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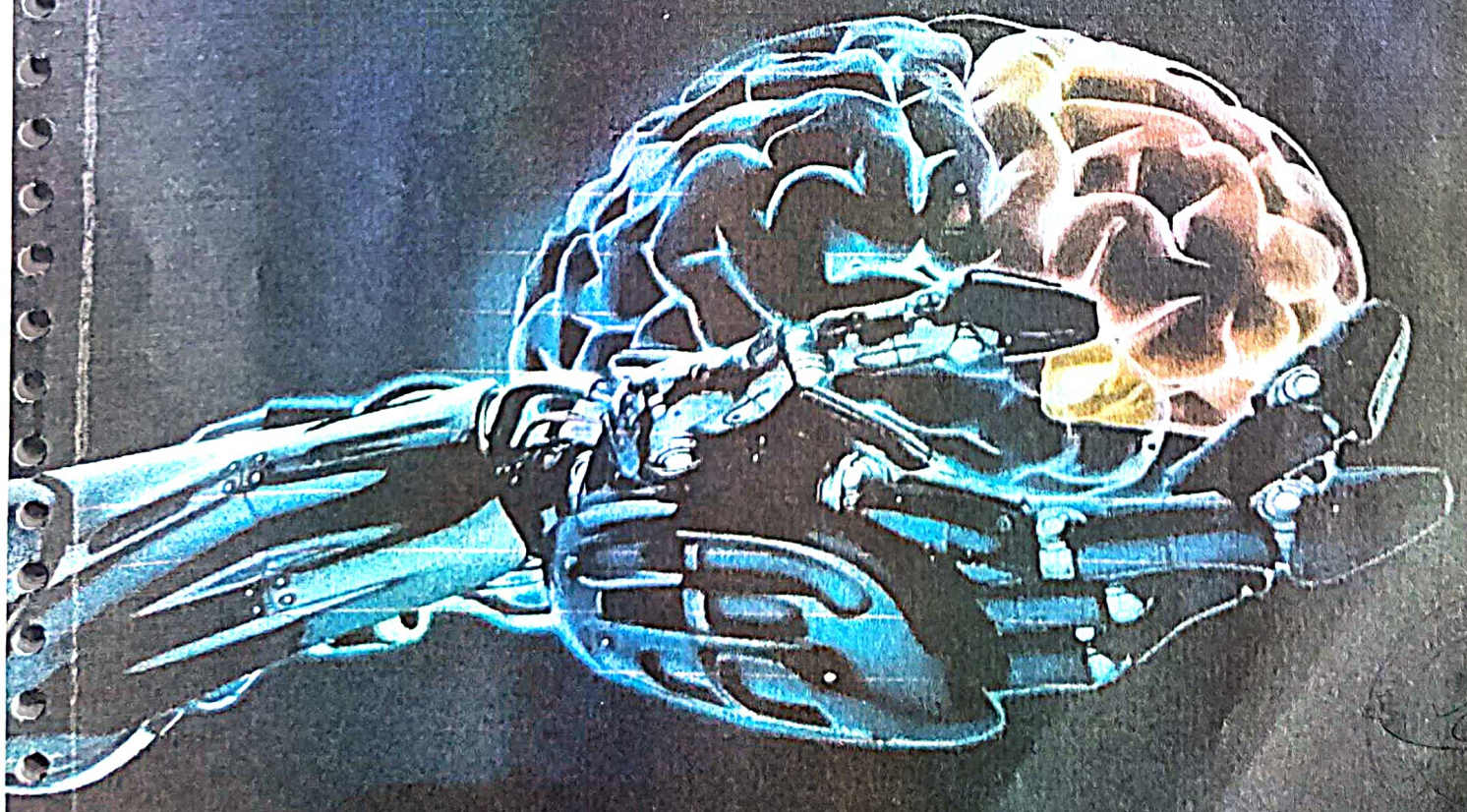

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NAVIGATING TRADEMARK LAW IN THE AGE OF ARTIFICIAL INTELLIGENCE: IMPACT ON CONSUMERS

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Abstract

The widespread adoption of new technologies has taken over most of the human performing activities. The field of technology is undergoing changes quite rapidly & one such changing dimension witnessed by the present era is evolution of Artificial Intelligence. The advent of artificial intelligence (AI) has significantly influenced trademark law, comprising of both opportunities and challenges. AI tools help in Trademark Search and Examination whereas the ability of AI inautomatic generation of content creation raises various issues concerning the ownership aspects and protection of trademarks created by machines. AI is conferred by Infringement detection tools which have improved efficiency in terms of safeguarding Trademark rights. Since, technological advancement comes with its own pros and cons, several issues like liability for AI-generated infringements are not yet been addressed which requires adequate legal frameworks to handle the same. AI softwares like Amazon's Alexa help consumers to choose products concerning their needs. It can be observed that based on social media searches & past purchase history how consumers get directed to similar product sellers without knowing their authenticity which again would mislead the consumers towards fake brands. As AI continues to shape brand-related activities, trademark law must adapt to safeguard intellectual property rights in a technologically dynamic environment& also with the good interest of the consumers. This paper tries to analyse the impact of artificial intelligence upon trademark law which would affect the ultimate consumers & bring out some concrete suggestions to tackle the issues that is been found in the area of study.

Key Words: ***Artificial Intelligence, Technology, Trademark, Consumer.***

Introduction:

Artificial Intelligence, commonly known as AI, represents a frontier of technology that seeks to imbue machines with the ability to learn, reason, and perform tasks

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traditionally associated with human intelligence. Rooted in computer science and mathematical algorithms, AI endeavours to simulate cognitive functions, enabling systems to analyse data, make decisions, and adapt in real-time. As AI applications evolve across industries, from healthcare to finance and beyond, the field continues to push boundaries, challenging our perceptions of what machines can achieve and prompting profound implications for society, ethics, and the future of technology.[1]

Artificial Intelligence (AI) has gradually woven itself into the fabric of our daily lives, transforming the way we work, communicate, and navigate the world. From smart assistants and recommendation algorithms to autonomous vehicles and advanced industrial systems, AI has taken on an increasingly prominent role in shaping human activities. This integration is fuelled by the ability of AI to analyse vast amounts of data, make rapid decisions, and adapt to evolving circumstances, ushering in an era where machines seamlessly collaborate with humans in various domains. As AI continues to advance, its impact on our society is profound, influencing not only our efficiency and convenience but also raising important ethical and societal questions about the nature of work, privacy, and the balance between human and machine autonomy.

Artificial Intelligence (AI) has become a game-changer across various industries, and its influence on trademark law has been particularly profound. As businesses leverage AI technologies to enhance their operations, the legal landscape surrounding trademarks undergoes significant transformations. A trademark is not just a combination of logo, symbol, letters, sign, and mark but also it is a method of distinguishing goods and services from one seller to that of another. It helps consumers to classify which is the better product for their own consumption. Trademark comes with quality assurance. Hence, it acts as a secure mechanism for the consumers while purchasing the goods.[2]

1. AI in Trademark Search and Registration:

Trademark searching is a crucial aspect of trademark law, as it ensures that new trademarks do not infringe on existing ones. Traditionally, trademark searches were conducted manually by searching databases of registered trademarks.[3]AI-powered tools have revolutionized the trademark search and registration process, streamlining the often intricate procedures. Rapid analysis of extensive databases allows businesses to register trademarks efficiently. The trademark examination processes at the national IP offices are also manually performed with the help of human trademark examiners who are supposed to conduct an exhaustive search in a large unordered database. Furthermore, they need to decide if there is any similarity between the mark submitted

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1 Artificial Intelligence | An Introduction - GeeksforGeeks(Last Visited on 02/02/2024; 10:30P.M)

2 Ray Kurzweil, "The Coming Merging of Mind and Machine", Scientific American (23 March 2009) available at https://www.scientificamerican.com/article/merging-of-mind-and-machine (Last Visited on 03/02/2024; 07:10A.M)

3 https://www.creedon.com/blog/aiandtmsearches (Last Visited on 06/02/2024; 03:30P.M)

through application and the existing approved trademarks using conventional methods like the Vienna classification. This complexity around trademark search is a big ip challenge. The expertise of a trademark examiner is combined with automation using AI technology can offer the best solution for trademark search. The most difficult & complicated task is to find differences between similar trademarks as there is no proper definition for similar trademarks, and difference in trademarks can be traced only if there are coming under the purview deceptively similar.

To improve the trademark search process, marks must be examined based on a range of similarity metrics like visual similarity, semantic similarity & text similarity which is again a time taking hectic task. Whereby, AI can be used to identify as well as distinguish between a novel trademark and those existing in the trademarks database within no time. The combination of similarity metrics and AI can provide the best and the most accurate trademark search results. AI is capable of performing better than humans when it comes to searching information about existing trademarks.[4]

AI-assisted trademark classification is also becoming more prevalent. This process involves using machine learning algorithms to classify trademarks based on their similarity to existing ones. This allows for more consistent and efficient trademark registration and examination, as well as more accurate and consistent enforcement of existing trademarks. In addition to these benefits, AI is also being used to assist in trademark enforcement. For example, AI-powered systems can be used to detect and remove infringing content from online platforms, such as counterfeit goods being sold on e-commerce websites. However, there are also concerns about the impact of AI on trademark law. One concern is that AI-assisted trademark searching and classification may lead to an increase in "trademark bullying," where large companies use their resources to register trademarks for a wide range of goods and services in an effort to prevent smaller companies from using similar marks.[5]

"In the field of trademarks, our state-of-the-art AI technology is a major improvement that will create greater certainty for the development of new image marks and greater ease for monitoring potentially misleading or conflicting new registrations." The World Intellectual Property Organization (WIPO) has launched a new artificial intelligence (AI)-powered image search technology that makes it faster and easier to establish the distinctiveness of a trademark.WIPO's new AI-based technology imbibes with the deep machine learning technology to identify combinations of concepts like an apple, an eagle, a tree, a crown, a car, a star within an image to find similar marks that have previously been registered.Thus, the new technology results in a narrower and more precise group of potentially similar marks, facilitating greater certainty in strategic planning for brand expansion into new markets. With fewer results to scrutinize, this also translates into labour-cost savings for tra

[4] Sagacious IP: Role of Artificial Intelligence in Trademark Search available at sagaciousresearch.com/blog/artificial-intelligence-trademark-search/(Last Visited on De

[5] Supra Note, 3

examiners, attorneys and paralegals, industry practitioners and researchers.All users can access the AI search technology for free through WIPO's Global Brand Database, where it has been fully integrated into the database search engine.[7]

1.1 Benefits of AI-Powered Trademark Search & Analysis Tool

An AI tool named IPNOTE is a tool that uses a sophisticated algorithm which can analyse millions of trademark records in seconds. This means that users can get accurate and comprehensive results in a fraction of the time it would take to do it manually. Valuable time and resources can be saved, allowing users to focus on other aspects of their business. The AI-powered tool is constantly improving, ensuring that users get the most up-to-date results every time. This feature is especially crucial in today's fast-paced business world, where new trademarks are being registered every day. The interface of the tool is user-friendly and does not require any specialized training or knowledge. The process is simple just enter the proposed trademark and the desired country, and the AI tool will do the rest. It will provide a detailed report that includes all relevant information about the proposed mark, such as its availability, similarity to existing trademarks, and potential conflicts. This report is easy to understand and can help users make informed decisions about their trademark registration. The tool also has a global trademark search feature, allowing users to search for trademarks not only in their own country but also in other countries around the world. As businesses become more global, it is essential to ensure that trademarks are available and not infringing on any existing marks in other countries.[8]

2. Consumer Awareness and Brand Protection:

With AI's ability to monitor vast online spaces, businesses can promptly identify potential trademark infringements. This proactive approach is beneficial for protecting brands and consumer interests. However, the challenge lies in striking a balance between safeguarding trademarks and avoiding unnecessary legal actions that might impact innocent parties.

2.1 Introduction of the AI-powered Chatbot:

A Chatbot is primarily a computer program that becomes a medium for the users to have a conversation with the company professionals over the Internet. The bots with AI (Artificial Intelligence) are capable enough of having meaningful conversations with humans and can make a path-breaking difference for many companies. Ever since then, there has been a loud and growing voice among the groups of market strategists that advocate the usage of Chatbots in enhancing brand awareness and customer retention. And, there are impressive facts and figures behind the rising

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7 Francis Gurry; Director General, WIPO

8 https://www.wipo.int/pressroom/en/articles/2019/article_0005.html(Last Visited on 07/02/2024, 8:40P.M)

9 https://ipnote.pro/en/blog/get-ahead-of-the-competition-with-our-ai-trademark-search-tool/ (Last Visited on 07/02/2024; 09:00P.M)

support of Chatbots. For instance, its inclusion will give the users an impulsive and quick answer to their problems.[9]

3. AI-generated Content and Consumer Confusion:

As AI technologies create content, the risk of consumer confusion increases. Trademark law traditionally hinges on the likelihood of confusion, making it imperative to adapt legal frameworks to address the implications of AI-generated content on consumer perceptions. Ensuring clarity and distinction between brands in the digital realm becomes a priority.Artificial intelligence could possibly ignore guidelines set by agencies like FCC and FTC, trick consumers into false beliefs, and cause confusion and dissatisfaction. A study by the University of Kansas analysed that, over 1,000 AI-generated ads from across the web and found that they are only labelled as ads about half the time and that they intentionally appeal to consumers positively to influence them. The technology has the potential to influence consumer behaviour and decisions without viewers understanding whether the content was an advertisement or if it was developed by humans or bots. The prevalence of AI in programmatic advertising shows how frequently the technology is used and that it can skirt guidelines that human-developed ads have to follow, according to researchers.[10]

3.1 Lack of accuracy & correctness in AI Contents:

AI-generated ads are created by algorithms to develop contextual and personalised content for an individual based on their internet usage and demographics. The ads are created in such a manner that they are made appealing to the eye of the consumers and their innocence is been misused. In terms of approach, the ads tended to be positive in their appeals, containing messages that were neither negative nor neutral in the way they touted the good or service represented. They also tended to focus on the consumer and the benefit the individual could experience from what was being sold. Analysis showed that ads on social media revealed sponsorship most frequently, and news and publishing sites labelled them least frequently.[11]

4. Ownership and Liability in AI-generated Trademarks:

AI's ability to autonomously generate trademarks introduces complexities regarding ownership and liability. Establishing clear guidelines for responsibility and accountability is crucial to prevent legal disputes and ensure fair practices. Legal frameworks must evolve to address the unique challenges posed by trademarks created by AI systems. Generative AI can seem like magic. Image generators can produce

[9] Pallavi Mandal: Significance of using AI & Chatbots in Brand Awareness and Customer Engagement available at https://www.prismetric.com/using-ai-for-brand-awareness/(Last Visited on 07/02/2024; 09:30P.M)

[10] George Hopkin:AI Strategy: Deceptive AI ad campaigns can cause confusion for consumers available at: https://aimagazine.com/articles/deceptive-ai-ad-campaigns-can-cause-confusion-for-consumers (Last Visited on 08/02/2024; 4:30P.M)

[11] Ibid

remarkable visuals in styles from aged photographs and water colours to pencil drawings and Pointillism. The resulting can be fascinating in terms of both quality and speed of creation is elevated compared to average human performance.[12]

There are infringement and issues of uncertainty about ownership of AI-generated works. In a case, Andersen v. Stability AI Ltd[13]., three artists formed a class to sue multiple generative AI platforms on the basis of the AI using their original works without license to train their AI in their styles, allowing users to generate works that may be insufficiently transformative from their existing, protected works, and, as a result, would be unauthorized derivative works. If a court finds that the AI's works are unauthorized and derivative, substantial infringement penalties can apply. Similarly, in another case filed in 2023 bring claims that companies trained AI tools using data lakes with thousands or even many millions of unlicensed works. Getty, an image licensing service, filed a lawsuit against the creators of Stable Diffusion alleging the improper use of its photos, both violating copyright and trademark rights it has in its watermarked photograph collection.[14]

In each of these cases, the legal system is being asked to clarify the bounds of what is a "derivative work" under intellectual property laws and depending upon the jurisdiction, different federal circuit courts may respond with different interpretations. Both individual content creators and brands that create content should take steps to examine risk to their intellectual property portfolios and protect them. This involves proactively looking for their work in compiled datasets or large-scale data lakes, including visual elements such as logos and artwork and textual elements, such as image tags. Obviously, this could not be done manually through terabytes or petabytes of content data, but existing search tools should allow the cost-effective automation of this task. New tools can even promise obfuscation from these algorithms. The good news regarding trademark infringement for business owners is that trademark attorneys have well-established how to notify and enforce trademark rights against an infringer, such as by sending strongly worded cease-and-desist notice or licensing demand letter, or moving directly to filing a trademark infringement claim, regardless of whether an AI platform generated the unauthorized branding, or a human did.[15]

5. Dynamic Trademark Protection in the Digital Era:

AI empowers businesses to adopt dynamic marketing strategies, including personalized advertisements. Trademark law needs to adapt to this evolving environment, providing effective protection while permitting businesses to harness AI for tailored consumer interactions. Striking a balance that encourages innovation while maintaining robust protection mechanisms is paramount. Implementing robust

[12] Gil Appel, Juliana Neelbauer & David A. Schweidal: Generative AI has an Intellectual Property Problem available at https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem(Last Visited on 08/ 02/ 2024; 06:30P.M)

[13] 23-cv-00201-WHO (N.D. Cal. Oct. 30, 2023)

[14] No. 1:23-cv-00135

[15] Supra Note. 12

'Terms of Service' agreements can safeguard brand protection in the Metaverse. These agreements can regulate usage, endorsement, and sponsorship functions, ensuring that trademarks are utilised in a manner consistent with their real-world counterparts.Trademark owners must vigilantly monitor their intellectual property within the Metaverse. Prompt detection of trademark infringements and immediate action through cease-and-desist measures can mitigate potential harm.[16]

Trademarks, being crucial in terms of brand identity and consumer protection, face challenges like domain squatting, counterfeit goods or service or promotion thereof on new age digital-media platforms, emergence of brand dynamics and associations in social media and digital space overall. Balancing protection of established brands with the rights of newcomers in the digital space remains a significant task for all brand owners and tedious task to trace back and put accountability on the infringing or involved parties, which at times seems next to impossible.[17]

In the dynamic landscape of intellectual property, trademarks serve as the bedrock of brand identity and market recognition. As businesses expand their online presence and global reach, the challenges of safeguarding trademarks have intensified. In response to this, the integration of machine learning (ML) has emerged as a powerful ally in the realm of trademark analysis and protection.[18]

5.1 The Challenges faced in the Digital Era:

Social media platforms such as Twitter, Facebook and Instagram have provided the opportunity for brands to interact with mass audiences quickly and effectively, but this interaction is a two-way street. Increasingly the public is looking to social media as a vehicle to interact with brands when something goes wrong. Trademark professionals are having to consider not only which social platforms to deploy for their brands, but also work with marketing, communications and customer service teams to manage their brand's presence online. Thinking of social media as "free" for those actively managing and promoting brands misses both the importance of the platform and the expectations of consumers in an increasingly connected world.

Protecting brands from false and spurious postings online has also become a daily part of the trademark role. It is simple for anyone to grab a trademarked logo from the web and share it and increasingly difficult for consumers to recognize what is a genuine post from an authentic company or one that is an unapproved use of a trademark.Negative publicity has the propensity to tarnish a brand's reputation, and social shaming has totally changed the dynamics of how trademark disputes are handled.

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[16] https://depenning.com/blog/trademarks-in-metaverse/(Last Visited on 09/02/2024; 07:30P.M)

[17] https://www.google.com/amp/s/m.economictimes.com/small-biz/sme-sector/why-need-for-effective-ip-protection-in-digital-space-is-critical/amp_articleshow/106466178.cms(Last Visited on 09/02/2024; 08:00P.M)

[18] https://www.linkedin.com/pulse/machine-learning-trademark-analysis-protection-safeguadi-yi?utm_source=share&utm_medium=member_android&utm_campaign=share_via(Last Visited on 10/02/2024; 10A.M)

Today, social media channels saturate every aspect of our business and consumer lives; the business world and the buyer's world interact more than ever, and the potential for abuse seems limitless. Applications like Amazon Alexa can be one-sided while making their suggestions towards their consumers which may harm the other traders & at the same time misleads the customers.As the role of trademark professional transitions from a primarily legal role to a wider brand management position encompassing new responsibilities, challenges, and partnerships trademark executives at all levels need all the support they can get to manage the increased workload.

Technology has a critical role to play in supporting these professionals, but needs to be deployed in a manner where it delivers automation, drives efficiencies and provides trademark experts with the relevant tools to do their job more effectively. When the industry gathers again in Seattle in 2018, it will be those that have proactively deployed technology to drive efficiencies and offer insight that will be in the best position to lead the industry.[19]

6. Data Privacy and Harmonization:

AI heavily relies on data, and its involvement in trademark law may raise privacy concerns. Protecting consumer data becomes a priority to ensure compliance with privacy regulations while allowing AI applications to operate within legal boundaries. Safeguarding consumer rights is essential in this data-driven era.As AI impacts trademark law on a global scale, achieving international harmonization becomes imperative. Establishing common standards and frameworks can facilitate cross-border enforcement and provide a unified approach to addressing AI-related trademark challenges. Collaborative efforts will be essential to navigate the complexities of AI within a global legal context.

7. Conclusion:

The intersection of AI and trademark law brings both opportunities and challenges for consumers. As technology continues to advance, adapting legal frameworks to ensure fair practices, protect consumer interests, and foster innovation is crucial. Striking a balance that harnesses the benefits of AI while safeguarding the rights of consumers will be pivotal in shaping the future of trademark law.Another concern is that AI-powered systems may not be able to fully understand the nuances of trademark law, and may make mistakes in their searching and classification. This could lead to the rejection of valid trademarks or the registration of invalid ones.

Overall, AI is having a significant impact on trademark law, and is likely to continue to do so in the future. While it has the potential to improve efficiency and accuracy in trademark searching and classification, it is important to consider the potential negative consequences and take steps to mitigate them.

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[19] Simon Webester:Challenges for Trademarks in a Digital World: A Review of INTA 2017 available at https://ipwatchdog.com/2017/06/06/challenges-trademarks-digital-world-inta-2017/id=84072/ (Last Visited on 10/02/2024; 09:30P.M)