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Branding Beyond Boundaries: The Future of Trademarks and Advertising in Augmented Reality

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BRANDING BEYOND BOUNDARIES: THE FUTURE OF TRADEMARKS AND ADVERTISING IN AUGMENTED REALITY

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I. INTRODUCTION

On February 2, 2024, Apple released the Apple Vision Pro, a revolutionary spatial computer, marking a transformative step in how individuals work, collaborate, and engage with entertainment.[1] The device is designed to redefine user interaction within digital and physical environments.[2] Operating through intuitive eye, hand, and voice inputs, the Apple Vision Pro offers over 1,000,000 apps as well as over 600 unique experiences.[3] This marks a significant shift in consumer and retail interactions, exemplified further by brands like L'Oréal and Sephora using augmented reality (AR) to simulate makeup on users' faces, and Amazon and IKEA allowing customers to visualize products in their homes in real size.[4] These advancements in AR technology present a new marketplace for consumers and retailers and expand user interaction and consumer engagement in the digital marketplace while simultaneously raising challenges within the spheres of advertising and trademark law, specifically around issues of infringement risks and deceptive advertising practices in immersive environments.

For instance, trademark infringement and dilution standards have not adequately evolved to address the needs of the mark owner, the consumer, or the competitor in the world of AR e-commerce. Consider this hypothetical: an AR shopping app overlays digital advertisements for its own products whenever a user points their smartphone at a competitor's storefront, and at a competitor's goods within a neutral storefront, using image recognition to trigger the display of these ads. This could result in harm to the brand owner, confusion to the consumer, and a lack of understanding of legal boundaries for competitors and mark owners wishing to protect their reputation in the AR landscape.

In addition, advertising in AR introduces complex challenges in that

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1. *Apple Vision Pro arrives in Apple Store locations across the U.S.*, APPLE (last visited Feb. 2, 2024), https://www.apple.com/newsroom/2024/02/apple-vision-pro-arrives-in-apple-store-locations-across-the-us/.

2. *Id*.

3. *Id*.

4. Yong-Chin Tan et al., *Augmented Reality in Retail and Its Impact on Sales*, SAGEJOURNALS (Feb. 1, 2021), https:// journals.sagepub.com/doi/full/10.1177/0022242921995449.

the technology enables advertisers to craft campaigns that are exceptionally targeted and personalized, achieving a level of precision in consumer engagement that was previously unattainable. For instance, AI has the capability to dissect consumer behaviors and preferences, thereby facilitating the delivery of ads that are finely tuned to resonate with individual users.[5] For example, the restaurant Wendy's plans to use AI-enabled menu changes and suggestive selling to introduce dynamic pricing, adjusting costs during peak demand periods.[6] The enveloping nature of AR advertising might obscure the distinctions between genuine experiences and promotional content, potentially leading to deceptive practices that could mislead consumers. This intersection of technology with trademark and advertising law needs a proactive approach to regulatory frameworks, ensuring that protections keep pace with rapid advancements in AR applications. Such adaptations will be crucial to maintaining fair competition and protecting consumer interests in the digital marketplace.

Limitations of the trademark and advertising law framework in an AR environment require a reevaluation of existing legal principles. This reevaluation is necessary to develop enforceable solutions that effectively address infringement, dilution, and deceptive practices.

This Comment argues that AR presents challenges in the legal landscape that the legislative and judicial branches must address. Section II identifies the problem that arises when AR integrates digital objects into the real world, leading to potential conflicts in trademark infringement and advertising law. Section III delves into the intersection of trademark law and AR technology and proposes a revised approach to trademark law that is evolved to address virtual goods and services that transcend geographic and jurisdictional boundaries. Section IV explores the implications of AR on consumer protection and advertising law and proposes enhanced regulatory measures through clear guidelines dictating how trademarks are displayed in AR and how they can be used in advertising to prevent deceptive practices. This Comment will focus solely on the commercial use of trademarks in AR, highlighting the challenges posed by this digital medium without delving into expressive uses, which typically involve First Amendment considerations outside the scope of this discussion.

5. Mike Kaput, *AI in Advertising: Everything You Need to Know*, MKTG AI INST. (Jan. 22, 2024), https:// www.marketingaiinstitute.com/blog/ai-in-advertising.

6. Stacey Leasca, *Wendy's Is Introducing Uber-Style Surge Pricing*, FOOD AND WINE (Feb. 26, 2024), https://www. foodandwine.com/wendys-introducing-dynamic-pricing-8600506.

II. OVERVIEW OF AUGMENTED REALITY (AR) AND THE PROBLEMS IT CREATES FOR TRADEMARK AND ADVERTISING LAW

Augmented reality (AR) uses technology to overlay digital information, such as images, data, and interactive virtual objects, onto the real world.[7] AR often utilizes a variety of sources from the real world, including devices such as digital cameras, sensors, and GPS, to overlay and visually change the surrounding environment or provide additional information to the user.[8] By merging digital information and three-dimensional components with an individual's perception of the real world, AR can transform our surroundings in real-time.[9] For example, pointing your smartphone at a restaurant could display real-time reviews and menu items, merging seamlessly with the view of the establishment. As these transformations enhance the ways we connect with places like restaurants and shops, they also pave the way for broader changes and challenges in how businesses and consumers interact with these environments.

The landscape of AR technology has rapidly evolved within the last two years and is seeing a significant increase in adoption across various sectors.[10] According to a study conducted by Deloitte, 74% of companies in the study were testing Generative AI with 65% already implementing these technologies internally.[11] When looking to the future, the companies reported the two largest concerns were reputational damage and human damage.[12] Fears of reputational damage highlights how the increased use of AR technology and its prevalence in the marketplace introduces complex challenges in the domains of trademark and advertising law. Concerns over reputational damage hint at the complexities surrounding brand identity, trademark infringement, and deceptive advertising practices within augmented spaces.

7. Ariane Takano, *Diluted Reality: The Intersection of Augmented Reality and Trademark Dilution*, 17 CHI. KENT J. INTELL. PROP 193 (2018).

8. Alexander S Gillis, *augmented reality* (AR), TECHTARGET (Nov. 18, 2022), https://www.techtarget.com/whatis/ definition/augmented-reality-AR.

9. *Id*.

10. Beena Ammanath, *State of Ethics and Trust in Technology*, DELOITTE (Last accessed May 5, 2024) https://www2.deloitte.com/content/dam/Deloitte/us/Documents/ us-tte-annual-report-2023.pdf.

11. *Id*.

12. *Id*.

III. TRADEMARK LAW AND AUGMENTED REALITY (AR)

A. Recognizing the Problem: Virtual Branding in Augmented Reality (AR) Marks a Significant Shift from the Traditional Trademark Landscape and Increases the Risk of Infringement.

Brands like Nike, Gucci, and Prada are already registering their trademarks in classes specifically relating to virtual goods for use in Augmented Reality (AR).[13] In fact, many brands have already begun providing goods and services in the world of AR.[14] The social commerce industry is predicted to grow three times faster than traditional e-commerce over the next three years, and internationally, sales are expected to increase from $492 billion sales in 2021 to $1.2 trillion in 2025.[15] Sales are predicted to be driven primarily by Gen Z and Millennial social media users, with the two groups estimated to account for 62% of the global social commerce spending.[16]

Various brands across multiple industries are integrating AR-powered shopping to enrich customer engagement and streamline the shopping experience. For example, Walmart and Starbucks have leveraged AR to entertain and educate customers, offering superhero-themed experiences and digital tours, respectively.[17] Walgreens and Lowe's are employing AR for practical in-store navigation, enhancing shopping efficiency.[18] While this improves customer experience, it potentially heightens the risk of future trademark disputes and makes it harder on the justice system.[19] Specifically, as brands deeply integrate with AR platforms, distinguishing between virtual and physical trademark uses becomes increasingly complex, raising questions about the scope of protection in augmented spaces.

Additionally, well known car brands like Toyota and Hyundai use AR to showcase their latest models' features, bridging the gap between digital exploration and physical product interaction.[20] This trend extends to the fashion and beauty sectors, where brands like NYX, Urban Decay, and Lancôme, employ AR to assist consumers in visualizing makeup and

13. *Intellectual Property Concerns in Augmented Reality*, TTCONSULTANTS (Mar. 29, 2023), https://ttconsultants.com/intellectual-property-concerns-in-augmented-realityar/.

14. Yong-Chin, *supra* note 4.

15. Megan McCluskey, *Augmented Reality is the Future of Online Shopping*, TIME (Jan. 28, 2022), https://time.com/6138147/augmented -reality-shopping/.

16. *Id*.

17. Yong-Chin, *supra* note 4.

18. *Id*.

19. *Id*.

20. *Id*.

skincare products in real life.[21] The shift from tradition to virtual branding in AR illustrates a significant transformation of trademarks from the physical space to a virtual landscape and underscores the need for an updated legal framework to address potential challenges posed by AR in trademark law.

Trademark law, at its core, is designed to distinguish goods and services from one competitor to another, safeguarding both the brand identity and the consumer from confusion.[22] This principle has traditionally been applied for branding associated with physical goods and services, where a trademark is any word, name, symbol or device, or any combination used to identify and distinguish goods from others and to indicate its source.[23]

However, as brands like Nike, Gucci, and Prada venture into the world of AR by registering their trademarks for virtual goods, and as the social commerce industry experiences exponential growth in AR environments, a question emerges: How does traditional trademark law adapt to an evolving digital landscape? Trademarks are symbols of goodwill that serve to endorse products and protect against counterfeit items; originally designed for the tangible goods market, trademarks may encounter enforcement challenges within the retail AR environment.[24] This Comment discusses enforcement challenges in greater detail, examining the issues of regulating a virtual jurisdiction and the difficulties with an infringement action in AR.[25]

B. Congress and the United States Patent and Trademark Office (USPTO) Must Act to Modernize Trademark Laws in Augmented Reality (AR) Addressing Gaps in Domestic and International Enforcement.

Enforcing trademarks within Augmented Reality (AR) presents unique challenges because traditionally, trademark protection is geographically bounded. Trademark enforcement at the state level typically involves the registration of trademarks with that State's secretary of state's office, offering protection within the State's borders.[26] A federally registered

21. McCluskey, *supra* note 15.

22. *What is a trademark?*, USPTO (June 13, 2022), https://www.uspto.gov/trademarks/basics/what-trademark.

23. *Id*.

24. Sigmon, Kirk, *Intellectual Property Protection for Video Games and Virtual/Augmented Reality*, LEXISNEXIS (Feb. 26, 2024), https://plusai.lexis.com/api/permalink/6e1b3880-d7c6-42ba-bf1e-939983284708/?context=1545874

25. Infra Section III.

26. Darren Harris, *State vs Federal Trademark Protection*, NW. REGISTERED AGENT (May 26, 2023), https:// www.northwestregisteredagent.com/trademark-service/state-vs-federal.

trademark, offers national protection and exclusive rights across the U.S., allowing its owner to initiate infringement lawsuits in federal court.[27] In contrast, an unregistered trademark relies on common law rights and only provides protection within the specific geographical area where it is used, marketed, and may reasonably expand to.[28] AR's inherent nature of overlaying digital information onto the physical world, does not consider geographic boundaries. For example, AR allows tourists to explore famous landmarks like the Eiffel Tower or take virtual walking tours through iconic city streets like Time Square, all from the comfort of home.[29] This can complicate enforcement in several ways.

An AR experience can be accessed from any location, potentially infringing on state-registered trademarks outside the jurisdiction where they hold protection. This misalignment makes it difficult for state-level trademark holders to enforce their rights against infringements occurring outside their borders within the AR space. While federal trademarks offer broader protection, the USPTO's focus on enforcement at registration, with no post-registration monitoring, leaves a gap in protection against unauthorized use that develops within the AR space.[30]

Considering the rapid pace at which AR can generate potentially millions of instances of infringement within mere nanoseconds, the UPSTO should be cautious about opening the floodgates to litigation that would overwhelm the courts. To manage the challenges more effectively, the USPTO should enhance its digital monitoring tools and provide clear guidelines for companies hosting AR. These tools would employ image recognition and artificial intelligence specialized for use in AR e-commerce environments for finding unauthorized use of trademarks.

Next, the USPTO should work in conjunction with the Federal Trade Commission (FTC) to establish clear legal guidelines and best practices for AR content to prevent unintentional trademark infringements when advertising or interacting in AR e-commerce.[31] This approach aims to manage infringement proactively without the logistical nightmares of traditional legal processes.

While these solutions address domestic issues relating to trademark protection in AR, the international landscape remains unprotected.[32] In nearly all countries, including the United States, trademark law is

27. USPTO, s*upra* note 22.

28. *Id*.

29. *Augmented Reality in Tourism and Travel*, ROCK PAPER REALITY (Oct. 18, 2023), https://rockpaperreality.com/insights/ar-use-cases/augmented-reality-in-tourism-and-travel/.

30. USPTO, s*upra* note 22.

31. See *Infra* Section IV.

32. WIPO, PARIS CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY (as amended on September 27, 1979) (official translation) TRT/PARIS/001.

territorial, meaning each country is empowered to grant trademark rights and police infringement within its borders.[33] Under the Paris Convention for the Protection of Industrial Property of 1967, a mark registered in a country under this treaty is regarded as independent of other marks registered in other countries, and the mark is only entitled to legal protection under the domestic laws of those countries.[34] The Lanham Act, which governs trademark law, incorporates this reference in stating foreign trademarks in the United States are independent of the registration of its country of origin and that rights in the mark in the United States are governed by domestic law.[35] Thus, the issue remains unresolved.

The territorial nature of trademarks mainly results in trademark protection and enforcement being confined within the borders of the country where they are registered, under the domestic laws of that country. In the context of AR, which lacks physical borders and can be accessed globally, this presents challenges with users in one country interacting with digital content that may infringe on trademarks registered within another country. For example, imagine a situation where a company in Spain uses AR to advertise products sold in Spain by overlaying its digital advertisements on the physical stores of a U.S. trademark holder. Despite the infringement of the U.S. company's trademark rights, the infringing conduct may not actually occur within the United States. What if the only users able to access the infringing conduct are in Spain or abroad?

The Supreme Court has contemplated the effect of infringement when the use in commerce was solely international.[36]In *Abitron Austria GmbH v. Hetronic Int'l, Inc.*, the Supreme Court limited the application of two provisions of the Lanham Act protecting against trademark infringement to claims where the infringing use in commerce was domestic.[37] Because trademark infringement in the Lanham Act is not extraterritorial, a plaintiff must show that the infringing conduct occurred within the United States.[38] However, the resolution is complex when considering the disagreement in the Justice's opinions. Justice Jackson, siding with the majority, emphasized the definition of "use in commerce" as per the Lanham Act, stressing it should involve the mark's role in identifying goods' source within U.S. commerce.[39] However, Justice Sotomayor, joined by three Justices, wrote a concurring opinion emphasizing the

33. Abitron Austria GmbH v. Hetronic Int'l, Inc., 600 U.S. 412, 143 S. Ct. 2522, 2533 (2023).
34. *Id*.
35. *Id*. at 2533-2534.
36. *Id.* at 2527.
37. *Id*.
38. *Id*. at 2528-2529.
39. *Id*. at 2527-2545.

importance of whether the infringing conduct itself is likely to cause confusion within the U.S., arguing that the focus should be on protecting consumers from confusion wherever the confusion may occur, suggesting that the foreign conduct causing confusion in the U.S. should fall under the Lanham Act's scope.[40]

Adopting a rationale aligned with Justice Sotomayor's opinion in *Abitron* could effectively address territorial challenges presented by AR, as it would recognize infringement based on the location of consumer confusion, thus simplifying jurisdictional issues in AR environments.[41] Or, to resolve these international enforcement issues, Congress could engage in international collaboration to develop new treaties, or amend existing ones, to address cross-jurisdictional issues like those presented above. This could involve establishing mechanisms for geolocation-based enforcement, where trademark rights within AR environments would be enforced based on the geographic location portrayed or accessed within the AR experience. For example, any AR environments portraying or mimicking geographic locations in the United States could be made subject to the domestic law of that region. Alternatively, any AR environments selling goods within U.S. commerce, could be made subject to the law of that region, wherever it is accessible. While the second approach may encounter further issues with defining commerce, the first suggestion would allow individuals to bring trademark infringement claims in the location where the harm occurred.

Implementing these changes requires legislative action by Congress and subsequent adaptations by the USPTO. This includes setting up a more robust trademark registration system that integrates advanced image recognition and artificial intelligence scans into their operations and coordinating with international bodies to ensure consistent enforcement across borders.[42] To establish and enforce clear guidelines for preventing trademark infringement in AR, the USPTO would need to use its rulemaking power and ability to review its existing regulations to coordinate with the Federal Trade Commission (FTC).[43] For international enforcement of AR trademarks, the U.S. government, through the appropriate department, would need to engage in international discussions and treaty negotiations to address the cross-jurisdictional AR trademark enforcement issues.[44]

40. *Id*.

41. *Id*. at 2537.

42. *Rulemaking*, USPTO (last visited April 20, 2024) https://www.uspto.gov/ip-policy/rulemaking.

43. *Id*.

44. 22 C.F.R § 181 (2023).

C. Trademark Infringement, Likelihood of Confusion Standards, and Trademark Dilution Claims May Face Difficulties in Application in the Augmented Reality (AR) Environment.

1. Trademark Infringement and a Potential Solution to Inconsistencies in "Use in Commerce" and Likelihood of Confusion Standards

Another challenge emerges when pursuing a likelihood of confusion claim where one individual's brand within the AR e-commerce environment triggers the improper display of another company's trademark. To prevail on a trademark infringement claim, a plaintiff must establish that it has an enforceable mark that is entitled to protection under the Lanham Act; and that, without the plaintiff's consent, the defendant used the mark or a confusingly similar mark in commerce and in connection with the sale or advertising of goods or services.[45] The court's decision hinges on whether the defendant's use of the plaintiff's mark, or a similar mark, is likely to cause confusion, mistake, or to deceive.[46] For instance, imagine a user browsing an AR shopping platform, and upon pointing their phone at a generic image of sneakers, the platform overlays the Nike swoosh logo on those sneakers without permission. This could mislead the user into thinking these generic sneakers are produced or endorsed by Nike, potentially leading to consumer confusion.

The likelihood of confusion test differs circuit by circuit in the US legal system.[47] Each circuit court uses a separate "likelihood of confusion" test that examines different factors, such as similarity of the marks, sophistication of consumers, strength of the mark, and channels of commerce.[48] Under Sections 32 and 43 of the Lanham Act, infringement occurs when any person uses, in commerce, any mark in connection with the sale, offering for sale, distribution, or advertising of any goods or services on or in connection with which is likely to cause confusion.[49] The Lanham Act defines "use in commerce," as having the trademark placed in any manner on goods, containers, displays, tags, or labels affixed thereto or associated with, that are sold or transported in commerce, and on services when used or displayed in the sale or advertising of services and the services are rendered in commerce.[50]

Understanding how "use in commerce" has adapted to the digital landscape is crucial as businesses and consumers expand into the AR

45. 1-800 Contacts, Inc. v. WhenU.com, Inc., 414 F.3d 400, 406-07 (2d Cir. 2005).
46. Jack Daniel's Props. v. VIP Prods. LLC, 599 U.S. 140, 143 (2023).
47. Virgin Enters., Ltd. v. Nawab, 335 F.3d 141, 149 (2d Cir. 2003).
48. *Id*.
49. 15 U.S.C. § 1114; 15 U.S.C. § 1125(a).
50. 15 U.S.C. § 1127.

marketplace. The internet era first saw this issue with domain names that mirrored trademark names, leading to significant legal challenges. For example, in *Planned Parenthood Federation of America, Inc. v. Bucci*, the defendant registered a domain that was identical to Planned Parenthood's trademark (www.plannedparenthood.com), using it to redirect to a website that sold books opposing Planned Parenthood's views.[51] The Southern District Court of New York granted Planned Parenthood's injunction and recognized that domain names on the internet could be used in commerce similarly to a trademark in the digital space.[52] This case highlighted that domain names could function in commerce not only as addresses but also as indicators of source, misleading consumers and potentially damaging the trademark owner's reputation.

During this same period, cybersquatting emerged as a major concern, involving the registration of domain names incorporating well-known trademarks with the intent to profit from the goodwill associated with these brands.[53] This practice typically aims to sell the domains back to the trademark owners at inflated prices or use them to attract traffic for unrelated commercial gains, thus diluting the trademark's strength.[54] The legal challenges posed by cybersquatting extended beyond simple trademark infringement, requiring swift legislative action.

The legal system rapidly evolved to address these new challenges through measures such as the Anti-Cybersquatting Consumer Protection Act and the Uniform Domain Name Dispute Resolution Policy.[55] These remedies tackled the misuse of trademarks in domain names and protected the rights of trademark owners in the digital space.[56] Given the similarities in issues arising from the expansion into the internet and now AR environments, there is a pressing need for similarly quick and decisive legal responses in AR. Just as the internet prompted adaptations in trademark law, AR may require new legal frameworks or adaptations to manage the likelihood of confusion and trademark dilution in this space.

To illustrate the issues that may arise with the likelihood of confusion standards and nuances in the world of AR e-commerce, reconsider this hypothetical: an AR shopping app overlays digital advertisements for its

51. Planned Parenthood Fed'n of Am., Inc. v. Bucci, 1997 U.S. Dist. LEXIS 3338, at 2-4 (S.D.N.Y. Mar. 19, 1997).

52. *Id*. at 16-17.

53. Terese L. Arenth., *Trademark Protection in the Digital Age: Protecting Trademarks from Cybersquatting*, AMERICAN BAR (June 2019) https://www.americanbar.org/groups/business_law/resources/business-law-today/2019-june/trademark-protection-in-the-digital-age/.

54. *Id*.

55. *Id*.

56. *Id*.

own products whenever a user points their smartphone at a competitor's storefront, and at a competitor's goods within a neutral storefront, using image recognition to trigger the display of these ads, potentially altering consumer perception, and causing confusion between the marks. Upon first glance, this may seem like an issue of initial interest confusion, which is actionable under the Lanham Act.[57] Initial interest confusion occurs when a customer is lured to one product by the similarity of the mark to another, even if the customer realizes the true source of the goods before the sale is consummated.[58] In *Promatek Industries, Ltd. v. Equitrac Corp.*, the Seventh Circuit held that placing a competitor's trademark in a metatag creates a likelihood of confusion comparable to placing a sign with another trademark in front of one's store. This holding creates ambiguity. For instance, if a competitor is merely displaying their own product in AR e-commerce based on the association with a competitor's brand, is there an actual likelihood of consumer confusion, similar to in *Promatek*? The answer, due to the complexity and recent updates of AR, has yet to be answered by the judiciary or legislators.

In *1-800 Contacts, Inc. v. WhenU.com, Inc.*, the Second Circuit addressed a situation where WhenU used 1-800 Contact's trademark in software that promoted ads for 1-800 Contacts' competitors when users searched for 1-800 Contacts online. The court ruled that WhenU's use did not constitute trademark infringement since there was no actual display of the trademark with the ads, and the ads did not confuse consumers about the source of the goods or services.[59] The rationale is that internally using a trademark in a manner that triggers a competitor's mark is not inherently confusing for the consumer so long as there is no outward display, or public communication of the association.[60] The Second Circuit analogies this use to an individual's private thoughts about a trademark, which do not inherently lead to consumer confusion about the source of goods or services.[61] The court noted vendors routinely benefit from their competitor's name recognition, such as when store-brand generics are positioned next to the trademarked items they emulate to encourage consumers to consider a more affordable option.[62] While this is logical in a grocery store where store-brand generics are displayed alongside their competitor's products in one central location, this practice presents problems in an AR environment where consumer perceptions can be significantly influenced by the immersive and interactive nature of the

57. Promatek Industries, Ltd. v. Equitrac Corp., 300 F.3d 808, 812 (7th Cir. 2002).
58. *Id*.
59. 1-800 Contacts, Inc. v. WhenU.com, Inc., 414 F.3d 400, 411 (2d Cir. 2005).
60. *Id*.
61. *Id*. at 409.
62. *Id*. at 411.

platform. The lack of consumer sophistication in understanding the difference between overlaid advertisements in AR drastically differs from product placement in a grocery store or an internet coupon triggered by internal use of a trademark; here, consumers are directly confronted with an alteration of their reality by misplacing marks from where ordinarily displayed in real life.

Applying the Second Circuit's analysis in *1-800 Contacts* to the hypothetical of overlaying digital advertisements onto a competitor's storefront or onto a competitor's goods within a neutral storefront, simply by pointing a phone at the storefront, the association of the competitors goods overlaying the mark owner's goods appears to be an internal decision that does not qualify as consumer confusion under the Lanham Act. This application seems to allow, and even encourage, infringing behavior. To resolve this issue would likely require an upheaval of the current legal framework for the likelihood of confusion standard, or a universal definition for "use in commerce' amongst circuit courts. A universal definition for "use in commerce" could yield helpful results; however, the courts already disagree on the application of the statutory definition contained within the Lanham Act.[63] Before altering the core of trademark infringement litigation, a consistent application among courts of "use in commerce" in regards to AR infringement litigation may account for this gap

Applying the principles from *1-800 Contacts* consistently across courts when faced with trademark infringement in AR would require a careful examination of how AR affects consumer perception. If an AR application's use of a trademark is deemed internal or analogous to thought, without creating an association in the minds of consumers, it should not constitute infringement.[64] However, this must be balanced against the immersive and interactive nature of AR, which can significantly influence consumer perceptions and potentially lead to confusion. Therefore, courts should apply this theory in conjunction with *Promatek*.[65] If an AR application causes initial interest confusion by overlaying digital advertisements based on a competitor's trademark, it could be considered infringement. Courts would need to evaluate whether the AR experience causes confusion at any state of the consumer interaction, not just at the point of sale. This framework would also involve a judicial approach of consistently adopting the understanding that "use in commerce" and "likelihood of confusion" include imposing brands over others in the context of digital and augmented realities. Where *1-800 Contacts* ensures fair competition in markets adapted to

63. Sensient Techs. Corp. v. SensoryEffects Flavor Co., 613 F.3d 754, 761-62 (8th Cir. 2010).

64. 1-800 Contacts, Inc. v. WhenU.com, Inc., 414 F.3d 400, 409 (2d Cir. 2005).

65. Promatek Industries, Ltd. v. Equitrac Corp., 300 F.3d 808, 812 (7th Cir. 2002).

traditional product placement settings, this framework protects retailers and consumers in the AR environment where the marketplace may not always be what it seems, and uncertainty can be costly.[66]

Following the discussion of the likelihood of confusion in AR e-commerce environments, it is evident that traditional interpretations of trademark infringement face challenges in adapting to the nuanced scenarios presented by AR technology. The hypothetical underscored these challenges, highlighting how current legal frameworks might not adequately address the intricacies of AR-induced consumer confusion or the inadvertent triggering of another company's trademark. This implies an urgent need to reconsider how traditional legal tests for confusion are applied in digitally immersive environments, where user interaction can drastically differ from conventional contexts. The suggested framework above, however, does not account for situations where likelihood of confusion is not required, and an imitating competitor reaps financial rewards from the good reputation of another's brand.[67]

2. The Application of Dilution Standards in AR Raises Issues for Trademark Law

Trademark dilution, distinct from infringement, refers to the weakening of a famous mark's distinctiveness or reputation through unauthorized use, which can occur without causing consumer confusion.[68] Under the Lanham Act, dilution can happen in two main ways: blurring and tarnishment.[69] Blurring dilutes the distinctiveness of a mark by using it with dissimilar products or services, while tarnishment involves using the mark in a way that could harm the mark's reputation, often by association with inferior or unsavory products or contexts.[70] This differentiation is crucial in AR, where blending of physical and virtual elements can obscure brand identities more readily than in traditional settings.

In the hypothetical related to the overlaying of a storefront in an AR environment outlined above, a valid dilution claim may already exist if the competitor's storefront or product designs are considered famous marks that are widely recognized by the general public of the United

66. 1-800 Contacts, Inc. v. WhenU.com, Inc., 414 F.3d 400, 409 (2d Cir. 2005).

67. Jack Daniel's Props. v. VIP Prods. LLC, 599 U.S. 140, 170. (2023).

68. *Id*. at 169-70.

69. Kristin Kosinski, *The Intersection of Artificial Intelligence and Federal Trademark Law*, MUNCK WILSON MANDALA (Nov. 14, 2023), https://www.munckwilson.com/news/the-intersection-of-artificial-intelligence-and-federal-trademark-law/.

70. *Id*.

States.[71] If the competitor overlays its product or trademark over the famous trademark, and that results in an association with dissimilar products or services that impair the distinctiveness of the famous mark and cause harm, then blurring has occurred, and the injured party may seek an injunction under the Lanham Act.[72]

Blurring specifically refers to an association that impairs the distinctiveness of a famous mark. [73] The same result applies if the same situation causes harm to the mark's reputation, known as tarnishment, by associating it with inferior or unsavory products or contexts.[74] Absent any fair use defenses alleged by the diluter, the action only works when the initial mark is considered famous.[75] Enhanced understanding of dilution in AR could help mitigate risks to brand integrity by preemptively addressing how virtual displays interact with recognized trademarks.

The dilution framework, however, is not without its complications in AR environments. The dynamic nature of AR content presents challenges for monitoring and enforcing dilution claims on user-generated content. Real-time changes and the potential for unintentional dilution by users complicate the application of traditional dilution protections. For instance, consider an AR application that enables creating and editing new or existing products in the virtual world. Imagine a user records a video where they tarnish or blur a famous trademark by superimposing an unrelated or unsavory brand on the original mark, and the video goes viral. Imagine this type of video begins trending and individuals all over the world are diluting the famous trademark, or multiple famous trademarks. There is an unanswered question as to whether the programmer, the users, the platform, or one of the manufacturers would be liable for the dilution.

D. Congressional Response for Augmented Reality (AR) and Trademark Law

While the idea of amending the definition of dilution claims to specifically address AR environments is intriguing, it may be more practical to develop guidelines or legal interpretations that apply the existing framework of the Lanham Act to AR. First, courts or the legislature should employ the suggested clarifications above, adopting a clearer universal acceptance for how terms like "use in commerce" and

71. *Jack Daniel's Props.,* 599 U.S. 140, 169-70.
72. 15 U.S.C. § 1125(c).
73. *Id*.
74. *Id*.
75. *Id*.

"public recognition" apply in AR e-commerce trademark disputes.[76] Next, the USPTO should employ clear guidelines for companies hosting AR. Currently, a non-famous mark does not have protection against tarnishment or blurring, and the route to remedy may be difficult.

For example, a ban of the association of one mark with another dissimilar mark, or with an inferior or unsavory product, aims to protect the distinctive quality of the famous mark rather than ensuring consumers expectations about quality, which relate more directly to infringement issues. Instead of mandating a ban, the USPTO can encourage AR platforms to conform to these practices by working with the FTC to produce regulatory guidance on best practices under the theory that doing otherwise would cause consumer deception. In fact, in addressing these issues, it is possible that the appropriate solutions may not solely reside within the realm of trademark law but could instead be found in other areas of law. For example, the FTC could issue an advisory opinion that encompasses the gaps in the likelihood of confusion or dilution issues through updated deceptive practices regulations in advertising law.

IV. ADVERTISING LAW AND AUGMENTED REALITY (AR)

A. Recognizing the Problem: Artificial Intelligence (AI) and Augmented Reality's (AR's) Impact on Advertising Highlights the Urgent Need for Clarity in the Intersection of Trademark and Advertising Law.

On the surface, Augmented Reality's (AR's) rapid integration into advertising and shopping experiences has largely benefited both consumers and businesses. Over half of surveyed consumers for an international cosmetics and beauty retailer suggested AR provides a more enjoyable shopping experience.[77] In fact, 56% of shoppers surveyed indicated AR gives them more confidence about the quality of products and 61% said they prefer to shop with retailers that offer AR.[78] This preference for AR-enabled shopping experiences underscores a growing consumer demand for interactive and immersive retail environments, highlighting a trend towards digital engagement in consumer decision-making processes. Even though 52% of retailers reported not being ready to integrate AR, its integration decreases shopper anxiety, increases

76. *Id*.

77. Srinivas K Reddy, *How Augmented Reality Can — and Can't — Help Your Brand*, HARVARD BUS. REVIEW (Mar. 29, 2022), https://hbr.org/2022/03/how-augmented-reality-can-and-cant-help-your-brand.

78. *Id*.

shopper use, and grows retailers' revenue.[79]

Major companies continue to demonstrate how AI and AR are reshaping retail strategies to enhance customer experience and business profitability. Lead advertising platforms like Google Ads and Meta Ads already use AI to sell, target, and place ads.[80] For example, Facebook uses frequency and relevancy to determine the price and display rate of advertisements on Facebook and Instagram.[81] This integration of AI and AR into marketing strategies signifies a shift towards more personalized and responsive consumer engagement, leveraging data analytics to optimize advertising effectiveness and customer satisfaction. The surge in marketing and branding initiatives within the AR environment has significantly heightened the risk of trademark infringement and deceptive advertising practices.[82] The overlap of AR with trademark and advertising law demands proactive regulatory updates. These updates are essential to keep pace with rapid advancements in AR applications, ensuring fair competition and protecting consumer interests in the digital marketplace.

As businesses navigate AR, distinguishing between genuine and unauthorized use of trademarks becomes increasingly challenging. This complexity is compounded by AR's ability to overlay digital content onto the real world, merging the boundaries between digital and physical brand representations. The immersive nature of AR advertising raises questions regarding the visibility and recognition of disclosures, potentially complicating compliance with advertising regulations. This new advertising frontier introduces significant challenges for consumer protection and trademark integrity.

In the sections that follow, this Comment will delve into the FTC's current stance on deceptive advertising and emphasize the urgent need for collaboration between the FTC and the USPTO in crafting AR-specific advertising guidelines. This evolving landscape calls for a reevaluation of the existing legal frameworks to ensure they adequately address the new challenges of AR technology and its impact on consumer rights and brand protection. These discussions aim to shed light on how regulatory bodies can adapt to safeguard trademarks and protect consumers through the lens of advertising law.

79. *Id*.

80. Mike Kaput, *AI in Advertising: Everything You Need to Know*, MKTG AI INST. (Jan. 22, 2024), https:// www.marketingaiinstitute.com/blog/ai-in-advertising.

81. *Id*.

82. McCluskey, *supra* note 15.

B. Enacting Clearer Guidelines for Advertising With Trademarks in Augmented Reality (AR), by Utilizing the Federal Trade Commission (FTC), Will Reduce Consumer Harm and Trademark Infringement.

1. The Federal Trade Commission (FTC) and the agency's current impact on Augmented Reality (AR), Trademark, and Advertising Law

The FTC is a U.S. federal agency tasked with protecting consumers and promoting competition.[83] The FTC characterizes deceptive advertising as any marketing practices that mislead or are likely to mislead the consumer.[84] Such deceptive activities encompass any omission, misrepresentation, or act that misleads a consumer acting reasonably under the circumstances.[85] An act or practice is unfair if it results in, or poses a significant risk of, substantial harm to consumers.[86] The harm must be material, meaning that it is not reasonably unavoidable by consumers.[87] However, if the benefits to consumers or competition outweigh the potential harms, then the practice might not be considered either unfair or deceptive.[88] The FTC assesses deception from the perspective of a reasonable consumer, focusing on the claims that could influence the consumer's decisions or actions.[89] Simply, the FTC ensures that ads do not trick consumers and that any harmful effects from ads are significant and unavoidable unless the benefits clearly outweigh the harm.

The FTC's stance on deceptive advertising is clear: advertisements must be truthful, not misleading, and when appropriate, backed by scientific evidence.[90] Additionally, the same consumer protection laws that apply to commercial activities in other media apply online, including in activities in the mobile marketplace.[91] The FTC's commitment to safeguarding consumers from deceptive advertising should extend to the use of trademarks in advertisements, emphasizing that the presentation of trademarks must not mislead consumers regarding the source, affiliation, or endorsement of products or services. The clarity and truthfulness

83. 15 U.S.C. §45 (a)(1).

84. 15 U.S.C. §45 (n).

85. *Id*.

86. *Id*.

87. *Id*.

88. *Id*.

89. *Id*.

90. FED. TRADE COMM'N, HOW TO MAKE EFFECTIVE DISCLOSURES IN DIGITAL ADVERTISING 9 (Mar. 2013), https://www.ftc.gov/system/files/documents/plain-language/bus41-dot-com-disclosures-information-about-online-advertising.pdf.

91. *Id*. at 2.

required by the FTC are crucial when trademarks are utilized within AR advertising spaces, where the potential for consumer confusion is heightened due to the immersive nature of the technology.

While the USPTO rulemaking capabilities are limited to the scope of addressing the procedures and practices related to the filing, examination, and registration of patents and trademarks, the FTC has the authority to make rules regarding deceptive practices and act upon them.[92] This includes the creation of interpretive rules, policy statements, and substantive rules that outline what practices are considered unfair or deceptive.[93] The FTC may initiate these rulemaking processes independently or in response to petitions from interested parties.[94] Interpretive rules explain how the FTC interprets laws and regulations, while substantive rules are legally binding.[95] The FTC can decide and enforce rules on what is fair in advertising, extending its power beyond mere interpretations to actual regulations that must be followed.

The authority granted to the FTC under the FTC Act not only enables the commission to initiate administrative enforcement proceedings and obtain cease and desist orders to remedy violations of the Act, but also reflects an essential aspect of administrative oversight where the judicial process may not adequately address the nuances of digital and AR spaces.[96] Following a final order, the FTC may proceed directly to court without administrative proceedings to seek a permanent injunction and legal remedies for consumer compensation in court.[97] This means the FTC possesses the authority to take enforcement actions against deceptive practices as they occur in real-time, across various platforms, including AR. The proactive enforcement capabilities of the FTC compliment the USPTO's registration system by addressing trademark misuse post-registration, thereby filling a crucial gap in protecting consumers and trademark owners in the digital and AR spaces where traditional judicial interventions may lag. The FTC's ability to initiate administrative and legal actions against deceptive advertising practices also provides remedy where the geographic enforcement issues arising under trademark law in AR are unaddressed.

Together, the FTC and USPTO should develop clear, comprehensive standards for AR advertising focusing on transparency, proper disclosure, explicit consumer consent for AR advertisements, and stringent guidelines for trademark portrayal in AR to prevent deception.

92. USPTO *supra* note 42.
93. 1 Antitrust Laws and Trade Regulation, 2nd Edition § 5.05 (2024).
94. *Id*.
95. *Id*.
96. FTC v. Nat'l Urological Grp., Inc., 80 F.4th 1236, 1242 (11th Cir. 2023).
97. *Id*.

2. Proposed Reforms For the Intersection of Augmented Reality (AR), Trademarks, and Advertising Law

First, the FTC and USPTO should provide guidance on how to be transparent in a disclosure. When a mark overlays another mark or product in AR, the disclosure should identify the relationship, or lack thereof, between the marks or environment if such a relationship could influence the consumer's purchasing decision. For instance, if a trademark is overlaid on a competitor's product, it should be explicitly stated that the overlaid trademark does not represent the actual source or sponsorship of the product in view. If the overlay is sponsored content or an advertisement it should follow existing FTC guidelines and indicate such to the consumer. Any material connections between the AR host, content creator, or mark owner and the products or services featured in the AR environment should be disclosed.[98]

Second, the FTC should provide guidance mirroring the ".com" disclosure rules in terms of proper disclosure when a mark is being overlaid in a digital environment.[99] For example, disclosures informing consumers that a trademark is being overlaid in an AR e-commerce environment should appear before the consumer sees the advertisement.[100] Additionally, disclosures should be in an appropriate context for the environment in which they are accessed. Given the immersive nature of AR, the disclosures likely should be integrated into the experience in a way that ensures they are seen and understood without breaking from the perception or requiring the user to lose sight of the trademarks, but still maintaining the clarity of the information conveyed. Specifically, disclosures should be clear, prominent, and make consumers aware without requiring the user to leave the AR environment or lose visibility of the trademarks.[101] The disclosures should last long enough for users to notice and appear in plain language in a readable font size. Considering the immersive environment, sensory or auditory disclosures should be addressed requiring a reasonable volume and speed. When the result of an advertisement where the trademark or branding being overlaid changes the users perception, explicit consent should be required after providing adequate disclosure that adheres to the rules stated in this paragraph. Disclosures in AR should be as intuitive and non-disruptive as the medium itself, providing clear information without detracting from the AR experience.

Finally, the FTC and USPTO should release guidance for AR hosts to

98. FED. TRADE COMM'N, *supra* note 90, at 16.

99. *Id*. at 15-20.

100. *Id*.

101. *Id*.

provide retailers, warning of the potential consequences of allowing dilution of marks on their platforms. Failing to provide retailers with guidance on how to avoid the risks of blurring or tarnishment may result in the retailers inadvertently engaging in practices that could be construed as deceptive advertising, thus attracting enforcement actions by the FTC. The FTC's role of protecting consumers from misleading marketing practices encompasses a broad range of activities, including the presentation of trademarks in a way that could confuse or mislead consumers in the AR space. Tarnishment, which degrades a trademark's reputation, and blurring, which confuses the source of products or services, both mislead consumers. Such actions could materially harm consumers by impeding informed purchasing decisions, misleading a consumer acting reasonably, and influencing their choices or conduct regarding a product or service.[102] Without any substantial benefit to consumers or competition to offset this harm, AR retailers risk FTC administrative enforcement or court actions. The risk of being forced to compensate consumers or suffer a permanent injunction should function as a preventative measure that prevents dilution infringement for non-famous trademarks in the AR space.

The guidelines should encourage AR platforms to ban the association of one mark with another dissimilar, inferior, derogatory, or unsavory mark to protect the goodwill of retailers and ensure consumers are not misled. Additionally, the guidelines should urge AR platforms to include mechanisms for reporting and addressing violations. This approach will ensure that trademark rights issues in AR related to likelihood of confusion or dilution will remain protected. This policy would effectively maintain the integrity of brands and the reliability of consumer information within the AR landscape. Creating an interpretation or rule would guide AR platforms in developing content policies that respect trademarks. These guidelines could serve as a benchmark for AR platforms, encouraging proactive measures to protect trademarks and prevent consumer confusion.

While the FTC explicitly states that new technology will be subject to the ".com" disclosure rules, it also acknowledges that new evaluations may be required to recognize the new challenges this technology presents.[103] To better clarify restrictions to AR hosts, and to guarantee mark owners and consumers are protected from infringement in AR settings, the FTC, in collaboration with the USPTO, should develop and implement a policy statement or new regulations specifically addressing deceptive practices arising from trademark infringement within AR

102. 15 U.S.C. §45 (n).

103. *Id*. at 21.

environments.

V. CONCLUSION

The rapid evolution of Augmented Reality (AR) and its integration into advertising and e-commerce presents a new frontier for trademark law and consumer protection. As AR blurs the lines between the digital and physical realms, traditional legal frameworks struggle to keep pace with the complexities that arise from this innovative technology. The immersive nature of AR introduces significant challenges in distinguishing between genuine and unauthorized use of trademarks. This complexity is heightened by the technology's ability to overlay digital content onto the real world, potentially leading to consumer deception and trademark infringement on a scale previously unimagined.

To navigate these challenges, a multi-faceted approach that encompasses legislative action, international cooperation, and regulatory collaboration is indispensable. Congress is urged to enact legislation, and the United States Patent Trademark Office (USPTO) is encouraged to establish policies that tailor the search system to have mechanisms specifically designed for the nuanced needs of AR trademarks. This includes the implementation of a comprehensive search system and the formulation of clear guidelines for companies hosting AR content. Such a system aims to safeguard trademarks registered at both state and federal levels, ensuring they are protected within the unique context of AR.

Effective international cooperation is paramount to address the cross-jurisdictional enforcement challenges that AR introduces. The territorial nature of current trademark law does not readily extend to the boundless digital landscape of AR, requiring new treaties or amendments to existing ones that accommodate geolocation-based enforcement mechanisms. Such international efforts would ensure that trademark protection in AR does not end at local or national borders but extends globally, reflecting the worldwide access and impact of AR technology.

Furthermore, the collaboration between the USPTO and Federal Trade Commission (FTC) is crucial in developing legal guidelines and best practices for AR content in the US to prevent unintentional trademark infringements and deceptive advertising practices in the AR space. This collaboration should also aim to issue advisory opinions or new rules that directly address the unique challenges posed by AR technology, reinforcing the need for transparency, proper disclosure, and explicit consumer consent in AR advertisements.

The need for proactive regulation is highlighted by the historical challenges presented by the internet, which saw a rapid evolution of judicial interpretations and rules that were often reactive rather than

preventive. By acting now, potential harm to both consumers and trademark owners can be mitigated. This proactive approach is essential to protecting existing legal rights, preventing overcompensation by courts reacting to these new technologies, and necessary to ensure evolving AR technologies are developed and implemented responsibly. If left unregulated until issues manifest significantly, it could be too late to implement effective solutions without a substantial disruption to the existing legal system.