

AI AND INTELLECTUAL PROPERTY RIGHTS: LEGAL CHALLENGES AND FUTURE PROSPECTS

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Abstract

The intersection of artificial intelligence and legal frameworks is reaching a stage where updates to the laws are necessary to align with technological progress. AI is advancing quickly, and there is a potential for it to assume numerous human roles, including significant aspects of the legal profession. Attorneys and their teams dedicate significant time to comprehending and formulating Patent claims. Considerable hours are invested in researching and evaluating the novelty, utility, and non-obvious characteristics of the products and processes for which a claim will be submitted. The process of obtaining a patent incurs considerable costs. Incorporating AI into the entire legal process could significantly reduce the time and costs associated with it. This paper has explored how traditional notions of Intellectual Property are being pushed to their limits in response to the disruptive effects of the emergence of Artificial Intelligence. In other terms, providing Intellectual Property protection to outcomes generated by Artificial Intelligence ultimately undermines the core principles of Intellectual Property law. Ultimately, this study bridges the gap between legal frameworks, management strategies, and humanistic perspectives, underscoring the interdisciplinary nature of contemporary challenges.

Keywords: *patents, intellectual property law, and artificial intelligence, World Intellectual Property Organization (WIPO).*

1. Introduction

Machine intelligence will surpass human intelligence at some point in the early years of this century. The entire spectrum of human intelligence, emotions, and abilities—from musical and other creative abilities to physical movement—will be exhibited by machines within 25 years. In contrast to today's virtual identities, they will be convincing when they say they have sentiment. In (2008, Ray Kurzweil). Many of us may have seen the Terminator starring Arnold Schwarzenegger or heard of the Benedict Cumberbatch film The Imitation Game. These films focus on highly

intelligent computers that resemble humans. The Imitation Game, in particular, tells the story of Alan Turing, an English mathematician who was incredibly unique and may have been the first to develop intelligent machines. One of the key technologies of our day is artificial intelligence (AI)³. AI has progressed to the point where it will have revolutionary consequences on humanity and is "likely to leave no stratum of society untouched," despite previously being thought of as a sci-fi fantasy. However, in recent years, it has shifted from fiction to science. Rapid technological change is occurring, and artificial intelligence systems are becoming more and more popular. When advanced technologies are combined, it will not be long until these systems begin to create amazing inventions on their own without any form of human involvement. The ability of a machine to mimic intelligent activity is known as artificial intelligence (AI).

2. Artificial Intelligence

Human intelligence and computers have progressed to the point that computers can now make judgements for themselves. Artificial intelligence is the term commonly used to describe a computer system's capacity to make decisions on its own.⁵ Artificial Intelligence (AI) is not a recent phenomenon; computer scientists like Alan Turing, Marvin Minsky, and John McCarthy have established much of its theoretical and technological foundation during the previous 70 years. A computer scientist named Mr. John McCarthy first used the term "artificial intelligence" at a conference in 1956. He explained that it was the idea of a program processing and acting on information in a way that was similar to how an intelligent person would react to similar input. AI has already been used to some extent in many industries and governments.⁷ There isn't a single definition of AI that all practitioners agree on. While some define AI generically as a computerised system that exhibits behaviour typically associated with intelligence, others define AI as a system that can rationally solve complicated problems or take appropriate action to accomplish its goals in real-world situations.⁸ Planning and navigation, knowledge representation, logical reasoning, and natural language processing are some examples of the problem spaces that AI is frequently characterized using.

3. Artificial Intelligence's Effect On Iprs

The need for IPR protection grew as new technologies and artificial intelligence advanced. IPR adaptation is under constant pressure because to the late 20th century digital revolution and the rise of the internet as a global communication tool.¹¹ The advent of revolutionary new technologies and the protection of intellectual property rights may be addressed by the several treaties that the World Intellectual Property Organisation (WIPO) has adopted. Robots and artificial intelligence (AI) have long been the stuff of science fiction, but they are now a reality that humans must deal with. According to a market intelligence agency (IDC), the AI market is expected to increase from \$8 billion in 2016 to over \$47 billion in 2020.¹² Artificial Intelligence is expected to grow quickly, made possible by the convergence of huge data, readily available processing power, and affordable infrastructure. We acknowledge that many contemporary AIs have a connection to intellectual property, even though each AI is unique in how it is implemented. This development may also give birth to ¹³ concerns. In reality, by mimicking certain characteristics of human cognition, AIs may be able to create content. Furthermore, a lot of AI systems go through a training process in which they practise making decisions and use feedback to make better decisions in the future,

ultimately creating their own algorithms and rules.¹⁴ Furthermore, massive amounts of input data are routinely examined by AI systems in order to find statistical patterns. However, AI may encounter difficulties in certain intellectual property issues, particularly given the majority of IPs are human-created.

4. Patent And AI

Patenting AI platforms and systems presents difficulties. Actually, an AI system typically imitates a human task. Microsoft's Inner Eye project serves as an example of an AI system that helps oncologists target cancer treatment more quickly. By applying machine-learning algorithms to the processing of patient magnetic resonance imaging scans, it is able to distinguish tumours from the surrounding bone and healthy tissue. In the past, the oncologist personally completed this task by contouring 3D images with his hands. A patent application for this job performed by the machine would be denied since it does not satisfy one of the essential conditions for patentability, which explains how the invention functions. New concepts and inventions are at the core of the shift in society. Patents are the foundation of the intellectual property legal system that has historically protected inventions. Although it still has strong roots in the industrial revolution, patent law has, to a greater extent, been able to adjust to subsequent revolutions, such as the computing revolution, albeit with certain difficulties. The world is currently on the verge of a historic upheaval whose effects on patent law in particular are still unknown due to their wide-ranging nature. The AI revolution is this.¹⁵

5. Copyright And AI

AI-generated works are not recognised by traditional copyright law. It exclusively safeguards human beings' original works of art. The U.S. Copyright Office clarified in the well-known Monkey-Selfie copyright dispute that a work must be generated by a human being in order to be protected by copyright law.¹⁶ This ruling sparked disputes over the copyrightability of works produced by artificial intelligence. The law in the United Kingdom, however, is rather different. According to a provision in the UK Copyright Act, the author of a computer-generated work is presumed to have been the one who made the creation possible.¹⁷ In a similar vein, we can presume that the person who created the arrangement required for the creation of the work would be the author of AI-generated art. According to Indian legal norms, "author" is defined as "the person who causes the work to be created in relation to any literary, dramatic, musical, or artistic work which is computer-generated" in Section 2(d) of the Copyright Act, 1957. It becomes more difficult to determine with confidence who made the arrangements required for the development of the job done when AI grows more sophisticated and completely autonomous and has the freedom to make its own decisions. Only human writers of creative works are currently eligible for copyright protection. Nonetheless, some academics have supported the notion of giving non-human authors copyright. They contend that the definition of "authorship" need to be expanded to include both non-human and human authors.¹⁹ It's still debatable who wrote a piece produced by AI.

Conclusion

With increasingly advanced robots, bots, androids, and other forms of artificial intelligence ("AI") seemingly ready to usher in a new industrial revolution that will likely affect every societal stratum, it is imperative that lawmakers take into account the ethical and legal ramifications of this development without stifling innovation.²⁰ Two issues are briefly summarized in the quoted recital of the European Parliament Report with recommendations on Civil Law Rules on Robotics ("Recommendations on Civil Law Rules on Robotics"): 1) How society is altered and challenged by artificial intelligence ("AI"), and 2) How regulators attempt to address these issues. Intellectual property is one area where the influence is obvious, even though policymakers are still trying to predict the problems that lie ahead for many applications of AI and evaluate the possible outcomes. For the current IP regulations to keep up with the rapidly developing field of artificial intelligence, they must be drastically updated. If they aren't updated, artificial intelligence will continue to advance to the point where the rules that are in place can no longer meet the demands of people. Smart mixed AI and human models, such as the one described above, may help people overcome their fear issues and make the process of obtaining intellectual property rights more efficient, transparent, and emotional. The majority of the laws aren't really made to function algorithmically.²¹ This is the primary rationale for the discretions granted to the majority of judges during case decisions. Legal infrastructure and human experience are now lacking in the strategy to fully shift the IP process to algorithmic decision-making. IP creation processes can be strengthened by the combination of AI and IP. In actuality, AI is currently providing businesses that must resolve challenging and complex problems with genuine value. As the volume of the data grows, the everyday chores associated with IP might become time-consuming for humans. As a result, AI technology frees up professionals' time to concentrate on more strategic choices. Additionally, it will increase accuracy by decreasing the need for human investigative techniques. The true benefit of AI for IP experts is the ability to access inaccessible and impenetrable amounts of data. AI will assist IP professionals in producing business insights that can expand their market reach and provide a more comprehensive understanding of the sources and destinations of the next generation of IP investment.

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