

In the
United States Court of Appeals
For the Seventh Circuit

No. 19-2035

FLEXIBLE STEEL LACING COMPANY,

Plaintiff-Appellant,

v.

CONVEYOR ACCESSORIES, INC.,

Defendant-Appellee.

Appeal from the United States District Court for the
Northern District of Illinois, Eastern Division.
No. 1:17-cv-05540 — **Ruben Castillo**, *Judge*.

ARGUED FEBRUARY 19, 2020 — DECIDED APRIL 7, 2020

Before WOOD, *Chief Judge*, and FLAUM and RIPPLE, *Circuit Judges*.

RIPPLE, *Circuit Judge*. Flexible Steel Lacing Co. (“Flexco”) brought this action for trade dress infringement and unfair competition against Conveyor Accessories, Inc. (“CAI”). Flexco alleges that CAI infringed its registered and common law trade dress by promoting and selling conveyor belt fasteners with a product design that is confusingly similar to the product design of Flexco’s fasteners. In its complaint,

Flexco set forth claims brought under the Lanham Act, 15 U.S.C. §§ 1114 and 1125(a), claims for common law unfair competition and trademark infringement, and a claim brought under the Illinois Uniform Deceptive Trade Practices Act, 815 ILCS 510/2.¹

CAI answered the complaint and asserted counterclaims seeking cancellation of Flexco's registered trademarks and seeking a declaratory judgment of invalidity, unenforceability, and noninfringement. CAI moved for summary judgment, contending that Flexco's trade dress is functional and therefore invalid. Flexco moved for partial summary judgment on other grounds.

The district court granted summary judgment in favor of CAI, holding that Flexco's trade dress was functional. It denied Flexco's motion for partial summary judgment and dismissed CAI's remaining counterclaims as moot. Flexco filed a timely notice of appeal seeking reversal of the district court's grant of summary judgment in favor of CAI with respect to one of its registered marks.²

¹ The district court had federal question jurisdiction over Flexco's Lanham Act claims pursuant to 15 U.S.C. § 1121 and 28 U.S.C. §§ 1331 and 1338(a). The district court's jurisdiction over Flexco's common law trademark infringement, unfair competition, and state law deceptive trade practices claims rested on 28 U.S.C. § 1367(a).

² We have jurisdiction pursuant to 15 U.S.C. § 1121, which grants federal courts of appeals appellate jurisdiction over cases arising under the Lanham Act, and 28 U.S.C. § 1291, because this is a timely appeal of right from a final judgment of a district court.

We agree with the district court's ruling and hold that Flexco's trade dress is invalid because it is functional. We accordingly affirm the district court's judgment.

I.

BACKGROUND

A. Facts

1. Belt Conveyor Systems and Fasteners

Flexco and CAI are competitors in the belt conveyor industry. Belt conveyors are used in a wide variety of material handling applications, ranging from transporting coal from a mine shaft to moving groceries at the checkout lane. Many belt conveyor systems employ an endless flexible rubber belt comprised of multiple high-strength rubber-belt segments that are spliced together.

Mechanical belt fasteners can be used to splice the belt segments together. Flexco likens mechanical belt fasteners to steel clips.³ The following illustrations, Figures 1 and 4 of Flexco's design patent, depict, respectively, a perspective view of a conveyor belt fastener and a left side elevational view of the conveyor belt fastener:

³ Appellant's Br. 5.

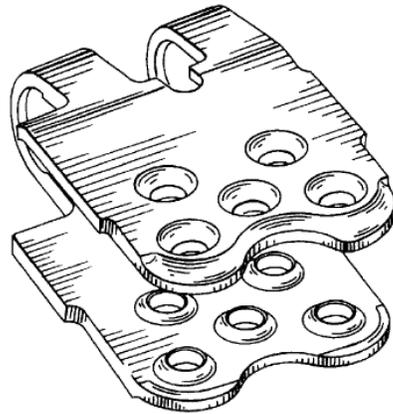


FIG. 1

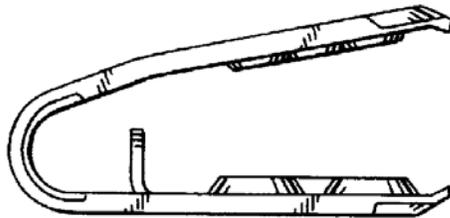


FIG. 4

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The fasteners feature top and bottom plates that are joined by curved bows. The plates have holes through which rivets are driven. A set of fasteners is attached to the end of a belt segment by inserting rivets through each of the holes in the upper plate. The rivets then puncture the conveyor belt material before exiting through the holes in the bottom plate. Securing the fastener in this fashion draws the top and bottom plates together and causes the fastener to “bite” into the

⁴ R.71-6 at 3.

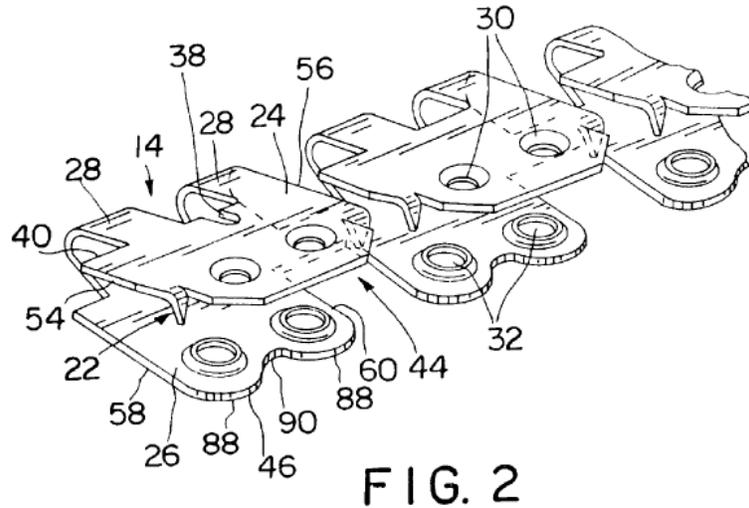
belt.⁵ This process is repeated with a second set of fasteners that is attached to the opposing end of a second belt segment. After the fasteners have been installed onto the respective ends of the opposing belt segments, the belt segments are connected together by interlocking the opposing fasteners and inserting a hinge pin through the space formed by the interlocking fastener bows. Once the hinge pin is inserted, the fasteners form a mechanical splice. The mechanical splice operates like a door hinge that flexes with the conveyor belt as it rotates around the conveyor system.

Flexco manufactures a variety of products for the belt conveyor industry, including mechanical belt fasteners, which are the subject of its asserted trade dress. The holding capacity of Flexco's fasteners is achieved through a combination of compression and penetration, which is how firmly and deeply the top and bottom plates bite into the belt.⁶ In general, one of the goals when designing a belt fastener is to ensure that the fastener provides sufficient holding capacity for the particular application without making the plates too thick.⁷ The particular fastener design at issue in this case involves the shape and the profile of the fastener's leading edge. The following illustration, Figure 2 of Flexco's utility patent, depicts a strip of fasteners before it is riveted to a belt:

⁵ Appellant's Br. 6.

⁶ R.71-12 at 8; Appellant's Br. 7.

⁷ R.83-1 ¶ 9.



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The numbers 44 and 46 in the illustration above identify the leading edges of the upper and lower plates.⁹ Plates that are too thick may be subject to “blunt impacts from the scraper blades and plows, as well as highly abrasive products carried on the belt such as coal or stone, resulting in excessive wear on the fastener’s leading edge that, over time, will affect the integrity of the splice.”¹⁰

⁸ R.71-4 at 3.

⁹ R.83-1 ¶ 11.

¹⁰ Appellant’s Br. 7.

2. Flexco's Fastener With A Scalloped Leading Edge

Flexco always has beveled the leading edges on its fasteners to reduce wear.¹¹ Traditionally, the leading edges of Flexco's fasteners have been straight edged. In 1999, however, Flexco introduced the Scalloped Edge™ fastener, a mechanical belt fastener featuring leading edges that are scalloped,¹² as depicted in the above illustrations. As shown in Figure 2 of the utility patent above, the scalloped leading edge, identified by the number 46, is comprised of two outer convex curves, both identified by the number 88, and a single concave curve, identified by the number 90.

Edward Musil, an engineering manager at Flexco from 1972 until 2006, was involved in the development of the scalloped edge fastener. Before the fastener's commercial release, Mr. Musil stated that "the main purpose of a scalloped edge will be to prevent fasteners from getting scraped off by the [belt] cleaner."¹³ In 1998, Mr. Musil visited a testing site and observed that the scalloped edge fastener "had noticeably gentler impact" than a standard fastener.¹⁴ Mine person-

¹¹ R.83-1 ¶ 36. Beveling is a process that involves striking the leading edge of the fastener to "extend the metal such that it's thinner at the very edge." R.71-5 at 17.

¹² Although the utility patent illustration of the fastener depicts only one scalloped leading edge, Flexco states in its brief that both leading edges of the fastener are scalloped. *See, e.g.*, Appellant's Br. 4 (describing the "leading edges" of its fastener).

¹³ R.83-1 ¶ 35.

¹⁴ *Id.* ¶ 38.

nel, who used belt conveyor systems with mechanical fasteners, believed that the scalloped edge fastener would extend the life of both the conveyor splice and conveyor cleaner blades.¹⁵ The Vice President of Engineering for Flexco prepared a confidential interoffice correspondence addressed to Mr. Musil and others concluding that, based on testing, the scalloped edge fastener “should perform equal [to] or better than the standard” straight edge fastener.¹⁶

“Compared to a straight-edged fastener, the Scalloped Edge™ fastener displaces and compresses less rubber when it is installed because less plate material is being imbedded in the belt.”¹⁷ The single center concave curve, 90, of the scalloped leading edge, 46, acts as a “reservoir” for the “incompressible rubber to be displaced ... when the fastener is being compressed onto the belt.”¹⁸ As Flexco explains, when the rubber is “squished down,” it “needs somewhere to go, so it flows into that semi-circular space.”¹⁹

3. Intellectual Property Protection of Flexco’s Fastener With A Scalloped Leading Edge

Flexco has pursued patent and trademark protection for its scalloped edge fastener. First, in 1997, Flexco filed a utili-

¹⁵ *Id.*

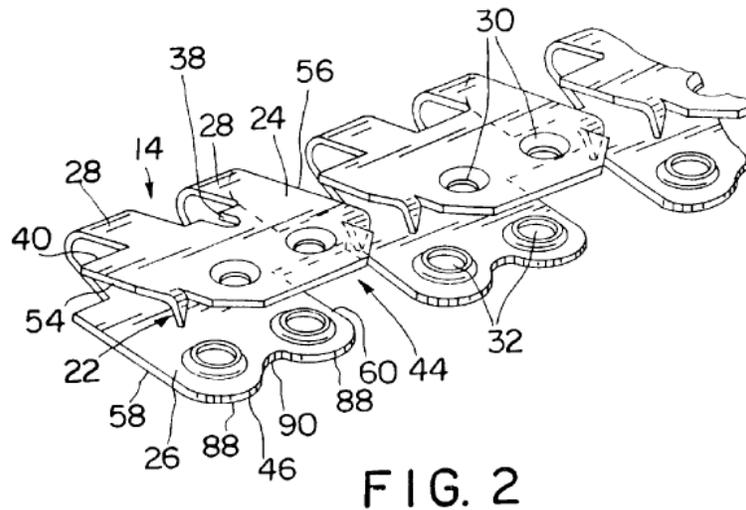
¹⁶ *Id.* ¶ 39.

¹⁷ Appellant’s Br. 8.

¹⁸ *Id.* at 10 (internal quotation marks omitted).

¹⁹ *Id.*

ty patent application with the United States Patent and Trademark Office (“USPTO”). The application issued in April 2000 as U.S. Patent No. 6,053,308 (“the utility patent”). The utility patent discloses a fastener having both a beveled and scalloped leading edge. Figure 2 of the utility patent is an illustration of the disclosed fastener:



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The utility patent expired on September 23, 2017.²¹

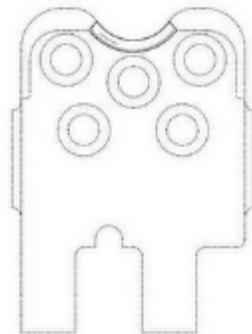
In 1998, Flexco applied for a design patent for the three-dimensional design of its scalloped edge fastener. The design patent issued in April 2000 as U.S. Patent No. 423,749 (“the design patent”). Gregory Westphall, Flexco’s Global Engineering Director and corporate designee, testified that, as the expiration of the design patent neared, Flexco was

²⁰ R.71-4 at 3.

²¹ R.83-1 ¶ 10.

“concerned that [the] Scalloped Edge patent was running out” and at least one employee asked if there was anything that could be done to “preserve the Scalloped Edge due to competitive threats.”²² Just days before the design patent expired, Flexco filed six trademark applications with the USPTO, two of which ultimately issued.

Flexco’s U.S. Trademark Registration No. 4,971,326 (“Flexco’s registered trade dress” or the “beveled center scallop”), the only trade dress that Flexco pursues on appeal, was registered on June 7, 2016.²³ Flexco’s registered trade dress claims only the beveled concave curve of the leading edge, as indicated by the darkened outline border in the below illustration:



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Flexco’s registered trade dress describes the claimed trade dress as the following: “the mark consists of a

²² *Id.* ¶ 19.

²³ *Id.* ¶ 21.

²⁴ R.71-10 at 2.

three-dimensional configuration of the curved beveled scalloped upper edge of a metal fastener.”²⁵

During prosecution of Flexco’s registered trade dress, Mr. Westphall submitted three declarations to the USPTO. In the first declaration, Mr. Westphall stated that “Flexco neither obtained nor sought to obtain utility patent protection” for the claimed trade dress.²⁶ He acknowledged that the fastener’s low profile reduced the leading edge’s exposure to impacts from other belt conveyor components but maintained that it was nevertheless nonfunctional because of the availability of alternative designs.²⁷ In his second declaration, Mr. Westphall further explained that the shape of Flexco’s scalloped edge fastener contributes to the quality of the fasteners by extending the life of the fasteners because the shape minimizes the effects of impact between the fasteners and the belt cleaners.²⁸ He also declared, in response to the Examining Attorney’s inquiry, that Flexco had considered filing an application for a utility patent but that it ultimately “believed that the overall shape of the goods was not functional, but merely an ornamental design.”²⁹

A different trade dress application submitted by Flexco was rejected on functionality grounds after the Examining

²⁵ *Id.*

²⁶ R.71-14 ¶ 9.

²⁷ *Id.* ¶ 11.

²⁸ R.71-15 ¶ 4.

²⁹ *Id.*

Attorney for that application independently discovered the utility patent. During the prosecution of Flexco's beveled center scallop design, however, the Examining Attorney did not independently discover the utility patent, nor did Flexco immediately disclose it. After the Examining Attorney had approved the application for publication,³⁰ Flexco submitted a supplemental declaration of Mr. Westphall stating that he was unaware of the utility patent, or at least its contents, when he signed his earlier declaration.³¹

4. Promotional Statements

Flexco's marketing materials contain statements that emphasize the various benefits of its fastener's scalloped leading edge. For example, in one brochure, Flexco states that the "scalloped design contributes to improved fastener profile resulting in increased compatibility with belt cleaners and improved cleaner-tip wear."³² Another marketing brochure states that the scalloped design of the leading edge allows the fasteners to "work seamlessly with cleaners, lagging, and other belt products."³³ In yet another marketing brochure, Flexco states that its scalloped edge design provides a lower profile that extends the life of the belt splice and reduces the

³⁰ Pursuant to 37 C.F.R. § 2.80, if a mark appears to be registrable, the mark is published in the *Official Gazette* for opposition.

³¹ R.105-1 ¶¶ 36-37.

³² R.83-1 ¶ 24.

³³ R.71-12 at 12.

fastener's exposure to belt cleaner blades and other conveyor components.³⁴

B. Procedural History

Flexco filed this action against CAI, alleging claims of trade dress infringement and unfair competition brought under the Lanham Act, 15 U.S.C. §§ 1114 and 1125(a), common law, and the Illinois Uniform Deceptive Trade Practices Act, 815 ILCS 510/2. The crux of Flexco's complaint is that the design of CAI's fastener is confusingly similar to Flexco's trade dress.

CAI answered the complaint and asserted counterclaims seeking cancellation of Flexco's registered trade dress and seeking declaratory judgment of invalidity, unenforceability, and noninfringement. CAI moved for summary judgment, contending that Flexco's trade dress is invalid because it is functional. Flexco moved for partial summary judgment on other grounds. Both Flexco and CAI responded in opposition to each other's motion for summary judgment and both filed replies. Flexco moved to strike certain portions of CAI's reply, or alternatively, to file a sur-reply. The district court allowed the sur-reply and denied the motion to strike.

The district court granted CAI's motion for summary judgment, holding that Flexco's trade dress was functional and that the trademarks were therefore invalid. First, the court determined that the utility patent discloses the utilitarian advantages of the features that Flexco asserts as trade

³⁴ R.71-13 at 2.

dress³⁵ and that, in response to Flexco's argument that the utility patent applied only to two-rivet fasteners,³⁶ the utility patent was not limited to two-rivet fasteners but also included five-rivet fasteners.³⁷ Second, the court found that Flexco's own advertisements emphasized the functional benefits of its trade dress.³⁸ Third, the court observed that Flexco referenced these functional benefits both in its internal communications and in sworn declarations it submitted to the USPTO.³⁹ Last, the court held that the availability of alternative designs to achieve the same functions as its beveled, scalloped leading edge failed to create a factual issue on functionality because the asserted feature was demonstrated to be functional.⁴⁰

³⁵ R.114 at 15.

³⁶ Appellant's Br. 25 (contending that the utility patent "applied to Flexco's smaller, two-rivet fastener").

³⁷ R.114 at 16. Flexco contends that "[t]his case primarily concerns the competing Flexco and CAI five-rivet fasteners." Appellant's Br. 18. The only issue before us, however, is whether Flexco's registered trade dress is functional. Flexco's asserted trade dress is not limited to either two-rivet fasteners or five-rivet fasteners. The registration for Flexco's trade dress describes the mark as "a three-dimensional configuration of the curved beveled scalloped upper edge of a *metal fastener*." R.71-10 at 2 (emphasis added).

³⁸ R.114 at 17.

³⁹ *Id.*

⁴⁰ *Id.* at 18.

The district court denied Flexco's motion for partial summary judgment and dismissed CAI's remaining counterclaims as moot. The district court entered final judgment in favor of CAI.

This appeal followed.

II.

DISCUSSION

We review the district court's grant of summary judgment de novo. *Georgia-Pacific Consumer Prods. LP v. Kimberly-Clark Corp.*, 647 F.3d 723, 727 (7th Cir. 2011). Summary judgment is appropriate when "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). We draw "all justifiable inferences" in the favor of the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986); *Auto-Zone, Inc. v. Strick*, 543 F.3d 923, 929 (7th Cir. 2008) (explaining that we view "the facts in the light most favorable to ... the nonmovant").

"Functionality is a factual question, but the bar for functionality is so low that it can often be decided as a matter of law." *Arlington Specialties, Inc. v. Urban Aid, Inc.*, 847 F.3d 415, 419–20 (7th Cir. 2017) (internal citation omitted). "Under the Lanham Act, registration of a trademark creates a rebuttable presumption that the mark is valid, but the presumption 'evaporates as soon as evidence of invalidity is presented.'" *Georgia-Pacific*, 647 F.3d at 727 (quoting *Door Sys., Inc. v. Pro-Line Door Sys., Inc.*, 83 F.3d 169, 172 (7th Cir. 1996)). CAI, as the party seeking to invalidate the registered mark, initially bears the burden of proof. If CAI can show strong evidence of functionality, however, then Flexco, the mark hold-

er, carries a “heavy burden of showing that the feature is not functional.” *Id.* (quoting *TrafFix Devices, Inc. v. Mktg. Displays, Inc.*, 532 U.S. 23, 30 (2001)).

A.

“It is well established that trade dress can be protected under federal law.” *TrafFix*, 532 U.S. at 28.⁴¹ “[T]he Lanham Act ... provides a cause of action to one who is injured when a person uses ‘any word, term[,] name, symbol, or device, or any combination thereof ... which is likely to cause confusion ... as to the origin, sponsorship, or approval of his or her goods.’” *TrafFix*, 532 U.S. at 28–29 (quoting 15 U.S.C. § 1125(a)(1)(A)). Courts had allowed claims of trade dress infringement to proceed by relying on this general provision until Congress confirmed the statutory protection of trade dress by amending the Lanham Act. *Id.*

The Supreme Court has cautioned against overextending trade dress protection, however, because it “almost invariably serves purposes other than source identification.” *Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205, 213 (2000). It is important to remember that trademark law “seeks to promote competition by protecting a firm’s reputation.” *Qualitex Co. v. Jacobson Prods. Co., Inc.*, 514 U.S. 159, 164 (1995). Patent law, in contrast, seeks to “encourage invention by granting inventors a monopoly over new product designs

⁴¹ In this opinion, we use the terms “trade dress” and “trademark” interchangeably. See *Thomas & Betts Corp. v. Panduit Corp.*, 138 F.3d 277, 283 n.1 (7th Cir. 1998) (The Lanham Act “provides no basis for distinguishing between trademark and trade dress.” (quoting *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 773 (1992))).

or functions for a limited time, after which competitors are free to use the innovation." *Id.* (internal citation omitted). If a product's functional feature were permitted to be used as a trademark, competition would be unduly stifled because a trademark can be "renewed in perpetuity." *Id.* at 164–65. Consequently, if a product feature is functional, it is not entitled to trade dress protection. *Id.* at 165 (citing *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 850 n.10 (1982)). This so-called functionality doctrine thus prevents useful innovations that are properly within the province of patent law from obtaining protection under trademark law. *Id.* at 164–65.⁴²

A product feature is considered functional and is ineligible for trademark protection "if it is essential to the use or purpose of the article or if it affects the cost or quality of the article." *Inwood*, 456 U.S. at 850 n.10. This is known as the "Inwood formulation." *TrafFix*, 532 U.S. at 33. In cases of "esthetic functionality," such as the question involved in *Qualitex*,⁴³ courts also may inquire as to whether the exclusive use of the feature would place competitors at a "significant non-reputation-related disadvantage." *Id.* at 33 (quoting *Qualitex*, 514 U.S. at 165). If the product feature or design is functional under the *Inwood* formulation, then the court need

⁴² With respect to the general history and purpose of the functionality doctrine, we do not seek to repeat what Judge Bauer has set forth in *Thomas & Betts*. We assume familiarity with that excellent opinion.

⁴³ The question before the Supreme Court in *Qualitex* was whether the Lanham Act permits the registration of color as a trademark. *Qualitex Co. v. Jacobson Prods. Co., Inc.*, 514 U.S. 159, 160–61 (1995).

not proceed further to consider whether there is a non-reputation-related disadvantage. *Id.*

Courts generally consider the following factors to determine whether a design is functional:

- (1) the existence of a utility patent, expired or unexpired, that involves or describes the functionality of an item's design element;
- (2) the utilitarian properties of the item's unpatented design elements;
- (3) advertising of the item that touts the utilitarian advantages of the item's design elements;
- (4) the dearth of, or difficulty in creating, alternative designs for the item's purpose;
- (5) the effect of the design feature on an item's quality or cost.

Georgia-Pacific, 647 F.3d at 727–28. None of these factors is dispositive. *Bodum USA, Inc. v. A Top New Casting Inc.*, 927 F.3d 486, 492 (7th Cir. 2019).⁴⁴ Moreover, evidence of the availability of alternative designs fails to create a factual issue of functionality once the asserted trade dress is shown to be functional by other evidence. *See Traffix*, 532 U.S. at 33 (explaining that there is no need to consider evidence of alternative designs where an expired utility patent establishes

⁴⁴ Flexco contends that the district court erred in not considering the second factor. Appellant's Br. 25. In *Georgia-Pacific Consumer Prods. LP v. Kimberly-Clark Corp.*, 647 F.3d 723 (7th Cir. 2011), we merely observed what factors other courts considered in making functionality determinations. Nothing in our opinion requires a court to consider every single factor in any given case.

functionality).⁴⁵ An asserted trade dress that affects the cost or quality of a product remains “functional even if other solutions to the design problems are available to competitors.” *Arlington Specialties*, 847 F.3d at 419.

B.

Flexco contends that summary judgment was improperly granted because, at bottom, the utility patent is not strong evidence of functionality and, regardless, alternative designs exist. We address each argument in turn.

1. Evidence of Functionality

First, Flexco contends that the utility patent is not strong evidence of the functionality of the beveled center scallop because, unlike that in *TrafFix*, Flexco’s registered trade dress is not “a protected element” of its utility patent.⁴⁶ The

⁴⁵ In *Specialized Seating, Inc. v. Greenwich Indus., L.P.*, 616 F.3d 722 (7th Cir. 2010), the plaintiff appealed from the district court’s holding following a bench trial that the plaintiff’s registered trade dress in the X-frame design of a folding chair was functional. We affirmed. The district court concluded that four utility patents collectively disclosed every feature of the claimed trade dress and that the “x-frame construction is functional because it was designed to be an optimal tradeoff between a chair’s weight (and thus its cost, since lighter chairs use less steel) and its strength.” *Id.* at 724. We agreed, holding that the chair “looks the way it does in order to be a better chair, not in order to be a better way of identifying who made it (the function of a trademark).” *Id.* at 727. We acknowledged that “[t]he list of alternative designs is very long,” but we concluded that it indicated only “that *all* of the designs are functional, in the sense that they represent different compromises along the axes of weight, strength, kind of material ... and so on.” *Id.*

⁴⁶ Appellant’s Br. 32.

question presented in *TrafFix* was what effect an expired utility patent has on a claim of trade dress infringement. *TrafFix*, 532 U.S. at 29. The Supreme Court concluded that an expired utility patent “has vital significance” because a “utility patent is strong evidence that the features therein claimed are functional.” *Id.* The holder of the expired utility patents, Marketing Displays, Inc. (“MDI”), had alleged that TrafFix Devices, Inc. (“TrafFix”) sold products that infringed the unregistered trade dress of MDI’s temporary road signs. *Id.* at 25–26. MDI’s road signs incorporated a dual-spring design that was visible near the base of the sign. The expired utility patents disclosed a sign mechanism that employed two springs to keep the signs upright while withstanding strong gusts of wind. *Id.* at 25.

The Supreme Court observed that statements in the expired patents confirmed that the dual-spring design served a functional purpose—keeping the road sign upright. For example, the specifications of the patents explained that, under strong wind conditions, road signs using only a single spring would fall over and that road signs using the new dual-spring design would not fall over because the dual-spring design prevented the sign from twisting. *Id.* at 31. The Supreme Court also relied on statements made in the course of patent prosecution as additional evidence of the design feature’s functionality. Such statements indicated that the use of a dual-spring design, as opposed to a single spring, was important because it prevented the sign from falling over. *Id.* at 31–32.

The Supreme Court determined that, in light of the expired utility patents, MDI failed to overcome the “strong evidentiary inference of functionality.” *Id.* at 30. Because the

patents established functionality, the Court held that there was “no need” to “speculat[e] about other design possibilities, such as using three or four springs which might serve the same purpose.” *Id.* at 33.

Flexco first contends that, although the utility patent “undeniably describes how a ‘scalloped’ edge provides a better bite and a lower fastener profile,” it does so only in “reference to the fastener’s [two convex curves]” and not in terms of its trade dress, the center scallop.⁴⁷ Specifically, Flexco submits that the utility patent refers solely to the leading edge’s two convex curves, not the center beveled scallop, as improving the fastener’s bite and profile.⁴⁸ Second, Flexco contends that the utility patent is not evidence of the functionality of its center beveled scallop because, although the patent facilitated the use of an installation tool for two-rivet fasteners, “[t]his case primarily concerns” the five-rivet fastener,⁴⁹ which does not require a center scallop to accommodate an installation tool.⁵⁰

We address each of these arguments in turn. First, we disagree that the utility patent refers solely to the two convex curves of the fastener’s leading edge as improving the fastener’s bite and profile; the patent refers to the leading edge of the fastener, which is comprised of the two convex

⁴⁷ Appellant’s Br. 39.

⁴⁸ *Id.* at 33–34.

⁴⁹ *Id.* at 18.

⁵⁰ *Id.* at 20, 34–36.

curves and the center beveled scallop. Utility patents are “excellent cheat sheets” in assessing the functionality of an asserted trade dress because “any design claimed in a patent is supposed to be useful.” *Jay Franco & Sons, Inc. v. Franek*, 615 F.3d 855, 857 (7th Cir. 2010).

Claim 3 of the utility patent provides the following:

The belt fastener of claim 1 wherein the one plate is the upper plate of the fastener with the teeth formed thereon, and the outer edge of at least one of the lower and upper plate[s] *is contoured to generally follow the contour around the apertures to reduce the amount of plate material spaced from the apertures* so that with the fastener riveted onto the belt end, the contoured edge bites into the corresponding belt surface for a lower profile for the fastener and additional belt gripping and tensile force resistance.⁵¹

Flexco’s reading of this claim, that it refers solely to the fastener’s two convex curves of the leading edge, is simply not supported by the plain language of the claim. Tellingly, when CAI asserted in its proposed facts that claim 3 of the utility patent claimed the center scallop shape, Flexco did not contest it; instead, Flexco stated that the only reason that the fastener had a scallop was so that it could curve around the installation tool.⁵² The utility patent explains that the

⁵¹ R.71-4 at 13 (emphasis added).

⁵² R.83-1 ¶ 15.

lower plate's outboard edge, identified by the number 46, is comprised of two outer sections, both identified by the number 88.⁵³ The two outer sections "are curved and meet at an inner oppositely curved section 90 so that the outboard edge 46 generally curves around the circular rivet openings 32."⁵⁴ Figure 2 of the utility patent supports this description. It depicts a leading edge 46 that is comprised of the two convex curves 88 and the center scallop 90.⁵⁵ Thus, when claim 3 references the outer edge of the plate, it is referring to 46, which necessarily includes 90, the center scallop. Nothing in claim 3 limits the leading edge 46 to the two convex curves 88.

Second, we disagree that the utilitarian functions disclosed by the utility patent are limited to the two-rivet fastener. Indeed, as the district court explained, our review is not limited to a particular fastener;⁵⁶ rather, the sole question

⁵³ R.71-4 at 12.

⁵⁴ *Id.*

⁵⁵ *Id.* at 3.

⁵⁶ R.114 at 14. The express language of the patent makes clear that the scope of the patent is not limited to a two-rivet fastener. R.71-4 at 9 ("While the hinged belt fastener described herein has two rivets and two teeth, it will be recognized that different numbers ... [of] teeth can be utilized. Thus, [a] belt fastener using more than two rivets ... will still fall within the purview of this invention."). This is not to say that, if the patent were limited to two-rivet fasteners, it would no longer be strong evidence of functionality. That the scalloped design facilitates the use of the installation tool is but one function; another function of the scalloped design is that it improves the bite and decreases the profile of the fasten-

(continued ...)

before us is whether the design feature claimed in Flexco's registered trade dress is functional and therefore invalid. Flexco's registered trade dress claims the beveled center scallop of the fastener's leading edge and does not limit the trade dress to a particular fastener.⁵⁷ In *TrafFix*, the Supreme Court explained that it "makes little difference" whether the dual-spring design depicted in the patents looked similar to the dual-spring design claimed by MDI as trade dress. *TrafFix*, 532 U.S. at 30. The Court instead focused on the utilitarian aspect of the claimed design and whether it served the same purpose as described in the patent. *Id.* at 32.

Before the district court, Flexco, relying on Mr. Musil's testimony, contended that the sole reason for the center scallop was to accommodate the two-rivet fastener's installation tool. In light of the clear language in the utility patent disclosing the utilitarian advantages of the center beveled scallop, Mr. Musil's testimony is not entitled to any weight. A design is functional when it is "essential to the use or purpose of the device or when it affects the cost or quality of the device." *Id.* at 33. The utility patent clearly discloses that the beveled center scallop improves the bite and reduces the profile of the fastener's leading edge. This "is functional because consumers would pay to have it rather than be indif-

(... continued)

er's leading edge. Flexco does not contend that this latter function is not present in the five-rivet fasteners.

⁵⁷ R.71-10 at 2 ("[T]he mark consists of a three-dimensional configuration of the curved beveled scalloped upper edge of a metal fastener.").

ferent toward or pay to avoid it.” *Jay Franco & Sons*, 615 F.3d at 857.

In addition to disclosing the functional advantage of scalloping the leading edge, the utility patent also discloses the functional advantage of beveling the leading edge. The specification of the patent states that “it is known to bevel ... the outboard edges 44 and 46” to improve “belt gripping” and that the beveling reduces the “profile” of the leading edge.⁵⁸ Flexco contends that this language does not refer to the fastener’s leading edges but instead refers only to the fastener’s two convex curves. The patent itself indicates otherwise. Numbers 44 and 46 in the patent are described as the “scalloped ... outboard edge 46” and the “outboard edge 44 of the upper plate 24.”⁵⁹ The patent specifies that “the lower plate outboard edge 46 includes two outer sections 88 that are curved and meet at an inner oppositely curved section 90.”⁶⁰ It is clear from this language that 44 and 46 are the leading edges of the fastener’s top and bottom plates. Thus, the utility patent discloses the utilitarian advantages of beveling the leading edge, which necessarily includes the center scallop.

Flexco contends that *McAirlaids, Inc. v. Kimberly-Clark Corp.*, 756 F.3d 307 (4th Cir. 2014), presents a “nearly identical circumstance” in which the “trademarked feature of the plaintiff’s product, although mentioned in the patent (as

⁵⁸ R.71-4 at 12.

⁵⁹ *Id.*

⁶⁰ *Id.*

here), was not a protected element of the patents.”⁶¹ *McAirlaids* is not a nearly identical circumstance; indeed, it is clearly distinguishable. McAirlaids, Inc. patented a “pressure-fusion process” in which steel rollers printed a raised pattern upon sheets of fluff pulp. *McAirlaids*, 756 F.3d at 309. This patented fusion process negated the need for glue or other binders because the raised embossing pattern fused the sheets of fluff together. For this process adequately to fuse the sheets together, the embossed design had to fall within certain size and spacing parameters.

McAirlaids had a registered trade dress with the following description: “the mark is a [three-dimensional] repeating pattern of embossed dots.” *Id.* (alteration in original) (quoting U.S. Trademark Reg. No. 4,104,123). McAirlaids filed suit against Kimberly-Clark Corp. (“Kimberly-Clark”) alleging infringement of its registered trade dress. The district court held that the trade dress was functional and granted summary judgment in favor of Kimberly-Clark. The Court of Appeals for the Fourth Circuit reversed, holding that a genuine issue of material fact existed as to whether McAirlaids’s trade dress was functional. Specifically, the court noted that the patent at issue disclosed a process but did not mention any particular embossing pattern, nor did the patent describe the functional advantages of any particular pattern. *Id.* at 312. In contrast, Flexco’s utility patent explicitly discloses the beveled center scallop and describes its functional benefits. Unlike the patent in *McAirlaids*, Flexco’s utility patent is

⁶¹ Appellant’s Br. 37.

not a process patent—it expressly discloses the product design itself.⁶²

The utility patent’s strong evidence of functionality is bolstered by Flexco’s own advertisements, internal communications, and statements to the USPTO. See *Georgia-Pacific*, 647 F.3d at 730–31 (explaining that statements in advertisements are not “mere puffery,” nor do they create a factual issue of functionality, where the language links the claimed feature of trade dress to utilitarian benefits); *Jay Franco & Sons*, 615 F.3d at 859 (explaining that advertisements that “highlight” the “functional aspects” of the product’s design “bolster[s]” evidence of functionality). Flexco’s advertisements emphasize the utilitarian advantages of the beveled center scallop. One of its marketing brochures states that the scalloped edge enabled the fastener to “interface seamlessly with belt cleaners, pulley lagging, and other conveyor com-

⁶² Flexco also relies on *Bodum USA, Inc. v. A Top New Casting, Inc.*, 927 F.3d 486 (7th Cir. 2019), as an “instructive” case on the issue of whether its utility patent is strong evidence of the functionality of its beveled center scallop design. Appellant’s Br. 39, 46–47. We disagree that *Bodum* is instructive. In *Bodum*, the jury returned a verdict in the plaintiff’s favor, finding that the plaintiff’s trade dress was not functional and that the defendant was liable for trademark infringement. *Bodum*, 927 F.3d at 490. After trial, the defendant moved for judgment as a matter of law, contending that the plaintiff’s trade dress was functional, and moved for a new trial, contending that the district court abused its discretion in excluding various utility patents from evidence. The district court denied both motions, and we affirmed. *Id.* at 488. Our opinion in *Bodum* is not instructive here because it involved a different standard of review, *id.* at 491, and it involved utility patents that did not disclose the asserted trade dress, *id.* at 496–97.

ponents.”⁶³ Other marketing statements made by Flexco included the following: “[l]ow-profile, Scalloped Edge™ design that reduces hang-ups on cleaners, pulleys, etc.”;⁶⁴ and “[t]he scalloped design contributes to improved fastener profile resulting in increased compatibility with belt cleaners and improved cleaner-tip wear.”⁶⁵

Flexco contends that these advertising statements merely “attributed the engineered performance of the outboard [convex curves] to that non-functional trade dress [of the beveled center scallop].”⁶⁶ But evidence of Flexco’s internal testing suggests otherwise. Mr. Musil, Flexco’s former engineering manager, stated in an internal email that “the main purpose of a scalloped edge will be to prevent fasteners from getting scraped off by the cleaner.”⁶⁷ In 1998, Flexco’s engineers conducted various performance tests comparing the traditional beveled, straight edge fasteners with Flexco’s new beveled, scalloped edge fasteners. Flexco’s Vice President of Engineering “prepared a confidential interoffice correspondence ... , concluding that based on the testing, ‘the scalloped [edge fastener] should perform equal or better than the standard [straight edge fastener].’”⁶⁸ These state-

⁶³ R.71-12 at 8.

⁶⁴ *Id.* at 9.

⁶⁵ R.71-3 at 3.

⁶⁶ Appellant’s Br. 50.

⁶⁷ R.83-1 ¶ 35.

⁶⁸ *Id.* ¶ 39.

ments do not distinguish between the fastener's two convex curves and the fastener's beveled center scallop, nor do they attribute the functional benefits of the design to the two convex curves. Instead, the statements refer to the scalloped edge as a whole; the scalloped edge includes the beveled center scallop.

Moreover, in statements to the USPTO during prosecution of Flexco's beveled center scallop registration, Mr. Westphall, on behalf of Flexco, stated that "the shape of the Flexco® Scalloped Edge™ rivet hinged fastener shown in paragraphs 6 and 7 reduces the exposure to cleaner blades, skirt rubber and return idlers."⁶⁹ He also stated that "[t]he leading, beveled scalloped edge of the goods reduces the effects of impact between the fasteners and belt cleaners."⁷⁰

The utility patent discloses the utilitarian benefits of the beveled center scallop and is strong evidence of the functionality of Flexco's trade dress. Flexco acknowledges the same benefits of its trade dress in its internal and external communications, both in sworn declarations submitted to the USPTO and in its marketing materials. Flexco contends that its advertisements, statements to the USPTO, and the utility patent create factual issues regarding the functionality of its trade dress that must be resolved by the jury. This evidence, however, accomplishes the opposite. Flexco's adver-

⁶⁹ R.83-2 at 86.

⁷⁰ *Id.* at 52.

tisements, statements to the USPTO, and the utility patent all emphasize the utilitarian features of its claimed trade dress.⁷¹

2. Alternative Designs

Flexco nevertheless contends that summary judgment was improperly granted because “CAI produced no evidence that the limited utilitarian properties of the protected beveled center scallop cannot be achieved through other means.”⁷² First, Flexco misapprehends the burden of proof. Although registration of trade dress under the Lanham Act creates a rebuttable presumption that the mark is valid, the presumption ““evaporates as soon as evidence of invalidity is presented.”” *Georgia-Pacific*, 647 F.3d at 727 (quoting *Door Sys.*, 83 F.3d at 172). The burden of proof thus originated with CAI as the party seeking to invalidate Flexco’s registered trade dress. *Id.* When CAI put forth evidence of the utility patent—“strong evidence that the features therein claimed are functional,” *TrafFix*, 532 U.S. at 29—the ““heavy burden”” then shifted to Flexco to show ““that the feature is not functional, for instance by showing that it is merely an ornamental, incidental, or arbitrary aspect of the device,”” *Georgia-Pacific*, 647 F.3d at 727 (quoting *TrafFix*, 532 U.S. at 30).

⁷¹ Flexco contends that its design patent creates a factual issue that the jury must resolve. Our case law is clear, however, that the existence of a design patent does not preclude a finding of functionality, even on summary judgment. *Georgia-Pacific*, 647 F.3d at 729. In light of the strong evidence of functionality, the design patent does not raise a triable issue of fact.

⁷² Appellant’s Br. 48.

Second, Flexco misapprehends the significance of evidence of alternative designs. Flexco contends that summary judgment was improper because of “conflicting evidence that CAI’s competing fastener has a flat-bottomed, trapezoid-shaped ‘notch’ that its president confessed works just as good as Flexco’s curved center scallop” and “that any suitably-sized space between the [two convex curves] of these competing fasteners, regardless of its shape, can perform the same function.”⁷³ Case law is clear that, where functionality is established, there is no need to consider alternative design possibilities. See *TrafFix*, 532 U.S. at 33; *Specialized Seating, Inc. v. Greenwich Indus., L.P.*, 616 F.3d 722, 726–27 (7th Cir. 2010) (stating that “claims in an expired utility patent presumptively are functional” and that the “list of alternative designs” establishes that “all of the designs are functional”). As we have stated, once established to affect the cost or quality of the product, the asserted trade dress is “functional even if other solutions to the design problems are available to competitors.” *Arlington Specialties*, 847 F.3d at 419.

Flexco submits that the center scallop could be any shape and that it “just has to have the same area or more to displace the same amount of rubber that the scalloped (sic) would do in order to be as effective.”⁷⁴ We rejected this argument in *Georgia-Pacific*. There, Georgia-Pacific Company (“Georgia-Pacific”) contended that its trade dress, an embossed toilet paper design, was not functional because “toi-

⁷³ Appellant’s Br. 24.

⁷⁴ *Id.* at 46 (internal quotation marks omitted).

let paper can be embossed with any number of designs ... and still possess the same utilitarian benefits” as the claimed trade dress. *Georgia-Pacific*, 647 F.3d at 731. We held that, regardless of the “many other available functional designs for toilet paper,” if the claimed trade dress is a “solution to a problem, as Georgia-Pacific claimed it to be in its patents, it is functional and thus remains in the sphere of patent protection and not in that of trademark.” *Id.* Here, as in *Georgia-Pacific*, there well may be numerous alternative designs for the space between the two convex curves of the metal fastener. But because Flexco has claimed the beveled center scallop as a solution to a problem in its patents, in its statements to the USPTO, and in its advertisements, the beveled center scallop properly remains in the world of patents. See *Specialized Seating*, 616 F.3d at 727 (“A design such as Clarin’s x-frame chair is functional not because it is the only way to do things, but because it represents one of many solutions to a problem.”).

Conclusion

Flexco’s trade dress is functional and is therefore invalid as a trademark. The judgment of the district court is affirmed.

AFFIRMED