–46 (1977).

340. *Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205, 212 (2000).

receive trade dress protection), but only upon a showing of secondary meaning.³⁴¹ However, where design is merely decorative, courts recognize that trade dress law has an interest in promoting competition among producers using the same or similar designs.

Notably, there is a dynamic element to distinctiveness. In trademark, once-protected word marks that become generic lose their distinctiveness and thus their protection.³⁴² Analogously, we argue that product design that had once acquired distinctiveness through secondary meaning could *lose* that distinctiveness through evolving consumer expectations. After all, secondary meaning attaches when, “in the minds of the public, the primary significance of a [mark] is to identify the source of the product rather than the product itself.”³⁴³ By this definition, secondary meaning can be acquired, but it can also be lost (à la genericide).³⁴⁴ Put differently, if the *primary* significance of a mark ceases to signal source, then exclusive rights should fall by the wayside. In practical terms, if the rounded corners and flat face of an iPad, which may at one time have signaled “Apple,” come primarily to signal “cool” or “tablet,” then such design features have lost whatever secondary meaning they may have attained and are inappropriate for trade dress protection. In this fashion, by paying fastidious attention to evolving consumer perceptions and distinctiveness, trademark law can “retire” elements of look and feel that may have one time signaled source but no longer do so.

Another conceptual route to reach a similar result flows through the doctrine of functionality. Recall that trademark law—under both utilitarian and aesthetic functionality—will not protect features that are essential to a product or are so desirable that precluding a competitor from using the feature would be unfair.³⁴⁵ Within this conception, it is well established that if technical elements affect the cost or quality of the article in a non-reputation-related manner, then they should not be subject to exclusive rights as trademarks.³⁴⁶ Similarly, if the look and feel of a product affects the cost or quality of the article in a non-reputation-related manner, such as a streamlined, minimalist shape for a smartphone, it should be considered

341. *Id.* at 216.

342. *See supra* notes 83–93, 113–115, and accompanying text.

343. *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 851 n.11 (1982).

344. *Cf. Hughes, supra* note 232, at 320 (“In short, some ideas become ‘depropertized.’”).

345. *See Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 165 (1995). Another conceptual route to reach a similar result flows through the doctrine of functionality. *See generally* Christopher Buccafusco & Mark A. Lemley, *Screening Functionality* (Stanford Public Law Working Paper No. 2888094 & Cardozo Legal Studies Research Paper No. 509, 2016), <https://ssrn.com/abstract=2888094>.

346. *See supra* notes 124–126 and accompanying text.

functional and not subject to exclusive rights as trade dress.³⁴⁷

As applied to look and feel, this reasoning suggests that exclusive rights on design features embodying “the right touch of beauty” may confer an undue competitive advantage on a right holder.³⁴⁸ Furthermore, product designs can *become* functional over time as they become the standard design paradigms to which firms must have access to compete effectively.³⁴⁹ Indeed, given the difficulties of parsing utilitarian and aesthetic functionality,³⁵⁰ it may be more useful to simply regard the functionality doctrine as preventing unfair competition,³⁵¹ in this light, design features may be considered functional when exclusive rights over them would unduly hinder competition.

Design patent law would benefit from a more robust conception of functionality, particularly the aesthetic variety, thus incorporating similar doctrinal safeguards that eliminate or curtail exclusive rights on “standard” designs.³⁵² In particular, design patents would benefit from a more nuanced and dynamic conception of functionality that adopts principles from trademark doctrine.³⁵³ If consumers come to expect a certain design, such

347. *Qualitex*, 514 U.S. at 170.

348. *Cf. In re Penthouse Int'l Ltd.*, 565 F.2d 679, 680 (C.C.P.A. 1977) (holding that jewelry designs are generally not registrable as functional but allowing registration on the facts of this case because applicant sought to register its pre-existing mark expressed as a piece of jewelry). Justin Hughes argues against reading this view too broadly and contends that aesthetic functionality should not constrain Apple's exclusive rights on its iPhone design because of any undue competitive advantage. Hughes stresses that aesthetic functionality should not apply here because Apple's design is just “one of many ways to meet the general consumer aesthetic for a ‘touch of beauty.’” Hughes, *supra* note 43, at 1279 (emphasis omitted). However, we would argue that in some cases—and the look and feel of the iPhone may be one of them—there are no acceptable noninfringing substitutes for a protected design, particularly when that design becomes a standard that consumers expect. In such cases, we would argue that aesthetic functionality should apply.

349. Notably, courts have recognized that product features that originated as functional can become nonfunctional. *Jay Franco & Sons, Inc. v. Franek*, 615 F.3d 855, 859 (7th Cir. 2010). This proposal recognizes the opposite dynamic—that nonfunctional features can become functional. *But see* Hughes, *supra* note 43, at 1230 (arguing that aesthetic functionality should only be obtained where a product feature triggers a cognitive response that predates the trademark owner's activities).

350. *See, e.g., Knitwaves, Inc. v. Lollytogs Ltd.*, 71 F.3d 996, 1006 (2d Cir. 1995) (citing *Wallace Int'l Silversmiths, Inc. v. Godinger Silver Art Co.*, 916 F.2d 76, 79–81 (2d Cir. 1990)) (“[T]he functionality doctrine may apply even to features of a product that are purely ornamental.”).

351. *See Abercrombie & Fitch Stores, Inc. v. Am. Eagle Outfitters, Inc.*, 280 F.3d 619, 640 (6th Cir. 2002) (“Concern for realistic competition in a given industry has a place in trade dress law: the functionality doctrine.”).

352. *Cf. Risch, supra* note 57, at 82 (discussing standardization as a rationale for mitigating strict intellectual property rights).

353. The Federal Circuit has on occasion drawn on trade dress functionality in its discussions of design patent functionality. Some commentators have criticized this mixing of doctrines. *See* Saidman,

as rounded corners on a tablet, this consideration should weigh against perpetuating an undue market advantage to the one firm that has patented it.³⁵⁴ In essence, that feature has achieved functional status—both utilitarian and aesthetic. In theory, these considerations could eliminate protection of a design altogether, analogously to the *scènes à faire* doctrine or genericide. We argue, however, that a more fruitful approach would be to consider such standardization and consumer interests in the remedies stage, denying injunctive relief against competitors who use such stock designs and allowing for apportioned damages.³⁵⁵

At bottom, design patent law would be improved by adopting some doctrinal mechanism for recognizing the dynamic nature of standardization.³⁵⁶ As Michael Risch notes, “[a] design that is ornamental when conceived may become functional years later, as technology expands and changes.”³⁵⁷ For instance, a particular animation used for expanding windows on a computer desktop may initially be ornamental but over time can become the way that consumers expect windows to expand, thus achieving functional status.³⁵⁸ Indeed, “a court’s willingness to protect the design might decrease as the standard becomes entrenched in user expectations.”³⁵⁹ For instance, while Apple’s square icons with rounded corners and “dock” of several icons may have been initially ornamental, over time they may be regarded as functional due to evolving consumer expectations (including the expectations of consumers who do not even

supra note 212, at 325; Carani, *supra* note 212, at 21. However, given that several branches of intellectual property law prohibit protection of functionality, identifying (and adapting) similar concepts and rationales does not appear to be inherently problematic as long as they are appropriately tailored to particular doctrinal contexts.

354. Rebecca Tushnet has written about a related problem with design patents—that without a doctrinal limitation akin to the idea/expression dichotomy in copyright law, design patents’ focus on similarity between products does not amply account for valid copying of elements in the public domain. See Rebecca Tushnet, *The Eye Alone Is the Judge: Images and Design Patents*, 19 J. INTELL. PROP. L. 409, 423–26 (2012).

355. See *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 392 (2006) (articulating a four-factor equitable test to determine the appropriateness of injunctive relief upon a finding of patent infringement); Lee, *supra* note 77, at 115. *Cf.* *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 443–44 (E.D. Tex. 2006) (denying injunctive relief to patentee z4 based in part on widespread reliance on infringing Microsoft products).

356. As an analytical matter, courts could consider functionality in the context of determining protectable subject matter or at the infringement stage, when courts filter out functional elements when comparing protected and accused works.

357. Risch, *supra* note 57, at 93. Conversely, “some designs may be functional when originally conceived and become ornamental as time passes.” *Id.*

358. *Id.* at 94.

359. *Id.*

own Apple products).³⁶⁰ Such relaxation of exclusive rights in response to standardization and consumer expectations promotes competition, enhances consumer welfare, and would be a welcome modification to design patent law.³⁶¹

B. INFRINGEMENT

Turning from doctrines of protectability to infringement, the manner in which courts compare protected and accused designs can also provide valuable flexibility in the law of look and feel. As a guiding principle, context matters. For instance, when similarities between a copyrighted work and an accused work inhere closer to the realm of ideas and necessary building blocks rather than the realm of particularized expressions, courts have usefully required “virtual identity” rather than “substantial similarity” to find infringement. In this vein, the Ninth Circuit appropriately declined to find infringement (on a virtual identity standard) in *Frybarger v. International Business Machines Corp.* because any similarities between two video games existed at the level of indispensable ideas.³⁶² Courts should apply a sliding scale, where the more similarities exist close to the level of stock or indispensable ideas, the more “identical” the copyrighted and accused works should be in order to find infringement.³⁶³

Context also usefully cabins trademark and trade dress infringement. Recall that trademark infringement depends not on simply using someone else’s mark (or a substantially similar one) but on a likelihood of consumer confusion. Thus, even if two forms of product design trade dress are similar, product packaging, logos, and the circumstances surrounding the purchase of an item may lessen the chance of consumer confusion and, therefore, the appropriateness of finding infringement. Indeed, courts are less willing to protect non-point-of-sale confusion relative to point-of-sale confusion.³⁶⁴

360. *Id.* at 99.

361. *Cf. id.* at 101 (“The world is better off with two smartphones competing for customers by introducing more and better features, especially if users can easily switch between the two of them as they so desire.”).

362. *Frybarger v. Int’l Bus. Machs. Corp.*, 812 F.2d 525, 529 n.2 (9th Cir. 1987).

363. *Cf. Hemphill & Suk, supra* note 35, at 1153 (proposing a limited exclusive right in fashion that would prohibit close copying but allow broad participation in design trends).

364. *Compare* *Gibson Guitar Corp. v. Paul Reed Smith Guitars, LP*, 423 F.3d 539, 548–49 (6th Cir. 2005) (emphasizing point-of-sale confusion), *with* *Mastercrafters Clock & Radio Co. v. Vacheron & Constantin-Le Coultre Watches, Inc.*, 221 F.2d 464, 466–67 (2d Cir. 1955) (recognizing post-sale confusion).

Design patent would also benefit from a contextual approach to infringement.³⁶⁵ The early test for infringement offered in *Gorham* focused on confusion of an ordinary observer at the time of purchase (similar to current trademark law), stating that such an ordinary observer must give “such attention as a purchaser usually gives.”³⁶⁶ Modern infringement analysis has evolved away from this context-based approach, however. As Matthew Smith writes, today courts focus less on “deception” of purchasers in a purchasing context, and more on an abstract side-by-side comparison of the two devices, “regardless of other product features that may remove a trademark-esque likelihood of confusion.”³⁶⁷ Furthermore, the Federal Circuit has explicitly held that “the ‘ordinary observer’ analysis is not limited to those features visible at the point of sale.”³⁶⁸ In short, the current approach focuses less on confusion at the moment of purchase, as trademark law does, and more on abstract confusion irrespective of the circumstances of purchase.³⁶⁹

Even so, well-established design patent doctrine holds that the appropriate perspective from which to assess infringement is a putative purchaser of a product³⁷⁰ as opposed to a casual, third-party observer. Thus, the circumstances surrounding a purchase, such as the type of good bought and the degree of care that a purchaser would exercise, should play a role in design patent infringement analysis as well. By comparison, the consumer confusion test for trademark infringement explicitly considers these contextual factors, as well as many more.³⁷¹ The law of design patent infringement should be similarly sensitive to context. After all, even if there are notable similarities between the look and feel of a Samsung Galaxy and an Apple iPhone, it is quite doubtful that a consumer, plunking down \$200 for a phone and signing a two-year agreement, would be “deceived” into purchasing a Samsung product while thinking it is actually an iPhone.³⁷²

365. Typically, design patent cases turn on questions of infringement rather than validity. Christopher V. Carani, *Apple v. Samsung: Intelligence on Apple’s U.S. Design Patent Offensive*, 82 PAT., TRADEMARK & COPYRIGHT J. 906, 913 (Oct. 28, 2011).

366. *Gorham Co. v. White*, 81 U.S. 511, 528 (1871).

367. Smith, *supra* note 180, at 29.

368. *Contessa Food Prods., Inc. v. Conagra, Inc.*, 282 F.3d 1370, 1381 (Fed. Cir. 2002).

369. Smith, *supra* note 180, at 13–14.

370. *Contessa*, 282 F.3d at 1381 (“[T]he *Gorham* test applies an objective frame of reference, the hypothetical purchasing decision to be made by an ordinary observer.”).

371. See *AMF Inc. v. Sleekcraft Boats*, 599 F.2d 341, 348–49 (9th Cir. 1979) (listing numerous factors for determining a likelihood of confusion between “related” products).

372. Cf. *Fisher*, *supra* note 204 (“No one buys a Samsung phone because they’re confused into thinking it is an iPhone.”).

Along the theme of context, design patent law would benefit from greater analytical and contextual consideration in infringement determinations rather than relying on rather broad, holistic comparisons. First, design patent law should more rigorously consider details in infringement analyses. Under prevailing design patent doctrine, “it is the appearance of a design as a whole which is controlling in determining questions of . . . infringement.”³⁷³ Notably, this holistic approach departs from utility patent infringement by not requiring that all elements of a claimed design be present in the accused design to find infringement.³⁷⁴ The absence of an “all elements” rule lends itself to broad, impressionistic comparisons of protected and accused designs, which tends to unduly expand the scope of protection.

Second, design patent law should consider the “design as a whole” *within its context*. A particular “design as a whole,” such as the patented shape of a screen icon, may only comprise a small component of a large, integrated product, such as a smartphone. Even if an accused product contains an infringing design, it is entirely possible that broader differences between products would negate the “deception” required for design patent infringement. Thus, for instance, even though Samsung’s Galaxy may have screen icons that infringe Apple’s design patents, this similarity would not likely deceive a consumer into buying a Samsung phone thinking that it is an iPhone. After all, the relevant market is for smartphones, not for icons. In general, design patent infringement analysis should shift from an abstract assessment of similarity between devices to a contextualized review.

C. REMEDIES

Finally, the law of look and feel should maintain (and in some cases, implement) a due regard for proportion and context in determining remedies. First, courts would be well served to consider standardization, consumer expectations, and context in determining whether to grant injunctive relief upon a finding of infringement of some protected look and feel. The Supreme Court recently adopted a holistic, four-factor, equitable test to determine the appropriateness of injunctive relief for utility patents,³⁷⁵ and it has long recognized such a test for copyrights.³⁷⁶ In the

373. *Contessa*, 282 F.3d at 1378; *In re Rubinfeld*, 270 F.2d 391, 395 (C.C.P.A. 1959). See Saidman, *supra* note 212, at 331; Carani, *supra* note 32, at 28.

374. Carani, *supra* note 32, at 30.

375. *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 392 (2006).

utility patent realm, courts have considered the small contribution of a patented feature to the overall value of an integrated product in refusing to enjoin distribution of the integrated product.³⁷⁷ This approach to injunctive relief is sensitive to context and diminishes the ability of a relatively trivial patent to foreclose access to a broader product.

Design patent law would benefit from incorporating a similarly proportional approach to injunctive relief. Here, the manner in which the district court and Federal Circuit handled the *Apple v. Samsung* litigation shows promise. Among other claims, Apple asserted infringement of two design patents against Samsung—a black, reflective surface and a bezel for a smartphone.³⁷⁸ Apple sought a preliminary injunction against Samsung, but the district court denied it, based partly on evidence that “only a small percentage of all smartphone purchasers bought the device because of its design.”³⁷⁹ Furthermore, Apple was unable to establish a “causal nexus” between Samsung’s infringement of Apple’s design patents and Apple’s lost sales.³⁸⁰ On appeal, the Federal Circuit affirmed.³⁸¹ Although this ruling applies to preliminary injunctions, this proportional approach should inform the determinations of injunctive relief more generally.³⁸²

Finally, the law of look and feel would benefit from shoring up a contextual, proportional approach to damages. Utility patent law valuably considers context in determining infringement damages. For instance, in *Lucent v. Gateway*, Microsoft incorporated an infringing “date-picker” function (which contributes to the software’s look and feel) in software programs like Outlook. However, the Federal Circuit recognized that this feature contributes only minimally to the overall value of the software program (and does not drive purchasing decisions), so it stringently applied

376. See, e.g., *id.* (corroborating the use of a multi-factor test in patent law because of its established history in copyright law); *N.Y. Times Co. v. Tasini*, 533 U.S. 483, 505 (2001); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578 n.10 (1994); *Dun v. Lumbermen’s Credit Ass’n*, 209 U.S. 20, 23–24 (1908).

377. *eBay*, 547 U.S. at 396–97; *z4 Techs., Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 441 (E.D. Tex. 2006). Cf. *Apple Inc. v. Samsung Elecs. Co.*, 695 F.3d 1370, 1374 (Fed. Cir. 2012) (“But in cases such as this—where the accused product includes many features of which only one (or a small minority) infringe—a finding that the patentee will be at risk of irreparable harm does not alone justify injunctive relief.”); *Apple, Inc. v. Samsung Elecs. Co.*, 678 F.3d 1314, 1327 (Fed. Cir. 2012) (denying preliminary injunctive relief because Apple did not establish that its patented “bounce-back” feature drove consumer purchasing decisions).

378. *Apple*, 678 F.3d at 1317–18 (describing the D’677 and D’087 design patents).

379. *Id.* at 1321.

380. *Id.* at 1323–24, 1327.

381. *Id.*

382. See *Apple*, 695 F.3d at 1374 (applying proportionality analysis to the irreparable harm inquiry for permanent injunctions).

the entire market value rule and did not award damages based on the total value of the infringing programs.³⁸³ This approach ensures some rough measure of proportionality between a design's contribution to product value and damages for infringement.

Design patent law should also adopt a more proportional and contextual approach to determining infringement damages. It would be rather problematic if the prevailing party in a design patent suit could demand *all* the profits from the sale of an infringing product, even if the protected design comprised a relatively small portion of the value of the product. As Mark Lemley notes, the historical application of design patent law's special damages provision differs sharply from the award of damages in utility patent infringement, where courts try to apportion damages based on the economic value of the infringed patent.³⁸⁴ The practice of awarding all profits in the design patent context may vastly overcompensate the holder of the design patent and may not reflect the true economic contribution of the design to the product. The Supreme Court took a step in the right direction by reversing the Federal Circuit in *Samsung Electronics Co. v. Apple Inc.* and holding that an "article of manufacture" for purposes of determining design patent infringement damages could be an entire product or just a component.³⁸⁵ However, the Supreme Court provided little guidance for actually determining what constitutes the relevant "article of manufacture" for any given instance of infringement, and lower courts should take the lead in interpreting that term in a limited and precise fashion in future cases.

CONCLUSION

This Article offers the first comprehensive examination of the legal regulation of consumers' aesthetic experiences. Our study identifies an emergent *law of look and feel* that valuably mitigates protection of design based on considerations of standardization, consumer expectations, and context. The Article proposes several reforms to the law of look and feel, particularly design patents. In the realm of protectable subject matter, it argues for relaxing protection of forms of look and feel that are or become standard. Relatedly, it argues for a strong and flexible approach to functionality that recognizes that design elements can *become* functional

383. See *supra* notes 171–174 and accompanying text.

384. See, e.g., Lemley, *supra* note 238, at 230–33.

385. *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 432 (2016).

over time. It argues for a more contextual approach to infringement, one that considers detailed similarities and differences of protected and accused products as well as the circumstances of purchase. Finally, it argues for a contextual approach to injunctions and damages that calibrates remedies based on standardization and the extent to which the design in question contributes to the overall value of a product. By providing limited and flexible protection for look and feel, intellectual property law can better balance a variety of competing interests in the legal regulation of aesthetic experience.

