

Trademarks in the Digital Age: The Current Challenges and Legal Protections

Youfei Zhang^{1,a,*}

¹Wellington College International Hangzhou, Hangzhou, Zhejiang Province, 311200, China
a. Zhangyoufei19980313@icloud.com

**corresponding author*

Abstract: In today's highly dynamic and rapidly evolving digital society, trade marks are experiencing profound transformations, presenting unique opportunities for trade mark owners to reach a broader and more diverse audience, thereby significantly enhancing brand visibility and recognition. However, these advancements also bring forth potential challenges, particularly directly related to trade mark rights infringement. Consequently, this dissertation delves deeply into the typical and recurrent conflicts that inevitably arise in relation to trade marks within the digital sphere by assessing the dilemma of existing representative cases, concluding that the central disputes existed. Additionally, it undertakes an in-depth exploration of the existing legal frameworks that govern this domain. Finally, this emphasizes the need for stronger international regulation of trademark rights across digital platforms. It is important to have the support of all parties involved in commercial actions to maintain a harmonious trading environment in the digital world while respecting the rights of trademark owners and maximizing profits from this flexible context.

Keywords: Trade marks, Trade mark law, Digital age, Trade mark rights, Property rights.

1. Introduction

From the period of industrialization to the present day, trade marks have played an essential role in maintaining an efficient commercial environment. According to the Lanham Act, a trade mark refers to "any word, name, symbol, or design, or any combination thereof, used in commerce to identify and distinguish the goods of one manufacturer or seller from those of another and to indicate the source of the goods [1-3]." For consumers, trade marks play three crucial functions. Firstly, they act as an identification of the source, which means that people can utilize the trade mark to find the producer of a certain product. Secondly, trade marks typically provide a guarantee of product quality that people can recognize the source, providing them with a sense of satisfaction [4]. Thirdly, trade marks help to drive up brand values, in another word, they assist companies in cultivating emotional satisfaction for their customers. Hence, trade marks play an essential role in benefiting both consumers by reducing search costs and entrepreneurs by maximizing profits [5]. However, with the boosting technological developments in recent years, there is a remarkable increase in the involvement of internet platforms and e-worlds in commercial activities, which leads to the broader uses of trade marks of digital platforms.

Meanwhile, this conspicuous trend raises concerns about various potential trade mark infringements in the digital realm. Trade mark infringement refers to the unauthorized use of a trade

mark or service mark. This unauthorized use may be connected to goods or services and has the potential to cause confusion or deception about the origin of a product or service [6]. This essay seeks to explore the issue of trade mark infringement within the digital landscape. By examining the various classifications of online trade mark infringement and analyzing notable cases, the essay will provide a comprehensive understanding of the challenges involved. Additionally, it will propose practical legal modifications to improve the current trade mark law system, supporting the sustainable growth of businesses while protecting trade mark rights in the evolving digital marketplace.

2. Online Infringement and Passing off

Trade mark infringement is especially frequent on digital platforms. Passing off refers to the act of an individual or business falsely presenting someone else's goods or services as their own, which misleads consumers and allows the perpetrator to benefit from the deception [7]. Passing off could be determined even logs or other brand assets that have not yet been registered may qualify the relevant commercial conduct as counterfeiting, which has proliferated due to the ease of setting up online stores and marketplaces. Infringers can quickly and anonymously create fake websites or use social media platforms to sell counterfeit products bearing well-known trade marks which could confuse consumers and undermine the trust of the brand. This dilemma can be exemplified by two types of legal conflicts: those related to electronics functions and those related to internet telecommunications e-commerce.

2.1. Case 1: Apple v. Shenzhen City Lian Yin Technology Co.

International trade mark infringement on digital functions.

Firstly, one of the most representative intellectual property protection cases in Chinese courts in 2022 serves to illustrate the first classification. It was the conflict between Apple and the defendant, Shenzhen City Lian Yin Technology Co., Ltd. The product made by Shenzhen City Lian Yin Technology was not directly authorized by Apple Company's commercial label. However, when consumers installed the product, the manufactured earphones displayed the "AirPods" or "AirPods Pro" label [8]. Controversially, trade mark infringement was understood to occur only through 'physical uses' of the trade mark, but in this case, the conflict arose in the devices used by consumers. After conducting a thorough investigation, the court concluded that the term "use" in this context is not restricted to physical utilization in cases of trademark infringement. The commercial use of the product was recognized as infringement if it occurred during commercial activity, even if it was non-physical.

In this case, the defendant's conduct was confirmed by consumers who used the product. The product appeared to be produced by Apple, as well as the origin of the product was mixed. This case revealed an additional non-physical type of trade mark infringement and the ease of passing off. Apart from that, it is necessary to expand the definition and scope of trade mark infringement to adapt to the evolving digital environment.

2.2. Case 2: Alibaba v. Gucci America, Inc

International trade mark infringement in online trading platforms.

Secondly, similar to the previous case, there was a dispute between firms from different countries. The plaintiff was Gucci America, Inc., while the defendant was Alibaba Group Holding Ltd., which owns various associated companies and internet platforms [9]. Gucci sued Alibaba for internet e-commerce passing off because Alibaba's marketplaces, including Taobao and AliExpress, allowed numerous sellers to offer counterfeit Gucci products. These counterfeit products bore Gucci's

registered trade marks, creating confusion among consumers regarding the authenticity of the goods. Gucci argued that Alibaba not only allowed the sale of these counterfeit goods but also facilitated it by providing services like keyword advertising and transaction processing.

The case shows that while digital platforms provide more opportunities for international trade, they also lead to more frequent trade mark infringement, which can tarnish famous brands on a global scale. Specifically, this case reveals the difficulties luxury brands face in combating online counterfeit sales and illustrates the evolving legal landscape regarding the responsibilities of online platforms in preventing trade mark infringement and passing off.

3. Legal Bodies' Modifications and Protections

Internationally, to tackle the problems that derive from the two above representative cases, TRIPS [10] establishes uniform standards for IP protection, which aim at in creating a more predictable and stable international IP environment. This is crucial in the digital age, where IP rights often span multiple jurisdictions. TRIPS includes provisions for customs enforcement against counterfeit goods, which is crucial for addressing issues such as digital piracy and counterfeit products sold online. INTA promotes international cooperation among IP offices, governments, and legal professionals. This cooperation is significant for addressing cross-border challenges of trade mark enforcement and protection in the digital space.

In China, the China National Intellectual Property Administration (CNIPA) administers trade mark registration and enforcement in the digital realm [11]. According to the Plan, by 2027, China aims to achieve significant breakthroughs by addressing current key difficulties in IP protection, meeting the long-term development needs of a forward-looking society, moreover, China aims to develop into a strong IP nation by 2035 [12]. Additionally, platforms like WeChat and Alibaba have developed mechanisms for intellectual property owners to report and address infringement swiftly. In a broader context, Alibaba has implemented more robust anti-counterfeiting measures, including enhanced detection algorithms, stricter seller verification processes, and collaboration with brand owners to protect intellectual property rights.

The existence of digital platforms increases consumer confusion infringement of trade marks, and the increasing possibility of international disputes. Courts are recognizing the need to adapt traditional legal concepts to address new forms of trade mark use and infringement, while platforms are being pushed to take greater responsibility for the content and transactions they facilitate. The most efficient and effective means of maintaining the stable development of internet market is the demands of the evolving legal landscape to the realities of modern commerce, ensuring that consumers are not misled, and that brand integrity is maintained.

4. Metaverse Infringement

As the metaverse is a rapidly emerging industry, the complexity of the technology involved can increase the risk of unauthorized trade mark use for commercial incentives, which could harm the brand's reputation and result in tarnishment.

4.1. Case 1: Nike v. StockX

Trade mark infringement in different competing markets.

A representative case was the conflict between Nike and StockX in 2022[13]. Nike claimed that StockX used its trade marks in NFTs without authorization. NFT, or non-fungible token, refers to a unique digital identifier that cannot be copied [14], substituted, or subdivided. It is recorded on a blockchain and is used to certify authenticity and ownership [15, 16]. Nike argued that the use of its trade marks in these NFTs mislead consumers into believing there is an official connection between

Nike and StockX, which could harm Nike's brand and reputation. However, StockX claimed that the fact that Nike's sales were not diminished would be “highly relevant – possibly even dispositive” to Nike's claims for damages. Furthermore, Nike does not compete with StockX in the same market—the secondary market—and therefore the fact that Nike continued to sell Air Jordans at a stable rate provides no evidence as to whether StockX unjustly profited by selling fakes [13].

In this case, although the court pointed out that Nike could sue StockX without providing evidence of losing profit, this conflict reveals the increasing complexity and possibility of trade mark infringement in the metaverse. StockX's actions could bring severe consequences to Nike. The association of Nike's trade marks with NFTs, especially without its control over the quality and authenticity of the digital products, could dilute and tarnish its brand by bringing customer confusion regarding the relationship between Nike and StockX. Moreover, this case underscores the importance of protecting intellectual property rights in the digital realm when there is a blur in the boundaries of physical and virtual products [17]. Thirdly, trade mark owners should have the right to exert strict control over their trade marks in response to the growing number of commercial competitors.

4.2. Case 2: Hermès v. Mason Rothschild

Trade mark infringement and Freedom of expression.

Another case involved Hermès and Mason Rothschild in 2022 [18]. Mason Rothschild, a digital artist, created the "MetaBirkins" NFTs, which are digital artworks resembling Hermès' iconic Birkin bags. Rothschild's colorful and furry version of Birkin bags attracted significant attention and financial transactions in the burgeoning digital art market. As a result, Hermès argued that Rothschild's use of the "Birkin" name and the visual similarities of the MetaBirkins to their iconic bags constituted trade mark infringement. They claimed it could confuse consumers about the source of the digital artworks, and MetaBirkins diluted the distinctiveness of the Birkin brand by associating it with unauthorized digital goods.

In the conflict between Hermès and Mason Rothschild, Rothschild's primary defense was that his MetaBirkins were a form of artistic expression and parody which should be protected under the First Amendment. The legal arguments focused on the nature of NFTs and the scope of trade mark protection in virtual spaces [19]. From this case, a clear insight has emerged that it underscores the challenges trade mark owners face in protecting their trade marks from unauthorized use in virtual environments and highlights the tension between protecting intellectual property and preserving artistic freedom.

The two cases mentioned above illustrate a prominent phenomenon: the theory of harm is rooted in trademark law's primary function, which is to prevent consumer confusion and protect the brand's goodwill. When companies sell unauthorized virtuous goods, consumers may become confused, leading to potential harm to the brand's integrity. Consequently, it is important to emphasize that there should be a priority of trade mark owners' rights to control the use of trade marks over the freedom of expression in the metaverse for mainly three reasons. The first reason is the economic impact and brand value that trad marks represent for companies. They are often among the most valuable assets a company owns, contributing to customer loyalty and competitive advantage. In virtual environments, where the economy of digital goods is growing rapidly, unauthorized use of trade marks can lead to economic losses for the trade mark owner, especially for companies with decades of the brand value and a strong reputation. Secondly, the possibility of causing consumer confusions: in virtual environments, where users can create and interact with digital goods and services in ways that closely mimic the real world, the potential for consumer confusion is significant, which could further erode consumer trust in the brand. Thirdly, consistency across both offline and online platforms is crucial for effective brand management and marketing. By maintaining a consistent brand presence across

different platforms, trade mark owners could strengthen brand identity and ensure a seamless experience for users.

5. Keyword Advertising and Trade marks lost its primary function

Keyword advertising is common on various online platforms, which refers to online and mobile advertising where an advertiser pays for its ad to appear based on the relevance of a specified term or phrase [20]. However, competitors or unauthorized parties can bid on trademarked terms as keywords in online advertising platforms like Google Ads. This can result in ads that lead to competing or unrelated websites, potentially confusing consumers and diluting the trade mark's value. Furthermore, this could potentially divert consumers towards competitors' products rather than the products of the trade mark holder.

The conflicts mostly arise from accusations of unfair competition, and the 2012 1-800 Contacts, Inc. v. Lens.com, Inc. could display this situation [21]. 1-800 Contacts is a company that sells contact lenses and related products online. It owns several trade marks, including "1-800 Contacts and Lens.com, Inc."

In the case of 1-800 Contacts, Inc. v. Lens.com, Inc., the primary issue revolved around the alleged trade mark infringement and unfair competition stemming from Lens.com's use of 1-800 Contacts' trade marks in search engine advertising. Specifically, 1-800 Contacts accused Lens.com of purchasing keywords identical or similar to its trade marks, such as "1-800 Contacts," to trigger the display of Lens.com's ads when consumers searched for these terms on the Google platform. 1-800 Contacts argued that this practice was likely to confuse consumers, leading them to mistakenly believe that the ads were business cooperations between Lens and 1-800 Contacts. This misleading information could lead to consumer confusion and inappropriately gaining the popularity of Lens. The company argued that the potential confusion could lead consumers to mistakenly click on Lens.com's advertisements, believing them to be associated with 1-800 Contacts, ultimately damaging the reputation and business of 1-800 Contacts.

Moreover, this led to another dilemma that problem raised by the development of digital technology, the research cost theory seems outdated [22]. Nowadays, algorithms can recommend products based on user behavior rather than trade mark recognition, reducing the importance of trade marks in the consumer decision-making process. Many online platforms can predict users' wants before they research, which demonstrates a significant loss in the function of trade mark as conveyors of information [23]. Furthermore, Judge Frank of the Second Circuit Court of Appeals raised questions about whether exceptions to the general rule favoring competition in trade mark law truly provide direct benefits to consumers, and if not, he questioned whether these exceptions still serve a meaningful social purpose that justifies their existence. [24] However, it is important to notice that for different classifications of goods, there might be different extents of influence. Products with close substitutes are more likely to fall into situation where people may be less likely to mind the specific brand of the product as long as the quality is desirable. On the other hand, for those products with high brand loyalty, consumers are less likely to be affected by the automatic push. Hence, here it reveals that the increasing importance of brand value of trade marks that trade mark owners should pay more attention to protecting it.

6. Discussion

There are two main issues related to trade mark rights that should receive significant attention in restricting the frequency of online trade mark infringement and protecting the declining value of trade marks. People with different roles on the platform could have various responsibilities to maintain harmony in the digital world.

Firstly, trade mark owners should consider the classifications of their products when registering the trade mark to prevent the future risk of disputes in different competing markets, which prevents digital firms from free-riding physical firms. Secondly, the government regulations within their jurisdictions should modify legal frameworks modification to protect trade mark rights in the digital realm. Currently, there are various trade mark rights protections under different jurisdictions. In the USA, the Anti-cybersquatting Consumer Protection Act (ACPA) aims at preventing bad-faith registration of domain names identical or confusingly similar to trade marks which can be applied to virtual real estate and domain names within metaverse platforms [25, 26]. International organizations such as the World Intellectual Property Organization regulate the Uniform Domain-Name Dispute-Resolution Policy (UDRP) to provide legal support to address issues such as cybersquatting, where individuals register domain names identical or confusingly similar to trade marks with the intent to sell them at a profit or to mislead [27]. Furthermore, numerous platforms have established their own policies to safeguard intellectual property. For example, Roblox, Second Life, and Decentraland have specific rules against trade mark infringement and mechanisms for reporting and addressing violations. This should be expanded to all the platforms that involve interactions between users and digital intelligence to protect the trade mark owners' rights as well as the business order. Thirdly, in order to preserve the value of trade marks, trade mark owners now have a greater responsibility of protect and shape the brand value. Trade marks can create a strong emotional bond between the firm and consumers, which is the most valuable and powerful asset of the firm. In the digital realm, the key to a memorable brand of is the strong emotional and visual impact they bring to consumers. Consequently, it is crucial to protect the trade mark from tarnishing, blurring, and free-riding.

7. Conclusion

In conclusion, this essay has examined the evolving landscape of trade mark infringement in the digital world, highlighting the increasing legal challenges posed by online platforms, e-commerce, and the metaverse. Overall, all parties involved in digital trade mark commerce share the responsibility of maintaining a fair and orderly environment. Individuals must prioritize the protection of their trade marks during the registration period, while platform regulators should implement detailed regulations to prevent the abuse of trade marks. Meanwhile, with the evolving environment and globalization, authorities and global organizations play a significant role in setting up regulations in terms of international trade mark infringement to counter the increasing international trading rather than only focus on different jurisdictions, which could prevent trade mark owners' rights from infringing and guarantee the rights of consumers.

While this essay presents key dilemmas related to trade mark infringement dilemmas in the digital age, there is room for further exploration. Specifically, it could delve deeper into the varying degrees of trade mark vulnerability across different product categories. For instance, commodities with low brand loyalty, such as everyday consumer goods, might be more susceptible to trade mark dilution and passing off due to their substitutability. On the other hand, luxury brands or products with strong emotional connections to consumers may face distinct challenges, such as brand tarnish in digital spaces. Hence, exploring these distinctions would offer a more detailed understanding of how trade mark protection strategies should evolve for different types of products in the future.

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