THE EMERGING JURISPRUDENCE AND LEGAL GAPS BETWEEN ARTIFICIAL INTELLIGENCE AND INTELLECTUAL PROPERTY DISPUTES

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ABSTRACT

Complex legal issues in the area of Intellectual Property Rights have arisen as a result of the revolutionary changes brought about by artificial intelligence (AI) in the fields of creativity, innovation, and data analysis. Because they give artists and innovators legal protection for their original works, inventions, designs, and distinctive marks, intellectual property rights (IPR) are essential for promoting innovation, creativity, and economic advancement. By creating an atmosphere that encourages invention, these rights seek to achieve a crucial balance between the interests of society as a whole and individual ingenuity. The relationship between AI and Intellectual Property law is still relatively new in India, but it is becoming more and more significant. From creating original paintings and music to identifying medicinal compounds and developing corporate identities, artificial intelligence's contribution to content creation is growing rapidly. AI is becoming more than just a tool; it has the ability to be an independent inventor or co-creator. This changing connection will therefore likely have a significant impact on Indian politicians, innovators, lawyers, and copyright holders. This study examines the legal voids and developing jurisprudence around AI-generated works, AI-assisted inventions, and data and algorithm protection within India's current intellectual property regimes. The study then delves into all the facets of Intellectual Property and the intersectionality of such facets with AI. This new intersection is now a practical issue rather than a theoretical one. It explores the ways in which AI-generated works and AI-assisted breakthroughs fall under the current legal standards of originality, authorship, inventorship, and novelty. The study intends to identify the potential and legal ambiguities presented by AI through doctrinal analysis, comparative jurisprudence, and policy evaluation. It also suggests a course for modifying India's intellectual property laws to take advantage of these revolutionary technical advancements. In order to close these legal gaps and prepare India's intellectual property system for the AI-driven future, the paper ends with a set of forward-looking policy and regulatory proposals.

Introduction

Intellectual Property Rights essentially aim to protect the creative application of mind, which can be anything – artistic work, literary work, an invention, a design, a logo which demonstrates brands unique and distinctive identity etc. By striking the right balance between the interests of innovators and the wider public interest, the IP system aims to foster an environment in which creativity and innovation can flourish.[1] Artificial Intelligence on the hand, is revolutionising businesses by making it possible for machines to carry out activities that previously required human intelligence. AI's powers are upending traditional ideas of creativity, inventorship, and authorship—three fundamental tenets of intellectual property law - from creating literature and art to finding new medications. India's legal reaction to AI-IP concerns is still scattered and immature, whereas nations such as the United States, United Kingdom, and Australia have started debates and reforms on this front. AI essentially is blurring the lines of Intellectual Property by introducing autonomous or semi-autonomous creators and inventors. Under the Copyright Act 1957[2], copyrights subsists when the idea or the expression of an idea takes a tangible form and there is some level of modicum of creativity. This doctrine stipulates that originality subsists in a work where a sufficient amount of intellectual creativity and judgment has gone into the creation of that work. The standard of creativity need not be high but a minimum level of creativity should be there for copyright protection.[3] Therefore the question that arises in Copyright is can AI be recognized as an author and can copyright subsist in such a case? Moving forward, for an invention to be patentable under the Patent Act 1970[4], three criteria's must be satisfied, i.e., the invention must be novel, the invention must be an inventive step and the invention must have an industrial application. Therefore, how can one decide if AI generated work can meet this criteria? Under the Design Act, 2000, it is essential for a design to be considered registrable for it to be new and original, aesthetic, appealing to the eye and must not be disclosed anywhere in public. How can it be proved that a design created by AI fulfils all of the above mentioned criteria?

Lastly, a trademark is the distinctive identity of a brand, it helps one identify the source of goods and services. Creative content, such as logos and brand names, can be produced by AI

[1] World Intellectual Property Organization, *What is Intellectual Property?*, WIPO, https://www.wipo.int/about-ip/ (last visited May 12, 2025).
[2] Copyright Act, No. 14, Acts of Parliament, 1957 (India).
[3] Shuchi Mehta, Analysis of Doctrines "Sweat of the Brow", "Modicum of Creativity", & "Originality" in Copyright, IndiaLaw LLP Blog, https://www.indialaw.in/blog/law/analysis-of-doctrines-sweat-of-brow-modicum-of-creativity-originality-in-copyright/ (last visited May 12, 2025).
[4] Patents Act, No. 39, Acts of Parliament, 1970 (India).

algorithms. This calls into question whether AI-generated trademarks qualify for Indian law protection? As this paper progresses, it will examine the questions outlined above and contribute to a deeper understanding of the role of artificial intelligence in intellectual property disputes, particularly in determining where the boundaries ought to be drawn.

Copyright and Artificial Intelligence

As advanced by Section 13 of the Copyright Act[5], the exclusive right of copyright subsist in the original literary, dramatic, musical, artistic work, cinematograph films and sound recordings. This exclusive rights gives the author the right to make any adaption of their work, translate their work, perform or communicate their work in public, issue copied of their work in public etc. Copyright has historically protected "original works" produced by human authors. However, what would happen if a machine created a graphic on its own, wrote a novel, or composed a symphony? The core of the copyright-AI controversy is this query. Before we get into this debate, it is imperative to understand two doctrines – namely 'sweat of the brow' and modicum of creativity'. As stated above, modicum of creativity doctrine states that there should be atleast some amount of creativity put in by the author, the threshold although for this creativity is not high. In ***Eastern Book Co. v. D.B. Modak***[6] the Court adopted the "modicum of creativity" criteria, which states that merely exerting effort or labour is insufficient to ensure copyright protection in collections. The sweat of the brow doctrine on the other hand, is a copyright theory that protects a work according to the skill, labour, and effort put into its creation. The Delhi High Court ruled in the matter of *Burlington Home Shopping v. Rajnish Chibber*[7] that a compilation may be deemed a copyrightable work if it was created with a significant investment of time, effort, and expertise. Indian copyright law aligns with both doctrines. Courts may have to reconsider what "originality" is and whether human-machine collaboration fulfils either concept in light of AI-generated work. Does the AI meet the requirements for originality or effort if a person only provides a suggestion and it creates a poem or painting? Or does it fall into a vacuum created by copyright? A deeper problem is highlighted by the convergence of AI with these doctrines: classical copyright theories were developed for human minds, not machine reasoning. India may need to enact new laws to address this, such as acknowledging AI-assisted works in which humans make significant contributions without requiring complete authorship. Currently, under Section 2(d) of the

[5] Copyright Act, 1957, § 13, No. 14, Acts of Parliament, 1957 (India).
[6] Eastern Book Co. v. D.B. Modak, (2008) 1 S.C.C. 1 (India).
[7] Burlington Home Shopping Pvt. Ltd. v. Rajnish Chibber, 61 (1995) DLT 6 (Del).

Copyright Act, a human creator of a work is referred to as the "author". Only natural or legal individuals are awarded rights under this anthropocentric interpretation of copyright law. As of yet, no legally binding ruling from an Indian court has addressed, whether copyright applies to works created by AI or what level of human ingenuity is required to be eligible for protection? One could use the doctrine of modicum of creativity to support the claim that AI-generated content is not protected since it lacks human originality. AI-generated works have occasionally been filed for copyright registration in India, but these applications are often only approved if a human creator is identified. AI authorship is not formally acknowledged in copyright records in Indian Jurisprudence as of now.

Novelty and Non-Obviousness in AI-Generated Inventions

The rise of Artificial Intelligence gets slightly more tricky when it comes to the patentability of inventions since AI can now solve complex problems, identify patterns and design prototypes without any interreference from human intellect. Fundamental patent law principles, especially the requirements of innovation and non-obviousness, need to be reevaluated in light of this progress. These regulations serve as vital gatekeepers in India and around the world, guaranteeing that only really inventive developments are granted patent protection. However, following these criteria becomes more difficult when inventions are the result of computer intelligence rather than human brilliance. The requirement that an invention be novel—that is, not a part of the "prior art"—is known as novelty. An innovation must not have been revealed anywhere in the world prior to the date of filing, per Section 2(1)(j)[8] of the Indian Patents Act, 1970. According to Section 2(1)(ja)[9], an invention must also have a "inventive step," which means it must be difficult for a person of ordinary skill in the art (POSITA). This criterion prevents the patenting of insignificant advancements. When taken as a whole, these guidelines seek to preserve the public domain's richness and accessibility while encouraging genuine innovation. Nonetheless, both are based on human-cantered approaches to problem-solving and creativity. AI is able to quickly generate a large number of iterations or variations of an idea. If equivalent outputs are already produced by AI but have not yet been published, patent examiners may find it difficult to assess whether a claimed invention is actually unique. Large datasets, such as technical literature and active patents, are used to train AI systems. Is an innovation produced by an AI that uses patterns from earlier work really novel? Or is it just an

[8] Patents Act, 1970, § 2(1)(j), No. 39, Acts of Parliament, 1970 (India).
[9] Patents Act, 1970, § 2(1)(ja), No. 39, Acts of Parliament, 1970 (India).

advanced recombination? Another practical concern is that prior art in the era of artificial intelligence might not be sufficiently recorded or searchable with the tools available today. AI isn't sentient or conscious. It predicts outcomes and calculates probability rather than "solving problems" imaginatively in the human sense. Courts may need to consider if the AI's approach to problem-solving is comparable to human creativity or merely the result of extensive calculation. India has not yet made a direct decision regarding AI inventorship. The Indian Patents Act, which implicitly assumes a human being, mandates the naming of a "inventor." In India, "a mathematical or business method or a computer program per se or algorithms" are expressly excluded from patentability under Section 3(k) of the Patents Act, 1970[10]. For AI-related inventions, which are frequently based on software and algorithms, this clause poses a significant obstacle. As of now, courts may have not directly adjudicated upon the patentability of inventions created by AI however, the Ministry for Commerce and Industry, department for Promotion of Industry and Internal Trade released guidelines for examinations of computer related inventions[11]. These guidelines interpreted Section 3(k) of the Patents Act, 1970 and stated that if AI invention technical application in industry or a technical effect, it may be considered patentable. The "technical effect" test has been used more frequently by Indian courts and patent examiners. An innovation incorporating software or an algorithm may be exempt from Section 3(k)'s bar if it results in a specific and observable technical outcome, like increased processing speed or improved device functionality. For inventions pertaining to artificial intelligence, this criteria is crucial since they must define their novelty in terms of technological contribution rather than abstract computation. The Delhi High Court in *Ferid Allani v. Union of India*[12] ruled that a computer-related invention cannot be denied a patent just because it uses software if it demonstrates technological effect or technical contribution. Therefore, at the time that Section 3(k) was written, it seemed unthinkable that machines might produce knowledge. AI is now capable of autonomously designing molecules, writing code, and making strategic choices. Although Section 3(k)'s goal of preventing the monopolisation of abstract ideas is still legitimate, its strict application to innovations pertaining to artificial intelligence may stifle creativity. India can maintain the integrity of its patent system while advancing cutting-edge technologies like artificial intelligence by adopting a nuanced,

[10] Patents Act, 1970, § 3(k), No. 39, Acts of Parliament, 1970 (India).
[11] Office of the Controller General of Patents, Designs & Trade Marks, Draft Guidelines for Examination of Computer-Related Inventions (CRIs), INTELL. PROP. INDIA, https://ipindia.gov.in/writereaddata/Portal/Images/pdf/Draft_CRI_Guidelines_Publication_March2025.pdf (last visited May 13, 2025).
[12] Ferid Allani v. Union of India, 2020 SCC OnLine Del 11837 (India).

technical-effect-based approach and revising the legal framework to match technological realities.

The Intersectionality between Artificial Intelligence and Design Law

The legal system must decide if designs that include AI meet the statutory conditions of registrability—novelty, originality, and non-functionality - as AI becomes more and more integrated into the aesthetics of industrial items. AI is now actively involved in a variety of creative industries, including digital art, consumer products, fashion, and automobile design. These days, industrial products can use the patterns, shapes, and combinations produced by machine learning, neural network, and generative algorithm-based tools. The registrability of such AI-generated works under the Designs Act, 2000 is still unclear, though, as the Indian legal system does not yet expressly acknowledge AI as a designer. The main question is whether an AI-generated design can be proven to meet the legal requirements for registrability as mentioned under Section 4[13] of being new and original, non-functional, not having been disclosed before and not being contrary to public order or morality. The challenge of derivativeness arises because AI frequently produces outputs dependent on training data. It must be demonstrated that originality is not just a copy of existing work. AI systems could be collaborative or cloud-based, which increases the possibility of unintentional exposure prior to registration. AI systems have the potential to blur the distinction between functional and aesthetic aspects by optimising designs for performance. Indian courts must prioritise aesthetics over functionality, according to the "solely judged by the eye" standard as stated in *Bharat Glass Tube Ltd. v. Gopal Glass Works Ltd.*[14] Although "author" and "creator" are not defined in the Designs Act, ownership usually passes to the applicant. This is still up for debate, as the Act does not explicitly mandate that the designer be a human. Although AI isn't specifically recognised as a designer, if a person oversees the design process, AI-generated artwork may be submitted under the applicant's name. Indian design legislation does not now forbid the registration of AI-generated designs, even if it does not specifically acknowledge AI as a designer. Applicants can legally prove that AI-generated designs meet the requirements of novelty, originality, and non-functionality by emphasising the result rather or the output.

Trademark Infringement and Artificial Intelligence

A key component of branding and customer association is trademarks. However, human

[13] Designs Act, 2000 § 4, No. 16, Acts of Parliament, 2000 (India).
[14] Bharat Glass Tube Ltd. v. Gopal Glass Works Ltd., (2008) 10 S.C.C. 657 (India).

agency, proprietorship, and economic aim are necessary for their legal protection. Because AI lacks legal personhood and volition, it presents difficult issues regarding authorship, proprietorship, distinctiveness, and bona fide use, particularly when the trademark is created fully or in large part by an autonomous system. The definition of a trademark under section 2(1)(zb)[15] asserts that a trademark must be capable of graphical representation, distinctiveness and must have the capability of distinguishing goods and services. Further Section 18(1)16 of the Act explicitly places ownership and application rights in the hands of a natural or legal person. As per Indian laws, a trademark needs to be created with legitimate commercial use in mind and the petitioner must demonstrate proprietorship, usually by first use or authoring. These requirements assume that a human or other creature has the ability to intend and utilise, which is not something that an AI system can do on its own. Wordmarks and logos created by AI might readily pass the graphical representation test. Given the advanced nature of generative design technologies, they might also be quite unique—even more so than human creativity. AI is not recognised as a legal person under Indian law. As a result, the AI cannot be the trademark owner or applicant. But ownership might pass to:

(i) The individual setting up or guiding the AI system,

(ii) The business using the AI system as part of their branding plan,

(iii) Depending on usage rights and agreements, the AI model's creator or licensor.

The problem of AI-generated trademarks has not yet been addressed by Indian courts. Nonetheless, certain parallels can be seen in cases involving design law and copyright. The Delhi High Court highlighted the importance of human expertise and work in the creation of intellectual property in *Emergent Genetics India (P) Ltd. v. Shailendra Shivam*[17]. However, in situations when human input, supervision, or selection is clear, AI might be seen as an extension of human expertise. This is a position that is now accepted in many countries for copyright and design. AI-generated trademarks bring up important issues for Indian intellectual property law, especially those pertaining to proprietorship, authorship, and commercial use. Indian law allows registration by human or legal persons who use the output for commercial purposes, even though it does not currently recognise AI as a legal person or author. Thus, if they satisfy the requirements of proprietorship, graphical representation, and distinctiveness,

[15] Trademarks Act, 1999, § 2(zb), No. 47, Acts of Parliament, 1999 (India).
[16] Trademarks Act, 1999, § 18(1), No. 47, Acts of Parliament, 1999 (India).
[17] Emergent Genetics India (P) Ltd. v. Shailendra Shivam, (2011) 108 DRJ 472 (Del).

trademarks developed by AI but managed and utilised by a person or company may be eligible for protection under Indian law.

Conclusion

India's intellectual property structure needs to be rethought in order to incorporate AI into creative and innovative processes. Although judicial recognition is beginning to take shape, it is still hesitant and fragmented. To guarantee that India maintains its competitiveness in the AI-driven global economy while defending the rights of inventors and the public interest, a forward-thinking, well-balanced legal strategy is necessary. India should now start implementing significant legislative and regulatory changes that take advantage of AI's revolutionary potential.