

UNITED STATES COURT OF APPEALS  
FOR THE FIFTH CIRCUIT

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No. 00-60875

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EPPENDORF-NETHELER-HINZ GMBH,

Plaintiff - Appellee - Cross-Appellant,

v.

RITTER GMBH; RK MANUFACTURING, INC.,

Defendants - Appellants - Cross-Appellees.

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No. 01-60658

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EPPENDORF-NETHELER-HINZ GMBH,

Plaintiff - Appellee,

v.

RITTER GMBH; RK MANUFACTURING, INC.,

Defendants - Appellants,

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Appeals from the United States District Court  
for the Southern District of Mississippi

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April 22, 2002

Before JONES and DeMOSS, Circuit Judges, and FELDMAN,<sup>1</sup> District  
Judge.

EDITH H. JONES, Circuit Judge:

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<sup>1</sup> United States District Judge of the Eastern District of Louisiana,  
sitting by designation.

Defendants-Appellants Ritter GMBH and RK Manufacturing, Inc., appeal the district court's judgment that they infringed upon Eppendorf-Netheler-Hinz GMBH's trade-dress rights in violation of the Lanham Act, 15 U.S.C. § 1125(a). For the reasons discussed below, we conclude that Eppendorf failed to carry its burden of proof on the issue of non-functionality, and reverse the judgment of the district court.

### I. BACKGROUND

Eppendorf is a German company which manufactures medical and laboratory equipment. At issue in this case is Eppendorf's line of disposable pipette tips<sup>2</sup> and dispenser syringes capable of accurate and rapid "multiple dispensing" of liquids. Eppendorf's disposable pipette tips are sold in the United States marked with the word-marks "COMBITIPS," "EPPENDORF" and "EPPENDORF COMBITIPS" (hereinafter referred to as "Combitips"). Eppendorf manufactures eight Combitip sizes, from .05 milliliters to 50 milliliters. All eight sizes are designed to fit into the "Combitip Dispenser Syringe". By attaching a Combitip to the dispenser syringe, a user can rapidly dispense liquids in precisely measured aliquots.

Ritter is a German manufacturer specializing in injection-molded plastic products. In the early 1990s, Ritter

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<sup>2</sup> Pipette tips attach to dispenser syringes, and are frequently replaced to avoid contamination. Pipette tips are commonly known in the marketplace as "tips".

began manufacturing disposable pipettes virtually identical to the Combitips. At that time, there was a large American market for disposable pipettes, and the market was dominated by Eppendorf.<sup>3</sup> Ritter, through its American distributor, RK Manufacturing, Inc., entered the American market in March of 1994. Ritter's disposable pipettes were marked with the word-mark "RITIPS" (hereinafter "Ritips") and distributed in boxes marked with Ritips and Ritter's name. Ritter also introduced its own dispenser syringe, known in the market as the "Ripette". However, the Ritips were compatible with Eppendorf's Combitip Dispenser Syringe, and the Ritips were marketed as a "direct replacement" for Combitips. Ritter priced its Ritips below Eppendorf's Combitips in an attempt to acquire market share from Eppendorf.

In June of 1998, Eppendorf filed suit in the Eastern District of New York against Ritter and RK, asserting various trademark and trade dress infringement claims under § 43(a) of the Lanham Act, 15 U.S.C. § 1125(a). Eppendorf's suit was transferred to the Southern District of Mississippi. Eppendorf alleges that Ritter infringed on its trade dress rights by "slavishly mimick[ing]" the design and trade dress of the "entire family of Eppendorf [Combitips]." Second Amended Complaint at 6. Eppendorf

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<sup>3</sup> According to the trial testimony, Eppendorf had sold over 10 million Combitips in the United States by 1989. Over the past 20 years, Eppendorf has sold almost 150 million Combitips.

contends that Ritter infringed upon eight elements of the Combitips's trade dress: (1) the flange on top of the tip; (2) the fins connecting the flange to the body of the tip; (3) the plunger head; (4) the plunger; (5) the length of the tips; (6) the eight sizes of the tips; (7) the coloring scheme on the tips; and (8) the angle of the stump on the tips. Eppendorf also contends that Ritter willfully and intentionally infringed upon its trade dress rights.

In June of 2000, Eppendorf's claims were tried before a jury in the Southern District of Mississippi. The jury returned a verdict for Eppendorf, finding that Ritter and RK infringed upon Eppendorf's trade dress rights. The jury also determined that Ritter and RK willfully violated Eppendorf's trade dress rights by marketing the Ritips with an intent to confuse or deceive. The jury awarded Eppendorf \$750,000 in lost profits and \$250,000 in lost licensing fees. The district court entered final judgment for Eppendorf for \$1,000,000 in damages awarded by the jury, and an additional \$750,000 in enhanced damages on the basis of the jury's finding of willful infringement. The district court also permanently enjoined Ritter and RK from selling or marketing in the United States dispenser syringes or syringes of "a confusingly similar design" to Eppendorf's syringes.

Ritter and RK now appeal. They contend, *inter alia*, that Eppendorf failed to carry its burden of proving that the eight elements are non-functional. Eppendorf cross-appeals the district court's denial of its motion for attorneys' fees and pre-judgment interest. For the reasons discussed below, we conclude that Eppendorf failed to carry its burden of proving non-functionality and find it necessary to reverse the judgment of the district court.

## II. DISCUSSION

### A.

The Lanham Act, 15 U.S.C. § 1125(1), establishes a cause of action for trade dress infringement. "Trade dress" refers to the design or packaging of a product which serves to identify the product's source. Traffix Devices, Inc. v. Marketing Displays, Inc., 523 U.S. 23, 28, 121 S.Ct. 1255, 1259 (2001). The purpose of trade dress protection, like trademark protection, is to "secure the owner of the [trade dress] the goodwill of his business and to protect the ability of consumers to distinguish among competing products." Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763, 774, 121 S.Ct. 2753, 2760 (1992) (citation omitted).

Trade dress protection, however, is not intended to create patent-like rights in innovative aspects of product design. Trade dress protection, unlike patent law, does not foster

innovation by preventing reverse engineering or copying of innovative product design features. See J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION, § 6:3 (4th ed. 2001) ("Unlike patent law, the purpose of trademark and trade dress law is to prevent customer confusion and protect the value of identifying symbols, not to encourage invention by providing a period of exclusive rights."). "Trade dress protection must subsist with the recognition that in many instances there is no prohibition against copying goods and products." Traffix, 523 U.S. at 29, 121 S.Ct. at 1260. Therefore, trade dress protection extends only to incidental, arbitrary or ornamental product features which identify the source of the product. If a product feature is functional, it cannot be protected trade dress. Unless protected by patent or copyright, functional product features may be copied freely by competitors in the marketplace. Id. "Allowing competitors to copy will have salutary effects in many instances. 'Reverse engineering . . . often leads to significant advances in technology.'" Id. (citing Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 160, 109 S.Ct. 971 (1989)).

The Lanham Act expressly limits the scope of trade dress protection by providing that "the person who asserts trade dress protection has the burden of proving that the matter sought to be protected is not functional." 15 U.S.C. § 1125(a)(3). The requirement of non-functionality "prevents trademark law, which

seeks to promote competition by protecting a firm's reputation, from instead inhibiting legitimate competition by allowing a producer to control a useful product feature." Qualitex Co. v. Jacobson Products Co., Inc., 514 U.S. 159, 164, 115 S.Ct. 1300, 1304 (1995). "Protection of functional product features is the province of patent law, which confers a monopoly over new product designs for a limited time only, after which competitors are free to copy at will." Abercrombie & Fitch Stores, Inc v. American Eagle Outfitters, Inc., 280 F.3d 619, 640 (6th Cir. 2002) (citing Qualitex, 514 U.S. at 164, 115 S.Ct. 1300).

It is clear that functional product features do not qualify for trade dress protection. However, the definition of "functionality" has not enjoyed such clarity. See J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION, § 7:67 (4th ed. 2001) (discussing the "plethora of definitions" for functionality). In Traffix, the Supreme Court recognized two tests for functionality. First, the Court recognized the "traditional" definition of functionality: "a product feature is functional, and cannot serve as a trademark, 'if it is essential to the use or purpose of the article or if it affects the cost or quality of an article.'" Traffix, 532 U.S. at 32, 121 S.Ct. 1255 (citations omitted). Under this traditional definition, if a product feature is "the reason the device works," then the feature is functional. Id. at 34. The availability of alternative designs is irrelevant. Id. at 33-34.

In addition to the traditional definition, Traffix recognized a second test for functionality: "a functional feature is one the 'exclusive use of which would put competitors at a significant non-reputation-related disadvantage.'" Id. at 32 (quoting Qualitex, 514 U.S. at 165, 115 S.Ct. 1300). This "competitive necessity" test for functionality is an expansion of the traditional test. Id. The Court emphasized, however, that the "competitive necessity" test is not "a comprehensive definition" of functionality. Id. at 33. The primary test for functionality is the traditional test, and there is no need to consider the "competitive necessity" test where a product feature is functional under the traditional definition. Id. at 33-35.

Eppendorf correctly argues that before Traffix, this circuit had adopted a "utilitarian" test of functionality. Under this utilitarian test, "[t]he ultimate inquiry concerning functionality [] is whether characterizing a feature or configuration as protected 'will hinder competition or impinge upon the rights of others to compete effectively in the sale of goods.'" Sicilia Di R. Biebow & Co. v. Cox, 732 F.2d 417, 429 (5th Cir. 1984) (citation omitted); see also, Pebble Beach Co. v. Tour 18 I Ltd., 155 F.3d 526, 537-38 (5th Cir. 1998); Sunbeam Products, Inc. v. West Bend Co., 123 F.3d 246, 255 (5th Cir. 1997). This court's "utilitarian" test, with its focus on the ability of competitors to



compete effectively in the marketplace, is virtually identical to the "competitive necessity" test discussed in Traffix. Accordingly, Traffix supersedes the definition of functionality previously adopted by this court. The "utilitarian" test, although still valid as a secondary test, is not a comprehensive definition of functionality. Traffix, 532 U.S. at 32-33. In light of Traffix, the primary test for determining whether a product feature is functional is whether the feature is essential to the use or purpose of the product or whether it affects the cost or quality of the product. Id.<sup>4</sup>

**B.**

The crucial issue presented by this appeal is whether the eight design elements of the Eppendorf Combitips are functional as a matter of law. This case was tried in June of 2000, almost ten months before the Supreme Court decided Traffix. The district court, correctly applying this circuit's utilitarian test of functionality, instructed the jury as follows:

A design or characteristic is nonfunctional if there are reasonably effective and efficient alternatives possible.

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<sup>4</sup> This court noted in Sunbeam that the utilitarian definition of functionality "lowers the threshold for trade dress protection." 123 F.3d at 255 n.18. This broad definition of functionality is not consistent with the Court's recent discussion of functionality. The Court, in Traffix, cautioned against "misuse or over-extension of trade dress [protection]." See Traffix, 532 U.S. at 29, 121 S.Ct. 1255 (citing Wal-Mart Stores, Inc. v. Samara Brothers, Inc., 529 U.S. 205, 213, 112 S.Ct. 2753 (1992)). A product feature that satisfies the traditional definition of functionality is not shielded from functional status merely because the feature is not a competitive necessity.

Hence, a product's trade dress is functional only, one, if competitors need to incorporate it in order to compete effectively because it is essential to the product's use, or, two, if it significantly affects the cost or quality of the article. A design is functional and thus unprotectable if it is one of a limited number of equally efficient options available to competitors and free competition would be significantly disadvantaged by according the design trademark protection.

Relying on this instruction, the jury determined that the Combitips were non-functional. Ritter and RK Manufacturing moved for judgment as a matter of law on the issue of functionality, and the district court denied the motion.

"We review *de novo* the district court's ruling on a motion for judgment as a matter of law, applying the same legal standards at the trial court." Flowers v. Southern Reg'l Physicians Serv., Inc., 247 F.3d 229, 235 (5th Cir. 2001). In reviewing a motion for judgment as a matter of law, "we consider all of the evidence, drawing all reasonable inferences and resolving all credibility determinations in the light most favorable to the non-moving party." Id. (citations omitted). Judgment as a matter of law will only be granted where the facts and inferences point "so strongly and overwhelmingly in the movant's favor that reasonable jurors could not reach a contrary conclusion." Omnitech Int'l, Inc. v. Clorox Co., 11 F.3d 1316, 1322 (5th Cir. 1994).

Eppendorf contends that the evidence supports the jury's finding of non-functionality because "[t]he evidence clearly established that there were alternative designs to each of the eight non-functional features." Appellee's Brief at 20. Indeed, there is extensive testimony in the record regarding available alternative designs for each of the eight elements. For example, Eppendorf's expert testified that the number of fins under the flange "could be increased or decreased or their appearance could be changed." Appellee's Brief at 5. Thus, Eppendorf argues that the fins are non-functional because alternative designs are available to competitors in the marketplace.

Eppendorf's argument, while consistent with this circuit's utilitarian definition of functionality, is unpersuasive in light of the Court's discussion of functionality in Traffix. As explained above, the primary test for functionality is whether the product feature is essential to the use or purpose of the product or if it affects the cost or quality of the product. In Traffix, the Court determined that the dual-spring design on a wind-resistant road sign was functional because the dual-spring design "provides a unique and useful mechanism to resist the force of the wind." 532 U.S. at 33, 121 S.Ct. at 1262. The Court rejected the argument that the springs were non-functional because a competitor

could use three or four springs which would serve the same purpose.

Id. The Court explained,

There is no need, furthermore, to engage, as did the Court of Appeals, in speculation about other design possibilities, such as using three or four springs which might serve the same purpose. . . . The dual-spring design is not an arbitrary flourish in the configuration of [the road sign]; it is the reason the device works. Other designs need not be attempted.

Id. at 33-34, 121 S.Ct. at 1261. Accordingly, the design features for which Eppendorf seeks trade dress rights are functional if they are essential to the use or purpose of the Combitips or affect the cost or quality of the Combitips. The availability of alternative designs is irrelevant.

In this case it is undisputed that the Combitips's fins provide necessary support for the flange. Without the fins, the flange is subject to deformation. The only testimony offered by Eppendorf to prove non-functionality of the fins related to the existence of alternative design possibilities. Eppendorf's functionality expert testified that the appearance and number of fins could be changed without affecting the function of the fins. Eppendorf did not prove, however, that the fins are an arbitrary flourish which serve no purpose in the Combitips. Rather, Eppendorf's experts concede that fins of some shape, size or number are necessary to provide support for the flange and to prevent deformation of the product. Thus, the fins are design elements

necessary to the operation of the product.<sup>5</sup> Because the fins are essential to the operation of the Combitips, they are functional as a matter of law, and it is unnecessary to consider design alternatives available in the marketplace. Traffix, 532 U.S. at 33-34, 121 S.Ct. at 1261.

Likewise, a careful review of the record demonstrates that Eppendorf failed to prove that the remaining Combitip design elements are unnecessary, non-essential design elements. It is undisputed that: (1) The flange is necessary to connect the Combitip to the dispenser syringe; (2) The rings on the plunger head are necessary to lock the plunger into a cylinder in the dispenser syringe; (3) The plunger is necessary to push liquids out of the tip, and the ribs on the plunger stabilize its action; (4) The tips at the lower end of the Combitips are designed to easily fit into test tubes and other receptacles; (5) The size of the Combitip determines the dispensed volume, and size is essential to accurate and efficient dispensing; (6) The color scheme used on the Combitip - clear plastic with black lettering - enables the user easily to see and measure the amount of liquid in the Combitip, and black is standard in the medical industry; and (7) The stumps of

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<sup>5</sup> Additionally, Eppendorf's experts concede that some of the suggested alternative designs would slightly increase the cost of the product. This provides further support for the conclusion that the fins are functional under the traditional definition of functionality.

the larger Combitips must be angled to separate air bubbles from the liquid and ensure that the full volume of liquid is dispensed. Thus, all eight design elements identified by Eppendorf are essential to the operation of the Combitips.

Eppendorf's theory of non-functionality focused on the existence of alternative designs. Eppendorf's design expert summarized Eppendorf's approach to functionality: "My conclusion was that to achieve the same functional purpose, [the design elements identified by Eppendorf] can be changed significantly, considerably without affecting the overall intended purpose." Although alternative designs are relevant to the utilitarian test of functionality, alternative designs are not germane to the traditional test for functionality. Each of the eight design elements identified by Eppendorf is essential to the use or purpose of the Combitips, and are not arbitrary or ornamental features. Therefore, no reasonable juror could conclude that Eppendorf carried its burden of proving non-functionality.

#### **CONCLUSION**

We conclude that Eppendorf failed to carry its burden of proving non-functionality. Therefore, pursuant to 15 U.S.C. § 1125(a)(3), Eppendorf is not entitled to trade dress protection because the eight Combitip product features are functional as a matter of law. Accordingly, we **REVERSE** the judgment of the

district court and **RENDER** judgment for Ritter and RK Manufacturing.  
We likewise **VACATE** the injunction entered by the district court.  
Eppendorf's cross-appeal is **DENIED**.