

PATENTABILITY OF AI - GENERATED AND HUMAN RELATED INVENTIONS: ADDRESSING LEGAL CHALLENGES AND THE OBTACLES FACED BY THE COURT

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ABSTRACT:

A patent is a legal recognition granted for a newly invented invention. When such an invention is granted a patent, the inventor gains various legal rights over the invention. However, if a similar invention was already discovered earlier, it raises questions about the validity of granting the patent. The Indian Patent Act, 1970, provides recognition for newly discovered inventions and grants rights exclusively to the inventor that is, the person who has created the invention. To obtain legal rights under this Act, the inventor must go through several procedural steps. This article examines whether an invention generated by Artificial Intelligence (AI) can be granted a patent under the current legal framework. It further discusses the legal challenges that may arise in granting such patents. It raises the question of whether an invention created by AI can enjoy the same patent rights as one created by a human inventor. We can also examine whether any international agreements related to artificial intelligence have been established under the Patents Act, 1970. Additionally, it explores whether the Patents Act, 1970, accommodates inventions generated by AI and whether Indian courts have dealt with such cases.

Keywords: The Patent Act, 1970, Artificial Intelligence, AI and Human Inventor, AI related Indian Court Cases, Legal Challenges, International Agreement.

INTRODUCTION:

It is challenging for an invention developed by artificial intelligence to be legally recognized. This is because the Indian Patents Act of 1970 does not contain any legal provisions stating that an invention discovered by an AI-based inventor will be granted a patent. Furthermore, the Patents Act of 1970 only recognizes inventions made by humans. Therefore, when we ask whether an AI-generated invention can obtain legal recognition or protection, thought-provoking questions arise. We also examine how international agreements address this issue. Patent rights are granted only for inventions

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discovered by humans; hence, artificial intelligence functions merely as an assisting tool. Let us explore the legal challenges that arise in this context, the Indian case laws that have dealt with such issues, and possible or necessary legal reforms that may be required in the future.

RESEARCH OBJECTIVES:

The objective of this research is to explore the legal challenges involved in obtaining patent rights for inventions made by Artificial Intelligence (AI), and to examine how courts might resolve these challenges if patent rights are to be granted for AI-generated inventions in the future. Furthermore, this study aims to analyze whether inventions created by AI are granted the same legal rights as those invented by humans. Overall, this research aims to determine how courts and intellectual-related aspects of law, which means the patent acts to face how many difficulties in artificial intelligence-related work get patents.

RESEARCH QUESTIONS:

1. From a legal perspective, particularly under intellectual property law, are inventions made by artificial intelligence (AI) treated the same as those made by humans?
2. In the future, if artificial intelligence-generated inventions are allowed to receive patent protection, what legal challenges might court face in resolving such cases?

RESEARCH METHODOLOGY:

This research uses the Normative Judicial Research Method to explore the legal differences between artificial intelligence and patent rights, as well as the challenges faced in addressing these issues through law. The research is conducted through secondary data sources, such as books, legal journals, scholarly articles, websites, legal research libraries and academic materials. It is primarily qualitative, focusing on how courts address legal complexities particularly the differences between the legal rights granted to inventions created by humans and those generated by artificial intelligence.

CHAPTERS:

CHAPTER 1: GENERAL VIEW OF AI AND PATENT

ARTIFICIAL INTELLIGENCE:

Machine learning refers to the branch of computer science that deals with the design and development of machines and computer software that can perform tasks that normally require human intelligence. These involve reasoning, learning from past experiences, identifying patterns, comprehending and producing human speech, and adapting to changes in the environment, among others. Indeed AI, in its essence, is trying to mimic the human brain by leveraging algorithms and computational models to allow a computer system to perform tasks such as learning to process and utilize vast amounts of data and improve autonomously without direct input from humans. AI encompasses a broader range of techniques, everything from narrow AI systems (like facial recognition or automated customer service) to more ambitious endeavors to reconcile general intelligence systems capable of independent thought, learning, and action across various domains. As a field still in the early stages, AI touches upon a host of issues in philosophy, neuroscience, linguistics, and ethics, sparking questions about what intelligence and consciousness mean, and how humans will ultimately coexist with intelligent machines.

PATENT UNDER 1970 ACT:

PATENT: A patent is awarded for a new, innovative invention². This means that any invention developed or discovered after this Act is subject to patent-ability. Only the original creator or discoverer may claim rights to such an invention.

INVENTION: An invention is a new product or process for making one³. In different wording, it implies a new method of imagining. It must also be exploitable in an industry.

NEW INVENTION : A new invention must satisfy basic criteria. It should mean a product or a new process.

²<https://boldip.com/blog/can-i-patent-an-improvement-to-an-existing-invention/>

³<https://www.wipo.int/en/web/patents>

INVENTIVE STEPS: An inventive step is a having an essential requirement under the Patents act, 1970 for grant of patent.⁴ Motion due to a technical advancement compared with existing knowledge or having economic significance, or both, is characteristic of an invention.⁵ Honourable Mention: Must not be obvious to a person of ordinary skill in the art. This typically means the invention cannot involve a mere refinement or routine enhancement that an ordinary artisan would have readily conceived. By requiring an inventive step, the patent system guarantees that new inventions are truly innovative and not something that can easily be deduced by others in the field, thus fostering real technological advancement.

CHAPTER 2: HISTORICAL BACKGROUND OF AI AND PATENT

The roots of artificial intelligence (AI) can be traced back to the mid-20th century when pioneers like Alan Turing established the theoretical groundwork by suggesting that machines could replicate human intelligence. The term "artificial intelligence" was formally coined at the Dartmouth conference in 1956, and it is recognized as the official start of AI as an academic field. In the 1950s and 1960s, early AI research centered on symbolic reasoning and problem-solving, leading to programs that could do logical tasks. Progress was slow, though, due to the limits of computation and data a period sometimes called the "AI winter. As processing power for computers grew and massive data sources became available, AI saw a renewed interest in the 2000s, mostly fueled by the machine learning and neural network boom. Fast forward to today, AI has become a trans-formative technology, impacting various sectors from healthcare and finance to autonomous vehicles and creative industries, fundamentally altering the way societies and legal frameworks engage with innovation.

The Indian country was governed until then by the Patents and Designs Act of 1911, a colonial-era law that served primarily the interests of overseas patent owners and did little to promote local innovation or public access to essential goods. Contrary to the growing clamour for a more liberalize patent regime, the Indian government felt the need of having a more balanced and development-focused patent regime and set up a ⁶committee in 1957 under the leadership of Justice N. Rajagopala Ayyangar. The committee recommended reforms that would encourage inventions while also ensuring that patents did not hinder

⁴ <https://intellectvidhya.com/what-is-inventive-step-objection-and-how-to-overcome-it/>

⁵ <https://www.uspto.gov/web/offices/pac/mpep/s2141.html>

⁶ <https://www.justice.gov/crt>

access to vital products, especially in the fields of food and medicine. After the 1970 Act Enacted to promote self-reliance and technological development, the Act limited patent protection to processes in certain sensitive areas rather than products, aiming to keep essential items affordable. It officially came into force in 1972 and represented a shift towards a patent system aligned with national priorities. The Act has since been amended, particularly after India joined the WTO and complied with the TRIPS Agreement, reintroducing product patents in sectors like pharmaceuticals in 2005.

CHAPTER 3: LEGAL PERSPECTIVE OF AI AND HUMAN CREATED INVENTIONS

Under the Patents Act, 1970, the concept of inventor ship is fundamentally linked to human agency. The Act does not explicitly recognize non-human entities, such as Artificial Intelligence systems, as inventors.⁷ As per Section 2(1)(y) of the Act, a "patentee" is defined as the person for the time being entered on the register as the grantee or proprietor of the patent. The use of the term "person" throughout the Act implies human or legal person hood, thus excluding autonomous AI systems from claiming inventor ship. This distinction was highlighted in the international legal debate around the DABUS case, where an AI system was named as the inventor in several jurisdictions. While countries like South Africa accepted the AI as an inventor, India has yet to formally address this issue through legislation or judicial interpretation. Therefore, in the current legal framework of India, only inventions with a human inventor are eligible for patent protection. This reflects a critical gap in the law as AI-generated outputs become increasingly capable of producing novel and inventive solutions without direct human intervention.

Therefore, under Indian law, patent protection is granted only for inventions made by humans, and the inventor is entitled to various legal rights. Since Artificial Intelligence (AI) is not recognized as a natural person, any invention generated solely by AI cannot be granted the same legal rights and protections as those available to human inventors. As a result, inventions created by AI cannot be treated under the same legal framework or viewed from the same legal perspective as inventions created by human beings.

⁷ <https://www.wipo.int/wipolex/en/text/128091>

CHAPTER 4: JUDICIAL CHALLENGES IN HANDLING AI-GENERATED INVENTION CASES FACED IN INDIAN COURTS

As Artificial Intelligence continues to advance, its ability to independently generate novel inventions poses a unique challenge to the existing patent framework in India. The Patents Act, 1970, currently does not recognize AI systems as inventors, as the law implicitly requires that an inventor must be a human or a legally recognized entity. This creates a fundamental barrier when courts are confronted with applications involving AI-generated inventions. Indian courts are bound by the statutory definitions laid out in the Act, and without express legislative provision, they lack the authority to recognize non-human inventors. This raises key issues such as who owns the invention created by an AI, who would be responsible in case of patent infringement, and how accountability would be determined. Additionally, courts would face difficulties in assessing inventive step and originality when the creator is not a natural person. Globally, the matter was tested in the well-known DABUS case, where AI was named as the inventor. While countries like ⁸South Africa accepted the AI-generated invention, others like the United Kingdom and the United States refused to grant the patent on the grounds that only a human can be an inventor. In India, similar cases are yet to be adjudicated, but if presented, courts would face the dilemma of interpreting outdated legal definitions in the context of rapidly evolving technology. Unless the legislature steps in to amend the existing law, judicial intervention alone may not be sufficient to resolve these challenges effectively.

While Indian courts have not yet directly ruled on the question of AI-generated inventions, existing jurisprudence on inventor-ship and patent eligibility provides insight into how such cases might be approached. ⁹the Supreme Court emphasized that patent protection in India must strictly conform to statutory definitions and eligibility criteria outlined in the Patents Act, 1970. The court reiterated the importance of clear legislative intent in recognizing what qualifies as an invention and who may be considered an inventor. Similarly, in the ¹⁰Supreme Court stressed that the inventive step must be judged from the perspective of a person skilled in the art a human element that is integral to the patentability assessment. These cases reinforce that under current Indian law, human agency is a necessary component

⁸ <https://aneweraaiera.quora.com/Worlds-first-AI-patent-issued-by-South-Africa-https-www-globallegalpost-com-news-south-africa-issues-worlds-first-p>

⁹ In Monsanto Technology LLC v. Nuziveedu Seeds Ltd. & Ors. [(2019) 3 SCC 381]

¹⁰ Bishwanath Prasad Radhey Shyam v. Hindustan Metal Industries [AIR 1982 SC 1444]

of patent protection. Therefore, if an AI-generated invention were to come before an Indian court, the judiciary would likely be constrained by the absence of statutory recognition of non-human inventors. Unless the legislation is updated to accommodate such technological realities, courts may find it difficult to extend patent rights to AI-created inventions without overstepping their interpretive boundaries.

CONCLUSION:

Based on the above analysis, patent rights are applicable only to inventions created by a human being. An invention developed solely through artificial intelligence (AI) cannot be granted a patent, as AI functions merely as a tool or aid that supports human innovation. It cannot itself be considered a legal right-holder. If AI-generated inventions were to be claimed for patent rights, it would add to the existing burden of cases and create further confusion within the judicial system. Specifically in the Indian context, there are currently no laws, amendments, or agreements that explicitly recognize or define intellectual property rights concerning artificial intelligence. Therefore, before any patent rights can be granted to AI-generated inventions, appropriate legal provisions must first be established. Only after the legal framework is in place can such inventions be protected under patent law. Such legislation or amendments would assist courts in handling these cases more efficiently and reduce uncertainties in the legal process.

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