Diluted Reality: The Intersection of Augmented Reality and Trademark Dilution

Ariane Takano
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ARIANE TAKANO

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I. INTRODUCTION

In the science fiction comic series *Tokyo Ghost*, humanity is addicted to the vapid release of virtual technology. The dystopian Isles of New Los Angeles, year 2089, are brimming with apathetic consumers who are addicted to artificial diversion. Saturated with nanotech, the dependent population is subservient to an entertainment industry run by digitally augmented thugs. Constable character Led Dent is so engrossed with the shows and ads that constantly stream on his ever-present holographic screens, that he is largely oblivious to the presence of his tech-free girlfriend Debbie Decay. A panel in Issue #1 depicts the onslaught of colorful ads that obstruct Dent’s field of view as he drives his monstrous bike through the polluted city streets.

Whatever your views on the growing presence of technology in modern-day society, *Tokyo Ghost* demonstrates how an immersive digital landscape presents the unique potential for companies to engage with consumers. Advertisers are already using virtual reality and augmented reality to appeal to consumers in creative ways. For instance, Patrón offers a virtual reality tour of Hacienda Patrón on YouTube. Users explore Weber Blue Agave fields as Patrón’s iconic bee, fly through a keyhole at Hacienda Patrón, and observe as the agave is roasted, crushed, fermented, and distilled. And luxury online retailer Net-A-Porter developed an augmented reality app that interacts with window displays to showcase the Karl by Karl Lagerfeld collection. The app reveals catwalk video clips and product information when fashionistas scan images of storefront products.

Science fiction has long envisioned the advent of virtual and augmented reality through technological maturity. Although still in its infancy, such technology is no longer a futuristic fiction. Moreover, augmented reality will become a particularly powerful tool for companies because it provides the most engaging brand experience. By blurring the distinction between

2. See id.
3. See id.
4. See id.
5. Id.
7. See id.
9. Id.
tangible actuality and artificial stimuli, augmented reality allows businesses to create compelling advertising campaigns. Imagine an augmented reality app for Major League Baseball that utilizes eyewear and headphones. Upon initiating the app, you can transform your backyard into a baseball field. You are not simply passively watching a sports ad, impatiently waiting for the two-dimensional images to pass. You are an active participant. You swing your arms, feel the thud of the digital ball, and hear the crowd roaring.\textsuperscript{10} As you bask in the experience, you see the MLB logo plastered on digital billboards, on the jumbotron, and on the blimp above. The brand is the winning team and it is hitting a home-run.

This note will discuss the intersection of augmented reality and trademark dilution. Part I provides a brief overview of virtual reality and augmented reality technology. Part II examines dilution under the Trademark Dilution Revision Act (TDRA). Part III applies dilution theory to the augmented reality platform, and Part IV considers potential defenses to augmented reality dilution.

\section*{II. VIRTUAL REALITY AND AUGMENTED REALITY TECHNOLOGY}

Fascination with the unreal real is nothing new. Before the introduction of photography, motion picture, and digital imaging, paintings relied on perspective to mimic real life. Trompe l’oeil is an illusionist art technique that deceives the viewer into believing that representation is reality.\textsuperscript{11} An anecdote from Pliny the Elder relates the ancient Greek rivalry of Parrhasius and Zeuxis.\textsuperscript{12} Zeuxis painted a picture of a bunch of grapes that was so realistic that birds flew down to peck at the fruit.\textsuperscript{13} Proud of this accomplishment, Zeuxis requested that the curtain covering his painting be drawn.\textsuperscript{14} But the curtain was in fact a painting by Parrhasius, making Parrhasius the victor.\textsuperscript{15} Humbled, Zeuxis admitted that although he had deceived the birds, Parrhasius had deceived him as an artist.\textsuperscript{16}

\footnotesize
12. \textit{Id.}
13. \textit{Id.}
14. \textit{See id.}
15. \textit{Id.}
16. \textit{See id.}
Arguably, Parrhasius’ painting produced a more complete illusion of reality than virtual and augmented reality technology. Whereas a user is ultimately still aware of the underlying computer interface, Parrhasius achieved belief without suspension. Nonetheless, virtual reality takes artifice a step further. Virtual technology would allow the sensation of lifting the curtain, but the illusion of Parrhasius’ painting was lost the moment finger touched canvas. Although the intent of imitative art and virtual technology is mimesis, the former relies on artistic skill, while the latter utilizes computer science.

Virtual reality refers to an interactive computer system that detects user movement to provide simulated presence and interaction in an artificial environment. Immersion relies on a feedback loop. The user provides the computer interface with input in the form of motion or physiological signals. And the computer uses that information to produce a display that the user can interact with in real time. Thus, virtual reality is comprised of four elements: the virtual environment, spatial presence, sensory feedback, and interactivity.

The virtual environment displays synthetic objects that the user can observe and manipulate. Navigation in the virtual space adheres to human expectations of depth and distance. Cognitive processing of user position in relation to objects creates physical presence. Physical presence refers to the sensation of existence that is rendered through visual, aural, and haptic modalities. Mental presence occurs on a spectrum. On one end is conscious recognition of artificiality and on the other end is transitory loss of medium awareness. User degree of mental engagement is affected by the delay between user action and computer response, graphics quality, and sensory stimulation. Sensory feedback and interactivity support verisimilitude. Sensory feedback refers to data output based on computer tracking of user orientation and location. Interactivity includes the user’s ability to affect

17. See MHIJ ET AL., supra note 10, at 1.
18. See id. at 10.
19. See id. at 11.
20. See id.
21. Id. at 1.
22. See id. at 3.
23. See id.
24. See id.
25. See id.
26. See id.
27. Id.
28. See id. at 4.
29. See id.
the virtual environment and the user’s ability to change his or her vantage point.30

Augmented reality is a type of virtual reality in which display technology is superimposed onto the real world.31 Overlays augment the information available for user consumption.32 Unlike virtual reality, augmented reality enhances, rather than replaces, the real world.33 For example, Vito Technology’s Star Walk app allows amateur stargazers to point their smartphones at the night sky to identify celestial bodies.34 And the Google Translate app can change foreign text into native language when users hover their mobile cameras over the text.35

Augmented reality consists of two phases: (1) sensing environmental information and (2) environment reconstruction.36 Information from the real world is collected using sensing technology, such as GPS and digital cameras, to create a three-dimensional model.37 The integrated environment is created using equations that calculate interactions between real and virtual objects.38 The ideal system synchronizes information from the real world and information from the virtual world seamlessly.39 Thus, augmented reality must regularly refresh virtual objects to allow real time interaction and responsivity.40

III. TRADEMARK DILUTION

Frank Schechter is credited with introducing trademark dilution theory in a 1927 Harvard Law Review article.41 Schechter argued that trademarks convey quality and a trademark’s value derives from its selling power.42 Since this selling power is amplified by a mark’s uniqueness, owners of arbitrary or fanciful marks, such as ROLLS-ROYCE and AUNT JEMIMA’S,
should be protected from unauthorized use that diminishes association with the product. According to Schechter, dilution refers to “the gradual whit- tling away or dispersion of the identity and hold upon the public mind of the mark or name.” While traditional trademark infringement law protects the consumer from confusion, dilution law protects the mark’s holder and the mark’s commercial value. And unlike trademark infringement, dilution does not require consumer confusion in the marketplace or competition. Because even if a consumer is not confused by the junior use, the presence of the senior user’s mark on goods or services from two different sources will weaken the mark’s ability to identify and distinguish the senior user.

State dilution law and federal dilution law coexist. Until the Federal Trademark Dilution Act (FTDA) became effective in 1996, mark holders relied on state statutes for protection from dilution. Under the FTDA, the owner of a famous mark was entitled to injunctive relief against a junior user’s commercial use of a mark if such use started after the mark became famous and diluted the mark’s distinctive quality. The FTDA was intended to promote predictable and uniform protection of famous marks. Nevertheless, subsequent circuit splits on the following three issues demonstrated the statute’s ambiguities: (1) whether the FTDA required actual dilution or merely a likelihood of dilution; (2) whether the FTDA protected only inherently distinctive marks, and not marks that had acquired distinctiveness; and (3) whether the FTDA protected marks with niche fame.

Confusion concerning the statute’s phrase “causes dilution” culminated in the Supreme Court’s 2003 decision Moseley v. V Secret Catalogue, Inc. In the dilution action between lingerie retailer Victoria’s Secret and adult novelty vendor Victor’s Little Secret, the Court held that violation of the FTDA required the owner of a famous mark to prove actual dilution.

43. See id. at 829.
44. Id. at 825.
46. See id. at 253–54.
49. Id.
54. Id. at 423, 433.
Although the Court indicated that circumstantial evidence may be sufficient to prove actual dilution, it failed to further explain the mark holder’s burden of proof.\(^{55}\) Shortly thereafter, the International Trademark Association (INTA) appointed a special committee to recommend amendments to the statute.\(^{56}\) And in 2006, Congress enacted the Trademark Dilution Revision Act (TDRA).\(^{57}\) The TDRA made various revisions to the FTDA, including the following: (1) a dilution claim only requires a likelihood of dilution, rather than actual dilution; (2) dilution by tarnishment is explicitly recognized and defined; (3) dilution by blurring is redefined and six nonexclusive factors for court consideration are included; (4) niche fame is excluded; and (5) famous marks that are distinctive, inherently or through acquired distinctiveness, are protected.\(^{58}\) Under the TDRA:

[T]he owner of a famous mark that is distinctive, inherently or through acquired distinctiveness, shall be entitled to an injunction against another person who, at any time after the owner’s mark has become famous, commences use of a mark or trade name in commerce that is likely to cause dilution by blurring or dilution by tarnishment of the famous mark, regardless of the presence of absence of actual or likely confusion, of competition, or of actual economic injury.\(^{59}\)

Therefore, a federal dilution claim requires ownership of a famous mark that is distinctive and third-party use of the mark in commerce that is likely to cause dilution.\(^{60}\)

A. Fame Requirement

The TDRA provides, “a mark is famous if it is widely recognized by the general consuming public of the United States as a designation of source of the goods or services of the mark’s owner.”\(^{61}\) Thus, a plaintiff’s mark must be famous nationwide among general consumers.\(^{62}\) This means that marks

\(^{55}\) See id. at 434.
\(^{56}\) McCarthy, supra note 48, § 24-96.
\(^{58}\) Delflache et al., supra note 52, at 140–44.
\(^{60}\) See id.
\(^{62}\) See id.
that are only famous in a niche market or limited geographic territory do not qualify for protection.\textsuperscript{63} Because federal dilution law is an exclusive remedy reserved for only the most prominent marks, owners of marks that are merely locally famous or famous in a specialized field must rely on state dilution law or an infringement claim for protection.\textsuperscript{64} In determining whether a mark has attained fame, the statute permits courts to “consider all relevant factors,” including:

\begin{itemize}
  \item[(i)] The duration, extent, and geographic reach of advertising and publicity of the mark, whether advertised or publicized by the owner or third parties.
  \item[(ii)] The amount, volume, and geographic extent of sales of goods or services offered under the mark.
  \item[(iii)] The extent of actual recognition of the mark.
  \item[(iv)] Whether the mark was registered . . . on the principal register.\textsuperscript{65}
\end{itemize}

Dilution fame is a rigorous standard that the Federal Circuit has recognized is “difficult to prove.”\textsuperscript{66} The scope of fame is intentionally narrow to ensure that only “those few truly famous marks like Budweiser beer . . . Camel cigarettes . . . and Barbie Dolls” are protected.\textsuperscript{67} Otherwise, the delicate balance between fair competition and protection of a mark holder’s goodwill would be disrupted by an overly broad cause of action for any reproduction of a mark.\textsuperscript{68} In addition, the plaintiff’s mark must have achieved fame prior to the date of the defendant’s first use of its mark in commerce.\textsuperscript{69} Examples of famous marks include the following: HOT WHEELS for toy cars;\textsuperscript{70} BIG GULP for drinks;\textsuperscript{71} and the HERSHEY COMPANY trade dress

\begin{itemize}
  \item[66.] Coach Servs., Inc. v. Triumph Learning LLC, 668 F.3d 1356, 1373 (Fed. Cir. 2012).
  \item[68.] \textit{See} M\text{C}ARTHY, supra note 48, § 24:104 (“If every trademark could invoke the anti-dilution remedy and stop uses of all similar marks in every market and every line of trade, this would upset the traditional balance of fair versus free competition that in [sic] inherent in trademark law.”).
  \item[69.] \textit{See} Rosetta Stone Ltd. v. Google, Inc., 676 F.3d 144, 172 (4th Cir. 2012).
  \item[70.] Jada Toys, Inc. v. Mattel, Inc., 518 F.3d 628, 635 (9th Cir. 2008).
for candy bars. In contrast, courts have found the following marks not famous: the MAKER’S MARK red dripping wax seal mark for whiskey; the magenta color mark for T-MOBILE wireless telecommunications products and services; and the CRISTAL mark for sparkling wine.

B. Distinctiveness Requirement

A protectable mark must be “distinctive, inherently or through acquired distinctiveness.” A mark is distinctive if it retains association with the senior user, even when the famous mark is encountered in a context unrelated to the senior user’s goods or services. In Hormel Foods Corp. v. Spam Arrest, LLC, the owner of the SPAM mark for canned meat petitioned to cancel the registration of the mark SPAM ARREST for computer software designed to filter unsolicited emails. The Board held that the SPAM mark did not possess the requisite degree of distinctiveness for dilution purposes because “spam” was a “generic term for unsolicited commercial email.” In other words, the mark holder failed to demonstrate that the common meaning of “spam” was eclipsed by trademark meaning of the term.

C. Use as a Mark or Trade Name Requirement

The TDRA bars a defendant’s “use of a mark or trade name in commerce that is likely to cause dilution by blurring or dilution by tarnishment of the famous mark.” Therefore, the defendant must use the mark as a mark or trade name. According to Professor Burstein, “the junior user must use the famous mark—or something similar to it—to indicate the source of his or her own goods or services.” In Nat’l Bus. Forms & Printing, Inc. v. Ford Motor Co., the printing business NBFP maintained a website that allowed

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78. Id. at *1.
79. Id. at *18.
80. See id.
83. Id.
customers to select corporate logos, including Ford’s marks, from a catalog for custom printed designs. The Fifth Circuit affirmed the district court’s finding that Ford failed to demonstrate dilution because “NBFP did not ‘use’ Ford’s marks . . . in identifying or distinguishing its own goods or services merely by reproducing them for customers as part of its commercial printing business.”

D. Dilution by Blurring

Dilution by blurring involves an “association arising from the similarity between a mark or trade name and a famous mark that impairs the distinctiveness of the famous mark.” Under dilution theory, a famous mark’s distinctive quality, and thus selling power, is diminished when it is associated with multiple sources. Examples of blurring include “Kodak pianos” and “Harry Potter dry cleaners.” For instance, suppose a pet owner has her poodle groomed at “Smirnoff Salon.” Blurring is not concerned with the possibility that the consumer may mistakenly assume that Smirnoff has branched its operations into the pet grooming industry. Instead, blurring addresses the injury that occurs when the consumer thinks of both the vodka brand and the pet salon when confronted with the SMIRNOFF mark. Because the mark ceases to recall one source, Smirnoff is deprived of direct mental association with its brand. And if the SMIRNOFF mark thereafter appears on sandpaper and bubblegum, then the mark’s source identification ability is further dissipated. Hence, dilution by blurring has been compared to “the pollution of a lake”; “a cancer-like growth”; “death by a thousand cuts”; and “the ‘first of a hundred bee stings.’” In determining whether such injury has occurred, courts may balance the following non-exhaustive factors:

85. Id. at 536.
87. See MCCARTHY, supra note 48, § 24:69.
89. Mattel, Inc. v. MCA Records, Inc., 296 F.3d 894, 903 (9th Cir. 2002).
90. See Ty Inc. v. Perryman, 306 F.3d 509, 511 (7th Cir. 2002).
91. See id.
95. Id.
(i) The degree of similarity between the mark or trade name and the famous mark.

(ii) The degree of inherent or acquired distinctiveness of the famous mark.

(iii) The extent to which the owner of the famous mark is engaging in substantially exclusive use of the mark.

(iv) The degree of recognition of the famous mark.

(v) Whether the user of the mark or trade name intended to create an association with the famous mark.

(vi) Any actual association between the mark or trade name and the famous mark.96

The Board applied the TDRA blurring factors in Chanel, Inc. v. Makarczyk, where it sustained designer brand Chanel’s opposition to registration of the CHANEL mark for “real estate development and construction.”97 The Board concluded that the applicant’s use of the CHANEL mark was likely to cause dilution by blurring because the marks at issue were identical; the famous mark was distinctive; Chanel engaged in substantially exclusive use of its mark; and the famous mark enjoyed a high degree of recognition.98 Furthermore, the applicant intended to create an association with Chanel because he named luxury rental units after fashion brands and boasted an alleged business relationship with Chanel.99

E. Dilution by Tarnishment

Dilution by tarnishment is defined as “association arising from the similarity between a mark or trade name and a famous mark that harms the reputation of the famous mark.”100 The gravamen of a dilution by tarnishment complaint is that the defendant’s unauthorized use degrades the positive connotations attached to the plaintiff’s mark.101 Tarnishment occurs when a trademark is “linked to products of shoddy quality, or is portrayed in an unwholesome or unsavory context likely to evoke unflattering thoughts about

98. Id. at 2025–26.
99. See id. at 2026.
the owner’s product.” In such cases, the defendant’s use impinges upon the famous mark’s advertising ability and business reputation.

A mark may be tarnished in two contexts. First, dilution by tarnishment has been found in cases involving sex, drugs, and adult content. For instance, in *Lorillard Tobacco Co. v. Cal. Imps.*, the manufacturer of NEWPORT cigarettes brought action against a business that sold NEWPROT “spice,” a smoking potpourri product “sprayed with a synthetic chemical similar to THC, the active ingredient in marijuana.” The court found the defendants liable for dilution by tarnishment because NEWPROT was advertised to “customers interested in legal highs” and at the same time, synthetic marijuana was a controversial subject in the media. In another example, luxury car manufacturer Rolls-Royce brought suit against a musician who used the stage name ROLLS ROYCE RIZZY. In granting the plaintiff injunctive relief, the court reasoned that the defendant had engaged in dilution by tarnishment under federal and New Jersey law because the musician promoted explicit lyrics and sexual themes, including the “Call of Booty” event and a hit single entitled “Hoe in You.”

Second, dilution by tarnishment has been found in cases where a mark is improperly associated with inferior goods or services. According to the Second Circuit, “tarnishment is not limited to seamy conduct.” In *Steinway & Sons v. Robert Demars & Friends*, for example, the court found that the defendant’s “inexpensive, mass-produced” clip-on beverage can handles bearing the designation STEIN-WAY diluted the prestigious STEINWAY mark associated with high quality pianos. And in *Burberry Ltd. v. Euro Moda, Inc.*, the court held that high-end fashion brand Burberry proved dilution per se because the defendants sold counterfeit Burberry merchandise “made from substandard materials.”

**F. Association Arising from Similarity**

Dilution by tarnishment and dilution by blurring both require “association arising from the similarity between a mark or trade name and a
famous mark.”111 At first blush, infringement confusion and dilution association may seem to refer to the same mental concept. Trademark infringement, however, requires a consumer to mistakenly attribute a junior user’s mark to a senior user.112 By contrast, association in the dilution context occurs when a consumer encounters the junior user’s mark, but is reminded of the senior user’s famous mark.113 For instance, when a consumer is confronted by an advertisement for CHEERIOS cat litter, she thinks of the brand for breakfast cereal, but is not necessarily confused by the overlap.

Nevertheless, instances of consumer confusion are probative of association, and thus dilution.114 In Bath & Body Works Brand Mgmt., Inc. v. Summit Entm’t, LLC, for example, the court determined that a potential finding of association between Bath & Body Works and Summit Entertainment was supported by evidence of consumer confusion between the former’s Twilight Woods and Twilight Crush marks for personal care products, and the latter’s motion picture Twilight franchise.115 Likewise, the Second Circuit in Starbucks Corp. v. Wolfe’s Borough Coffee, Inc. noted in dicta that survey evidence of source confusion may demonstrate association because the senior user’s mark would necessarily enter one’s mind.116

In addition, “not just any mental association will suffice—it must be an association that arises from the similarity or identity of the two marks.”117 Although the TDRA is silent regarding the degree of similarity, case law indicates that it need not be substantial similarity. In Starbucks Corp., the Second Circuit held that the district court had erred by requiring substantial similarity between the marks CHARBUCKS and STARBUCKS for a showing of dilution by blurring.118 The Ninth Circuit agreed with the Second Circuit in Levi Strauss & Co. v. Abercrombie & Fitch Trading Co., where the court found that the plain language of the TDRA indicated that jeans retailer Levi Strauss need not demonstrate that its “Arcuate” back pocket stitching design was “identical, nearly identical or substantially similar” to Abercrombie’s “Ruehl” design.119

113. Id. § 24:116.
114. See id (“[I]f a survey reveals evidence of a likelihood of confusion between conflicting marks, then this is also evidence that there is the kind of ‘association’ that is one ingredient of dilution.”).
117. Hearing, supra note 64, at 12.
IV. DILUTION IN THE AUGMENTED REALITY CONTEXT

A. Advertising Overlays

In the future, consumers will insert contact lenses or don other eyewear to experience augmented and virtual reality. Samsung has already filed a patent in South Korea for smart contact lenses intended for augmented reality.120 The lenses incorporate a camera and sensors that are controlled by blinking.121 Businesses will likely utilize augmented reality technology to overlay digital advertisements onto the physical world.122 When such technology becomes ubiquitous, a shopper perusing the stores of a shopping mall may receive a pop up in her field of view alerting her to the location of a nearby pair of shoes based on her prior online searches for a similar style, color, size, and price point. Similarly, viewing a certain object may generate an algorithm that suggests related goods and services.123 Thus, if the said shoe shopper picks up and closely examines three pairs of black ballet flats within an hour, she may receive analogous suggestions. Or a consumer eying a loaf of gluten-free bread at the grocery store may notice ads in his periphery pitching gluten-free cookies. And if he places the bread in his shopping cart, he may be notified that the same bread is sold for a dollar less at a nearby store.

Furthermore, augmented reality may eventually become a completely custom experience. Apps with presets dialed to user preferences would enhance informational intake by removing or diminishing the negative and amplifying the positive. For instance, if a user was committed to losing weight, temptations at the grocery store would be blacked out or covered by advertisements for healthier alternatives. Thus, a bag of potato chips becomes a nondescript black blob or an endorsement for dried banana crisps. Likewise, picking up a bag of baby carrots would prompt positive reinforcement by triggering rewarding stimuli, such as the playing of a cheerful tune.

Depending on how advanced – and invasive – augmented reality technology gets, implanted microchips could monitor other bodily signals, such as heart rate, facial expressions, and tone of voice, that would further personalize advertising suggestions. For instance, detection of the faintest trace

121. Id.
123. See id.
of a smile 20% of the time a consumer observes a cat in an advertisement translates into individualized advertisements that make liberal use of felines. And if the likelihood of a smile increases when the cat is chubby, the consumer can count on digital overlays of chubby cats purring next to real world candles, chubby cats rubbing up against Egyptian Cotton sheets, and chubby cats playfully pawing at laundry dryer balls. Or perhaps such smart technology will apply data relating to a user’s mood when she interacts with products by certain brands. A shopper scanning the oral care aisle at a drugstore may receive a virtual advertisement pointing out that she usually seems tired when she uses her manual toothbrush, so perhaps a new electric model in a jazzy color will increase her alertness when brushing her teeth.

B. Overlays and Dilution

As augmented reality content becomes more prevalent, the technology promises to raise various trademark implications. A company could superimpose its digital trademark on top of a competitor’s physical logo or interrupt a user’s observation of a competitor’s physical advertisement with a pop up virtual advertisement. In addition to trademark infringement, the layering of graphics and logos onto the physical world may present opportunities for trademark dilution.

Digital dilution of trademarks has been found in the context of internet domain names. For example, in Archdiocese of St. Louis v. Internet Entm’t Grp., Inc., the owners of marks memorializing the Pope’s 1999 visit to St. Louis sued Internet Entertainment Group, Inc. for using the marks as internet domain names for websites that advertised sexually explicit material. The court held that the defendant diluted the PAPAL 1999 mark and its variations by “associating them with adult entertainment venues that are inconsistent with the positive and spiritual uplifting image plaintiffs have striven to create and maintain . . . .” And in Victoria’s Cyber Secret Ltd. P’ship v. V Secret Catalogue, Inc., the court held that Victoria’s Cyber Secret violated the FTDA by using the VICTORIA’S SECRET mark for adult entertainment websites. In the court’s opinion, the defendant was liable for dilution by tarnishment because the marks were used in association with “entertainment

124. WASSOM, supra note 122, at 118.
126. Id. at 1146.
of a lascivious nature.” Furthermore, the plaintiff’s use also constituted dilution by blurring because consumers would cease to relate the mark to only the lingerie retailer.

C. Use as a Mark or Trade Name

In addition, keyword advertising cases offer analogous fact patterns because a physical trademark could trigger a virtual advertisement similar to how a keyword prompts sponsored link advertisements. In Tiffany (NJ) Inc. v. eBay, Inc., online auction company eBay purchased sponsored links that advertised its provision of merchandise from luxury jewelry retailer Tiffany whenever search terms like “Tiffany” were entered onto search engines. According to Tiffany, eBay engaged in dilution by blurring because it used the TIFFANY marks to promote counterfeit products, thus impairing the ability of the marks to identify the actual Tiffany brand and its authentic jewelry. Tiffany also argued that eBay was liable for tarnishment because its use of the TIFFANY marks created a negative association between Tiffany and low-quality products. The Second Circuit affirmed the district court’s rejection of Tiffany’s dilution claim however, agreeing that eBay did not use the TIFFANY marks to identify its own products. Rather, eBay only used the marks to directly advertise the Tiffany brand. Because eBay merely used the TIFFANY marks to identify Tiffany jewelry available on eBay, rather than to identify eBay’s own products or services, the Second Circuit seems to indicate that eBay’s use of the marks qualified as permissible non-trademark use.

And in Rosetta Stone Ltd. v. Google, Inc., language learning software developer Rosetta Stone filed suit against Google, asserting various causes of action, including trademark dilution. Google’s AdWords program allowed competitors to use Rosetta Stone’s trademarks as keywords that triggered sponsored-link advertisements. The district court found that Rosetta

128. Id. at 1355.
129. Id.
130. Cf. WASSOM, supra note 122, at 121.
131. See Tiffany (NJ) Inc. v. eBay Inc., 600 F.3d 93, 101 (2d Cir. 2010).
133. Id.
134. Tiffany (NJ) Inc., 600 F.3d at 112.
135. Id.
136. See id.
138. Id. at 150–52.
Stone failed to establish dilution because Google’s trademark policy increased Rosetta Stone’s brand awareness and Rosetta Stone did not prove that Google used the ROSETTA STONE marks to identify its own goods and services.\footnote{Rosetta Stone Ltd. v. Google, Inc., 730 F. Supp. 2d 531, 550–51 (E.D. Va. 2010), aff’d in part, vacated in part, remanded, 676 F.3d 144 (4th Cir. 2012).} The Fourth Circuit vacated and remanded the dilution claim, however, holding that the district court misapplied the fair use defense when it required the plaintiff, Rosetta Stone, to demonstrate that the defendant, Google, was using the ROSETTA STONE marks to identify Google.\footnote{See Rosetta Stone Ltd., 676 F.3d at 168–69.} In addition, the appellate court challenged the lower court’s reliance on merely one of the six non-exhaustive factors of dilution by blurring, the degree of recognition of the famous mark.\footnote{Id. at 170.}

But the district court and the Fourth Circuit in Rosetta Stone Ltd. erred in relying on the nominative fair use defense instead of the statutory requirement that the defendant use the famous mark as a “mark or trade name.”\footnote{McCarthy, supra note 48, § 24:122.} Like in Tiffany (NJ) Inc., the dilution claim should have failed because Google did not use the marks for source identification purposes.\footnote{Id. § 24:124.} Perhaps confusion is attributable to the overlap between the trademark use requirement and the nominative fair use defense.\footnote{Tiffany (NJ) Inc. v. eBay, Inc., 600 F.3d 93, 112 (S.D.N.Y. 2008).} After all, requiring the plaintiff to prove that the defendant is using the famous mark as a “mark or trade name” is essentially the same as requiring the plaintiff to demonstrate an absence of nominative use. Thus, the nominative fair use defense seems needlessly duplicative.

In Tiffany (NJ) Inc., eBay did not use the TIFFANY mark to identify eBay, but rather to identify Tiffany products available on eBay.\footnote{See Rosetta Stone Ltd. v. Google, Inc., 730 F. Supp. 2d 531, 550–51 (E.D. Va. 2010), aff’d in part, vacated in part, remanded, 676 F.3d 144 (4th Cir. 2012) (holding that Google was not liable for dilution because Rosetta Stone failed to prove that Google used the mark to identify its own products and services).} And in Rosetta Stone Ltd., Google did not use the ROSETTA STONE marks to identify Google, but rather to identify third party competitors.\footnote{Id. at 170.} Similar scenarios may arise in the augmented reality context. An online marketplace app could use physical trademarks as markers to trigger virtual suggestions touting the availability of similar products on its website. Likewise, augmented reality browsers could utilize virtual advertising programs that recognize physical trademarks like keywords. But since both uses are nominative, there
would be no dilution claim. However, if a business uses physical trademarks to directly advertise its own goods or services, the outcome might be different. Suppose a green company develops an app that provides advertisements for its own earth friendly alternatives whenever the user picks up a product bearing the logo of an environmentally harmful company. In such a situation, the green company is using the mark of the environmentally harmful company to identify its own goods or services, and thus satisfies the TDRA requirement that the defendant used a mark as a “mark or trade name.”

D. Use in Commerce

As a threshold matter, dilution requires that the junior user use the senior user’s mark “in commerce.” Augmented reality browsers may employ programs that resemble Google’s AdWords and Keyword Suggestion Tool. Google’s Keyword Suggestion Tool recommends keywords to advertisers and AdWords allows advertisers to purchase keywords that trigger sponsored link advertisements. But instead of inputting search requests into a search engine, digital advertisements would be generated whenever users look at certain physical objects or trademarks. If an entity like Google suggests and sells trademarks to advertisers to use to prompt digital advertisements, the use in commerce requirement will likely be satisfied, as demonstrated by *Rescuecom Corp. v. Google Inc.* below.

In *Rescuecom Corp.*, the Second Circuit held that Google’s sale of the Rescuecom marks to advertising customers constituted “use in commerce.” The court revisited its prior decision, *1-800 Contacts, Inc. v. WhenU.Com, Inc.*, to highlight notable differences between the facts underlying the two cases. In *1-800 Contacts*, the defendant WhenU provided free proprietary software to users as part of a bundle downloaded from the internet. Based on search terms or websites visited, the software generated relevant pop-up advertisements that were randomly selected from directory categories. *1-800 alleged trademark infringement because the software suggested competitor advertisements whenever users accessed 1-800’s website.* The Second Circuit found that the internet marketing company was

148. Id.
150. See WASSOM, supra note 122, at 121.
151. Rescuecom Corp., 562 F.3d at 127.
152. Id. at 128–29.
153. 1-800 Contacts, Inc. v. WhenU.Com, Inc., 414 F.3d 400, 404 (2d Cir. 2005).
154. Id.
155. Id. at 405.
not liable for infringement because it did not use the 1-800 CONTACTS mark.156 Furthermore, the internet marketing company’s program did not allow clients to purchase specific keywords. 157

Rescuecom Corp. explained that 1-800 Contacts was distinguishable in several important respects.158 First, in 1-800 Contacts, WhenU did not use or reproduce the 1-800 CONTACTS mark; instead, it used 1-800 Contacts’ website address.159 In Rescuecom Corp. however, Google sold the RESCUECOM mark to prompt sponsored link advertisements.160 And second, WhenU did not sell trademarks to use as keywords to advertising customers, nor did it “otherwise manipulate which category-related advertisement will pop up in response to any particular terms on the internal directory.”161 In other words, the proprietary software relied on a category associated with the search term or website, rather than the actual search term or website itself; whereas, Google allowed advertisers to purchase the RESCUECOM mark and use the mark to trigger specific sponsored advertisements.162 Furthermore, Google used its Keyword Suggestion Tool to recommend that advertisers purchase the Rescuecom trademark.163

E. Likelihood of Dilution: Association Arising from Similarity

But even if trademark use and use in commerce are satisfied, the question remains whether there is a likelihood of dilution. As mentioned earlier, dilution by blurring and dilution by tarnishment both require “association arising from the similarity between a mark or trade name and a famous mark.”164 Dilution by blurring traditionally occurs when a company with an unrelated product adopts a famous mark as its own.165 When a company starts selling Rogaine rugs, the value of the ROGAINE mark is diluted because it no longer uniquely identifies the hair product. The new association with floor decoration diminishes the formerly singular association with the hair product. In the augmented reality context however, if Company A’s physical advertisement featuring the SCHWIFTY SPAGHETTI mark

156. See id. at 409.
157. Id.
159. Id.
160. Id. at 129.
161. Id. (quoting 1-800 Contacts, Inc. v. WhenU.Com, Inc., 414 F.3d 400, 411 (2d Cir. 2005)).
162. See id.
163. Id.
triggers a virtual overlay advertisement for Company B’s RICK RAVIOLI, it is questionable whether the association arising from the similarity between the SCHWIFTY mark that Company B uses and the famous SCHWIFTY mark. Admittedly, both marks are identical. But the consumer does not necessarily associate SCHWIFTY with Company B because each product bears its own distinct mark. Moreover, the mental connection is attenuated because the consumer is not actively searching for the term SCHWIFTY; rather, she is merely passively observing her surroundings and receiving a pop-up advertisement for RICK RAVIOLI.

V. DEFENSES TO AUGMENTED REALITY DILUTION

Tension exists between the First Amendment and dilution because the Constitution guarantees free speech, but trademark law allows regulation of the use of famous marks. In E.S.S. Entm’t 2000, Inc. v. Rock Star Videos, Inc., the owner of the Play Pen Gentlemen’s Club alleged that the manufacturer of the Grand Theft Auto: San Andreas video game infringed its trade mark and trade dress with its digital depiction of the Pig Pen strip club. Although the Ninth Circuit observed that the real-life strip club possessed “little cultural significance,” the court held that Rock Star’s portrayal of the club served the expressive purpose of representing a “cartoon-style parody of East Lost Angeles.” Furthermore, the court reasoned that the “reasonable consumer” would not mistakenly assume that the Pig Pen was sponsored by the owners of the Play Pen.

And in Sherwood 48 Assoc. v. Sony Corp. of Am., Sony used digital pictures of Times Squares to create an altered version of the location for its 2002 film Spider-Man. The owners of the Times Square buildings sued Sony for various claims, including trademark infringement, trade dress infringement, and trespass, because Sony digitally replaced billboard advertisements that had appeared on the buildings when the pictures were taken.

With respect to trademark and trade dress infringement, the court concluded that the digital alteration of the advertisements was protected under the First Amendment.

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166. Cf. Robert C. Denicola, Trademarks as Speech: Constitutional Implications of the Emerging Rationales for the Protection of the Trade Symbols, 1982 Wis. L. Rev. 158, 195–96 (1982) (“Famous trademarks offer a particularly powerful means of conjuring up the image of their owners, and thus become an important . . . part of the public vocabulary. Rules restricting the use of well-known trademarks may therefore restrict the communication of ideas.”).

167. Id. at 1100.

168. Id. at 1100–1101.


171. Id.
Amendment because it served artistic purposes. The Second Circuit, how-

ever, found that the First Amendment was not an absolute bar to trade dress

claims at the pleading stage.

The TDRA balances free speech concerns with protection of the good

will associated with famous marks. Even where the plaintiff has estab-

lished a prima facie case for dilution, the defendant may still not be liable for
dilution. The TDRA excludes the following from its reach:

(A) Any fair use, including a nominative or descriptive

fair use, or facilitation of such fair use, of a famous mark by

another person other than as a designation of source for the

person’s own goods or services, including use in connection

with—

(i) advertising or promotion that permits consumers
to compare goods or services; or

(ii) identifying and parodying, criticizing, or com-

menting upon the famous mark owner or the goods or

services of the famous mark owner.

(B) All forms of news reporting and news commentary.

(C) Any noncommercial use of a mark.

The nominative fair use defense applies “where a defendant uses the
mark to refer to the trademarked good itself.” And descriptive fair use, or
classic fair use, is invoked where a mark is used to describe a product “in a
non-trademark sense.” The statute also expressly includes defenses for
comparative advertising, parody, news reporting and commentary, and non-
commercial use.

A. Comparative Advertising

According to Smith v. Chanel, the use of a competitor’s mark in com-
parative advertising is permissible, absent misrepresentation or a likelihood

172. Id.
174. See Hearing, supra note 64, at 6.
176. Adobe Sys. Inc. v. Christenson, 809 F.3d 1071, 1081 (9th Cir. 2015) (quoting Toyota Motor
Sales, U.S.A., Inc. v. Tabari, 610 F.3d 1171, 1175 (9th Cir. 2010)) (internal quotation marks omitted).
177. McCarthy, supra note 48, § 11:46.
If a user’s observation of Company ABC’s mark prompts an advertisement for Company XYZ that appears in her periphery, the user can compare the claims of both advertisements. Thus, the user would not be associating the goods or services of Company ABC with Company XYZ, but rather would compare the assertions of the respective businesses. But if the advertisement for Company XYZ completely covers Company ABC’s mark, the viability of such a defense may diminish, especially if the overlay is opaque.

B. Parody and Social Commentary

Aside from overlays advertising competing goods or services, overlays could also alter marks for artistic, social, political, economic, or environmental purposes. If augmented reality becomes a platform for user content similar to YouTube, the potential for individuals and organizations to use physical trademarks as markers for digital messages is immense. Anytime a company is involved in a controversy, manipulation of the brand’s logo would provide a constant reminder of the underlying scandal. For example, the iPhone app “The Leak in Your Hometown” allows users to see the BP Deepwater Horizon oil spill. The user hovers her phone camera over the BP logo at a gas station and an overlay of a broken pipe spewing oil appears. The project promotes the “repurposing of corporate icons” as a means of artistic expression. Although the app seems to implicate dilution by tarnishment because it has an adverse effect on BP’s reputation, the app is not for sale so there is no “use of a mark or trade name in commerce” and the virtual alteration of the mark may qualify as a protected parody.

In a resonant case decided under Missouri’s anti-dilution statute, beer distributor Anheuser-Busch sued publishing business Balducci Publications for dilution by tarnishment, among other claims, because the publisher printed a mock advertisement for “Michelob Oily” in its humor magazine. The fictional advertisement states, “ONE TASTE AND YOU’LL DRINK IT OILY” and features an image of a can of Michelob Dry pouring oil over a fish. In addition, Anheuser-Busch’s “A & Eagle” design is depicted

180. See WASSOM, supra note 122, at 123.
182. Id.
183. Id.
185. Anheuser-Busch, Inc. v. Balducci Publ’n, 28 F.3d 769, 772 (8th Cir. 1994).
186. Id.
soaked in oil below the Shell Oil Company symbol. The false advertisement was intended to refer to the “then-recent Shell oil spill in the Gasconade River—a source of Anheuser-Busch’s water supply.” In an opinion lacking any sense of humor, the Eighth Circuit rejected the defendant’s argument that the parody was protected under the First Amendment because the ad criticized the quality of the mark holder’s product. Moreover, the court held that the use constituted dilution by tarnishment because the ad was located on the back cover of the humor magazine; thus, the casual observer might fail to appreciate its parodic nature.

More recently, in *Louis Vuitton Malletier, S.A. v. My Other Bag, Inc.*, My Other Bag sold canvas tote bags with graphics resembling expensive Louis Vuitton handbags on one side and the “My Other Bag” slogan on the other side. The District Court suggested that Louis Vuitton “just cannot take a joke,” and held that MOB’s use of the Louis Vuitton marks was a protected parody. The Second Circuit agreed, explaining that MOB intended to poke fun at Louis Vuitton’s luxury image because “MOB’s plebian product” clearly indicated that MOB was not affiliated with Louis Vuitton. Although the tote bags evoked LV handbags, the juxtaposition of the designer images with MOB’s casual product conveyed the contradiction that parody requires. Indeed, the crux of the joke was that the inexpensive bags were designated as “My Other Bag.”

Suppose an organization combating obesity creates an app that criticizes fast food by altering restaurant logos. Thus, every time a consumer looks at a “McDonald’s” sign, a digital overlay would instead spell out “McWrongald’s” in a similar font and include information critiquing calorie content. Likewise, “Wendy’s Old Fashioned Hamburger” would change into “Weighty’s Old Fashioned Diabetes.” But even assuming that the app is sold and satisfies the use in commerce requirement, there would be a persuasive parody defense since the app’s alteration of the marks “convey[s] two simultaneous—and contradictory—messages: that it is the original, but also

187. Id.
188. Id.
189. See id. at 778.
190. Id.
192. Id. at 430, 440.
194. See id.
that it is not the original and is instead a parody.\textsuperscript{196} Furthermore, the app
would not be promoting a competing product, and according to \textit{Deere & Co. v. MTD Prod., Inc.},
"more leeway for alterations is appropriate in the context of satiric expression and humorous ads for noncompeting products."
\textsuperscript{197}

\textbf{C. Noncommercial Use}

Finally, even if an augmented reality app is sold, the use may still fall under the noncommercial exception if the primary purpose of the app is social commentary.\textsuperscript{198} The mere presence of economic incentive does not preclude a noncommercial defense.\textsuperscript{199} For instance, in \textit{Mattel, Inc. v. MCA Records}, Mattel brought action against MCA and other music companies that produced and sold a song entitled “Barbie Girl” by the Danish band Aqua.\textsuperscript{200} The Ninth Circuit observed that MCA engaged in dilution by blurring, but ultimately found that the defendant’s use was exempted under the noncommercial exception to the FTDA.\textsuperscript{201} Although the court found that the BARBIE mark served a commercial purpose because it was used to sell copies of the song, the use was not “purely commercial speech” under the First Amendment.\textsuperscript{202} Indeed, the song also performed an expressive function because it ridiculed the Barbie image.\textsuperscript{203}

\textbf{VI. CONCLUSION}

Interruptive digital advertisements may impair the advertising ability of physical trademarks and parodic apps may tarnish brand reputations. Nevertheless, keyword advertising cases and TDRA defenses indicate that the viability of a dilution claim in the context of augmented reality overlays may be narrow. Should the TDRA expressly address dilution by augmented reality? On one hand, the selling power of physical trademarks may be diminished by digital pop-up overlays, especially if the public grows accustomed to physical-digital pairings. Arguably, if a physical advertisement for

\textsuperscript{196} See \textit{id. at} 434.

\textsuperscript{197} Deere \& Co. v. MTD Prod., Inc., 41 F.3d 39, 45 (2d Cir. 1994).

\textsuperscript{198} See \textit{Smith v. Wal-Mart Stores, Inc.}, 537 F. Supp. 2d 1302, 1339 (N.D. Ga. 2008) (quoting Procter \& Gamble Co. v. Anway Corp., 242 F.3d 539, 552–53 (5th Cir.2001)) ("[s]peech that is principally based on religious or political convictions, but which may also benefit the speaker economically, would fall short of the requirement that the speech was economically motivated and therefore would be considered noncommercial.") (internal quotations marks omitted).

\textsuperscript{199} See \textit{id}.

\textsuperscript{200} Mattel, Inc. v. MCA Records, Inc., 296 F.3d 894, 899 (9th Cir. 2002).

\textsuperscript{201} See \textit{id. at} 903, 906–907.

\textsuperscript{202} See \textit{id. at} 906–907.

\textsuperscript{203} \textit{Id. at} 906–907.
Company ABC almost always triggers a digital advertisement for Company XYZ, consumers may come to associate ABC with XYZ, and this diminishes the unique hold that ABC has on consumers. In addition, an augmented reality advertisement is more engaging and interactive than a physical advertisement; thus, its effect on consumers is more substantial. If a consumer views the physical advertisement for Fluffy Furniture, but then is prompted to experience an augmented reality advertisement for Cushy Couches that allows the user to visualize digital furniture in her home, the impact of Fluffy pales in comparison to Cushy. Furthermore, augmented reality advertising is comparatively less expensive than print and broadcast advertising. So perhaps mark holders with physical advertisements should receive greater protection for the additional investment.

But at the same time, the scope of a dilution claim is intentionally limited. Dilution law is not intended to extend “rights in gross” to trademark owners that are the “equivalent of granting real property interests.” Furthermore, lawmakers would risk running afoul of the First Amendment by expanding the TDRA to include broader protection for dilution by augmented reality. And companies can foreseeably seek relief through alternative avenues. As with any form of technological advancement, content creators will benefit from embracing innovation to stay ahead. For example, office furniture designer Herman Miller introduced virtual versions of its “Aeron” chairs to combat knockoff products in the online virtual world Second Life. Herman Miller even offered to exchange knockoff items for authentic Herman Miller chairs at no cost. Either way, courts should be careful to avoid bending the TDRA to accommodate an augmented reality dilution claim.


208. Id.