A Semiotic Analysis: Developing a New Standard for Scent Marks

ABSTRACT

In recent years, businesses have discovered a new way to capture consumer loyalty: through their noses. Companies have begun to invest heavily in the development of scent marks and innovative digital scent technology that will disseminate signature scents through the Internet and television; however, the standards surrounding scent mark registration and infringement remain hazy due to a lack of precedent and conflicting global legal standards. While US and European courts have determined that scent marks can exist under current laws, the registration requirements and infringement standards remain unclear.

This Note analyzes the four major issues that arise in scent mark jurisprudence: (1) the written description requirement, (2) the application of the functionality doctrine, (3) the possibility of scent depletion, and (4) the risks of scent confusion. Imposing a categorized registration process and a simplified scent mark infringement analysis rooted in semiotic—or sign-based—theory can eliminate the concerns surrounding scent mark analysis. A system that includes a registration process that requires the presentation of a trademark’s semiotic elements as well as an infringement analysis that mandates only the examination of consumer-confusion surveys secures the legitimacy of scent mark registration and serves the traditional rationales for trademark law.

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As you slide into your friend’s brand new car and he laughingly revs the engine, the sweet, sticky smell of cherry overcomes you. You glance around for a spilled bottle of cherry Robitussin or a discarded and melting cherry-flavored Chapstick, but see nothing. Do you immediately recognize that the car dealership must have added several drops of Manhattan Oil’s cherry-scented fuel fragrance to the gas tank? The US Patent and Trademark Office (USPTO) seems to think you might; it has awarded Manhattan Oil the only scent trademark currently on the USPTO’s Principal Register for its Cherry Bomb fuel additive, thus acknowledging the cherry scent’s ability to identify and distinguish the product.¹

Other companies are quickly learning that scents attract and retain consumers, just like memorable logos and catchy slogans. One study suggested that infusing a pizza shop with the scent of lavender led to increased sales and longer customer stays,² and Nike has reported that its customers have demonstrated an 80 percent increase in intent to purchase when stores are infused with certain scents.³ Scientists are rushing to keep up with the changing market by inventing digital scent technology—ways to transfer scents over the Internet and through television.⁴ As companies begin to pour more money into developing signature scents and the technology necessary to produce them, the question arises: How does the law protect this new form of intellectual property?

The Lanham Act, which governs federal trademark law, appears to allow the registration of scent marks because it has not explicitly excluded them.⁵ Furthermore, the USPTO has taken an affirmative position on their registration, recognizing scent marks’ ability to fulfill traditional trademark objectives and permitting scent

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² Eric Nagourney, Vital Signs: Sensations; A Hint of Lavender and the Scent of Money, N.Y. TIMES, July 5, 2005, http://query.nytimes.com/gst/fullpage.html?res=9F02E5DA1031F936A35754C0A9639C8B63 (detailing a study that found that infusing lavender into a store caused customers on average to remain fifteen minutes longer and to spend almost four euros more).


⁴ See Mico Tatalovic, Digital Scents, COSMOS, Jan. 12, 2010, http://www.cosmosmagazine.com/features/online/3230/digital-scents (explaining that one researcher has created a chip that stores fluids, which is capable of releasing certain scents at specified times).

mark registration on the principal register. However, many members of the global legal community have expressed serious concerns. Because producers have yet to sue over scent infringement, scholars have debated for twenty years about how such a case would play out under current federal trademark infringement laws. How would other producers be notified of a scent mark when its description is necessarily imprecise? What types of scents would the functionality doctrine prohibit? Would the number of available scents eventually run out? How would judges distinguish among scents, which are necessarily subjective due to changing environmental conditions and the characteristics of the smeller?

The uncertainty these questions have generated prompted a European Court of Justice (ECJ) ruling, holding that producers typically cannot register scent marks, even though European law seemingly allows for registration. Yet even this decision by the ECJ has not stopped other international organizations and certain European governments from permitting scent marks within the boundaries of their own countries. The fragmented and disjunctive rulings on the use of scent marks have generated confusion for consumers and producers alike. This Note proposes a solution to the scent mark problem, engaging a semiotic, or sign-based, analysis in order to ensure that scent mark registration and infringement analysis support the traditional goals of trademark law.

Part I explains the purposes and doctrines of traditional trademark law. Part II explores the opposing positions that US and European courts have taken in addressing the registration of scent marks. Part III argues that the stances taken by courts and critics can be distilled down to four major issues: the written description, the functionality doctrine, scent depletion, and scent confusion. Finally, Part IV proposes that a categorized, uniform registration process and a more concise trademark infringement analysis would best serve the purposes of trademark law within the realm of scent marks.

7. See infra Part II.B.
8. See infra Part III.
9. See infra Part III.A.
10. See infra Parts I.C, III.B.
11. See infra Part III.C.
12. See infra Part III.D.
14. See infra Parts II.B.2-3, II.C.
15. See infra Part II.B.3.
NEW STANDARD FOR SCENT MARKS

I. SNiffING OUT THE BASICS: PURPOSES AND DOCTRINES OF TRADEMARK LAW

When trademark law first developed in the early nineteenth century, it only offered protection to marks that included company names.16 As companies grew and marketing became more creative, the law began to recognize those marks that consumers view today as traditional trademarks17—marks such as the apple symbol for an Apple computer, the curvy script of Coca-Cola, and McDonald’s slogan, “I’m lovin’ it.” The enactment of the Lanham Act in 1946 stretched trademark law to its current limits and left the judicial system with puzzling questions regarding the feasibility of nontraditional trademarks like color, sound, and smell.18

A. What is a Trademark?

The Lanham Act defines a “trademark” as “any word, name, symbol, or device, or any combination thereof . . . used by a person . . . to identify and distinguish his or her goods.”19 The US Supreme Court has relied heavily on Congress’s stated intent of making the statute “stronger” and, notably, “more liberal” in its iconic interpretation of the term.20 In Qualitex Co. v. Jacobson Products Co., the Court broadly interpreted the statute and identified a trademark as “almost anything at all that is capable of carrying meaning.”21 Since this decision, both courts and the USPTO have relied on this expansive interpretation of the law and have assumed that the statute permits the registration of nontraditional trademarks because it does not explicitly exclude them.22

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17. Id.


21. Qualitex, 514 U.S. at 162.

The Lanham Act divides a trademark into three distinct elements.\textsuperscript{23} First, the trademark must include a “tangible symbol.”\textsuperscript{24} Next, the trademark owner must demonstrate actual use of the trademark in commerce.\textsuperscript{25} Finally, the registrant must clearly identify the feature’s function, explaining what the alleged trademark does in the marketplace.\textsuperscript{26} The Lanham Act’s and the Supreme Court’s broad definitions of a trademark seemingly deem nearly any symbol registrable and thus protectable under federal law.\textsuperscript{27}

\textbf{B. The Traditional Functions of Trademark Law

Trademarks are often an important factor when a consumer is considering the purchase of a new product.\textsuperscript{28} For this reason, producers invest much time and money in developing the perfect network of trademarks to attract a consistent consumer base and ensure the success of a product.\textsuperscript{29} Congress developed federal trademark law in large part to protect producers’ significant investments in their marks and to provide restitution when others infringe upon producers’ rights.\textsuperscript{30}

Congress was also interested in developing trademark law to protect the general public.\textsuperscript{31} Consumers often shop by focusing on brand names.\textsuperscript{32} For example, a consumer who already knows that he enjoys Kraft Macaroni & Cheese will be more likely to purchase Kraft Singles rather than relying on an unfamiliar brand for his slices of cheese.\textsuperscript{33} The Lanham Act is structured to support this easy, efficient, and rational way of shopping.\textsuperscript{34} Trademarks exist to ensure that the

\begin{itemize}
  \item \textsuperscript{23} \textit{M}c\textit{C}\textit{A}r\textit{h}y, \textit{supra} note 5, § 3:1.
  \item \textsuperscript{24} \textit{Id.} (interpreting the Lanham Act’s definition of a “trademark” as a “word, name, symbol, or device, or any combination thereof”).
  \item \textsuperscript{25} \textit{Id.}
  \item \textsuperscript{26} \textit{Id.} (interpreting the Lanham Act’s requirement to “identify and distinguish the seller’s goods from goods made or sold by others”).
  \item \textsuperscript{28} See \textit{M}c\textit{C}\textit{A}r\textit{h}y, \textit{supra} note 5, § 2:3.
  \item \textsuperscript{29} See, e.g., Zareer Pavri, \textit{Where the Value in a Trademark Lies}, CA MAG., Feb. 1987, available at http://bvstrategy.com/Where%20The%20Value%20In%20A%20Trademark Lies.pdf (“Trademarks are bought and sold for a variety of reasons. For example, . . . Procter & Gamble Co., Cincinnati, purchased . . . Morton-Norwich Products Inc. of Chicago for $371 million cash, or about 17 times the division’s 1981 pre-tax earnings . . . ”). The high premium likely reflects the value of the “Morton-Norwich” trademark. See \textit{id}.
  \item \textsuperscript{30} \textit{M}c\textit{C}\textit{A}r\textit{h}y, \textit{supra} note 5, § 2:1.
  \item \textsuperscript{31} \textit{Id.} § 2:2.
  \item \textsuperscript{32} \textit{Id.} § 2:3.
  \item \textsuperscript{33} See \textit{id}.
  \item \textsuperscript{34} \textit{Id.} §§ 2:3, 2:5.
\end{itemize}
consumer can rely on his inference about the Kraft brand.\textsuperscript{35} Trademarks that are confusingly similar may dupe a trusting consumer into buying a different product than he had anticipated.\textsuperscript{36} For example, the consumer above may see “Craft” or “Krafft” cheese and purchase it, because he assumes that it is the same brand as the original Kraft Macaroni & Cheese.\textsuperscript{37} In theory, the potential for trademark infringement suits deters companies from creating products that are confusingly similar to their competitors’ products, thus protecting consumers’ decisions to trust trademarks.\textsuperscript{38}

Because trademark law allows consumers to rely on their expectations about brands, the law also encourages accountability, competition, and quality products.\textsuperscript{39} Without a trademark, it would be difficult for a consumer to determine whose product he likes or dislikes; thus, the consumer would have a hard time holding the producer accountable.\textsuperscript{40} For example, the macaroni-loving consumer above would not know to reward Kraft with another purchase if the original macaroni product lacked the Kraft trademarks.\textsuperscript{41} Therefore, the existence of trademarks gives producers an incentive to create better and more memorable products than their competitors in the hopes that consumers will associate the good product with their trademark and subsequently purchase other products under that brand.\textsuperscript{42} Likewise, if products lacked trademarks, producers would be encouraged to neglect product development.\textsuperscript{43} Consumers would be unable to determine which producers to hold accountable and little punishment would therefore exist to deter producers from selling an unpalatable bowl of macaroni and cheese.\textsuperscript{44} These concerns for producers and consumers alike led to the enactment of federal trademark law.\textsuperscript{45}

\textsuperscript{35} See id.
\textsuperscript{36} See id.
\textsuperscript{37} See id.
\textsuperscript{38} See id.
\textsuperscript{39} See id.
\textsuperscript{40} See id.
\textsuperscript{41} See id.
\textsuperscript{42} See id.
\textsuperscript{43} See id.
\textsuperscript{44} See id.
\textsuperscript{45} See id. § 2:1.
C. The Functionality Doctrine as a Limitation on Trademark Protection

In addition to defining the scope of trademarks, the Lanham Act creates a civil cause of action for trademark infringement. A defendant, however, can overcome such a claim by demonstrating that the trademark represents a functional feature of the product; this is known as the functionality doctrine. When the court deems a supposedly infringed-upon trademark to be “functional,” that feature is not a protectable trademark and the infringement suit will fail. Over time, two strands of the functionality doctrine have developed: utilitarian functionality and aesthetic functionality.

Concerned with maintaining fair competition, utilitarian functionality ensures that trademark law does not give producers a monopoly in a feature that the court considers necessary to the sale of a product. In other words, if the product’s feature is “essential to the use or purpose of the article,” a court will hold that the feature is not a protectable trademark. For example, a court deemed a dual-spring mechanism that supported temporary road signs functional because the design ensured that a sign would remain upright, even in windy conditions. Because a sign must remain upright in order for the public to see its message, the springs were essential to the proper functioning of the product; the law must permit other road-sign producers to use this design in order to ensure fair competition.

The Supreme Court elaborated upon the concept of functionality in Qualitex, a case concerning the alleged infringement of a trademark consisting entirely of one color. The Court explained that, while the aesthetic functionality doctrine is also centered on fair competition concerns, the court examines the “aesthetic value” of the trademark in order to discern its protectability. If the trademark confers “a significant benefit that cannot practically be duplicated by the use of alternative designs,” then a court will find it aesthetically

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47. See id. § 1125(a)(3).
50. See Pagliero v. Wallace China Co., 198 F.2d 339, 343 (9th Cir. 1952).
52. TrafFix Devices, 532 U.S. at 31.
53. See id.
54. See Qualitex, 514 U.S. at 169-70.
55. Id. at 170 (quoting RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 17 (1995)).
functional and thus unprotectable. For example, a boat-engine manufacturer may not trademark black for the color of its boat engines. Traditionally, engine manufacturers deliberately use neutral colors that will coordinate with the color of boat exteriors in order to increase sales. Depriving other manufacturers of the use of black—the most neutral of colors—would hinder competition, thus ignoring an integral goal of trademark law and failing the aesthetic functionality test.

D. Barton Beebe’s Semiotic Analysis of Trademarks

Diverting from the traditional economic perspective on trademarks, Professor Barton Beebe posits in his oft-cited 2004 article, The Semiotic Analysis of Trademark Law, that trademarks function as traditional signs based on a semiotic analysis. Professor Beebe explains that every sign consists of three elements: a signifier, a referent, and the signified. The signifier is the perceptible element of the sign. For example, the word “Kraft” is what the consumer sees when looking at boxes of macaroni in the supermarket aisle; thus, “Kraft” is the signifier. The referent might be a “physical object of the world’ or a mental entity ‘of the nature of thought or of a sign.” One can think of it as the object of the sign—the thing to which the sign is referring. In the Kraft example, the macaroni and cheese is the referent. Finally, the signified is the “effect of the sign.” Upon seeing a Kraft product, the consumer trusts the product; this resulting goodwill is the signified.

56. *Id.* (quoting RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 17 (1995)) (internal quotation marks omitted).
58. *Id.*
59. *See id.; see also supra Part I.A.*
61. *Id.* at 636 (elaborating upon the Peircean triadic sign model).
62. *See id.*
63. *Id.* (quoting 1 CHARLES SANDERS PEIRCE, COLLECTED PAPERS OF CHARLES SANDERS PEIRCE 372 (Charles Hartshorne & Paul Weiss eds., 1934)).
65. *Beebe, supra note 60, at 636 (quoting 5 CHARLES SANDERS PEIRCE, COLLECTED PAPERS OF CHARLES SANDERS PEIRCE 538 (Charles Hartshorne & Paul Weiss eds., 1934)) (internal quotation mark omitted).
The three semiotic elements that Professor Beebe articulates coordinate perfectly with the requirements of a trademark as set forth in the Lanham Act. The signifier is the tangible symbol that a consumer sees; the referent is the way that the producer is using the symbol; and the signified is the function of the trademark—the creation of goodwill or ill-will toward the trademark. Professor Beebe emphasizes that each of these elements must be present and separate in order to create a complete and effective sign.

Semiotics also explains that the value of a sign contains both vertical and horizontal aspects. Traditionally, US courts grant trademark protection if the registrant can demonstrate that the trademark has earned secondary meaning within the marketplace. Secondary meaning analysis exclusively implicates a vertical perspective analysis—courts consider the relationship between the three elements of a trademark and whether consumers strongly associate the mark with its source (the signifier with its referent). Once a court has determined that a trademark is protectable, it will perform trademark infringement analysis by inquiring only superficially into horizontal relationships under the likelihood of confusion test.

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67. See Beebe, supra note 60, at 645-46.

68. See id. at 657-63.

69. See id. at 638-40.

70. See, e.g., Zatarains, Inc. v. Oak Grove Smokehouse, Inc., 698 F.2d 786, 791 (5th Cir. 1983) (“[D]escriptive terms are ordinarily not protectable as trademarks. They may be protected, however, if they have acquired a secondary meaning for the consuming public.”), abrogated by KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111 (2004).

71. Id. (explaining that a brand name may acquire secondary meaning if it is “known by the public as specifically designating that product” (quoting Volkswagenwerk Aktiengesellschaft v. Rickard, 492 F.2d 474, 477 (5th Cir. 1974) (internal quotation mark omitted))); see also 15 U.S.C. § 1125 (2006).

72. See, e.g., Pizzeria Uno Corp. v. Temple, 747 F.2d 1522, 1527 (4th Cir. 1984). According to Pizzeria Uno, the likelihood of confusion test considers the following factors:
   a) the strength or distinctiveness of the mark;
   b) the similarity of the two marks;
   c) the similarity of the goods/services the marks identify;
   d) the similarity of the facilities the two parties use in their businesses;
   e) the similarity of the advertising used by the two parties;
   f) the defendant’s intent;
   g) actual confusion.

Id. It is important to note that in a likelihood of confusion analysis, even if courts find that the trademarks’ referents are completely different, the court may still find infringement if the tangible symbols are similar enough. See Kellogg Co. v. Toucan Golf, Inc., 337 F.3d 616, 625-26 (6th Cir. 2003) (“Courts have held for trademark owners relying heavily on the similarity of the marks, even where the parties’ goods were in different product markets.”). This principle demonstrates that courts engage in only very weak horizontal analysis. See id.
Semiotics, on the other hand, emphasizes an in-depth horizontal analysis: signs are valuable only when the consumer considers them in relation to other signs.73 Producers value their trademarks because trademarks identify and distinguish their products from another company’s products.74 The consumer learns that he prefers Kraft Macaroni & Cheese only because he has tasted another brand’s inferior version.75 Thus, the mark “Kraft” gains meaning and value by virtue of a comparison with another mark.76

Embracing the horizontal perspective of semiotics, Professor Beebe suggests that courts should add a step to the traditional trademark infringement analysis.77 It is not enough to examine the vertical perspective—whether the sign has a strong association with its source—which is the integral consideration in both secondary meaning and likelihood of confusion analyses.78 Instead, the court should specifically “determine whether the defendant’s signifier-referent combination is sufficiently similar to the plaintiff’s.”79 Courts should compare the actual relationships between the signifier and referent, rather than signifier A to signifier B and referent A to referent B.80 Professor Beebe suggests that consumer-confusion surveys will play an integral role in this evaluation.81 His test embraces a more holistic view of the value of the mark, and it ensures that trademarks fulfill the Lanham Act’s identifying and distinguishing functions.82

II. SOMETHING IS ROTTEN IN THE STATE OF DENMARK: CONFLICTING GLOBAL PERSPECTIVES ON THE SCENT MARK

As companies reach across borders, industries continue to globalize, and the Internet plays a larger role in marketing, it is becoming increasingly important to recognize how different national laws will treat the same trademark. Though it seems clear that a uniform standard would be the most efficient way to create an

73. Beebe, supra note 60, at 639-40.
74. See supra Part I.A.
75. See Beebe, supra note 60, at 640.
76. See id.
77. Id. at 675-76.
78. See supra notes 70-72 and accompanying text.
79. Beebe, supra note 60, at 675.
80. See id.
81. See id. at 676.
82. See 15 U.S.C. § 1127 (2006); Beebe, supra note 60, at 675-76.
unambiguous and predictable system, there is international disagreement over the proper treatment of scent marks.83

**A. The Absence of a Clear Scent Mark Standard in the United States**

As stated above, the Lanham Act provides a sweeping perspective on trademarks by allowing the USPTO to consider registration applications for nearly any symbol that identifies a product.84 Although registration is not a prerequisite to a trademark infringement suit in US courts, registration with the USPTO creates a presumption of validity and protection for the mark, which an opposing party must rebut in court in order to bring suit successfully.85 If the USPTO rejects a trademark as invalid, the registrant may appeal the decision to the US Trademark Trial and Appeal Board (TTAB), an adjudicatory body within the USPTO.86 The TTAB explicitly addressed the topic of scent marks for the first time in 1990, and the USPTO has since developed unique requirements for their registration.87

1. *In re Clarke*: The Story Begins to Unravel

In the late 1980s, a woman named Celia Clarke undertook a small business venture and began to sell scented yarn, a product that would later become iconic in the realm of scent marks.88 Clarke’s trademark application with the USPTO included a written description detailing the scent as “a high impact, fresh, floral fragrance reminiscent of [p]lumeria blossoms.”89 The examining attorney rejected the application on the grounds that consumers would not...
recognize the scent as an “indication of origin.”"90 Instead, they would view the floral scent as a pleasant side effect of the product.91

The TTAB, however, took a different position.92 Noting Clarke’s emphasis of the product’s scent in her advertising campaigns and the goodwill she had developed with consumers based on the scent, the TTAB ruled that Clarke had earned the registration of her scent mark through an adequate showing of secondary meaning.93 The plaintiff had sufficiently demonstrated that the scent of plumerias served the functions of a traditional trademark.94

Despite its acceptance of the scent mark, the TTAB distinguished the product in Clarke from those “scents or fragrances of products which are noted for those features, such as perfumes, colognes or scented household products,” upon which it refused to comment.95 Clarke has become universally recognized as the United States’ acceptance of scent marks.96 The Supreme Court implicitly affirmed the TTAB’s decision by reference in Qualitex.97

2. The Current Registration Procedure for Scent Marks in the United States

After the TTAB’s ruling in the Clarke case, the USPTO altered its guidelines to address the registration of nontraditional trademarks.98 The Trademark Manual of Examination Procedures (TMEP) advises examining attorneys that scent marks must comply with the traditional trademark constraints, such as the functionality test.99 On the other hand, the TMEP disregards the traditional requirement of a drawing when the registered trademark is a scent.100 Instead, the TMEP requires and emphasizes a written

90. Id. at 1239.
91. See id.
92. Id. at 1239-40.
93. Id. at 1240.
94. Id.
95. Id. at 1239 n.4.
97. Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159, 162 (1995) (“The courts and the Patent and Trademark Office have authorized for use as a mark a particular shape . . . , a particular sound . . . , and even a particular scent . . . . If a shape, a sound, and a fragrance can act as symbols why, one might ask, can a color not do the same?” (citations omitted)).
99. See id. § 1202.13.
100. See id. § 807.09.
description of the mark. However, the manual does not describe what a proper written description includes, the type of language required, or the level of specificity necessary. Additionally, the USPTO requires the submission of a specimen, though the manual again fails to detail any specific requirements for such a specimen.

B. The European Union and an Excess of Scent Mark Jurisprudence

In an effort to strengthen domestic economies and unite European peoples, several countries came together on March 25, 1957 to sign the Treaty of Rome, which established the predecessor to the European Union (EU). Even before the enactment of the Treaty of Rome, the countries of Europe had recognized a need for a general adjudicatory body and formed the court that is now known as the ECJ. Today, the ECJ is tasked with ruling on EU law and answering questions that come from the national courts of individual European nations. A decision by the ECJ, however, affects only EU law; it does not preclude a contrary ruling by EU member-states’ national courts on a domestic issue.

The European Union passed its first trademark directive in 1988. It defined a trademark as “any sign capable of being represented graphically, provided that such signs are capable of distinguishing the goods or services of one undertaking from those of

101. See id.
102. For example, an appropriate written description might include a chemical formula, the scientific categorization for the scent, or language that is understandable to the average consumer, but the TMEP makes no such specification. See id.
103. See id.
104. See id. § 903.03(m).
107. Id.
other undertakings." Much like the Lanham Act, the EU directive recognizes a broad definition of trademarks. Also like the Lanham Act, it fails to address scent marks explicitly, emphasizing instead a trademark’s ability to distinguish one product from another.

The EU definition of trademarks remained unchanged when the EU government enacted an additional trademark regulation in 1993. This regulation established an Office for Harmonization in the Internal Market (the Office). As the trademark registration organization for the European Union, the Office is tasked with registering trademarks that are valid throughout the entire European Union: community trademarks. The Office’s relationship with the ECJ mirrors the USPTO’s relationship with US courts: while one registers and adjudicates trademarks, the other serves as the final arbiter on disputes arising from those trademarks.

The contrary rulings from the ECJ, European national courts, and the Office have generated confusion regarding the viability of registering a scent mark that is valid throughout the European Union.

1. The European Court of Justice Denies Registration

The ECJ definitively rejected the registration of a scent mark in 2002 and has continued this trend ever since. In Sieckmann v. Deutches Patent-und Markenamt (German Patent and Trade Mark Office), German courts referred to the ECJ the question of whether a mark described as “the pure chemical substance methyl cinnamate (= cinnamic acid methyl ester),” could be registered for use in the

111. Id.; cf. supra Part I.A.
117. See infra Part II.B.1-3.
realm of business management and administration. The registrant added, in layman’s terms, that the scent is “balsamically fruity with a slight hint of cinnamon.” In addition to these descriptions, the registrant submitted the chemical formula of the scent, as well as sample specimens. The German court had already found that the scent mark would distinguish the registrant’s service from its competitors.

Despite the applicant’s excess of descriptions and specifications, the ECJ denied registration. Referencing arguments from governments in Austria and the United Kingdom, the ECJ explained that it had to interpret the graphic representation requirement in compliance with the registration process’s stated purpose of notifying other producers of the trademark’s existence. The court determined that a trademark “may consist of a sign which is not in itself capable of being perceived visually, provided that it can be represented graphically, particularly by means of images, lines or characters, and that the representation is clear, precise, self-contained, easily accessible, intelligible, durable and objective.” As few members of the general public understand a chemical formula, the court deemed such a submission insufficient to satisfy the graphic representation requirement. Additionally, the court noted, the formula is a representation of the substance emitting the scent rather than the scent itself. Moreover, while the written descriptions of the methyl cinnamate were certainly graphic, the court concluded they were not sufficiently precise to satisfy the requirement.

2. The Office for Harmonization in the Internal Market Accepts Registration

Despite the ECJ’s unambiguous rejection of scent marks, the Office has taken a different position—allowing some scent marks,
though not all. Acknowledging the graphic representation requirement, the Office allowed the registration of a mark for tennis balls that emanated the scent of “fresh cut grass” in Vennootschap onder Firma Senta Aromatic Marketing v. Markgraaf B.V. Because this scent is so readily recognizable by the general public, the Office deemed its description precise enough to satisfy the graphic representation requirement.

3. An Example of European Union Domestic Law: The United Kingdom

In the face of conflicting rulings in the ECJ and the Office, individual countries have continued to make their own decisions regarding the permissibility of scent marks under their domestic laws. The United Kingdom has attracted attention for accepting scent marks. Despite its integration of the EU regulations into domestic law, the UK Register Office accepted its first scent mark registration in 1996: a “floral fragrance/smell reminiscent of roses as applied to [i]res” for the Sumitomo Rubber Company. The UK Register Office also granted registration for “the strong smell of bitter beer applied to flights for darts.”

That same day, Chanel attempted to register the scent of its perfume, Chanel No. 5. The company provided a written description of the scent:

[A] “scent of aldehydic-floral fragrance product, with an aldehydic top note from aldehydes, bergamont, lemon and neroli; an elegant floral middle note, from jasmine, rose, lily of the valley, orris and ylang-ylang; and a sensual feminine note from sandal.

130. Id.
133. See id.
134. Id.
135. Id. (internal quotation marks omitted).
136. Id. (internal quotation marks omitted).
137. Id.
cedar, vanilla, amber, civet and musk. The scent is also being known by the written brand name No. 5.\textsuperscript{138}

Despite the detail in this graphic representation, the UK Register Office denied the trademark application, explaining its decision only by saying the smell of the perfume “is the good itself.”\textsuperscript{139} This trifecta of UK rulings demonstrates the freedom that each EU country has to make its own decisions regarding the registration of scent marks under its domestic laws. The additional national court rulings, combined with the already conflicting rulings from the ECJ and international organizations, serve only to further confuse producers hoping to protect their scent marks.

C. The International Trademark Association Remains Vague

The International Trademark Association (INTA), a well-respected nonprofit that promotes trademark-protection legislation, has informally proposed guidelines that encourage registration of scent marks.\textsuperscript{140} In a letter to the Japanese Patent Office, INTA suggested that scent marks should: “consist of a written description that conveys the identity of the scent clearly and unambiguously and permits its differentiation from other scents. Additional representations might include submitting a sample of the scent . . . or a chemical formula . . . . [T]hese should not substitute for the written description . . . .”\textsuperscript{141} Despite having passed resolutions on the topics of touch marks, color trademarks, three-dimensional marks, and sound marks, however, INTA has yet to pass an official resolution on scent marks.\textsuperscript{142}

III. It Looks Bad And Smells Worse: Points Of Divergence In Scent Mark Jurisprudence

The conflicting standards in both the United States and Europe\textsuperscript{143} have prompted significant discourse among scholars and

\textsuperscript{138} Id.
\textsuperscript{139} Id. See infra notes 166-68 and accompanying text (explaining the rationale behind the UK Register Office’s decision).
\textsuperscript{141} Id.
\textsuperscript{143} For the purposes of this Note, “Europe” includes all of the sources of European law, including the ECJ, the Office, and EU member states’ domestic laws.
practitioners over the viability of scent marks.\textsuperscript{144} The major points of contention in the scent mark debate fall into four categories: the written description requirement, the functionality doctrine, scent depletion theory, and scent confusion theory.

\textit{A. Varying Standards within the Written Description Requirement}

The purpose of trademark registration is not solely to strengthen the right to protection by earning a presumption of validity in court; registration also puts other producers on notice that a trademark is already in use.\textsuperscript{145} Thus, the written description of the trademark is incredibly important; it defines the scope of the trademark and the boundaries of competitors’ expected liability.\textsuperscript{146}

Unfortunately, neither the United States nor Europe offers any clear guidelines as to what constitutes a sufficient written description.\textsuperscript{147} While the USPTO certainly requires a written description, the TMEP does not specify which details a registrant must include in that description.\textsuperscript{148} Furthermore, the United States has yet to create case law that provides further direction on the written description.\textsuperscript{149}

In contrast, Europe has conflicting case law regarding the elements of a written description.\textsuperscript{150} As EU law stands, the decision of the ECJ in \textit{Sieckmann} implies that the graphic representation requirement renders the registration of a scent mark incredibly difficult, if not impossible.\textsuperscript{151} The ECJ has deemed the combination of a chemical formula, chemical name, and common-language description riddled with familiar olfactory terms insufficient in this regard.\textsuperscript{152} If these graphic representations do not satisfy the ECJ, the trademark owner is left to wonder what description \textit{would} be sufficient.

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\item \textsuperscript{144} \textit{See infra} Part III.B.D.
\item \textsuperscript{146} \textit{See id.} at I-11769.
\item \textsuperscript{147} \textit{See supra} Parts II.A.2, II.B.1-2.
\item \textsuperscript{148} \textit{See supra} Part II.A.2.
\item \textsuperscript{149} \textit{Jay M. Burgett, Hm . . . What’s That Smell? Scent Trademarks—A United States Perspective, 64 INTA Bull. 5, 5 (2009), available at} \url{http://www.inta.org/INTABulletin/Documents/INTABulletinVol64n05.pdf} (“Since the Clarke decision there have not been a large number of scent mark applications filed with the USPTO, so there remains little guidance for future applicants in this area.”).
\item \textsuperscript{150} \textit{See supra} Part II.B.1-2.
\item \textsuperscript{151} \textit{See supra} Part II.B.1.
\item \textsuperscript{152} \textit{See supra} Part II.B.1.
\end{enumerate}
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The Office’s decision in Markgraaf might provide some guidance, but Markgraaf is difficult to reconcile with the ECJ’s decision in Sieckmann.153 The ECJ deemed the graphic representation in Sieckmann inadequate because it failed to provide proper notification of the scent mark to other producers;154 yet the wordy description that the ECJ rejected in Sieckmann155 appears to be more precise than the mere reference to “fresh cut grass” in Markgraaf.156 The conflicting opinions from two authoritative organizations in EU trademark law generate much confusion for those producers hoping to register scent marks.

Moreover, individual countries have the opportunity to create their own requirements for a graphic representation.157 Though many nations have incorporated the EU trademark regulation into domestic law, domestic courts remain free to interpret their statutes as they wish.158 Adding domestic laws and judicial rulings atop the already opposing viewpoints of the Office and the ECJ creates an increasingly tangled web of standards that prevents a producer from finding a clear requirement on which it can rely.

The conflicting and unclear guidance from both the United States and Europe amounts to ambiguity regarding what constitutes an adequate written description. While commonplace or easily recognizable scents might satisfy the graphic representation requirement according to certain European regulatory bodies, those same simplistic descriptions might fall victim to another organization’s high standards. The United States may accept a chemical formula, but the European Union will likely reject it. The lack of clear guidance makes it difficult for producers to predict what constitutes an adequate written description.

153. See supra Part II.B.1-2.
154. See supra notes 118-28 and accompanying text.
157. See INTELLECTUAL PROP. OFFICE, MANUAL OF TRADE MARKS PRACTICE ch. 1, § 3.1(d), available at http://www.ipo.gov.uk/tmmanual-chap1-newapp.pdf (“A representation of the mark . . . in the format that registration is sought must be provided.”). But see, e.g., 3 OSCAR BACOT & JUAN E. VANRELL, TRADEMARKS THROUGHOUT THE WORLD § 172:12 (2011) (“In Uruguay, the registration of . . . olfactory marks will remain conditional on the availability of suitable technical means that would allow the examiner to analyze such marks. . . . Scent and moving marks are not registrable.”).
158. See European Law, supra note 108.
Some legal scholars believe that the written description requirement is impossible to satisfy for scent marks. Douglas Churovich, an IP practitioner, argues that “accurate scent descriptions cannot effectively be communicated through language.” Written descriptions of scents are necessarily imprecise, he concludes, so the US trademark register will never be capable of producing a uniformly understood description.

B. The Potentially Bizarre Results of Functionality Doctrine Application

The functionality doctrine is one of the most significant limitations on trademark law; it ensures producers do not use trademark law to protect product features that are vital to fair competition. Scents, however, pose an interesting challenge to the well-established doctrine: Are scents associated with products like perfume and air fresheners eligible for registration?

Both US and European courts commented indirectly on the functionality doctrine in their scent mark opinions. In Clarke, the TTAB ruled that a particular floral odor associated with yarn was a protectable scent mark, yet it explicitly refused to comment upon “the registrability of scents or fragrances of products which are noted for those features, such as perfumes, colognes or scented household products.” By distinguishing the yarn at issue in Clarke from those products that are traditionally associated with smells, the TTAB implied that the latter scent marks would not be registrable. An application of the functionality doctrine is likely the reason behind the TTAB’s reluctance to recognize scents that are the essential feature of a product.

Similarly, even after readily registering trademarks for beer-scented darts and rose-infused tires, the UK Registry Office denied a trademark registration for Chanel No. 5. The Office

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160. Id. at 312.
161. See id. at 305-06.
162. See supra Part I.C.
164. See id.
165. See supra Part I.C. The sole purpose of perfume is to emanate a scent; thus, scent is a feature that is “essential to the use or purpose of the article.” Porter v. Farmers Supply Serv., Inc., 617 F. Supp. 1175, 1189 (D. Del. 1985). The functionality doctrine denies such a feature the benefit of trademark registration. See id. Furthermore, the TMEP later stated explicitly that the functionality doctrine must be applied in the registration of scent marks. See supra Part I.A.2.
166. See Schaal, supra note 132.
denied registration of the perfume's scent because the scent was, in fact, "the good itself."\textsuperscript{167} Again, the refusal to register the scent of a perfume suggests that the UK Registry Office applied the functionality doctrine.\textsuperscript{168}

Despite both European and US courts' willingness to apply the functionality doctrine to scent marks, the doctrine's presence in scent mark jurisprudence still attracts criticism from legal scholars and practitioners.\textsuperscript{169} James Hawes, who later became Celia Clarke's attorney, contributed the most significant commentary on whether the functionality doctrine should apply to scent marks.\textsuperscript{170} Although Hawes acknowledges that scents associated with certain products, like tissues or laundry detergents, function to make the product more marketable, he argues that the "mere possession of a function does not render a mark functional."\textsuperscript{171} Hawes explains that the producer exercised his own genius in order to create the scent and that denying registration does not further trademark law's goal of protecting the creator's investment.\textsuperscript{172}

Bolstering his argument that the functionality doctrine has no place in scent mark jurisprudence, Hawes argues that the functionality doctrine exists to avoid hindering competition, yet denial of scent mark registration in the perfume industry encourages unfair competition.\textsuperscript{173} It is incredibly expensive to create and launch a new perfume, costing "tens of millions of dollars."\textsuperscript{174} While designers spend exorbitant amounts of money to create new signature scents, free riders can easily copy those fragrances,\textsuperscript{175} profiting off of the costly research and development in which the designers invested.\textsuperscript{176} Hawes

\textsuperscript{167.} Id.
\textsuperscript{168.} See text accompanying note 139.
\textsuperscript{169.} See, e.g., James E. Hawes, Fragrances as Trademarks, 79 TRADEMARK REP. 134, 150-54 (1989) (discussing the reasons why scent marks work in the context of foods, tissues, and perfumes); Moon-Ki Chai, Article, Protection of Fragrances Under the Post-Sale Confusion Doctrine, 80 TRADEMARK REP. 368, 372 (1990) (arguing that "the policy interests behind the functionality doctrine do not apply" to the perfume industry).
\textsuperscript{170.} See generally Hawes, supra note 169.
\textsuperscript{171.} Id. at 150-53.
\textsuperscript{172.} See id.
\textsuperscript{173.} See id. at 152-53.
\textsuperscript{175.} In the past, it was difficult to create generic versions of designer perfumes, but companies now use "chromatography, mass spectroscopy, nuclear magnetic resonance spectroscopy, high-pressure liquid chromatography and other sophisticated techniques, [resulting in] analyses [that] are quite rapid and precise, thereby facilitating the formulations of copycats." PERFUMES: ART, SCIENCE, AND TECHNOLOGY 469 (P.M. Müller & Dietmar Lamparsky eds., 1994) (alterations in original).
\textsuperscript{176.} See Hawes, supra note 169, at 152-53.
argues that denying a scent mark registration encourages this unfair competition, and therefore it is not advisable for the law to classify perfume fragrances as functional. He posits that awarding perfumes scent mark registration better serves the overarching goals of trademark law.

C. The Competitive Need for Scents and the Dangers of Scent Depletion

When it first considered the registration of nontraditional trademarks, the Supreme Court addressed the hypothetical problem of depletion in *Qualitex*. Differentiating colors from the fanciful words that the USPTO and courts typically protect as trademarks, the opponent of color mark registration in that case argued that colors are “in limited supply.” In other words, a finite number of colors exist in the world. Thus, the argument followed, the amount of potential color marks would diminish with each color mark awarded, and businesses would eventually be left with no colors. Competitors would find themselves at a “significant disadvantage,” vitiating trademarks’ typical pursuit of fair competition. The Court in *Qualitex*, however, rejected the color depletion argument, citing the functionality doctrine as the solution to this potential problem. If it were ever likely that the award of a color mark would result in harming competition, the aesthetic functionality doctrine would force the USPTO to reject registration.

Hawes and Moon-Ki Chai, a Japanese practitioner, both argue that scent depletion is no more of a concern than color depletion. Courts need not even look toward the functionality doctrine as a limitation because there are “innumerable possible scent combinations and variations.”

177. *See id.*
178. *See id.* at 153.
179. *See id.*
181. *See id.*
182. *See id.*
183. *See id.*
184. *See id.*
185. *See id.* at 169.
186. *See id.* at 172-73; *see, e.g.*, Brunswick Corp. v. British Seagull Ltd., 35 F.3d 1527, 1532 (Fed. Cir. 1994) (where the USPTO rejected a boat engine manufacturer’s application to register the very desirable, neutral color of black as a trademark for boat engines based on aesthetic functionality rationale and the need for fair competition).
188. *See Hawes, supra* note 169, at 153; *see also* Chai, *supra* note 169 (declaring “an infinite number of distinguishable scents”).
Despite the Court’s response to the depletion argument in Qualitex and the theory that a potentially infinite number of scents exist, some scholars continue to argue the danger of fragrance depletion in the context of scent marks.\(^{189}\) Bettina Elias, an American IP practitioner, argues that courts have previously reasoned that color depletion is a non-issue only in those cases where there is “no competitive need” for colors.\(^{190}\) Applying this “competitive need” test to scents, scent depletion becomes a much stronger argument.\(^{191}\) Within the realms of household cleaners and personal care products, consumer preferences have demanded scents.\(^{192}\) For example, Elias cites consumer preferences for “soft” smells for tissues and “fresh” smells for laundry detergent.\(^{193}\) When buyers strongly prefer a particular genre of smells for a product, a manufacturer can necessarily use only a limited amount of scents successfully.\(^{194}\) Because it appears that the competitive need for scents is much greater than for colors, the scent depletion argument could preclude the possibility of scent mark registration.\(^{195}\)

\section*{D. The Subjectivity of Smell and the Likelihood of Scent Confusion}

In another attempt to distinguish color marks from traditional trademarks, the party arguing against trademark protection in Qualitex asserted that the registration of a color mark is impossible due to “shade confusion.”\(^{196}\) The opponents argued that the registration of color marks would result in too much uncertainty and “unresolvable court disputes,” because color shades vary based on lighting and therefore can be confusingly similar.\(^{197}\) The Court rejected this argument, asserting that color is not “special”;\(^{198}\) courts often face difficult decisions regarding whether trademarks are too confusingly similar, so colors should not present a unique challenge.\(^{199}\)

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190. See id. at 488 (quoting In re Owens-Corning Fiberglas Corp., 221 U.S.P.Q. (BNA) 1195, 1198 (T.T.A.B. 1984), rev’d, 774 F.2d 1116 (Fed. Cir. 1985)).
191. See id. at 489.
192. Id.
193. See id.
194. Id.
195. See id.
197. Id.
198. Id.
199. See id.; see also In re Owens-Corning Fiberglas Corp., 774 F.2d 1116, 1123 (Fed. Cir. 1985) (“[D]eciding likelihood of confusion among color shades . . . is no more difficult or subtle than deciding likelihood of confusion where word marks are involved.” (quoting In re
The opinion noted that, if need be, courts can easily reproduce lighting conditions that may affect the perception of the color mark.  

Scent marks, however, could very well be “special,” presenting more unique problems to the likelihood of confusion analysis. The number of variables that influence the perception of scent is so great that judges may be unable to conduct a traditional likelihood of confusion analysis. Because people experience scents through the perception of gas molecules, “temperature, humidity, and wind conditions can all strengthen or weaken the potency of a scent.” Thus, environmental conditions play a significant role in determining a scent’s capacity to identify and distinguish a product. For example, a consumer might easily recognize a scent mark indoors, where the air is still and warm, yet the consumer may be more likely to confuse that previously strong scent with a different scent mark when exposed to windy, cooler conditions. Even in identical environmental conditions, scents are highly subjective based on the person smelling the odor. Furthermore, women generally have a better sense of smell than men. Furthermore, women’s sense of smell is apt to change based on monthly hormonal changes. In addition to these gender differences, age affects olfaction; the sense of smell changes as people grow older. Therefore, the exact same scent in the same environmental conditions can smell differently to a twenty-year-old woman at the beginning of her menstrual cycle, a twenty-year-old woman in the middle of her cycle, a twenty-year-old man, and a forty-year-old woman. The subjectivity in olfactory perception may present an insurmountable challenge in a likelihood of confusion analysis for

Owens-Corning Fiberglas Corp, 221 U.S.P.Q. (BNA) 1195, 1198 (T.T.A.B. 1984), rev’d, 774 F.2d 1116 (Fed. Cir. 1985) (internal quotation marks omitted)).  

200. Qualitex, 514 U.S. at 167-68.  

201. Elias, supra note 189, at 490; Kenneth L. Port, On Nontraditional Trademarks, 38 N. Ky. L. Rev. 1, 25 (2011) (“Lessons from osphresiology, the science of smells, teach us that scents are inappropriate for trademark protection.”).  

202. See Elias, supra note 189, at 490-91; see also Churovich, supra note 159, at 301-302.  

203. Churovich, supra note 159, at 300.  

204. Id. at 301 (explaining that higher temperatures increase “the potency of . . . scents” or can even alter the scent itself; “an increase in humidity . . . dampen[s] the potency of nearby scents”; and “drafty conditions . . . cause[] . . . the scent’s wafting in different directions”); see Port, supra note 201 (affirming that “the actual scent that one recognizes is affected by temperature and humidity”).  

205. Elias, supra note 189, at 490-91.  

206. Id. at 490.  

207. Id. at 491.  

208. See id. at 490-91.  

209. Id.  

210. See id.
scent mark infringement.\textsuperscript{211} Unlike in color mark analysis, it appears that it is nearly impossible to recreate the exact circumstances surrounding scent perception since the circumstances change depending upon the consumer and his environment. Thus, judges will have a difficult time determining even which precise scents are at issue in an infringement suit, as well as whether those scents are so similar as to constitute infringement. Because a scent mark infringement suit has yet to be litigated, it is unclear whether the courts will find scent confusion a persuasive argument against the maintenance of scent marks.

IV. THE SWEET SMELL OF VICTORY: THE APPLICATION OF A SEMIOTIC ANALYSIS TO SCENT MARK REGISTRATION AND INFRINGEMENT PROCEEDINGS

While the registration of scent marks remains contentious due largely to practical problems, the USPTO should grant scent marks protection because they perform the traditional functions of trademarks. Proven to evoke past experiences and memories,\textsuperscript{212} smell is one of the most emotive senses.\textsuperscript{213} An individual’s ability to associate aromas with memories demonstrates a scent’s capability to fulfill trademark’s primary identifying and distinguishing functions.\textsuperscript{214} Just as a consumer remembers the brand name “Kraft” when shopping for cheese products, that same consumer can remember the scent of cherry that he once encountered when shopping for fuel additives. That consumer might pick up each competing bottle of fuel additive, flip open the cap, and continue shopping until the familiar waft of cherries reaches his nose. Furthermore, protecting scent marks would fulfill the goal of protecting companies’ investments in intellectual property. As companies continue to realize the power of scent, they pour money into the development of scent technology and

\textsuperscript{211} See id. at 490.

\textsuperscript{212} See Christopher H. Hawkes & Richard L. Doty, The Neurology of Olfaction 33 (2009) (“Humans have an uncanny ability to remember smells, and from an early age odors quickly become associated with environmental objects . . . . [M]emory, emotion, and smell frequently seem to be interrelated.”).

\textsuperscript{213} Id.

\textsuperscript{214} See supra Part I.A.
the exploration of scent marks. Trademark law should protect the significant investments that companies are making.

This Note proposes solving the problems that scent mark registration generates by incorporating Professor Beebe’s semiotic analysis into the USPTO’s registration procedure and trademark infringement proceedings in US courts. A thorough and categorized registration process would help remedy complications that the written description and functionality doctrine present to those seeking protection for scent marks. Furthermore, the replacement of the traditional trademark infringement test with consumer-confusion surveys eliminates the risks of scent depletion and confusion.

A. Scent Mark Registration

Presently, an application to register a scent mark in the United States requires not only the submission of both a written description and a specimen, but also evidence of actual use and secondary meaning. Proper registration of a scent mark creates a presumption that the trademark is protected. In lieu of this procedure, this Note proposes that the USPTO require a thorough description of the proposed trademark through an explanation of each of the semiotic elements of a sign: signifier, referent, and signified. These categories will reflect many of the requirements that the USPTO already imposes and will result in the same presumption of protection.

1. A New Application Procedure: The Elements of a Sign

The first element of a sign under semiotic analysis is the signifier. In the case of a scent mark—for example, Cherry Bomb—the scent of cherries is the signifier. As both the Lanham

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216. See supra notes 2-4 and accompanying text; see also supra notes 38-39 and accompanying text.

217. See supra Parts I.D, II.A.2.

218. See supra Part II.A.2.

219. See LOREN & MILLER, supra note 85 (“[R]egistration provides prima-facie evidence of the validity of the mark. [T]hus, for registered marks[,] the burden is shifted to the defendant to prove a problem with the mark that would prevent protection.”).

220. See supra Part I.D.

221. See supra Part I.D.

222. See supra note 1 and accompanying text.
Act and the EU trademark directive require, an applicant must explain the signifier through a written description or, in EU terminology, a “graphic representation.”

This Note proposes that an applicant generate his scent mark’s written description by utilizing Perfumery Radar methodology. Perfumery Radar is a novel classification system for perfumes developed in 2010. It predicts perfume classification by placing the scent within one of the following eight olfactive families: citrus, fruity, floral, green, herbaceous, musk, oriental, and woody. It “analyze[s] the odor of perfumes, and map[s] out what scents are present, and in what proportions.” An applicant should engage Perfumery Radar methodology prior to registration and submit the results, including the gas chromatography, as the written description of the signifier.

The applicant should then describe the referent. In the case of Cherry Bomb, fuel additive is the referent. The referent would provide context for the trademark and would encompass the “use” requirement of the current registration procedure. The applicant could submit a specimen in order to satisfy the referent requirement, but the USPTO would not require such a submission due to the unreliable nature of a specimen. An applicant could also demonstrate a referent, for example, through advertisements that celebrate the sweet scent of cherries emanating from a car’s exhaust pipe or statements from manufacturers and carriers of the additive that confirm its association with cherries. The USPTO should accept any evidence that explains to what product or service the smell actively applies.

Finally, the applicant should provide evidence of the signified. The public’s recognition of a cherry scent in the context of car fuel would constitute sufficient evidence of signified goodwill. The

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223. See supra Parts II.A.2, II.B.
225. Id.
226. Id. at 11767.
229. See supra Part I.D.
230. See Churovich, supra note 159, at 312 (“[A] physical sample would soon lose its potency . . . .”)
231. See supra Part I.D.
signified requirement would be equivalent to the secondary meaning requirement and could be satisfied in the same manner. Under current secondary meaning analysis, courts typically consider both direct and circumstantial evidence, including “amount and manner of advertising, volume of sales, and length and manner of use”; consumer surveys are often dispositive. The USPTO should evaluate the proposed “signified” element of the registration process according to the same considerations.

2. The Impact of a Categorized Registration Application

The written description has been one of the most contentious topics in the debate regarding scent mark registration, because an unambiguous written description is an integral part of trademark registration. The Perfumery Radar could create a baseline for objective written descriptions that other applicants could easily understand and utilize in the development of their own products. The system’s utility justifies the potential added expense of requiring registrants to engage the novel technology of Perfumery Radar classifications. Uniform use of this methodology and its classification system would give adequate notice to competitors, who will be well versed in the system due to their own attempts to develop scent marks. Furthermore, Alírio Rodrigues, one of the system’s creators, points out that because Perfumery Radar can correctly predict the classification of an odor, “it can be used in the pre-formulation step of perfumes or other fragrant mixtures”, thus, competitors could use Perfumery Radar during the development stage of their scent in order to predict and avoid potential infringement.

Researchers found that Perfumery Radar successfully predicted the perfume industry’s professional classifications of several essential oils and commercial perfumes; proof of the classification system’s repeated success

233. See, e.g., id.
234. See supra Part III.A.
235. See supra notes 125-28 and accompanying text (explaining that a written description puts competitors on notice of a registered scent mark).
236. See supra notes 125-28 and accompanying text.
238. See id.
239. Id. (“According to the study, the Perfumery Radar correctly predicted the primary olfactory family of four essential oils (orange, lemon, jasmine and thyme) and a number of commercial perfumes.”); Coxworth, supra note 227 (“When 14 popular women’s fragrances were tested on the system, the results were similar to those arrived at by human perfume experts.”).
makes it a good candidate to fulfill the signifier’s written description requirement.

Although it may appear that many of the same requirements are present in both the semiotic registration process and the current registration procedure, the semiotic structure provides a comprehensive way to avoid functionality doctrine problems.\(^{240}\) When the signifier and the referent are identical, the functionality doctrine is triggered;\(^ {241}\) such a mark is unregistrable. For example, the scent of a perfume is the signifier of the trademark. Likewise, the scent of the perfume is also the referent; therefore, perfumes should not receive trademark protection. Dividing the registration process into sign elements simplifies the functionality doctrine determination.

Both US and European courts have implied that the functionality doctrine is applicable to scent mark registration.\(^ {242}\) The need to avoid overstepping boundaries into other forms of intellectual property protection supports functionality doctrine application.\(^ {243}\) While Hawes convincingly argues that applying the functionality doctrine to scent marks encourages unfair competition,\(^ {244}\) the law has already provided an adequate protection against this risk through both trade secrets and patents.\(^ {245}\) It would be against public policy to afford trademark protection to a product like perfume on top of existing trade secret and patent protection, because overprotection of a mark deprives the consumer of the benefits of competition: the availability of cheaper and perhaps better products. Therefore, the functionality doctrine is vital even in the unique context of scent marks because it provides a balance between consumer and producer interests. A categorized registration process that requires the division of a scent mark into the three elements of a sign provides a simple way to uphold the functionality doctrine in a complex context.

\(^{240}\) See Beebe, supra note 60, at 661.

\(^{241}\) See id.

\(^{242}\) See supra Part III.B.

\(^{243}\) See Beebe, supra note 60, at 661.

\(^{244}\) See Hawes, supra note 169, at 152-53.

\(^{245}\) See 35 U.S.C. § 101 (2006) (stating that patent law protection is available to “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof”); see also LOREN & MILLER, supra note 85, at 27 (“Legal protection for what are known as ‘trade secrets’ allows holders of secrets to share the secrets in a controlled way with confidence that the law will protect the holders from invasive behavior by others . . . .”).
B. Scent Mark Infringement

Current trademark infringement analysis hinges upon the determination of whether a likelihood of confusion exists. While each circuit has developed its own official list of factors, courts generally consider very similar pieces of information in discerning whether consumers are likely to confuse two products. For example, the US Court of Appeals for the Sixth Circuit considers (1) the strength of the plaintiff’s mark, (2) the relatedness of the goods or service offered by the parties, (3) the similarity of the marks, (4) any evidence of actual confusion, (5) the marketing channels used by the parties, (6) the probable degree of purchaser care and sophistication, (7) the defendant’s intent, and (8) the likelihood of either party expanding its product line using the marks. No one factor is dispositive.

While trademark infringement analysis appears to be thoroughly based upon the various factors considered, scent marks require a more direct analysis due to the unique concerns they present. An inquiry into the likelihood of confusion via consumer-confusion surveys both alleviates the potential problems of scent confusion and depletion and serves the purposes of trademark law. Consumer-confusion surveys generate an average consumer, simplifying infringement analysis and eliminating the dangers of scent confusion; they also permit scents to remain perpetually available to competitors, mitigating concerns of scent depletion and ensuring the development of quality products. While courts often use consumer surveys to determine the protectability of a trademark before performing a likelihood of confusion analysis, the proposed consumer-confidence surveys will focus on a precise horizontal comparison of the trademarks at issue. The exclusive use of these consumer-confusion surveys should supplant the current trademark infringement analysis in the realm of scent marks.

246. See supra note 72 and accompanying text.
247. See generally LOREN & MILLER, supra note 85, at 563-90.
249. Id.
250. See supra Part III.C-D.
251. See supra Parts I.A, III.C-D.
252. See infra Part IV.B.1-2.
1. A New Standard for Scent Mark Infringement: Consumer-Confusion Surveys

Courts should disregard the traditional likelihood of confusion factors and instead perform an in-depth horizontal analysis based on Professor Beebe’s semiotic theory. The courts should look exclusively to consumer-confusion surveys when determining scent mark infringement. Both plaintiffs and defendants should have an opportunity to present their own surveys to the court, in order to argue the strength and validity of their respective scent marks. While parties to the infringement suit would have leeway with regard to the exact structure and execution of their surveys, courts should consider (1) whether each survey constitutes a random sampling of the population, (2) whether the conditions of the survey represent a variety of variables, (3) whether the survey presents the trademarks in a holistic manner, and (4) which scent mark, if any, prevails.

A truly random sampling of the population would engage a large number of people from across the country. Furthermore, the survey should include information regarding the age and gender of the survey participants. Finally, the survey should include information regarding the location of the survey, the date the questions were asked, and other relevant circumstances. Pertinent circumstances might include the temperature, general degree of windiness, or a participant’s medical conditions that affect his sense of smell. Because such environmental variables are relevant to the results of the survey, a survey would be more reliable if it was performed in person, rather than over the phone. A sample survey would look something like this:

<table>
<thead>
<tr>
<th>Date</th>
<th>City</th>
<th>Inside/Outside</th>
<th>Age</th>
<th>Gender (F/M)</th>
<th>Other Information</th>
<th>Scent A</th>
<th>Scent B</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/25</td>
<td>Nashville, TN</td>
<td>Inside</td>
<td>25</td>
<td>F</td>
<td>N/A</td>
<td>Identified as Product A</td>
<td>Identified as Product A</td>
</tr>
<tr>
<td>12/15</td>
<td>Philadelphia, PA</td>
<td>Outside, 28º F</td>
<td>54</td>
<td>M</td>
<td>Windy outside (10 mph)</td>
<td>Identified as Product B</td>
<td>Identified as Product B</td>
</tr>
</tbody>
</table>

In order to present the trademarks in a holistic manner, surveyors should give the participants the signifier, as well as the

253. While this Note proposes the use of consumer-confusion surveys only once the court is faced with allegations of scent mark infringement, producers might also elect to perform their own surveys periodically in order to anticipate vulnerability to liability.
referent, free from any other indicative trademarks. For example, in an infringement suit involving Cherry Bomb, a surveyor would provide the participant with the cherry scent and the product—fuel additive. The court would deem the scent mark a success if the participant demonstrated the third element of the sign—the signified—by supplying the product’s name, Manhattan Oil Cherry Bomb.254

If the court determines that a sufficient number of participants correctly identified both the original product and the alleged infringer, then there is no confusion, and thus no infringement.255 On the other hand, suppose Company A holds a registered scent mark for Product A. If a sufficient number of participants correctly identify Scent A as Product A and identify Scent B as Product A, then there is infringement; consequently, Company A should win the appropriate remedy.256 Again, however, assuming Company A holds a protected mark, if a significant number of surveyed participants identify both scents as Product B, there is no infringement and Company B should gain protection of its scent mark. If the court determines that the survey participants do not successfully identify either product a significant portion of the time, the court should show deference to the USPTO’s previous determination of Trademark A’s secondary meaning and the results should reflect the circumstances ex ante: there would be no infringement, and Company A would continue to hold a protected mark.

2. The Significance of Consumer-Confusion Surveys

The current likelihood of confusion test gives judges too much discretion in evaluating infringement cases involving scent marks.

254. By being able to name the origin of the scent, the participant demonstrates that the signifier-referent combination has earned enough goodwill that the participant has learned the product’s name. Thus, the third element, the signified (goodwill), is demonstrated and a complete trademark is deemed to exist.

255. See Stacey L. Dogan & Mark A. Lemley, A Search-Costs Theory of Limiting Doctrines in Trademark Law, 97 TRADEMARK REP. 1223, 1243 (2007). Current trends demonstrate that judges find infringement when there is a showing of “as little as 10[ percent] consumer confusion.” Id. In other words, even if 90 percent of the consumers surveyed can distinguish between the trademarks at issue, courts will sometimes find infringement. See id. Thus, courts require strong consumer recognition of products. See id. While the court is in the best position to determine what constitutes a “sufficient number of participants,” judges should probably find that a sufficient number of participants have correctly identified a product when 90 percent or more of the survey participants have done so.

256. Available remedies in trademark infringement suits include pecuniary damages, such as recovery of defendant’s profits, plaintiff’s lost profits, and costs of the action, as well as equitable relief in the form of injunctions and orders commanding the destruction of all infringing materials. See LOREN & MILLER, supra note 85, at 674-76.
The ambiguities that scent marks present necessitate a strong horizontal analysis based entirely on consumer perception and trademark comparison. Such an analysis would ensure that trademarks are fulfilling their identifying and distinguishing functions, unhindered by the distinct dangers that scent confusion and depletion can present.257

Even considering the laundry list of factors that help determine whether a likelihood of confusion exists in any given case, it is unlikely that judges can take into account the numerous variables that contribute to scent subjectivity and generate the potential for scent confusion. A judge’s perspective is simply too narrow, even if he considers himself representative of the typical consumer, because he represents only one consumer of one gender, age, and environment. A representative survey, on the other hand, would absorb all of the variables that make scent confusion a considerable risk. A survey of individuals from across the country would provide proof that the scent mark is well known nationally and deserving of federal protection. Furthermore, a compilation of participants of all genders, ages, and circumstances would essentially create an “average” consumer on which a judge could base his decision. If the average consumer confuses the origin of the two scents, the court should find infringement and award the appropriate remedy. The survey results would, however, represent a valid average consumer only if the court determines that the survey signifies a truly representative sample; thus, the court should consider the number of participants, age, gender, and relevant circumstances.

The surveyor should present the scent mark holistically, such that each of the three semiotic elements is present, in order to validate the survey’s results. The presence of each of the three elements would guarantee consistency with the newly proposed registration process.258 As explained previously, each element must exist in order for the entire sign to be represented accurately.259 Thus, the absence of one of the elements in a trademark infringement analysis would create an unreliable and incomplete test.

Moreover, the three-element requirement would prevent the infringement analysis from treating trademark holders too harshly. Rather than granting protection only to those scents (or signifiers) that are recognizable independent of any product association (or referent), the infringement analysis would also protect any scent that is recognizable in association with its referent. Trademark law would

257. See supra Part III.C-D.
258. See supra Part IV.A.1.
259. See supra Part I.D.
continue to fulfill its goal of protecting the investments that companies make when developing their trademarks.

While it may seem counterintuitive to consider the possibility of a previously unregistered trademark winning a trademark infringement suit and consequently mark protection, this result is the best means of avoiding a scent depletion problem while continuing to meet trademark law’s objectives. The use of consumer-confusion surveys would ultimately mean that any protected scent mark would remain available to a competitor. Companies could invest in the development of previously registered scents, achieve greater goodwill than the original protected mark, “win” the consumer-confusion survey, and thereby receive protection. In other words, consumer-confusion surveys would allow continuous scent availability because courts would choose the more successful mark, regardless of previous registration. According to semiotics, the more successful mark is the stronger scent mark when compared to other marks.

Furthermore, the potential to win scent mark protection through an infringement suit would benefit consumers by fulfilling trademark law’s goal of promoting competition and better products. This proposed system encourages producers that choose to engage a scent already in use to develop scent marks and create better relationships with consumers, thereby achieving strong scent mark recognition and winning an infringement suit. Likewise, the potential consequences of an infringement suit would encourage producers to monitor similar trademarks and bring suit early, before the general public recognizes competing marks. This would result in more efficient infringement cases.

Critics might assume that the new infringement analysis would render registration worthless; however, registration would continue to serve an important purpose to trademark holders. Registration puts competitors on notice of the scope of a currently used trademark. Although competitors would technically be able to win the use of the scent mark through intense product development and advertising, registration would inform competitors that it is much easier and more attractive to invest in a different scent mark.

260. *See supra* Parts I.A, III.D.

261. *See supra* notes 72-75 and accompanying text (stating that semiotics emphasizes a horizontal perspective of signs; explaining signs are valuable only in relation to other signs).

262. *See supra* Part III.A.
V. CONCLUSION

As technology modernizes and companies explore new ways to attract loyal customer bases, trademark law must evolve to reflect these changes. Today, international scent mark jurisprudence presents an amalgam of confusing and unclear standards for scent mark registration and infringement claims. While both the United States and the European Union undoubtedly require a written description for trademark registration, no country or international organization has been able to agree upon a clear and uniform standard that markholders can easily follow. Though judicial systems across the world seem to apply the functionality doctrine to scent mark registration, certain practitioners and scholars argue that the functionality doctrine undermines traditional trademark rationales when applied to scent marks. Theories of scent depletion and scent confusion demonstrate concern that scent marks are a unique version of trademarks that require a customized body of law.

This Note acknowledges the unique implications of scent mark registration and proposes that streamlining the registration procedures and infringement analysis for scent marks can alleviate the concerns arising in scent mark jurisprudence. An objective written description standard and a categorized registration process will create an efficient method of registration that puts competitors on notice of registered scent marks and simultaneously rids the USPTO of functionality doctrine concerns. The imposition of consumer-confusion surveys ensures that all scents will remain available to competing producers, while still promoting high quality, recognizable products for consumers. Redefining scent mark registration and infringement procedures through semiotic analysis ensures a holistic and thorough perspective that serves the traditional functions of trademark law.

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