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MACHINES AS CREATORS: THE LEGAL DILEMMA OF AI-GENERATED WORKS IN INDIA

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Abstract

The swift progression of Artificial Intelligence (AI) has profoundly affected multiple industries, including intellectual property (IP) law. This analysis investigates the obstacles and prospects that AI introduces to conventional IP systems in India, with a focus on copyright, patents, and trademarks. The discussion revolves around the legal consequences of content generated by AI, the issues of authorship and inventorship, and the potential necessity for revamped legal frameworks to accommodate AI's involvement in creative and inventive activities. The evaluation also looks into the existing legal systems in India, pointing out the deficiencies and inconsistencies in dealing with AI-generated works. By scrutinizing recent judicial rulings, legislative changes, and academic perspectives, this study posits that while AI complicates traditional understandings of IP, it simultaneously presents opportunities for innovation and the establishment of new legal structures. The conclusion provides suggestions for lawmakers to modify IP regulations in accordance with the realities of AI, ensuring a balance between fostering innovation and safeguarding human creativity.

Keywords: Artificial Intelligence, Intellectual Property, Copyright, Patents, Authorship, Legal Personhood, Indian Law

Introduction

The incorporation of Artificial Intelligence (AI) into numerous aspects of human existence has been remarkably transformative. Ranging from healthcare to finance, AI's potential is redefining sectors, and the field of Intellectual Property (IP) law is also being affected.¹ As AI technology advances, it is now able to produce content that was previously thought to require human creativity. This evolution introduces significant legal dilemmas regarding authorship,

¹ Nuria Porxas; Carme Sanz, "AI Health Applications and Related Intellectual Property Challenges," European Pharmaceutical Law Review (EPLR) 3, no. 4 (2019): 184-191

ownership, and the essence of intellectual property. This analysis investigates how AI-generated materials are putting traditional concepts of copyright and patent law in India to the test, reviews recent cases that feature AI in creative activities, and explores the potential future directions of IP law in a world shaped by AI.²

Compilation of Research

The research for this project utilizes a diverse array of sources, which include legal documents, judicial decisions, and academic papers. The main emphasis is on the influence of artificial intelligence on intellectual property law in India, specifically in the realms of copyright, patents, and trademarks. The examination also explores the legal position of works generated by AI and the possibility of AI being acknowledged as a legal entity. This study is based on an assessment of the latest advancements in AI technology and their effects on intellectual property law in India.

The data analysis segment looks into the existing legal frameworks in India, pinpointing the gaps and inconsistencies in the treatment of AI-generated works and the likelihood of new legal frameworks to tackle these issues. Additionally, the analysis takes into account the repercussions of recent judicial rulings and legislative changes in India.

1. AI and Copyright Law

In India, the Copyright Act of 1957 regulates copyright law, offering protection to original works in literature, drama, music, and art, along with cinematographic films and audio recordings. The primary requirement for copyright protection is originality, which is fundamentally linked to human creativity³. The emergence of AI-generated content has brought complexity to this standard. Can a creation produced by an AI system truly be deemed original? If it can, who holds the copyright—the AI, its developer, or the end user? The Indian Copyright Act does not clearly define the status of works generated by AI. Nonetheless, Section 2(d) of the Act defines an "author" as the individual who facilitates the creation of the work.⁴ This definition might be understood to encompass the developer or user of an AI system as the creator of works

² Mark A. Prinsley et al., 'The Rise of AI and WIPO Consultation on Intellectual Property Issues' (2020) 3(3) *RAIL: The Journal of Robotics, Artificial Intelligence & Law* 213

³ Anca Florina Mateescu, "Intellectual Property Rights and Civil Liability of AI," *Revista de Stiinte Juridice* 2022, no. 1-2 (2022): 130-138

⁴ The Copyright Act, 1957 (India).

generated by the AI. However, this view is not without its disputes, as it brings up issues regarding the level of human involvement necessary for establishing authorship. The Indian judiciary has typically adopted a cautious stance towards non-human authorship, underscoring the importance of human creativity for obtaining copyright protection. In the pivotal case of *R.G. Anand v. Delux Films* (1978), the Supreme Court of India determined that copyright protection is afforded to original works that demonstrate the author's skill, effort, and judgment. The Court highlighted that copyright law safeguards the expression of ideas rather than the ideas themselves, underlining that human creativity is fundamental to copyright protection. Although this case did not pertain to AI, it set forth the principle that originality in copyright law is linked to human effort and creativity. Following this reasoning, AI-generated works, which do not have human authorship, would probably be excluded from copyright protection.⁵

A notable case, *Eastern Book Company v. D.B. Modak* (2008), emphasized the importance of human creativity in obtaining copyright protection. The Supreme Court established the idea of a "modicum of creativity," indicating that even minor enhancements or changes that demonstrate the author's talent and discernment can make a work eligible for copyright protection⁶. This situation underscores that works created by AI, without any human involvement, are probably not able to satisfy the "modicum of creativity" requirement. Nevertheless, if a human user or developer makes substantial modifications or contributions to the AI-generated work, it might be eligible for copyright protection within this context.

The existing legal structure in India struggles to effectively tackle the challenges presented by works generated by AI. Although the judiciary has highlighted the significance of human creativity, the emergence of AI calls for a reassessment of conventional ideas surrounding authorship and originality. Policymakers might need to explore reforms such as acknowledging AI as a tool utilized by humans, establishing a distinct category for AI-generated content, or considering successful practices from other countries for insight. It is crucial to implement legislative changes to find a balance between fostering innovation and safeguarding human creativity, ensuring that the legal system adapts to the realities of the digital era.⁷

⁵ *RG Anand v. Delux Films*, AIR 1978 SC 1613

⁶ *Eastern Book Company v. D.B. Modak*, 2008 (36) PTC 1 (SC)

⁷ *Supra* Id Pg- 1, Note 2

2. AI and Patent Law

In India, the Patents Act of 1970 regulates patent law, giving patents to inventions that are original, demonstrate an inventive step, and can be applied industrially. The Act specifies that an "inventor" is the individual who comes up with the invention.⁸ Despite this, the Act does not clearly tackle the topic of inventions created by AI, resulting in a lack of legal clarity as AI systems increasingly demonstrate the ability to autonomously generate patentable creations. The Indian Patent Office has not yet provided specific regulations concerning AI-generated inventions, and the prevailing practice is to issue patents only to human inventors. This poses major concerns about the future of innovation in India, as the exclusion of AI-generated inventions from patent protection might hinder technological advancement and leave valuable inventions without legal safeguards.⁹ In the absence of specific regulations for AI-created inventions, the Indian judiciary may have to interpret the current provisions of the Patents Act to tackle this matter. For instance, the courts might need to decide if the creator or operator of an AI system can be recognized as the inventor of inventions produced by AI. Although this topic has not been explicitly addressed in Indian case law, two cases offer clues about how the courts could approach the issue of inventorship.¹⁰

In the case of *Bishwanath Prasad Radhey Shyam v. Hindustan Metal Industries* (1979), the Supreme Court highlighted that for an invention to be eligible for patent protection, it must involve human creativity and effort. The Court ruled that simple mechanical modifications or routine advancements do not satisfy the criteria for an inventive step. Based on this reasoning, inventions generated by AI, which do not exhibit human creativity, are unlikely to qualify for patent protection unless a human inventor can show a substantial contribution to the inventive process.¹¹

In *F. Hoffmann-La Roche Ltd. v. Cipla Ltd.* (2015), the Delhi High Court emphasized the significance of human involvement in the invention process. The Court determined that patent protection is awarded to those who use their expertise and knowledge to develop something innovative and beneficial. This notion implies that AI systems, which function independently of human involvement, are not classified as inventors

⁸ Patents Act, 1970 (India)

⁹ Kathleen Wills, "AI around the World: Intellectual Property Law Considerations and beyond" (2022) 102:2 J Pat & Trademark Off Soc'y 186.

¹⁰ *Id*

¹¹ *Bishwanath Prasad Radhey Shyam v. Hindustan Metal Industries*, (1979) 2 SCC 511

within the existing legal structure.¹²

These instances underscore the necessity for legal reforms to tackle the difficulties presented by inventions generated by AI. Lawmakers must deliberate on whether to view AI as an instrument utilized by human innovators or to establish new legal structures to reflect AI's involvement in the invention process. In the absence of these reforms, India may face the danger of lagging in the global competition for innovation.

3. AI and Trademark Law

In India, the regulation of trademarks is handled by the Trade Marks Act, 1999. This legislation provides safeguards for marks that can differentiate one individual's goods or services from those of others. The Act does not specifically cover the topic of trademarks generated by artificial intelligence.¹³ The Indian Trade Marks Registry has yet to provide specific guidance regarding trademarks generated by AI. However, the standard approach is to offer trademark protection to marks created by natural or legal entities. This situation brings up concerns about who holds ownership over trademarks produced by AI. When an AI system creates a brand name or logo, should the trademark belong to the AI, its developer, or the end user? The Indian legal system may need to clarify the current provisions of the Trade Marks Act to resolve this matter. For instance, the courts might need to decide whether the developer or user of an AI system qualifies as the owner of trademarks generated by AI.¹⁴

The debate surrounding the potential for AI systems to be granted legal personhood is a highly debated topic at the crossroads of AI and intellectual property (IP) law. Legal personhood would mean that AI systems could possess the ability to hold property, form contracts, and engage in litigation. At present, the Indian legal framework does not acknowledge AI systems as legal entities, as the idea of personhood is typically assigned to natural persons (humans) and juridical persons (like corporations). Nonetheless, recognizing AI systems as legal persons could significantly impact IP law in India. For example, if AI systems were acknowledged as legal entities, they might be able to own copyrights for the works they produce or patents for the inventions they create. This would require a major transformation in how authorship and inventorship

¹² F. Hoffmann La Roche Ltd and Ors v Cipla Ltd 2016 65 PTC 1 Del

¹³ Trade Marks Act, 1999 (India)

¹⁴ Anna Kirakosyan, "Intellectual Property Ownership of AI-Generated Content," Digital Law Journal 4, no. 3 (2023): 40-50

are understood, along with the legal structures that regulate these notions.¹⁵

A pertinent case that illustrates the notion of legal personhood in India is *Shiromani Gurdwara Parbandhak Committee v. Shri Som Nath Dass* (2000). In this instance, the Supreme Court of India elucidated that legal personhood is not confined to natural individuals but can also apply to artificial or juridical entities, such as corporations, trusts, and religious organizations, as long as they meet certain legal requirements. The Court highlighted that legal personhood is conferred upon entities that can hold rights and responsibilities, engage in contracts, and be held liable under the law.¹⁶ Using this reasoning, it is possible that AI systems could be awarded legal personhood if they fulfill comparable criteria. Nonetheless, accomplishing this would necessitate considerable changes in legislation and judicial processes, since AI systems presently do not possess the independence and accountability structures necessary for such acknowledgment.¹⁷

The ramifications of granting legal personhood to AI systems are extensive. For instance, if an AI system were recognized as a legal entity, it might be able to hold the copyright for a novel or the patent for an innovative invention. This would challenge established concepts of authorship and inventorship, which are fundamentally tied to human creativity and innovation. Additionally, it would introduce complicated issues related to liability and accountability. For example, if an AI system violated another party's intellectual property rights, who would be considered responsible—the AI itself, its creator, or its operator? These dilemmas emphasize the necessity for a thoughtful and carefully considered strategy regarding the topic of AI personhood in India. Until this is addressed, the existing legal framework will persist in viewing AI as a tool rather than a separate legal entity.¹⁸

4. Ethical Considerations

The ethical dimensions of artificial intelligence in the realm of intellectual property (IP) law are significant and complex. If AI systems are recognized as legal entities, it prompts urgent inquiries about their rights and obligations. Should these AI systems have the ability to possess IP rights, such as copyrights or patents, and what measures

¹⁵ *Id* Note 15

¹⁶ *Shiromani Gurdwara Parbandhak Committee v. Som Nath Das*, 2000 (4) SCC 146

¹⁷ *Id* Pg 4, Note 15

¹⁸ Shivanshi Singh, "Impact and Application of AI in Governance of Intellectual Property Rights of a Company," *International Journal of Law Management & Humanities* 6 (2023): 2055-2062

would be put in place to prevent the misuse of these rights? Alternatively, should AI systems bear responsibility for IP violations, or should that responsibility rest with their creators or users? These matters extend beyond legal boundaries into deep ethical territory, as they involve questions of accountability, justice, and the distribution of authority between humans and machines.¹⁹

Assigning legal personhood to AI entities may result in cases where works or inventions produced by AI are owned by the AI itself, which could marginalize human creators and innovators. This development might contradict the fundamental goal of intellectual property law, which is to promote human creativity and invention. Furthermore, holding AI systems accountable for infringement poses challenges, as they do not possess the moral agency and intent necessary for legal responsibility. Instead, it may be more fitting to hold developers and users—those who design, train, and implement AI systems—accountable for any violations of intellectual property rights. Ethically, the discourse also touches on issues of fairness and transparency. Is it justifiable to grant rights to AI systems, which do not possess consciousness or autonomy, if it could potentially put human creators at a disadvantage? Policymakers need to thoughtfully navigate the necessity of fostering technological progress while safeguarding human interests, making sure that the advancement of AI does not compromise the ethical principles of intellectual property law.²⁰

Authors Analysis

The viewpoint expressed here suggests that although AI poses challenges to established concepts of intellectual property, it simultaneously creates opportunities for innovation and the development of new legal structures. The existing legal frameworks in India fall short in addressing the issues brought about by AI, necessitating the creation of new legal paradigms to maintain a balance between encouraging innovation and safeguarding human creativity. Acknowledging AI as a legal entity could significantly impact intellectual property law, especially regarding copyrights and patents.

¹⁹ Russ Pearlman, "Recognizing Artificial Intelligence (AI) as Authors and Investors under U.S. Intellectual Property Law," *Richmond Journal of Law & Technology* 24, no. 2 (Winter 2017): i-38

²⁰ Mauritz Kop, "AI & Intellectual Property: Towards an Articulated Public Domain," *Texas Intellectual Property Law Journal* 28, no. 3 (2020): 297-342

Recommendations

The swift evolution of Artificial Intelligence (AI) brings forth notable challenges to conventional intellectual property (IP) systems in India. In order to tackle these issues, it is crucial for lawmakers to modify IP legislation to align with the realities of AI, striving for a balance that promotes innovation while safeguarding human creativity. The following suggestions provide a framework for achieving this equilibrium:

To begin with, it is vital to revise copyright laws to confront the difficulties introduced by works created through AI. Amendments to the Copyright Act of 1957 should be made to clarify the classification of content produced by AI. Policymakers might contemplate acknowledging the creator or operator of an AI system as the author of AI-generated works, assuming they can demonstrate substantial human contribution to the creative process. Alternatively, a fresh legal structure could be established to tackle the distinct challenges that AI presents, ensuring these works receive protection while upholding the essence of human authorship.²¹

Updating patent legislation is essential to keep up with inventions created by AI. The Patents Act of 1970 should be amended to clarify who is considered the inventor when AI systems independently create patentable inventions. Policymakers might think about acknowledging either the developer or the operator of an AI system as the inventor, or they could establish a distinct category for inventions made by AI. Doing so would protect valuable innovations and encourage ongoing creative development.²²

To effectively tackle the larger issues presented by AI, it is essential to develop new legal frameworks. This may involve considering the idea of granting AI legal personhood, enabling it to possess intellectual property rights and assume legal obligations. Although this would necessitate a significant change in legal perspectives, it could offer a systematic approach to dealing with the distinct challenges that AI presents.²³

Fostering additional research is essential to grasp the complete effects of AI on intellectual

²¹ Anderson, K. Lance, “Artificial Incompetence: How Generative AI Creates Latent Intellectual Property Issues “

RAIL: The Journal of Robotics, Artificial Intelligence & Law, Vol. 7, Issue 3 (2024), pp. 177-194

²² Henderson, Rebecca, “AI and Intellectual Property Ownership: Who Is the 'Inventor' When the Machine Self-Develops? “Business Law Review, Vol. 44, Issue 3 (2023), pp. 124

²³ *Id* Pg 26, Note 22

property law. Decision-makers ought to allocate resources for investigating the potential consequences of AI on copyright and patent frameworks, along with the ethical and legal issues related to creations and inventions produced by AI. Such research would lay an evidence-based groundwork for upcoming legislative changes..²⁴

Conclusion

Fostering international collaboration is crucial for tackling the worldwide challenges associated with AI and intellectual property. India should engage with global bodies, like the World Intellectual Property Organization (WIPO), to establish unified legal standards that address the specific issues brought about by AI. This approach will help ensure that India stays at the cutting edge of global innovation while also protecting the rights of creators and inventors. Finally, it is vital to maintain a balance between innovation and creativity. Policymakers need to formulate legal structures that encourage the application of AI in innovation while also protecting the rights of human creators. This could involve measures that guarantee recognition and rewards for human contributions, even when AI has a significant influence on the creative or inventive process.²⁵

In summary, modifying intellectual property laws to align with the realities of artificial intelligence necessitates a comprehensive strategy that harmonizes innovation and creativity. By enacting these suggestions, lawmakers can guarantee that India's intellectual property system stays strong and effectively addresses the challenges and opportunities brought forth by AI.

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