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An Alternate Functionality Reality

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INTRODUCTION

Trade dress law does not protect the appearance of a product design feature (e.g., a product's configuration) against unauthorized copying if the feature is functional, but may protect the appearance if the feature is nonfunctional. The functionality doctrine is intended to preserve competition in the market for a product incorporating a design feature that allegedly is protected by trade dress law, and to avoid conflicts between trade dress law and patent law. The Supreme Court last addressed the functionality doctrine in *TrafFix Devices, Inc. v. Marketing Displays, Inc.* The Court intended *TrafFix* to "choke off" anticompetitive trade dress "strike suits." Unfortunately, *TrafFix*’s reviews have been terrible.

Some critics complain that *TrafFix* made it too difficult to protect design features against unauthorized copying, while others claim that it remains too easy to protect them. Much of the debate focuses on whether *TrafFix* mandated a more restrictive functionality standard for useful design features than for aesthetic design features, and upon the meaning, merits, and application of *TrafFix*’s standards. However, there is broad critical consensus that *TrafFix* made the

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1 Trade dress law reduces consumer search costs by prohibiting unauthorized copying of design features that convey information concerning the product incorporating the feature. Stacey L. Dogan & Mark A. Lemley, *A Search-Cost Theory of Limiting Doctrines in Trademark Law*, in *TRADEMARK LAW AND THEORY: A HANDBOOK OF CONTEMPORARY RESEARCH* 66–70 (G. Dinwoodie & M. Janis eds. 2008). In addition to functionality, other issues in trade dress litigation typically include whether the trade dress serves as a source or quality identifier and whether there is a likelihood of confusion. See, e.g., *Yunnan Design, Inc. v. PAJ, Inc.*, 262 F.3d 101, 115–16 (2d Cir. 2001) (concerning trade dress protection for jewelry).


5 See, e.g., Perry J. Saidman, *The Crisis in the Law of Designs*, 89 J. PAT. & TRADEMARK OFF. SOC’Y 301, 304–06 (2007) (indicating that *TrafFix* is an important reason why trade dress protection for design features is "difficult, if not impossible, to attain").


functionality doctrine inconsistent, confusing, and opaque. As one early critic put it, the post-‐*TrafFix* doctrine is "a mess." More recent criticism is in accord.

*TrafFix*’s critics generally employ conventional interpretive legal scholarship. This Article applies content analysis to data collected from post-*TrafFix* functionality cases. Content analysis seeks insights based upon an objective and systematic reading of a collective body of case law. The Article employs content analysis to seek insights concerning outcomes under the post-*TrafFix* functionality doctrine and into how the doctrine operates. The Article emphasizes data from cases concerning motions for summary judgment (SJ Cases) and preliminary injunction (PI Cases). These procedural postures provide important opportunities for courts to apply *TrafFix*.

The Article proceeds as follows. Part I provides essential background. It defines terminology, discusses burden of proof, and reviews *TrafFix*’s first principles and functionality standards. Part I also provides analytic and conceptual tools for assessing the post-*TrafFix* functionality doctrine. These tools include a “two-bar mandate” that is based upon a restrictive reading of *TrafFix*. Under the mandate, useful design features are subject to a higher functionality bar than aesthetic design features. Part I also describes a “useful/aesthetic continuum” with useful, primarily useful, midcontinuum, primarily aesthetic, and aesthetic reference points. In addition, Part I describes the process of characterizing design features for placement on the continuum. Finally, Part I discusses trade dress law’s “useful-scarcity” and “aesthetic-abundance” principles. These principles aid the characterization process and link the question of character (e.g., useful vs. aesthetic) with the question of functionality (functional vs. nonfunctional).

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8 The doctrine was not a model of clarity prior to *TrafFix*. See infra Part V.
9 Thurmon, *supra* note 7, at 244.
11 See generally Mark A. Hall & Ronald F. Wright, *Systematic Content Analysis of Judicial Opinions*, 96 CAL. L. REV. 63, 79 (2008) (describing the three distinct elements of content analysis as selecting cases, coding cases, and analyzing the coded data). This Article’s appendix further discusses methodology.
12 SJ and PI Cases are the most frequently occurring procedural postures in the post-*TrafFix* functionality doctrine. For example, they constituted 57% and 24%, respectively, of the cases addressing the functionality issue obtained during Round I of the research for this Article. See infra APPENDIX CONCERNING METHODOLOGY.
The Article then turns to the SJ Cases and the PI Cases. Part II reviews summary judgment and preliminary injunction procedures. Part III discusses win/loss records in the SJ and PI Cases. Part IV assesses whether and to what extent these cases were affected by procedural uncertainty, the ambiguity of mixed-character design features, and the willingness of courts to focus the functionality inquiry on the appearance of combinations of design features. Part V concludes the article with final observations concerning the post-\textit{TrafFix} functionality doctrine and suggestions for improving it. While some critics have suggested that the Supreme Court should or is likely to revisit the functionality doctrine,\textsuperscript{14} this Article’s suggestions may be implemented without further action by the Court.

I. PRELIMINARIES

A. TERMINOLOGY

This Article employs the following terminology. “Trade dress” is the appearance of a product or packaging that potentially is capable of identifying a product’s source or qualities.\textsuperscript{15} Trade dress is composed of one or more “design features” including configuration, color, look, size, or shape.\textsuperscript{16} The design feature in issue in many of the SJ and PI Cases was the overall appearance of a product.\textsuperscript{17} “Trade dress law” provides “trade dress rights” that may protect trade dress against unauthorized copying.\textsuperscript{18} “P” is the party asserting that trade dress is nonfunctional, and “D” is the party asserting that trade dress is functional.\textsuperscript{19} P’s and D’s contest the “functionality issue” which is whether a design feature is functional or nonfunctional.

B. BURDEN OF PROOF

The Lanham Act specifies that P has the burden of proving nonfunctionality in trade dress litigation concerning a design feature that is not federally registered

\textsuperscript{14} See \textsc{Mary LafRance, Understanding Trademark Law} 23 (2d ed. 2009).


\textsuperscript{17} See infra Part IV.C.

\textsuperscript{18} Trade dress law includes traditional rules of federal protection for trademarks and trade dress. See \textsc{1 McCarthy, supra} note 2, § 8:7.

\textsuperscript{19} Typically, P is the plaintiff in trade dress litigation claiming that trade dress is nonfunctional, and D is the defendant claiming that the trade dress is functional. However, in a declaratory judgment action, P is the defendant claiming that the trade dress is nonfunctional, and D is the plaintiff claiming that the trade dress is functional. See, e.g., \textit{Berlin Packaging, LLC v. Stull Tech., Inc.}, 381 F. Supp. 2d 792 (N.D. Ill. 2005) (concerning declaration of noninfringement of trade dress).
as a trademark. However, if a design feature is federally registered, then it is presumptively valid.

Nonetheless, this Article does not distinguish between unregistered and registered trade dress for two reasons. First, 74% of the SJ and PI Cases addressed the functionality of unregistered trade dress. Second, cases concerning registered trade dress generally did not turn on the presumption of validity. For example, D moving for a summary judgment that registered trade dress is functional as a matter of law may provide evidence of functionality that simultaneously rebuts the presumption and permits the court to grant the motion. The court merely may note the presumption and then decide whether D is entitled to the requested relief. Or, P moving for a preliminary injunction may base its case both on a registration and on evidence of nonfunctionality.


22 See Louis Vuitton Malletier v. Dooney & Bourke, Inc., 340 F. Supp. 2d 415, 438 n.118 (S.D.N.Y. 2004) (stating that the case’s outcome is the same whether or not the contested trade dress is registered). But see Au-Tomotive Gold, Inc. v. Volkswagen of Am., 457 F.3d 1062, 1072–74 (9th Cir. 2006) (discussing the absence of evidence that registered and incontestable trademarks were functional and concluding that they were “properly protected under the Lanham Act”).

23 See, e.g., Berlin Packaging, LLC v. Stull Techs., Inc., 381 F. Supp. 2d 792, 802 (N.D. Ill. 2005) (stating that the presence of an expired utility patent causes the presumption “to drop out of the case”). The quantum of evidence necessary to overcome the presumption of validity may be comparable to what D must produce under summary judgment procedure to trigger Ps burden of proving that unregistered trade dress is nonfunctional. See Talking Rain Beverages Co. v. S. Beach Beverage Co., 349 F.3d 601, 603 (9th Cir. 2003) (“[O]nce the presumption of validity afforded a registered trademark has been rebutted, mere registration does not enable a trademark holder to survive summary judgment.”). D’s summary judgment triggering burden is discussed infra Part II.A.


are wise not to rely solely upon a registration because the presumption simply may “drop out” of the litigation if $D$ has “any” evidence of functionality.26

C. TRAFFIX, THE “TWO-BAR MANDATE,” AND “ALTERNATIVES ANALYSIS”

The SJ and PI Cases frequently repeated TrafFix’s first principles of functionality. TrafFix clearly intended to limit the scope of nonfunctional trade dress potentially protected by trade dress law. The Court emphasized that “[t]rade dress protection must subsist with the recognition that in many instances there is no prohibition against copying goods,”27 that the “Lanham Act does not exist to reward manufacturers for their innovation in creating a particular device,”28 and that the “Lanham Act . . . does not protect trade dress in a functional design simply because an investment has been made to encourage the public to associate a particular functional feature with a single manufacturer or seller.”29

TrafFix’s statements of first principles bracket multiple functionality standards. The Court’s “traditional” standard turns upon evidence that a design feature is essential to a product’s use or purpose or affects the product’s cost or quality.30 If the feature is essential to use or purpose or affects cost or quality, then it is functional. TrafFix’s “competitive need” standard turns upon evidence that providing exclusive use of a design feature to $P$ would place $P$’s competitors (actual or potential $Ds$) at a significant non-reputation-related disadvantage.31 If competitors would be so disadvantaged, then the feature is functional. The competitive-need standard emphasizes “competitive necessity,” and weighs evidence of “other design possibilities” that “might serve the same purpose” as the design feature claimed to be legally protected trade dress.32

TrafFix also addressed the roles of the traditional and competitive-need functionality standards. The Court indicated that “[i]t is proper to inquire into a ‘significant non-reputation-related disadvantage’ in cases of aesthetic functionality” and “[w]here the design is functional under the [traditional] formulation there is no need to proceed further to consider if there is a competitive necessity for the feature.”33

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26 See, e.g., K-Swiss Inc. v. USA AISIQI Shoes Inc., 291 F. Supp. 2d 1116, 1121 (C.D. Cal. 2003) (stating that $D$ can rebut the presumption by showing that the mark is incapable of being protected by trademark law).
28 Id. at 34.
29 Id. at 34–35.
30 Id. at 32–33.
31 Id. at 32.
32 Id. at 33.
33 Id.
Finally, *TrafFix* stated that a design feature is functional unless it is merely “ornamental, incidental, or arbitrary.” For example, trade dress protection may be appropriate for a design feature that is an “arbitrary flourish” but not for a feature that is “the reason the device works.” As used in *TrafFix*, the terms ornamental, incidental, and arbitrary may frame the functionality issue, or may only describe types of design features that likely are nonfunctional.

One reason that *TrafFix*’s standards are controversial is because they apparently raise a characterization issue: Is a design feature useful or aesthetic? The answer may control the availability of “alternatives analysis.” Under alternatives analysis, a design feature is nonfunctional and capable of being protected by trade dress law only if competitors have sufficient substitutes for it. *TrafFix* seems to rule out

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34 Id. at 30, 34. *TrafFix* did not acknowledge that the design patent statute employs the term “ornamental” to distinguish the subject matter of design patents from that of utility patents. See 35 U.S.C. §§ 101, 171 (2008).


36 See *Eco Mfg. LLC. v. Honeywell Int'l, Inc.*, 357 F.3d 649, 653 (7th Cir. 2003) (“*TrafFix* gave ‘an ornamental, incidental, or arbitrary aspect of the device’ as a for-instance, and not as an exclusive means to show non-functionality.”).


38 Prior to *TrafFix*, alternatives analysis was the “fulcrum” upon which the functionality issue often turned. See generally Harold R. Weinberg, *Trademark Law, Functional Design Features, and the Trouble with TrafFix*, 9 J. INTELL. PROP. L. 1, 5–6 (2001) (discussing the fulcrum). Language in *TrafFix* suggests that alternatives analysis applies only to aesthetic design features. *TrafFix* Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 33–34 (2001) (“the functionality of the [design feature in issue] ... means that competitors need not explore whether other [designs] ... might be used” and that the “[the feature in
alternatives analysis for useful design features, but did not explicitly hold that useful design features are per se functional. Therefore, Trafficix may leave legal space for nonfunctional useful design features. Trafficix seems to permit alternatives analysis for aesthetic design features. It clearly leaves legal space for nonfunctional aesthetic design features.

For ease of reference, this Article distills Trafficix’s functionality standards into two functionality bars that are consistent with the Court’s first principles and a restrictive reading of its traditional and competitive need standards. The “high bar” forbids alternatives analysis for useful design features. The “low bar” permits alternatives analysis for aesthetic design features.

D. THE “USEFUL/AESTHETIC CONTINUUM” AND “MIXED-CHARACTER” DESIGN FEATURES

In standard usage, “useful” means “capable of being put to use” or “serviceable for an end or purpose.” For example, the shape of a claw-hammer’s head is useful for pounding and removing nails. “Aesthetic” means “of, relating to, or dealing with aesthetics or the beautiful”; “artistic”; “pleasing in appearance”; “attractive.” For example, filigree engraving on a claw-hammer’s head may make the tool more attractive. “Aesthetic” in trade dress law is broader than its standard usage, describing all design features that are not useful. The term refers

issue] ... is the reason the device works” so “[o]ther designs need not be attempted”). Courts do not agree concerning when alternatives analysis is appropriate. See, e.g., Antioch Co. v. Western Trimming Corp., 347 F.3d 150, 156 (6th Cir. 2003) (considering the functionality of, inter alia, the dual strap-hinge design of a scrap book and stating that “[w]e need not resolve the question of whether evidence of alternative designs has a place”); Valu Eng’g, Inc. v. Rexnord Corp., 278 F.3d 1268, 1276 (Fed. Cir. 2002) (considering the functionality of the cross-sectional designs of conveyor guide rails and stating that the availability of alternative designs can be “a legitimate source of evidence to determine whether a feature is functional in the first place”); Eppendorf-Netheler-Hinz GMBH v. Ritter GMBH, 289 F.3d 351, 357 (5th Cir. 2002) (“The design features for which [P] seeks trade dress rights are functional if they are [functional under the traditional standard]” and “[t]he availability of alternative designs is irrelevant”). Commentators disagree concerning whether and to what extent Trafficix limited alternatives analysis. Compare 1 McCarthy, supra note 2, § 7:75 (stating that it was not restricted), with Barrett, supra note 6, at 121–34 (stating that it was restricted).

39 See Barrett, supra note 6, at 147 (“Trafficix adopted a rule that would prevent trade dress protection for most or all useful product features.”).

40 Id. (“Trafficix did not adopt a rule that would prevent protection of most or all ornamental product features.”).

41 MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY 1301 (10th ed. 1994).

42 Id. at 19.
to beauty created through an elaborate design process.\textsuperscript{43} It also refers to simple, plain, and perhaps even unattractive design features.\textsuperscript{44}

Trade dress law suggests that one might conceptually place design features on an "useful/aesthetic continuum" having 100% useful character at one pole, and 100% aesthetic character at the opposite pole.\textsuperscript{45} This Article employs a continuum with five reference points: useful, primarily useful, midcontinuum, primarily aesthetic, and aesthetic.

Probably the most important lesson from the continuum is that there are "mixed-character" design features (primarily useful, midcontinuum, and primarily aesthetic) that are neither 100% useful nor 100% aesthetic. \textit{TrafFix} did not recognize mixed-character design features. However, data in this article suggest that they are critical to understanding the post-\textit{TrafFix} functionality doctrine.\textsuperscript{46} Seventy-four percent of the SJ Cases and 63\% of the PI Cases addressed the functionality of mixed-character design features.\textsuperscript{47}

E. CHARACTERIZING DESIGN FEATURES

Information provided by the SJ and PI Cases aided the process of conceptually placing design features onto the useful/aesthetic continuum. For example, some courts indicated a design feature's character in framing the functionality issue.\textsuperscript{48}


\textsuperscript{45} See Stormy Clime Ltd. v. Progroup, Inc., 809 F.2d 971, 977 (2d Cir. 1987) (discussing a functionality continuum having at one end "unique arrangements of purely functional features [that] constitute a functional design [and on] the other end, distinctive and arbitrary arrangements of predominantly ornamental features"). \textit{Cf.}, e.g., Mother, LLC v. L.L. Bean, No. C06-5540 JKA, Inc., 2007 WL 2455461, at *5 (W.D. Wash. Aug. 24, 2007) (stating that some elements of a day pack's trade dress "are functional, some are quasi-functional, and some [are] design components"); Colt Defense LLC v. Bushmaster Firearms, Inc., 2005 WL 2293909, at *29 (D. Me. Sept. 20, 2005) (describing one facet of P's burden as demonstrating that a design feature is "primarily non-functional"). \textit{See also} Robert C. Denicola, \textit{Applied Art and Industrial Design: A Suggested Approach to Copyright in Useful Articles}, 67 MINN. L. REV. 707, 741 (1983) (stating that "there is no line, but merely a spectrum of forms and shapes responsive in varying degrees to utilitarian concerns").

\textsuperscript{46} \textit{See infra} Part IV.

\textsuperscript{47} The characterization process is described \textit{infra} Part I.E. Of the sixty-one SJ Cases, forty-five concerned mixed-character design features (twenty-three primarily useful, fifteen midcontinuum, and seven primarily aesthetic). Of the twenty-seven PI Cases, seventeen concerned mixed-character design features (nine primarily useful, three midcontinuum, and five primarily aesthetic).

\textsuperscript{48} \textit{Compare} Antioch Co. v. Western Trimming Corp., 347 F.3d 150, 156 (6th Cir. 2003) (not considering aesthetic functionality because "there is no suggestion that the Antioch scrapbook album is 'aesthetically functional'"), \textit{with} Abercrombie & Fitch Stores v. Am. Eagle Outfitters, 280 F.3d 619, 641 (6th Cir. 2002) (concluding that the case before it was one of aesthetic functionality).
Others described evidence bearing upon character such as testimony from witnesses or the contents of utility or design patents. Courts discussed design features' useful or aesthetic contributions to products, and indicated character when applying TrafFix's standards. Pictures of design features in judicial opinions also aided characterization.

Characterization also was aided by word usage in the SJ and PI Cases. For example, courts sometimes employed "functional" as a synonym for "useful," and as an antonym for "arbitrary." Courts also employed "ornamental," "incidental," and "arbitrary" as synonyms for "aesthetic" and "nonfunctional," and as antonyms for "useful" and "functional."

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51 See, e.g., Component Hardware Group, Inc. v. Trine Rolled Moulding Corp., No. Civ.A.05-891 (MJC), 2005 WL 1514190, at *31 (D.N.J. June 27, 2005) (stating that the design for a filter is functional because it is essential to use).


It was relatively easy to conceptually place useful design features and aesthetic design features onto the continuum. For example, the appearance of a utility patented, "de jure functional," and "not arbitrary" mechanical linkage system for a mass transit folding seat was placed at the useful pole. A western jewelry design including "a combination of aesthetic features" (tapered beads, vine and leaf scrollwork, black background, and tricolor gold) was placed at the aesthetic pole.

It was more difficult to place mixed-character design features onto the continuum because they have both useful and aesthetic elements. Ps often argued that the design feature in issue was a nonfunctional combination of useful and aesthetic design features. Nonetheless, clues from the SJ and PI Cases often assisted placement.

For example, the over-all appearance of a utility-patented golf cart canopy consisting of a combination of three "essential" or "functional" design features (the texture and appearance of a rain-repellant fabric, the shape and location of a flap holding the canopy in place, and a single clear piece of plastic serving as a rear window) was characterized as primarily useful because the combination also included two optional colors (green and white). The trade dress of a bow maker "viewed as a whole" was placed at midcontinuum. The device was subject to both a utility patent and a design patent. Some of the bow maker's design elements (e.g., its base and dowels) were "clearly functional," while other elements (e.g., the grain, color, and texture of wood) were "ornamental" and did not affect


See supra Part IV.

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the device’s operation. The “unique arrangement” of a cable jewelry design was placed at the primarily aesthetic reference point because while “more important” elements were aesthetic (e.g., a solitary pearl set in gold), the design may also have had some “marginal functional benefit” (e.g., lightweight, yet strong).

F. CHARACTER, ALTERNATIVE DESIGNS, AND THE “USEFUL-SCARCITY” AND “AESTHETIC-ABUNDANCE” PRINCIPLES

Conceptually placing design features onto the continuum also was aided by references in the SJ and PI Cases to the availability of alternative design features to substitute for the feature subject to the functionality issue. Some cases suggested that a design feature with no or very few alternative design features belongs toward the continuum’s useful pole. Others suggested that features with numerous alternatives belong toward the continuum’s aesthetic pole.

Looking to alternatives as a proxy for character is consistent with trade dress law’s “useful-scarcity” and “aesthetic-abundance” principles: useful design features are unlikely to have good substitutes and, therefore, are more likely to be functional than aesthetic design features that often have good substitutes.

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60 Id. at *22–23.
62 If TraFix forbids alternatives analysis for deciding whether useful design features are functional, then is it permissible after TraFix to look to alternatives to decide whether a design feature is useful? Whatever the correct answer to that question, it is notable that evidence of alternative designs is employed in deciding the arguably analogous patent law issue of whether a design is “ornamental” rather than “primarily functional.” If ornamental, then the design may be protected by a design patent. See JANICE M. MUELLER, PATENT LAW 290–92 (3d ed. 2009) (discussing Avia Group International, Inc. v. L.A. Gear California, Inc., 853 F.2d 1557 (Fed. Cir. 1988)).
63 Cf. Invisible Fence, Inc. v. Perimeter Techs., Inc., No. 1:05-CV-361, 2007 WL 273129, at *8 n.13 (N.D. Ind. Jan. 26, 2007) (stating that Ps “musings” positing two alternative designs for a coin slot were insufficient to show a genuine issue of nonfunctionality).
64 See, e.g., Leviton Mfg. Co. v. Universal Sec. Instruments, Inc., 409 F. Supp. 2d 643, 650 (D. Md. 2006) (“The element of arbitrariness . . . is supported by the fact that other manufacturers . . . use different configurations.”).
Neither principle creates a per se rule that useful features are functional and that aesthetic features are nonfunctional.66 There may be room for nonfunctional useful features.67 And there is room for functional aesthetic features.68 However, the principles generally seem realistic.

Like the two-bar mandate, the useful-scarcity and aesthetic-abundance principles may be helpful to understanding the SJ and PI cases. Just as one can ask whether data from post-TraFi cases suggest that courts applied the two-bar mandate, one also can ask whether the data are consistent with the two principles.

II. MOTIONS FOR SUMMARY JUDGMENT AND PRELIMINARY INJUNCTION

A. SUMMARY JUDGMENT PROCEDURE

The federal rules of civil procedure provide that summary judgment should be granted if the pleadings and evidentiary materials "show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law."69 The SJ Cases treat the functionality issue as a material issue of fact.70 Courts generally decide summary judgment motions after each party has the opportunity to discover evidence supporting its position.71 The parties may employ any evidence that would be admissible at trial.72 The procedure is intended to dispose of factually unsupported claims and to avoid unnecessary trials when no rational jury could find for the party with the burden of proof.73 In designs to substitute for P's trade dress).

66 One of TraFi's messages may be that alternatives for useful design features generally are so scarce that courts should not waste resources considering whether they exist.
67 The SJ and PI cases do not provide an example of a nonfunctional useful design feature. They do contain examples of nonfunctional primarily useful design features. See infra Parts IV.A, B.
68 The SJ and PI cases contain examples of aesthetically functional design features. See infra Parts IV.A, B. Aesthetic functionality is discussed supra note 37.
70 See, e.g., Dippin' Dots, Inc. v. Frosty Bites Distrib., LLC, 369 F.3d 1197, 1207 (11th Cir. 2004) (disposing of a trade dress claim on functionality grounds). This treatment is universal. 1 MccARTHY, supra note 2, ¶ 7:71.
72 Courts typically decide summary judgment motions upon written evidentiary materials such as affidavits. Id. Courts also consider legal argument concerning the functionality issue which may or may not be grounded in fact. See, e.g., Merit Med. Sys., Inc. v. Aspen Surgical Prods., Inc., No. 05-0040, 2006 WL 2620836, at *14–15 (W.D. Mich. Sept. 12, 2006) (discussing D's arguments, and noting that one of them lacked support).
73 BRUNET & REDISH, supra note 69, §§ 1:1, 5:2. The Supreme Court's 1986 "Celotex Trilogy" elevated the importance of summary judgment and suggested a greater readiness to grant summary judgment than previously existed in some lower federal courts. Id. § 6:4.
functionality litigation, that party typically is $P$, and the movant typically is $D$. For example, $D$ might point to evidence of functionality in $P$'s evidentiary materials, or may support its motion with its own evidence suggesting that the feature in issue is functional. After $P$'s burden is triggered, it must come forward with competent evidence of nonfunctionality. The judge's role is to decide whether there is a genuine issue of fact and, if there is, to allow the case to go to trial. If no reasonable jury could find that $P$'s allegedly protected trade dress is nonfunctional, then trying the case would be a waste of public and private resources.

There are three possible outcomes when the functionality issue becomes the subject of a summary judgment motion: (1) design feature functional as a matter of law, (2) design feature nonfunctional as a matter of law, and (3) genuine functionality issue for trial. The first outcome favors $D$ because $P$ has failed to meet its burden of proving nonfunctionality. The second outcome favors $P$ because it has met its burden. The third outcome also is $P$-favorable. $P$ has produced enough evidence to meet its burden of proof on the functionality issue for the time being.

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75 See infra note 95 and accompanying text. See, e.g., Maharishi Hardy Blechman Ltd. v. Abercrombie & Fitch Co., 292 F. Supp. 2d 535, 540 (S.D.N.Y. 2003) (discussing procedure when $D$ moves for summary judgment on the functionality issue and $P$ has the burden of proving nonfunctionality). The predominance of $D$'s motions in the SJ Cases is consistent with the general summary judgment experience that the plaintiff has the burden of proof and the moving party is the defendant. See BRUNET & REDISH, supra note 69, § 5:7 (stating that the plaintiff is usually the nonmoving party). A minority of the SJ Cases consisted of $P$'s motions or cross motions. See, e.g., Johnson & Johnson v. Actavis Group HF, 2008 WL 228061 (S.D.N.Y. 2008) (deciding $P$'s motion); Baughman Tile Co. v. Plastic Tubing, Inc., 211 F. Supp. 2d 720 (E.D.N.C. 2002) (addressing cross motions). If $P$ moves, $D$ has no triggering obligation. See BRUNET & REDISH, supra note 69, § 5:8(a) (discussing cases where the movant has the burden of proof). In cross motions, each motion “stands on its own bottom.” See GENE R. SHREVE & PETER RAVEN-HANSEN, UNDERSTANDING CIVIL PROCEDURE § 11.03[2][b] (3d ed. 2002).

76 It may be relatively easy for $D$ to meet its triggering obligation. See BRUNET & REDISH, supra note 69, § 5:7(c) (stating that the burden is not significant). Compare FRIEDENTHAL, KANE & MILLER, supra note 71, § 9.3 (stating that the moving party must present information “clearly establishing” that there is not a fact issue).

77 See, e.g., Neutrik AG v. Switchcraft, Inc., 31 Fed. Appx. 718, 726 (Fed. Cir. 2002) (affirming that $P$'s evidence of nonfunctionality was insufficient when it failed to rebut $D$'s expert testimony of functionality); Maharishi Hardy Blechman Ltd. v. Abercrombie & Fitch Co., 292 F. Supp. 2d 535, 540 (S.D.N.Y. 2003) (requiring $P$ to show by “hard evidence” that there is more than “metaphysical doubt” that a design feature is functional); Frosty Bites, Inc. v. Dippin' Dots, Inc., No. 3-01-CV-1532-M, 2003 WL 21196247, at *2 (N.D. Tex. May 19, 2003) (indicating that competent evidence concerning the functionality issue does not include “conclusory statements, hearsay, and testimony based merely upon conjecture or subjective belief”).


79 Appeal is possible. See generally BRUNET & REDISH, supra note 69, § 11:1.
Perhaps the most important aspect of summary judgment procedure for understanding the SJ Cases is that as the party with the burden of proof, $P$ may receive the benefit of the doubt concerning the functionality issue. Many SJ Cases state that a court must construe evidence and draw all reasonable inferences from it in $P$'s favor, and must avoid credibility judgments. Thus, $P$ may avoid summary judgment that a design feature is functional on evidence that would not support a trial verdict of nonfunctional. Of course, $P$s that emerge from summary judgment procedure with a trial-worthy functionality issue continue to have the burden of proof and ultimately might lose, but can press their cases in the meantime.

B. PRELIMINARY INJUNCTION PROCEDURE

The federal rules of civil procedure provide that a court may issue a preliminary injunction. Notice must be given to the adverse party, $D$ in a PI Case. The moving party, $P$ in a PI Case, must show multiple factors, which are to be balanced. Federal courts differ concerning how they describe and apply

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80 The SJ Cases describe in various ways the constraints imposed upon courts by summary judgment procedure. See, e.g., Antioch Co. v. W. Trimming Corp., 347 F.3d 150, 154 (6th Cir. 2003) (stating that the trial court "must construe the evidence and draw all reasonable inferences in favor of the nonmov[ant]"); Clicks Billiards Inc. v. Sixshooters Inc., 251 F.3d 1252, 1257 (9th Cir. 2001) (stating that a court must view the evidence in the light most favorable to the nonmovant, draw all reasonable inferences in its favor, and determine whether the district court correctly applied the relevant substantive law); Berlin Packaging, LLC v. Stull Techs., Inc., 381 F. Supp. 2d 792, 796 (N.D. Ill. 2005) (stating that if a "set of facts yields competing, but reasonable, inferences, then there is a genuine issue that precludes summary judgment"). Some SJ Cases clearly did not want to encroach on the function of the trier of fact. See, e.g., S.H. Leggitt Co. v. Fairview Fittings & Mfg., Inc., No. 1:03-cv-294, 2005 WL 1106901, at *11 (W.D. Mich. Apr. 25, 2005) (stating that it is not appropriate to weigh testimony; that "the question is whether there is a genuine issue of material fact at this point, and not whether [P] has proven anything"); and that while $P$ "may ultimately fail to convince a trier of fact that it has established [nonfunctionality], [P] has presented more than enough evidence to raise a triable issue of fact as to [nonfunctionality]". $P$ also may enjoy the benefit of the doubt when it is a moving party. See, e.g., GMC v. Lanard Toys, Inc., 468 F.3d 405, 412 (6th Cir. 2006) (stating that "credibility judgments and weighing of the evidence are prohibited" (quoting Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986))).

81 $P$ should have the ultimate burden of proving nonfunctionality at trial. E.g., New Colt Holding Corp. v. RJG Holdings of Florida, Inc., 312 F. Supp. 2d 195, 211 n.9 (D. Conn. 2004). See generally SHREVE & RAVEN-HANSEN, supra note 75, § 11.03[a] (discussing summary judgment procedure in bench and jury cases); CHRISTOPHER B. MUELLER & LAIRD C. KIRKPATRICK, EVIDENCE § 3.2 (3d ed. 2003) (indicating that the burden of production and the burden of persuading the trier of fact usually are aligned).

82 FED. R. CIV. P. 65. The purpose of a preliminary injunction is to maintain the status quo pending a trial on the merits. 13 JAMES WM. MOORE ET AL., MOORE'S FEDERAL PRACTICE ¶ 65.20 (3d ed. 2009).

83 See supra Part I.A. See generally 13 MOORE ET AL., supra note 82, ¶ 65.21[2].

84 See supra Part I.A. See 13 MOORE ET AL., supra note 82, ¶ 65.22[1][a].
the prerequisites. However, they typically require the $P$ to show a likelihood of success on the merits. The functionality issue typically is addressed from within this prerequisite. $P$ must provide evidence in support of likely success, but is not required to demonstrate that likelihood with absolute certainty. Depending upon the court and the circumstances, $P$'s burden has been couched in various ways including whether it can make a prima facie showing, a clear showing, or has at least some probability of success.

In preliminary injunction procedure, there are only two possible answers to the question of whether $P$ is likely to succeed on the merits of the functionality issue: likely functional or likely nonfunctional. Unlike summary judgment procedure, preliminary injunction procedure does not provide judges with an explicit third option of not deciding the functionality issue and sending the case to trial. A $P$ that obtains a preliminary injunction has the "upper hand" in the litigation.

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85 The relevant factors typically include the movant's likelihood of success on the merits, the likelihood that the movant will suffer irreparable injury if the requested relief is denied, the balance of hardships between the parties, and the effect of grant or denial of a preliminary injunction on public policy. See 13 Moore ET AL., supra note 82, ¶ 65.22[1][a], 65.22[2].

86 See, e.g., Shire US Inc. v. Barr Labs., Inc., 329 F.3d 348 (3d Cir. 2003) (concerning the trade dress of medicine tablets). In inquiring into likelihood of success, some PI Cases considered only the functionality issue. See, e.g., id. Others also considered whether the trade dress was sufficiently distinctive or whether there was a likelihood of confusion. See, e.g., Perk Scientific, Inc. v. Ever Scientific, Inc., 2005 WL 851078 (E.D. Pa. 2005). A showing of likelihood of success on the merits may result in a presumption of irreparable injury. Kirstin Stoll-Debell, Nancy L. Dempsey & Bradford E. Dempsey, INJUNCTIVE RELIEF: TEMPORARY RESTRAINING ORDERS AND PRELIMINARY INJUNCTIONS 114-15 (2009). It is debatable whether this presumption remains good trademark law after eBay, Inc. v. MercExchange, LLC, 547 U.S. 388 (2006) (holding that in a patent case a court must apply the traditional four factor test for a permanent injunction). See 1 McCarthy, supra note 2, § 30:47 (discussing eBay). Most of the PI Cases were decided prior to eBay, and none referred to it.

87 See 13 Moore ET AL., supra note 82, ¶ 65.22[2].


91 However, a court can conclude that it is premature to decide the functionality issue due to lack of evidence. Prudencia Prods., LLC, 2008 WL 227281, at *3.

92 Nonetheless, a court deciding a preliminary injunction motion may avoid the functionality issue. See HRP Creative Servs. Co. v. FPI-MB Entm't, LLC, 616 F. Supp. 2d 481, 493, 495, (D. Del. 2009) (raising but not explicitly deciding whether $P$ was likely to succeed on the functionality issue, but stating that $P$'s overall case for an injunction was "vaporous [and] preposterous").

III. WIN/LOSS RECORDS

Critics of the post-*Trafficix* functionality doctrine contend both that the doctrine makes it too difficult and too easy for Ps to legally protect design features against unauthorized copying by Ds.\(^9\) TABLE 1 contains the win/loss data for the SJ and PI Cases and for them combined. The data include the count of P-favorable outcomes and D-favorable outcomes. It also includes "outcome ratios" which are ratios of P-favorable outcomes to D-favorable outcomes.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>OUTCOMES AND OUTCOME RATIOS</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>P-FAVORABLE</td>
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<tr>
<td></td>
<td>OUTCOMES:</td>
</tr>
<tr>
<td></td>
<td>NONFUNCTIONAL</td>
</tr>
<tr>
<td>SJ CASES</td>
<td>10</td>
</tr>
<tr>
<td>PI CASES</td>
<td>11</td>
</tr>
<tr>
<td>COMBINED CASES</td>
<td>21</td>
</tr>
</tbody>
</table>

A. SJ CASES

*Ds*' motions for summary judgment far exceeded *Ps*' motions.\(^9\) However, Table 1 indicates that *Ps* prevailed in 36 (59\%) of the SJ Cases, while *Ds* prevailed in 25 (41\%). The resulting 1.4:1 outcome ratio may cut against the criticism that *Trafficix* importantly contributes to making it too difficult for *Ps* to enforce trade dress rights.\(^9\) *Ps* actually did better than *Ds*, a fact that may provide ammunition for critics claiming that *Ps* enjoyed too much success with the functionality issue.\(^9\)

Twenty-six (43\%) of the SJ Cases sent the functionality issue to trial. These cases account for 72\% of the *P*-favorable outcomes. Thus, it appears that *Ps* often

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\(^9\) See supra INTRODUCTION.
\(^9\) Of the 61 SJ Cases, 2 concerned *Ps*' motions; 51 concerned *Ds*' motions; and 8 concerned cross motions.
\(^9\) See supra note 5.

enjoy the benefit of the doubt afforded by summary judgment procedure.\textsuperscript{98} Subsequent data and discussion in this Article will suggest additional reasons why Ps prevail in summary judgment.\textsuperscript{99}

B. PI CASES AND COMBINED CASES

TABLE 1's data for the PI Cases show 11 (41%) \textit{P}-favorable outcomes, 16 (59%) \textit{D}-favorable outcomes, and an outcome ratio of 0.7:1.\textsuperscript{100} Thus, Ps were less successful in the PI Cases than in the SJ Cases. This difference may exist because courts in the PI Cases typically made a decision of functional or nonfunctional in deciding whether \textit{P} was likely to succeed on the merits.\textsuperscript{101} Their decision options were binary. However, SJ courts had the explicit third option of sending a case to trial rather than deciding whether a moving party was or was not entitled to summary judgment on the functionality issue.

TABLE 1's combined data yields an outcome ratio of 1.15:1. This is very close to a tie between \textit{P}-favorable and \textit{D}-favorable outcomes. A tie may seem inconsistent with the criticism that \textit{TrajFix} is an important reason why it is too difficult for Ps to prevail on the functionality issue. A tie might support criticism that Ps enjoyed too much success.

IV. CHARACTER, PROCEDURAL UNCERTAINTY, AND "COMBINATION ANALYSIS"

Much criticism of the post-\textit{TrajFix} functionality doctrine seems to boil down to arguments that courts failed to properly recognize, interpret, or apply the two-bar mandate. That is, courts did not properly deploy the more rigorous high bar for useful design features and the less rigorous low bar for aesthetic design features.\textsuperscript{102} Only the low bar permits alternatives analysis. A comparable criticism would be that courts failed to choke off trade dress claims based upon useful design features that likely are functional under the useful-scarcity principle.\textsuperscript{103}

Did the courts in the SJ and PI Cases reach results consistent with the two-bar mandate and the useful-scarcity and aesthetic-abundance principles? To answer these questions, this Article first considers data concerning useful design features and aesthetic design features. It then considers data concerning mixed-character design features.

\textsuperscript{98} See supra Part II.A.
\textsuperscript{99} See infra Part IV.
\textsuperscript{100} Forty-one percent \textit{P}-favorable outcomes appears to be consistent with the results in a study showing that federal district courts granted 40% of all motions seeking preliminary injunctive relief. STOLL-DEBELL, DEMPSEY & DEMPSEY, supra note 86, at 3.
\textsuperscript{101} See supra Part II.B.
\textsuperscript{102} See supra Part I.C.
\textsuperscript{103} The useful-scarcity and aesthetic-abundance principles are discussed supra Part I.F.
A. USEFUL AND AESTHETIC DESIGN FEATURES

If the SJ and PI Cases reached results consistent with the two-bar mandate and the useful-scarcity and aesthetic-abundance principles, then data from the cases would tend to show that Ps were less successful in cases concerning useful design features than in cases concerning aesthetic design features. That this was so is suggested by the data in TABLE 2. The table shows the count of P-favorable outcomes, D-favorable outcomes, and outcome ratios for cases concerning useful design features and aesthetic design features.

<table>
<thead>
<tr>
<th></th>
<th>SJ CASES USEFUL</th>
<th>SJ CASES AESTHETIC</th>
<th>PI CASES USEFUL</th>
<th>PI CASES AESTHETIC</th>
<th>COMBINED CASES USEFUL</th>
<th>COMBINED CASES AESTHETIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-FAVORABLE OUTCOMES</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>D-FAVORABLE OUTCOMES</td>
<td>12</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>OUTCOME RATIO (P:D)</td>
<td>0:12</td>
<td>4:0</td>
<td>0:7</td>
<td>2:1</td>
<td>0:19</td>
<td>6:1</td>
</tr>
</tbody>
</table>

The outcome ratios in TABLE 2 appear to be consistent with both the two-bar mandate and the useful-scarcity and aesthetic-abundance principles. For example, Ps obtained no favorable outcomes in cases concerning useful design features. Courts determined that all the useful design features at issue were functional. On the other hand, Ps prevailed over Ds by a 6:1 outcome ratio in cases concerning aesthetic design features.

The single D-favorable outcome represented in TABLE 2 for an aesthetic design feature represents an aesthetically functional design feature. That case illustrates that while P-favorable outcomes are more likely for aesthetic design features, they are not inevitable.

107 The aesthetic-abundance principle is discussed supra Part I.F.
B. MIXED-CHARACTER DESIGN FEATURES

Seventy percent of the combined SJ and PI Cases concern mixed-character design features.108 When thinking about mixed-character, it is important to recall that the useful/aesthetic continuum has a useful pole at one end and an aesthetic pole at the other.109 If one visualizes starting at the useful pole and moving along the continuum toward the aesthetic pole, then one would perceive increasing aesthetic character and decreasing useful character.110 The variation in character is reflected in the five characters of design features arrayed along the continuum: useful, primarily useful, midcontinuum, primarily aesthetic, and aesthetic.

Given the continuum, one might expect data from the SJ and PI cases to show that as aesthetic character increased (and as useful character decreased) along the continuum, so did P-favorable outcomes. That is, the data would be consistent with the two-bar mandate and the useful-scarcity and aesthetic-abundance principles.

Is such consistency present? TABLE 3 includes data for both mixed-character and nonmixed-character design features in order to illustrate all of the P-favorable outcomes along the continuum. The table shows the percentage of P-favorable outcomes for each character of design feature.

<table>
<thead>
<tr>
<th>Character and Percent of P-Favorable Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>USEFUL</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>PERCENT SJ CASES WITH P-FAVORABLE OUTCOMES</td>
</tr>
<tr>
<td>PERCENT PI CASES WITH P-FAVORABLE OUTCOMES</td>
</tr>
<tr>
<td>PERCENT COMBINED CASES WITH P-FAVORABLE OUTCOMES</td>
</tr>
</tbody>
</table>

1. SJ Cases. According to TABLE 3, Ps obtained favorable outcomes in SJ Cases concerning useful, primarily useful, midcontinuum, and aesthetic design features in respectively 0%, 61%, 93%, and 100% of those cases. For those

108 See supra Part I.D.
109 See supra Part I.D.
110 One could also start at the aesthetic pole and conceptually move along the continuum toward the useful pole, in which case useful character would increase relative to aesthetic character, which would decrease.
classes of design features, $P$-favorable outcomes tended to increase as aesthetic character increased. These results appear consistent with the two-bar mandate and the useful-scarcity and aesthetic-abundance principles. However, the presence of a significant degree of aesthetic character does not ensure $P$ success. Only 59% of the cases concerning primarily aesthetic design features had $P$-favorable outcomes. The other 41% held design features aesthetically functional. The large increase from 0% $P$-favorable outcomes for useful features to 61% for primarily useful features seems significant. It suggests that even a modest degree of aesthetic character may nudge a case toward a $P$-favorable outcome.

TABLE 3's data for the SJ Cases also suggest how $P$-favorable outcomes might flow from the ambiguity of mixed-character design features and summary judgment procedure's willingness to give $Ps$ the benefit of the doubt. On a limited summary judgment record, a court might find it difficult to decide whether the feature is useful or aesthetic, subject to the high or low bar, or functional or nonfunctional as a matter of law. Consequently, the court might decline to decide the functionality issue and send the case forward toward trial.

2. PI Cases and Combined Cases. The data from the PI Cases also suggest that $P$-favorable outcomes generally increased as aesthetic character increased in a manner consistent with the two-bar mandate and the useful-scarcity and aesthetic-abundance principles. TABLE 3 shows $P$-favorable outcomes concerning useful, primarily useful, and primarily aesthetic design features of respectively 0%, 33%, and 100%. The table also reflects how a $P$ asserting trade dress rights in an aesthetic design feature may be foiled by aesthetic functionality.

The PI Cases, like the SJ Cases, also suggest that a modest degree of aesthetic character may nudge a case toward a $P$-favorable result. $Ps$' 0% successful outcomes in cases concerning useful design features increased to 33% successful outcomes in cases concerning primarily useful design features.

The data for the Combined Cases is more similar to the SJ Cases' than the PI Cases'. This is because there were more than twice as many of the former than the latter. 


112 See supra Part II.A.

113 See, e.g., Maharishi Hardy Blechman Ltd. v. Abercrombie & Fitch Co., 292 F. Supp. 2d 535, 548–49 (S.D.N.Y. 2003) (referring to “the uncertainty surrounding the functionality element following Trafficix” and concluding that “under both . . . definitions of functionality, [P] has raised a sufficient fact question as to whether its trade dress is nonfunctional, aesthetically and otherwise”).

C. COMBINATION ANALYSIS

_TrafFix_ provided neither the bar nor judges with a doctrinal device to address the functionality of mixed-character design features. They may have filled that void with "combination analysis," a mode of reasoning which was well established prior to _TrafFix_. Combination analysis reasons that when the allegedly protected trade dress consists of the overall appearance of a combination of design features, then the functionality issue turns on the overall appearance. The overall appearance may be nonfunctional even if one or more of the individual design features that contribute to the overall appearance are functional.

Combination analysis typically may inquire into whether the appearance of a combination of design features is functional or nonfunctional. However, it easily converts into an inquiry apparently required by _TrafFix_: is a design feature useful or aesthetic? This conversion is possible because the useful-scarcity and aesthetic-abundance principles closely (but not completely) equate functional with useful and nonfunctional with aesthetic. After substituting useful for functional and aesthetic for nonfunctional, combination analysis reasons that the overall appearance of a combination may be aesthetic and subject to the low bar even if one or more of the design features contributing to the overall appearance are useful and subject to the high bar. Thus, a litigant or a court might employ combination analysis either when the issue is couched as one of functional versus nonfunctional or couched as one of useful versus aesthetic.

To determine how the SJ and PI Cases used combination analysis, it was necessary to distinguish between nonmaterial and material combination analysis. Many cases refer to or recite combination analysis, but some do not clearly employ it in resolving the functionality issue. For this Article's purposes, combination analysis was considered material to a case's outcome only if it was clear that the analysis was part of the court's functionality analysis or was outcome determinative. Going forward, when this Article refers to combination analysis, it means material combination analysis.


116 See 1 McCarthy, _supra_ note 2, § 7:76 (discussing nonfunctional combinations of features that individually are functional).

117 The principles are discussed _supra_ Part I.F.

As suggested above, combination analysis would be most applicable to cases concerning mixed-character design features, and would tend to tip cases toward P-favorable outcomes. Do the SJ cases tend to bear this out? TABLE 4 contains data concerning design feature character, combination analysis, and P-favorable outcomes. It shows for each character of design feature a percent equaling the number of cases containing both combination analysis and P-favorable outcomes divided by all cases for that character containing combination analysis.\textsuperscript{119}

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>CHARACTER, COMBINATION ANALYSIS, AND P-FAVORABLE OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>USEFUL</td>
<td>_primarily useful</td>
</tr>
<tr>
<td>PERCENT SJ CASES WITH COMBINATION ANALYSIS AND P-FAVORABLE OUTCOMES</td>
<td>0</td>
</tr>
<tr>
<td>PERCENT PI CASES WITH COMBINATION ANALYSIS AND P-FAVORABLE OUTCOMES</td>
<td>0</td>
</tr>
<tr>
<td>PERCENT COMBINED CASES WITH COMBINATION ANALYSIS AND P-FAVORABLE OUTCOMES</td>
<td>0</td>
</tr>
</tbody>
</table>

1. \textit{SJ Cases}. TABLE 4's data suggest that the tendency of cases to contain both combination analysis and P-favorable outcomes generally increased as aesthetic character increased along the useful/aesthetic continuum. For useful design features lacking aesthetic character, no case contained combination analysis and a P-favorable outcome.\textsuperscript{120} This suggests that there must be at least some aesthetic character present for P to successfully launch combination analysis. The data for primarily useful, midcontinuum, and aesthetic design features suggest that as the degree of aesthetic character increased, so did the presence of cases containing combination analysis and P-favorable outcomes. These percentages are respectively 78\%, 90\%, and 100\%. Thus, combination analysis may be an important doctrinal lever for Ps in cases concerning these character design features.

\textsuperscript{119} Forty-eight percent of the SJ Cases, 37\% of the PI Cases, and 44\% of the combined cases contain combination analysis.

Combination analysis was less important for primarily aesthetic design features in the cases considered for this Article.\textsuperscript{121} Two contained combination analysis, but only one had a P-favorable outcome.\textsuperscript{122} This illustrates that the presence of a significant degree of aesthetic character and judicial willingness to employ combination analysis does not ensure a P-favorable outcome if the design feature in issue is aesthetically functional.

Eighty-eight percent of the mixed-character SJ Cases with combination analysis and P-favorable outcomes sent the functionality issue to trial.\textsuperscript{123} This suggests that combination analysis provided Ps with an effective doctrinal lever in the presence of summary-judgment-uncertainty and mixed-character-ambiguity.

Ps also may have benefited from a “doctrinal synergy” between combination analysis and alternatives analysis.\textsuperscript{124} Combination analysis deemphasizes functional or useful character and emphasizes nonfunctional or aesthetic character.\textsuperscript{125} This “character shifting” may move a case toward alternatives analysis which after TraFix may be permissible only for aesthetic design features subject to the low bar.\textsuperscript{126}

Data from the SJ Cases suggest the presence of doctrinal synergy between combination analysis and alternatives analysis. Both modes of analysis often were involved in cases with P-favorable outcomes. Of these, the most frequent P-favorable result was survival for trial.\textsuperscript{127} Both combination analysis and alternatives analysis were present in 38% of the SJ Cases (including all characters of design features). Out of these cases, 65% had P-favorable outcomes. And out of these cases, 93% sent the functionality issue to trial.

2. \textit{PI and Combined Cases}. The data in TABLE 4 for the PI Cases (and thus also for the combined cases) also suggest that as aesthetic character increases, so does the likelihood that a case will contain combination analysis and a P-favorable outcome. Combination analysis failed in the two PI Cases concerning useful design features. Those courts determined that the features in issue were functional. However, 50% of the cases involving primarily useful design features contain combination analysis and P-favorable outcomes, as do 100% of the cases concerning midcontinuum through aesthetic design features.

\textsuperscript{121} See infra APPENDIX CONCERNING METHODOLOGY.
\textsuperscript{122} Abercrombie & Fitch Stores v. Am. Eagle Outfitters, 280 F.3d 619, 644 (6th Cir. 2002) (concerning aesthetically functional clothing designs and store display set ups).
\textsuperscript{124} Like combination analysis, alternatives analysis was material to a case’s outcome when it was part of the court’s functionality analysis or was outcome determinative. Going forward, when this Article refers to alternatives analysis, it means material alternatives analysis.
\textsuperscript{125} See supra notes 115–18 and accompanying text.
\textsuperscript{126} See supra note 38 and accompanying text.
The PI Cases represented in TABLE 4 also suggest doctrinal synergy between combination analysis and alternatives analysis in cases with P-favorable outcomes. Thirty percent of the PI Cases contain both forms of analysis, and 63% of those have P-favorable outcomes.128

V. CONCLUSION

Perhaps the most interesting facet of the data concerning win/loss records is that Ps succeeded more frequently under summary judgment procedure than under preliminary injunction procedure.129 That data, plus the greater frequency of summary judgment motions in functionality litigation, suggests that summary judgment should be the starting point for evaluating the post-TraFix functionality doctrine.130 Questionable outcomes sometimes may come about when the functionality issue meets summary judgment procedure.

Data concerning outcomes, design feature character, and combination analysis also is provocative.131 It appears that even a relatively modest degree of aesthetic character in mixed-character design features is positively associated with P-favorable outcomes. The influence of aesthetic character may be particularly important because it makes it more difficult to determine within the confines of summary judgment or preliminary injunction procedures whether a design feature is useful or aesthetic, subject to the high or low bar, or functional or nonfunctional. The presence of relatively modest aesthetic character may make it easier for P to advance its case by successfully invoking combination analysis, alternatives analysis, or both.132

What do the data from the post-TraFix cases suggest about TraFix's impact on the functionality doctrine? That is harder to say. The Court might have worsened the doctrine. For example, TraFix emphasized design feature character, but failed to account for mixed-character or mixed-character ambiguity. However, after TraFix a court that is uncertain about what TraFix says or how to apply it nonetheless may appreciate the useful-scarcity and aesthetic-abundance principles.133 These principles can lead to results that are consistent with TraFix's first principles, even if the court's reasoning and use of precedent may appear

129 See supra Part III.
130 The SJ Cases outnumbe the PI Cases by over 2:1. See infra APPENDIX CONCERNING METHODOLOGY. Of course, if P obtains a preliminary injunction, D is in serious straits. See supra note 93 and accompanying text.
131 See supra Part IV.
132 It also follows that the presence of relatively modest aesthetic character could foil a functionality bar that, unlike TraFix's high bar, explicitly states that useful design features are functional per se.
133 See supra Part I.F.
inconsistent with *TraFix*’s standards. Nor is mixed-character ambiguity an exclusively post-*TraFix* problem. Locating the boundary between useful and aesthetic or functional and nonfunctional is an old problem. It especially is a problem for design features that are designed, as many are, to meld both useful and aesthetic character. The functionality issue can present an “extremely close call.”

Whether or not *TraFix* made the functionality doctrine worse, its progeny suggest at least three ways to improve the doctrine’s judicial administration. All follow from the data discussed in this article, and all may be accomplished within the confines of existing procedural and substantive law.

First, judges addressing the functionality issue should always be skeptical of claims that trade dress is nonfunctional. That is a broad and emphatic message from Congress and the Supreme Court. For example, courts deciding summary judgment motions may be concerned with not encroaching upon the role of the

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134 *See, e.g.*, Sham, Inc. v. Wolfe Tony Med., Inc., No. 8:09-cv-706-T-33AEF, 2009 U.S. Dist. LEXIS 97385, *16-17* (M.D. Fla. Sept. 30, 2009) (PI Case in which the court agreed that considering “whether alternative designs are available [is] . . . compatible with *TraFix*’s . . . traditional test of functionality,” but was not persuaded “that the available alternative designs could optimally perform the functions of the [Ps] . . . devices, or that the available alternative designs would not affect the cost or quality of the devices”). *TraFix*’s first principles and standards are discussed supra Part I.C.

135 *See generally* J.H. Reichman, *Design Protection and the New Technologies: The United States Experience in a Transnational Perspective*, 19 U. BALT. L. REV. 6 (1989) (discussing the problem of legally protecting industrial design). While the post-*TraFix* functionality doctrine may have its problems, the pre-*TraFix* doctrine suffered from a “plethora” of functionality standards. 1 McCARTHY, supra note 2, § 7:69.


138 Summary judgment procedure generally is “transsubstantive.” BRUNET & REDISH, supra note 69, § 9:16.

139 *See supra* Parts I.B, C (respectively concerning burden of proof and *TraFix*’s first principles and functionality standards). Congress placed the burden of proving that unregistered trade dress is nonfunctional on Ps because doing so served the substantive policies of the functionality doctrine. *See generally* MUELLER & KIRKPATRICK, supra note 81, § 3.1 (stating that “[f]irst and perhaps most important,” burdens serve substantive policy). A key policy is the benefit of competitive copying. This value is implicit in *TraFix*’s first principles, and was emphasized by the Court in Wal-Mart Stores, Inc. v. Samara Bros., 529 U.S. 205, 213 (2000) (“Consumers should not be deprived of the benefits of competition with regard to the utilitarian and esthetic purposes that product design ordinarily serves by a rule of law that facilitates plausible threats of suit against new entrants.”). Considering the public interest often is an explicit part of preliminary injunction procedure. *See supra* Part II.B. Some PI Cases emphasize the import of low prices and avoiding monopolies. *E.g.*, ASICS Corp. v. Target Corp., 282 F. Supp. 2d 1020, 1032 (D. Minn. 2003).
trier of fact.\textsuperscript{140} However, giving \textit{Ps} the benefit of the doubt is not always appropriate.\textsuperscript{141} Courts have an affirmative obligation to prevent factually unsupported claims of nonfunctionality from becoming trial worthy.\textsuperscript{142}

Second, data suggest that it may be too easy for \textit{Ps} to move a case to the low bar.\textsuperscript{143} If a court reads \textit{Trajfix} to permit alternatives analysis only for aesthetic design features, then it should require a \textit{P} invoking alternatives analysis to demonstrate, within the confines of the procedural posture, that the design feature in issue is at least primarily aesthetic. That burden is implicit in \textit{P}'s burden of proving nonfunctionality, and corresponds to the requirement in some circuits that \textit{P} must prove that a design feature is primarily nonfunctional.\textsuperscript{144}

Third, courts should recognize that combination analysis may result in utility-patent-like rights in design features that should be in the public domain.\textsuperscript{145} This is a troubling possibility. Courts addressing the functionality issue have employed combination analysis to reach \textit{P}-favorable results for the configurations of useful products: e.g., adhesive spreaders;\textsuperscript{146} ground fault circuit interrupters;\textsuperscript{147} military vehicles;\textsuperscript{148} mat-cutting systems;\textsuperscript{149} pistols;\textsuperscript{150} and propane gas regulators.\textsuperscript{151}

While combination analysis is an established part of trade dress law, courts should be skeptical of a \textit{P}'s claim that the overall appearance of a combination of design features is aesthetic or nonfunctional when one or more of the features contributing to the appearance are useful or functional.\textsuperscript{152} Courts should require \textit{Ps} to do more than merely suggest or argue that the appearance of a combination is aesthetic or nonfunctional.\textsuperscript{153} For example, under summary judgment

\textsuperscript{140} See supra Part II.A.
\textsuperscript{141} See BRUNET \& REDISH, supra note 69, § 6.5 (discussing drawing inferences, weighing credibility, and the summary judgment standard).
\textsuperscript{142} Leviton Mfg. Co. v. Universal Sec. Instruments, Inc., 409 F. Supp. 2d 643, 648 (D. Md. 2006) (so stating, but permitting the functionality issue to go to trial).
\textsuperscript{143} See supra Parts IV.B.1, 2.
\textsuperscript{144} E.g., Abercrombie & Fitch Stores v. American Eagle Outfitters, 280 F.3d 619, 629 (6th Cir. 2002).
\textsuperscript{145} See 1 MCCARTHY, supra note 2, § 7:76 (discussing the dangers of "common law patents").
\textsuperscript{148} GMC v. Lanard Toys, Inc., 468 F.3d 405, 414, 417 (6th Cir. 2006).
\textsuperscript{149} Logan Graphic Prods., Inc. v. Texnx USA, Inc., No. 02 C 1823, 2003 WL 21011746, at *11–13 (N.D. Ill. May 5, 2003).
\textsuperscript{150} New Colt Holding Corp. v. RJG Holdings of Fla., Inc., 312 F. Supp. 2d 195, 219 (D. Conn. 2004).
\textsuperscript{152} See, e.g., Big Island Candies, Inc. v. Cookie Corner, 244 F. Supp. 2d 1086, 1089 (D. Haw. 2003) (concerning the appearance of a dipped cookie).
procedure, courts should require Ps to come forward with competent evidence that the appearance of a combination is at least primarily aesthetic or primarily nonfunctional. Fortunately, many post-
Traffic Fix cases appear to have carefully assessed whether combination analysis is or is not appropriate.

APPENDIX CONCERNING METHODOLOGY

This Article employs data from federal district and circuit courts cases. The cases were obtained via Westlaw and Lexis searches. The first search included cases appearing in the two services on or before May 18, 2008 (Round I). Round I yielded fifty-two SJ Cases and twenty-two PI Cases. They provided data employed in this Article. Round I was supplemented by a second search locating cases reported in the two services after Round I and on or before December 16, 2009 (Round II). Round II yielded nine additional SJ Cases and five additional PI Cases. Thus, this Article discusses data from sixty-one SJ Cases and twenty-seven PI Cases.

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154 See supra Part II.A (discussing P's burden under summary judgment procedure).
156 There may be other data sources (e.g., the Patent and Trademark Office) that were not employed in this Article, but which might be germane to the functionality issue. See generally Barton Beebe, An Empirical Study of the Multifactor Tests for Trademark Infringement, 95 CAL. L. REV. 1581, 1649--54 (2006) (discussing data from sources other than judicial opinions).
157 The searches were accomplished as follows. In Westlaw, KeyCite was used to locate all cases that cited Traffic Fix. In LexisNexis, Shepard's was employed likewise. After retrieving these cases, some were abandoned because they did not contain the keywords "functional" or "functionality." This was accomplished by employing a search term "functional functionality" in Westlaw's Locate utility and "functional or functionality" in LexisNexis's Focus utility.
158 The research techniques employed in Round I also were employed in Round II.
159 If there were both district and circuit court opinions addressing the functionality issue in the same case, only the appellate opinion is included. Some cases analyzed the functionality of individual design features for a product and also considered the functionality of the overall appearance of that product. See New Colt Holding Corp. v. RJG Holdings of Fla., Inc., 312 F. Supp. 2d 195, 219 (D. Conn. 2004) (concerning the design of a revolver). These were counted as a single case and coded as such. However, if a court addressed the functionality of multiple distinct design features and reached different results, data concerning each design feature was separately coded. See Abercrombie & Fitch Stores v. American Eagle Outfitters, 280 F.3d 619, 644 (6th Cir. 2002) (holding that clothing designs and store display set ups were aesthetically functional as a matter of law; and that there was a triable functionality issue concerning a catalog design).
Commencing around the time of Round I, the Article’s author developed a coding system for the data to be extracted from the opinions. He subsequently systematically read and coded all of the Round I SJ and PI Cases. Coded data was entered into Excel spreadsheets from which the data would be analyzed. A research assistant independently read and coded the Round I cases from the Second, Sixth, Seventh, and Ninth Circuits and entered it into identical spreadsheets. The author and research assistant compared and discussed their respective results from these circuits. This process resulted in some refinement of the coding system and also the recoding of a few data points from the Round I cases. Subsequently, the author systematically reread all of the Round I SJ and PI Cases. This rereading resulted in the revised coding of a few data points and the acquisition and coding of some additional data points. The author alone read and coded the Round II Cases.

160 This Article does not analyze all of the coded data acquired from the cases disclosed by the Round I and II searches (e.g., from cases concerning motions to dismiss or bench trials). Neither this Article nor the research and coding that preceded it systematically addressed other material trade dress issues such as secondary meaning or likelihood of confusion. Conceivably, a court might have given P the benefit of the doubt on the functionality issue because P’s case failed on likelihood of confusion or other grounds. However, virtually all of the SJ and PI Cases seemed to the author to recognize the importance of the functionality issue and to decide it independent of other issues. The presence of a functional design feature ended some cases. See, e.g., Invisible Fence, Inc. v. Perimeter Techs., Inc., No. 1:05-CV-361, 2007 WL 273129, at *8 (N.D. Ind. Jan. 26, 2007). In others, the functionality analysis followed the court’s assessment of other issues. See, e.g., Gemmy Indus. v. Chrisha Creations Ltd., No. 04 Civ. 1074, 2004 WL 1406075, at *8–11 (S.D.N.Y. June 23, 2004) (considering the functionality issue after considering whether there was secondary meaning and before considering likelihood of confusion).

161 The author previously read many of what became the Round I Cases. However, this reading was not systematic.

162 The codes and data employed in this Article are available from the author.