BEYOND HUMAN CREATIVITY: ARTIFICIAL INTELLIGENCE AND THE TRANSFORMATION OF INTELLECTUAL PROPERTY RIGHTS

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ABSTRACT

The globe has seen an exponential expansion in industrialization, with innovation propelling the development of new technologies and processes at an unprecedented rate, as well as the sliding span from Information Technology (IT) to Artificial Intelligence (AI). The globalised production landscape feeds on international cooperation and competitiveness. IPR rules have traditionally protected human creations, but artificial intelligence's potential to generate convincing evidence and innovation on its own poses doubts about such frameworks. In such a fluid context, Intellectual Property Rights (IPR) protection is indispensable.

Traditional frameworks may fail to effectively address the ownership and rights of AI-generated ideas or original creative production. As a result, this puts into question the degree of conventional and legal definitions of inventions and creations in the pursuit of patents, ownership and copyrights, trademarks, and geographical indications among those who rely solely on AI, as well as the issue of ownership of AI-created things, including whether the user, programmer, or AI has intellectual property rights. Furthermore, difficulties in granting IPR for AI-generated data or the IPR of the human mind raise doubt on the scope of infringement in AI-assisted, AI-generated, and AI-based conceptions, which will be discussed in the article.

The industry requires new laws and protocols to address unresolved concerns about the ownership of AI-created items, such as whether the user, programmer, or AI owns intellectual property rights, and to address the rights to authorship, ownership, patenting, geographical indications, and trademarks, as well as the ethical implications of AI's role in content creation. International harmonization of identical IPR standards would produce a level playing field, enabling for knowledge transfer and cross-border collaboration, both of which are crucial for long-term industrial progress in the ethical and legal aspects of IPR and AI on a global scale, increasing customer trust in the digital age. To address potential concerns, international AI and IPR regulation should be based on international concepts such as the precautionary principle in environmental law. Nations may collaborate to

negotiate the complexities of AI and IPR, allowing them to maximize their potential for growth.

Keywords: Artificial Intelligence, Intellectual Property Rights, Regulation

1. INTRODUCTION

The world has undergone a major transition from the realm of information technology to contemporary AI one. Alan Turing, a mathematician introduced AI as a concept and during the Dartmouth conference, in 1950 computer scientist John McCarthy coined the term Artificial Intelligence.[1] There is no proper single definition for AI that can be accepted by all practitioners. Generally, AI is referred to as the science of making machines think like humans. AI may now use methods like machine learning to create creations and works that are on identical levels to human outputs[2] and touches every stratum of the society[3]. Intellectual property (IP) refers to any original invention of the human intellect, including artistic, literary, technical, and scientific works. Intellectual property rights (IPR) are legal rights granted to an inventor or creator to safeguard his invention or creativity for a specified length of time.[4]

AI could supplement human efforts in tracking intellectual property assets, identifying infringers, and resolving copyright concerns. As this trend continues, the delicate link between AI and intellectual property will become increasingly vital to address. However, the aforementioned difficulties could also emerge from AI systems themselves. Generative AI, in particular, has the potential to profoundly influence intellectual IPR laws. ChatGPT, black box AI other tools continue to gain prominence, yet they are being accused of plagiarism.

This article presents a comprehensive evaluation of the relationship between *Artificial Intelligence (AI) and Intellectual Property (IP)* in light of worldwide issues and challenges. The argumentation is anchored and supported by a comprehensive analysis of comparative assessments of AI and intellectual property rights, as well as legal scrutiny.

[1] Exec. Office of the President National Science and Technology Council Committee on Tech., Preparing for the Future of Artificial Intelligence (2016) (referred as 2nd Obama report)
[2] Guadamuz, A. (2017). Artificial intelligence and copyright. WIPO Magazine
[3] Civil Law Rules on Robotics - European Parliament resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)), Eur. Parl. Doc. P8 TA 0051, at (2017) (hereinafter European Parliament Resolution)
[4] Singh R. Vol. 1. New Delhi: Universal Law Publishing Co. Pvt. Ltd; 2004. Law relating to intellectual property

2. NEED FOR INTERNATIONAL REGULATORY FRAMEWORK

To keep up with rapid technological advancements, regulatory frameworks for AI and IP must be flexible and adaptive. Regulatory ability to respond fast to technological advances without inhibiting innovation is critical. This includes knowing the technology, anticipating its future direction, and setting up laws that are wide enough to allow unforeseen improvements while being explicit enough to provide unambiguous instructions.[5] Elon Musk himself has called for greater research and regulation to ensure AI is developed ethically.

WIPO published the WIPO Technology Trends (WITT) report on AI in January 2019. The WITT showed that there is a large demand for intellectual property (IP) rights in AI technologies. It presents the analysis of more than 340,000 AI-related patent applications and 1.6 million scientific papers published since the 1950s. The WITT also contains comments and suggestions made by 27 world leaders in the field.[6] In December 2019, WIPO published a draft discussion paper on IP and AI, asking for feedback from member states and others. It addressed thirteen challenges in AI and IP policy, providing a framework for informed policymaking.[7]

The lawsuit against Google for collecting content from books to create its search engine was successfully defended on the grounds of fair use for transformative purposes which establishes a precedent.[8], yet questions remain about AI. Issues such as infringement, ownership of AI-generated works, patents, unlicensed content, the ability to interact with protected and trademarked content, and designs via AI programs without consent create problems that require protection in the eyes of the law.[9] With rapid technological developments in big data analytics and cloud computing propelling the precision agriculture phenomenon, an assessment is needed of the suitability of the EU legal framework to cope with the ethical and regulatory challenges that the digitization and automation of farming activities may pose in the years to come.[10]

[5] Gulyamov, S., Rustambekov, I., Narziev, O., & Xudayberganov, A. (2021). Draft Concept of the Republic of Uzbekistan in the Field of Development Artificial Intelligence for 2021-2030.
[6] https://aiforgood.itu.int/about-ai-for-good/un-ai-actions/wipo/
[7] https://indiaai.gov.in/ai-standards/ai-and-intellectual-property-rights
[8] 804 F, https://www.scotusblog.com/wp-content/uploads/2016/01/Authors-Guild-v.-Google.pdf
[9] Beier FK, Schricker G. Munich: Copyright and Competition Law; 1996. IIC studies: Studies in industrial property and copyright law, from GATT to TRIPS - the agreement on trade related aspects of intellectual property rights.Max Planck Institute for Foreign and International Patent. [Google Scholar]
[10] Kritikos, M. (2020). Regulating Artificial Intelligence: The EU Approach. Science and Technology Options Assessment (STOA). European Parliament.

3. ISSUES AND DISCUSSIONS

In the realm of law, artificial intelligence has severe implications for several types of Intellectual Property Rights, including copyright, trade secrets, patents, trademarks, and designs. As AI emerges as a general-purpose technology with significant uses in business and society, key concerns arise about the existing IP structure. How should the relevance of human invention and creation be balanced with AI innovation and creation? Is it appropriate to treat artificial intelligence-generated data as intellectual property? Whether AI has a legal personality that can own IP much like owners and companies that fall under legal personas or entities? If an AI system creates a logo that closely resembles an existing trademark, who owns the rights to that logo? Who should be granted a patent for AI-generated data, the AI itself, the user, or the programmer? Does AI-generated data infringe on third-party rights? If so, who's to be held liable AI, the user, or the programmer? Can third parties sue the person who generated data from AI for infringing their rights or should it be rejected on the grounds that it is not emanating from human minds? Can AI-generated content be copyrighted in cases where there is some human engagement with the AI in the creative process of an original work? What levels of conventional and legal definitions of innovations and creations and originality in IP define ownership and copyrights, trademarks, and geographical indications among people who rely only on AI, should they be modified? Should there be no patenting for AI-generated data and its users, thereby encouraging the innovation of the original owner or worker through human intellect only? Whether AI-generated inventions should be excluded from intellectual property rights (IPR), whether special rules should be created for AI-assisted inventions (or if they should be treated the same as other computer-assisted inventions), etc. *These questions, and many more, demand complicated legal systems.*[11]

3.1. OWNERSHIP, AUTHORSHIP

Today, AI is altering the landscape of intellectual property and patents in two key ways: the competition to create and safeguard intellectual property pertaining to the newest advancements in AI, as well as the use of AI in the process of creating and producing IP. One of the most severe issues with law associated with artificial intelligence to intellectual property is the issue of ownership and authorship and patent of AI-generated works. AI can be used to generate original work with a high level of originality, but the question remains: 'Who owns

[11] WIPO (2019). WIPO Technology Trends 2019: Artificial Intelligence. WIPO

that work?' The person who directs the AI system to create the work (User), the AI system's creator (AI programmer), or the AI system itself. According to traditional intellectual property law, the creator or author of the work is regarded as the only owner of the work, but this is not true for AI-generated art.

The definition of "author" in Section 2(d) of the Indian Copyright Act[12] Implies a human or legal person and is defined as the one who causes the work to be generated. In the Raghav case[13], the Copyright Office granted AI Raghav and the originator joint authorship rights under Section 2(z) of the Indian Copyright Act. A crucial concern involving AI copyright in India is whether computer-authored works meet the originality standard under Section 13 of the Copyright Act, which can be answered by carefully reading Sections 2(z) and 17(a)4.

A work's copyright is based on human authorship, which the Court in Cummins v. Bond[14] affirmed by granting copyright to the human medium who transcribed the work, rather than the nonhuman spirit source.

3.2. AI AND DESIGNS AND TRADEMARK

The goal of trademark protection is to prevent consumer misunderstandings while maintaining a mark's uniqueness and commercial appeal.[15] The core tenets of trademark law are called into question by AI. AI has the ability to produce designs that closely resemble already-registered trademarks, which could result in unintentional infringements. The line separating originality from resemblance becomes increasingly hazy, which affects how judges evaluate possible infractions. Can artificial intelligence be deemed a second infringer if it advises on and purchases counterfeits? AI-generated designs may be less unique and functional than those created by humans, reducing consumer confidence and brand perception and leading to further challenges. It is widely acknowledged that trademark law was created to address inherent flaws in people; but, are there flaws in artificial intelligence?

The court determined that Amazon had infringed upon Lush's trademarks in the historic case of Lush v. Amazon.[16] The biases in the data that AI tools are trained on are often reflected in

[12] Copyright Act, 1957 India
[13] https://spicyip.com/2023/12/ankit-sahnis-ai-co-authored-artwork-denied-registration-by-us-continues-to-be-registered-in-india.html
[14] (1927) 1 Ch. 167
[15] Frank I. Schechter, The Rational Basis of Trademark Protection, 40 HARV. L. REV. 813 (1927)
[16] Cosmetic Warriors and Lush v Amazon.co.uk and Amazon EU ([2014] EWHC

their designs, which may inadvertently reinforce preconceptions or exclude particular demographics. Confusion among consumers is a significant problem with AI-generated designs.[17]

The UK's s Anti-Copying In Design (ACID)[18] Maintains a databank of over 300,000 designs (including unregistered designs) that could provide data to train an AI to recognize infringing designs.

3.3. AI AND PATENT

Under the Indian Patents Act of 1970[19], the terms "patent" and "person interested" in Section 2(p) of the aforementioned Act serve as a barrier to AI inclusion in its scope. Section 2 (y) does not require that the "true and first inventor" be a person; thus, works created by AI systems are under the definition's scope. However, the section that prohibits non-human patent holders contradicts this notion. Besides, the phrase used in Section 6 to identify a human "true and first inventor" suggests that accommodating AI inventors will be difficult. Since human authors are the cornerstone of copyright, the law recognizes and rewards them for their creativity and originality.[20] Patenting cannot be obtained for mere patenting.[21] This disparity demonstrates a fundamental loophole in Indian patent law when dealing with AI-generated ideas.

Qualcomm Inc. v. Apple Inc.,[22] the court ruled in favor of Qualcomn finding the patent was valid and holding Apple liable for it as it was based on an AI algorithm. *Eastern Book Company V. D.B. Modak, 20042[23] It was stated by the SC that in order to assess the originality of the work, the involvement of the author's judgment and abilities is necessary along with the labor done. Recent cases, such as the DABUS case (Thaler v Comptroller-General of Patents, Designs and Trademarks [2023] UKSC 49)[24] In the UK, the Hearing Officer issued a decision*

181 (Ch))
[17] https://www.wipo.int/export/sites/www/about-ip/en/artificial_intelligence/call_for_comments/pdf/ind_revella.pdf
[18] https://www.wipo.int/edocs/mdocs/enforcement/en/wipo_ace_16/wipo_ace_16_15_presentation.pdf
[19] Indian Patents Act of 1970
[20]. See WIPO Secretariat, "Revised Issued Paper on Intellectual Property Policy and Artificial Intelligence", WIPO/IP/AI/2/GE/20/1 REV (11 June 2022)
[21] IBM Corp.'s Appln., [1980] F.S.R. 568.
[22] Case No.: 3:17-cv-2403-CAB-MDD (S.D. Cal. Aug. 29, 2018
[23] Eastern Book Company and Ors. vs D.B. Modak and Ors. 101 (2002) DLT 205
[24] European Parliament and Council of the European Union (2016). General Data Protection Regulation. EU 2016/679.
https://www.wpt.co.uk/en/news/uksc-thaler-appellant-v-comptroller-general-of-patents-designs-and-trademarks-respondent

that DABUS could not be regarded as an inventor under the 1977 Act, and further, that Dr. Thaler was not entitled to apply for the patents simply because he owned DABUS and held unanimously ruled that only a natural person can be named as an inventor on a patent application. The United States considers humans as copyright holders. Fairly recently, The United States Patent and Trademark Office (USPTO) declined a petition involving Artificial Intelligence (AI) systems and inventors.[25] The same was done by the European Patent Office.[26] In UK legislation, under the Copyright Designs and Patents Act, 1988 (the CDPA), AI is not viewed as a creator.[27] In Australia and New Zealand, the patentability of AI-generated inventions is currently limited by the requirement that an invention be the product of human inventiveness in order to be patentable.[28]

3.4. AI AND COPYRIGHT

Historically, copyright ownership in computer-generated works was not questioned as the software served as a tool for creativity. The computer code is no longer merely a tool, though, as the latest advancements in artificial intelligence enable it to make numerous innovative decisions without the need for human input. ChatGPT cannot be considered the author because the person claiming copyright in India must be a natural person. Only persons are permitted to be authors, according to Section 17 of the Indian Copyright Act.[29]. The term "persons" is often limited to individuals; but, based on an agreement, an individual may grant copyright (Section 18) to entities like companies for a defined amount of time but AI lacks the legal personality to claim any rights.

Many countries' policies appear to be mutually exclusive with non-human copyright. For instance, the Copyright Office[30] in the United States has said that it will register an original work of authorship, provided the work was created by a human being. In the case of *Feist Publications v Rural Telephone Service Company, Inc.*[31]*, it was held that copyright law only protects "the fruits of intellectual labor" that are "founded in the creative powers of the mind*."

[25] https://www.theverge.com/2024/2/13/24072241/ai-patent-us-office-guidance
[26] https://www.epo.org/en/news-events/news/epo-publishes-grounds-its-decision-refuse-two-patent-applications-naming-machine
[27] https://www.gov.uk/government/consultations/artificial-intelligence-and-intellectual-property-call-for-views/artificial-intelligence-call-for-views-copyright-and-related-rights
[28] https://www.jamesandwells.com/nz/nz-high-court-says-an-ai-cannot-be-named-as-an-inventor-on-a-patent/
[29] ibid
[30] Who Owns AI-Generated Art?, LBB (2022), available at https://www.lbbonline.com/news/who-owns-ai-generated-art
[31]499 U.S. 340 (1991), https://supreme.justia.com/cases/federal/us/499/340/

Australian and European Laws adhere to the same principles. The same contention was held in a recent Australian decision (Acohs Pty Ltd v Ucorp Pty Ltd)[32] As well as the case of DABUS (Device for Autonomous Bootstrapping of Unified Sentience).[33] In Commissioner of Patents v Thaler[34], the Deputy Commissioner of Patents was correct to conclude that, by naming DABUS as the inventor, the application did not comply with reg 3.2C(2)(aa) of the Patents Regulations 1991 (Cth).

3.5. THIRD-PARTY INFRINGEMENT, ABILITY TO SUE, DETERMINATION OF LIABILITY

Third-Party infringement

If an individual uses AI-generated content without the owner's permission which violates current patents, copyrights, or trademarks it is known as third-party infringement. This is complicated by AI as the algorithm can independently produce outputs that closely resemble words in already-protected works.[35] Involving the developers, investors, coders' users and AI itself might create ambiguity about who should be held responsible.

Possibility of Sue

Nonetheless, conventional IPR systems grant those rights to the original creator but AI changes this. It poses a legal question of determining who has a right to sue either the programmer, user, or an entity of AI when AI generates some materials. This could stifle innovation since there is uncertainty regarding potential legal consequences for infringers.[36]

Determination of Liability

Culpability with respect to IP law concerning AI-related issues is determined by assessing each part's contribution towards generating and using work 1done by artificial intelligence. Given

[32] [2010] FCA 577
https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/single/2010/2010fca0577
[33] ECLI:EP:BA:2021:J000820.20211221
https://brandequity.economictimes.indiatimes.com/news/digital/meet-dabus-the-worlds-first-ai-system-to-be-awarded-a-patent/85149000
[34] [2022] FCAFC 62
https://www.judgments.fedcourt.gov.au/judgments/Judgments/fca/full/2022/2022fcafc0062
[35] https://www.mondaq.com/india/trademark/1373608/what-if-ai-starts-infringing-ip-rights#:~:text=The%20section%20reads%20%22any%20person,she%20shall%20be%20held%20liable
[36] https://www.potterclarkson.com/insights/might-an-output-from-an-ai-infringe-a-third-party-s-rights-and-who-may-be-liable/

that our guide on "AI & Liability" explains why an AI system cannot be sued because it isn't a juridical person. So, if you can't take legal action against artificial intelligence what would you do? The important factors include the purpose of use of AI; the degree of control exercised by a developer or user; and specifics about infringement committed. It might be necessary for courts to create new legal guidelines to assess culpability in a way that ensures liability is distributed equitably and supports the development of technology.[37]

4. FURTHER APPROACH

4.1. REVIEWING OR TWOFOLD LICENSING

A suitable solution for AI and intellectual property rights (IPR) can be two-fold licensing, combining open and traditional licensing ways as well[38]. The first fold focuses on open licensing, by allowing AI use and altering existing AI technologies, paving the way towards innovation as well as advancements. In the event of unauthorized use or infringement, the second fold is focused on traditional licensing, which gives creators control over the specific AI applications and outputs they generate. This way, innovators' rights are also protected by providing legal recourse, ensuring that the innovators and fairly and rightly recognized and compensated for their contributions. By combining these two, a framework that brings about harmony between the creator rights and utilization of tech or AI, encouraging creativity can be created.[39]

4.2. STATUS OF AI IN IPR

The following options may be taken into consideration when using AI-generated data that is utilized by humans.

a. Acknowledging the AI owner's authorship over the AI's original creations, i.e., patenting the AI programmer rather than the AI.

b. Identifying AI and its owner both as co-authors and owners of the work.

c. Strict liability: Assuming complete responsibility for any harm caused by AI and

[37] https://iapp.org/news/a/third-party-liability-and-product-liability-for-ai-systems
[38] https://www.synopsys.com/blogs/software-security/software-licensing-decisions-consider-dual-licensing.html
[39] https://www.lexisnexis.in/blogs/shielding-creativity-understanding-intellectual-property-rights-in-india/

holding its creator or owner and user liable.

d. Denying the complete legal personality of AI is known as a limited legal personality.

e. Encouraging original work, creativity, and innovation originating from human minds alone, as well as allowing AI-assisted content to be part of the public domain and not protecting it at all, can help prevent copyright challenges linked with AI.[40] For example, 70% of a book must be written by the human mind that is inclusive of derivations from both AI and the human mind in order to claim IPR.

4.3. LEGAL PERSONALITY OF AI

Granting legal personality to AI would be achievable, but it would not solve any of the issues raised by their progress and would probably create new ones. These would include the potential for assigning responsibility to AI, the danger of AI being abused, and, in the worst case, the potential for AI to misuse its skills.[41] Therefore, it doesn't currently seem like a realistic or feasible step to give copyright registration in the name of an AI besides it lacks 2 main elements of legal personality i.e, Corpus, the physical embodiment recognized by law (AI lacks since it exists as software without a tangible form) and Animus, the intention or will to act (AI operates based on algorithms without true intent or consciousness). AI is not capable of independent thoughts and cognitive approaches.[42]

The European Commission adopted a proposal in April 2021 for a Regulation laying down harmonized rules on AI (Artificial Intelligence Act). This proposal has no significance to the legal personality of robots but constitutes an element of a larger comprehensive package of measures that address issues raised by the development and use of AI, including liability issues.[43]

4.4. COMPLETELY AI-GENERATED DATA AS AN EXCEPTION TO IPR

While AI text generators may accurately emulate writing styles in a variety of formats, they are not a substitute for human creativity, but rather a powerful tool that augments it.[44] The

[40] https://ksandk.com/intellectual-property-rights/ipr-and-artificial-intelligence/
[41] https://liedekerke.com/en/insights/artificial-intelligence-and-legal-personality
[42] S. Russell and P. Norvig, Artificial Intelligence: a Modern Approach, Pearson, 3rd edn., 2016 (introduction).
[43] European Commission. (2018). Communication Artificial Intelligence for Europe. COM (2018) 237 final.
[44] https://aicontentfy.com/en/blog/ethical-dilemma-of-ai-writing-assistants-balancing-authenticity-and-automation

Doctrine of Fair Utilization or Fair Dealing should be implemented to allow a person to utilize AI for any work in a restricted manner so that the work's uniqueness and intellectual rights are preserved and are not completely derived from AI, intended to safeguard intellectual property that is AI-assisted rather than completely AI-generated. [45]

4.5. NEED TO REDEFINE THE EXISTING CONCEPTUAL FRAMEWORK

The rapid development of innovative company models, digital technology, and the growing importance of intangible assets have called into question traditional concepts of intellectual property protection. This is why existing intellectual property systems need to be re-evaluated for a more precise conceptual framework on settled definitions of creativity, innovation, and original work.[46]

To strike a balance between the competing principles of safeguarding human involvement in creative works and recognizing the copyrightability of AI-generated content, identifying the level of human engagement in the process and the level of its significance is crucial for which the "Human Involvement percentile" test seeks to find an equilibrium between the opposing goals of preserving human input in creative works and identifying AI-generated information as copyrightable.[47] What level or degree of human creativity, innovation, and originality grants the right to assert IPRs for authorship and ownership of works created from both the human mind and artificial intelligence (AI) is to be specified for which existing laws must go modifications so as to preclude AI and its works in it for transparency.

5. ETHICAL AND REGULATORY CONSIDERATION

Whether AI-assisted or AI-generated inventions present any challenges in the disclosure requirement; further, it considers whether the initial disclosure requirement would be sufficient where the algorithm continuously changes over time through machine learning; how to treat data used to train an algorithm; and whether human expertise used to select data and train the

[45] "Under what circumstances would the unauthorized use of copyrighted works to train AI models constitute fair use?" 88 Fed. Reg. 59942, 59946.
https://www.techpolicy.press/copyright-fair-use-regulatory-approaches-in-ai-content-generation/
[46] https://www.iiprd.com/ai-and-intellectual-property-rights-issues-and-impacts/
[47] https://www.reuters.com/legal/litigation/patents-ai-creations-require-significant-human-input-uspto-says-2024-02-12/
https://www.ijlt.in/post/balancing-indian-copyright-law-with-ai-generated-content-the-significant-human-input-approach

algorithm should be disclosed.[48] While not explicitly legally required, adopting ethical norms might help reduce dangers and increase trust in AI systems. Bias in AI algorithms can result in discriminatory outcomes and unfair trade practices hence it is critical to establish openness and accountability in AI decision-making.[49] Companies and individuals responsible for disclosing the services used by AI, as well as companies that include AI provisions, would be helpful. There is no distinct legislation in India that protects trade secrets, confidential information, or concealed knowledge, despite the fact that laws pertaining to all forms of intellectual property are being implemented at varying stages.[50]

6. CONCLUSION

In this AI-reliant world, using AI to improve one's ability to express one's opinions in any way and to assist its users has become acceptable; however, relying solely on AI to perform all tasks would severely limit human creativity, innovation, and critical thinking.[51] The future of AI and IP regulation presents equal obstacles as well as potential for advancement.[52] The establishment of a regulatory framework is crucial for governing AI and IPR to provide adequate monitoring and bolster customer trust in this advanced society.[53] Policymakers, regulators, and AI developers must navigate this rapidly changing terrain with knowledge, and foresight, and preserve the principles of transparency and responsible behavior.

With its fast-expanding tech sector, India stands to gain from well-defined and efficient AI legislation. The European approach might be modified to give India's AI governance a solid basis.[54]. However, a customized strategy is required due to the nation's distinct socioeconomic, technological, and regulatory environment. The IPR law must be amended in a way that addresses every detail and leaves no room for interpretation. This determined approach deliberated above combines theoretical and practical analysis and is intended to provide a comprehensive knowledge of the issues surrounding AI and IPR. It's paramount that we strike

[48] https://indiaai.gov.in/ai-standards/ai-and-intellectual-property-rights
[49]https://www.researchgate.net/publication/375744287_Artificial_Intelligence_and_Ethics_A_Comprehensive_Review_of_Bias_Mitigation_Transparency_and_Accountability_in_AI_Systems
[50] Michaels A. 2nd ed. London: Sweet and Maxwell; 1996. A Practical Guide to Trade Mark Law. [Google Scholar]
[51] https://www.weforum.org/agenda/2023/02/ai-can-catalyze-and-inhibit-your-creativity-here-is-how/
[52] https://www.tilleke.com/insights/challenges-future-intellectual-property-issues-artificial-intelligence/
[53] Smithers T., Whittaker M., & Campolo A. (2019). Accountability in Artificial Intelligence: Frameworks for AI System Design. Proceedings of the Conference on Fairness, Accountability, and Transparency, 278-287
[54] European Parliament and Council of the European Union (2016). General Data Protection Regulation. EU 2016/679.

a balance between regulation and innovation, as well as explore potential future regulations for AI and IP while fostering innovation and preserving competition.[55]

[55] Glasgow LJ. Stretching the limits of intellectual property rights: Has the pharmaceutical industry gone too far? IDEA J Law Technol. 2001;41:227–58. [Google Scholar]