

Navigating Innovation: Legal Challenges at the Crossroads of AI and Patent Law

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Abstract: New artificial intelligence technologies under rapid development change many sectors of industry, impacts patents and other intellectual property, and thus poses legal concerns with strategic economic consequences besides interfering with patent law and artificial intelligence. Concerns about the patentability of ideas produced by AI systems and the regulation of those processes that legal systems ultimately end up sifting arise since AI systems are still becoming involved in the innovation process. This paper addresses fundamental issues: patents generated by AI systems have the right for application to be patentable, the prerequisites for obtaining patents, and how AI might enhance the patent application process. Moreover, the paper identifies the case of DABUS, which is wildly divergent in its approach to AI-generated inventions. Furthermore, institutions that have started thinking about formulations are the United States Patent and Trademark Office (USPTO) and the European Patent Office (EPO), which offer formulations that consider the involvement of AI in invention. However, there are debates, including whether AI can be recognized as an inventor so businesses can protect their inventions effectively. For organizations that use AI for product development, there are choices on the kind of patent rights to grant and what AI methodologies permit in case they pose a competitive disadvantage.

Keywords: Artificial Intelligence, Development, Intellectual Property, Patents, Patentable, Rights, Technologies.

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I. INTRODUCTION

The rise of AI as an inventor of novel¹ and new ideas marks a paradigm shift in the era of intellectual property. Incorporating artificial intelligence (AI) with patent law creates new and compound issues for businesses and the legal field. With the advancement of technology, AI has progressed as the core tool for innovation in sectors like technology, pharmaceuticals, finance, and manufacturing; it does not just focus on helping human inventors but is capable of generating new ideas, products, or processes. AI is powerful and independent, challenging the existing patent law, which revolves around human creativity and ownership.²

The main legal question is about inventorship; the question arises: Who is considered an inventor when AI creates something innovative? Patent law predominantly protects the interest of the human inventor. However, suppose an AI system creates a new drug by generating novel

compounds and predicting drug-drug behavior. In that case, it makes the discovery process more efficient or comes with an innovative technology or a unique design all on its own. The issue arises whether the AI itself is acknowledged as an inventor or whether the inventor is a person who created or owns the AI. This is a highly valued discussion because different countries have varying approaches towards AI. Now that AI systems create novel solutions on their own, from chemical and medical formulas to oil rig designs and structural facilities, they can, under specific circumstances, apply for patents. This revolutionary new advance enables the commercial opportunity of AI-generated novelties, enabling the patents of algorithm and machine learning outputs to be commercialize assets in corporate intellectual property portfolios.

Based on current trends in the world's business environment³, the interaction of AI and patent law today is recasting the nature of continued advancements. In the past,

¹ Anna Carnochan Comer, *AI: Artificial Inventor or the Real Deal?*, 22 N.C. J.L. & TECH. 447 (2020), <https://heinonline.org/HOL/Page?handle=hein.journals/ncjl22&id=471&div=&collection=>. (last visited Nov 14, 2024).

² Ben Hattenbach & Joshua Glucoft, *Patents in An Era of Infinite Monkeys and Artificial Intelligence*, 19 Stan. Tech.

L. Rev. 32 (2015), <https://heinonline.org/HOL/Page?handle=hein.journals/stantlr19&id=40&div=&collection=>. (last visited Nov 14, 2024).

³ Mimi S. Afshar, *Artificial Intelligence and Inventorship - Does the Patent Inventor Have to Be Human?*, 13 HASTINGS SCI. & TECH. L.J. 55 (2022),

patents have been granted for any new invention that is discovered and invented through human intellect, giving the inventor a monopoly over the commercial use of the invention.

The power of AI to process large data sets, make innovative decisions, and produce new products, services, and technologies has enabled AI to move from a mere tool to a tool-maker. AI can be defined as an 'auxiliary tool'⁴ while awarding inventorship to those who set up and direct AI tools, while others have demanded more remarkable radical change, including the recognition of AI as an inventor. Global courts and regulatory authorities are gradually meditating on these questions. Meanwhile, businesses are in turbulent waters of new emerging opportunities to use AI to create novelties but need help with new risks regarding intellectual property rights. Businesses across almost every sector have turned to AI not only to optimize processes but also to work as a means to develop new products and services in such areas as pharmaceuticals and chemicals, retail goods and services, software, and hardware. Incorporating AI into the innovation process offers businesses vast opportunities to achieve goals faster, with more cost-efficient R&D, and develop marketable products with an efficient competitive advantage⁵. For instance, the notions of novelty, non-obviousness, and utility, which are the components of patentability, are more easily breached when an AI makes an invention than a human.

A. Overview of Patent Law, AI, and Innovation

The ongoing rapid development of new technologies in the sphere of AI significantly changes many sectors, as far as patents and other forms of IP are concerned. This paper explores the legal issues, the tactical economic implications, and directions of relation between patents and artificial intelligence. Given the fact that the links between patent law, artificial intelligence, and innovation are still quite understudied, there is evidence of timely changes in the general directions of creating, assessing, and protecting inventions. By now, AI is not just part of an enterprise supporting the operational activities, but can also actively participate in the invention processes.

➤ Core Principles of Patent Law and Generated Inventions⁶:

The key elements of patenting regulation - originality, non-obviousness, and industrial applicability are the criteria every invention has to match in order to be patented. In addition to this, the principles of invention have never faced greater threat as Artificial Intelligence comes into play as an inventor.⁷

• Novelty:

An invention to be considered must be novel. Novelty in traditional norms, to be patentable, must not have any resemblance to any existing knowledge. AI systems using machine learning algorithms can analyze vast databases and generate solutions. These systems develop further into peculiar outputs without human intervention. Additionally, this raises the question about the capability of whether an AI-generated invention is "novel"⁸ if other comparable algorithms have access to similar datasets and produce identical outputs. For instance, AI can distinguish new undetermined molecular structures in drug discovery, thus creating trailblazing therapeutic. Hence by identifying these novel and genuine outputs as patentable. Devoid of patent protection, there is a peril that AI-generated innovations would be open to public use without gratifying the entities that invested in their creation.

For innovations resulting from AI, patent examiners face difficulties in determining the possibility of their inventions being new or just the creation of human minds since the entire process is opaque (the so-called black box).

• Non-Obviousness:

One of the main characteristics of AI innovation is its capability to find a solution beyond human understanding.⁸ AI can create inventions that an AI system might find 'obvious,' which could be huge breakthroughs from a human perspective. It puts struggles before Courts and patent examiners to draw a line and decide whether the invention is non-obvious because it is hard to decide between the possibility that the AI applied its intuition or paid a significant

<https://heinonline.org/HOL/Page?handle=hein.journals/hascietl13&id=56&div=&collection=> (last visited Nov 14, 2024).

⁴ Anna Carnochan Comer, *AI: Artificial Inventor or the Real Deal?*, 22 N.C. J.L. & TECH. 447 (2020), <https://heinonline.org/HOL/Page?handle=hein.journals/ncjl22&id=471&div=&collection=> (last visited Nov 14, 2024).

⁵ Hannes Tukeva, *Utilization of Artificial Intelligence in the Machine and Equipment Manufacturing Industry in Finland: Artificial Intelligence as a Tool for Sustainable Value Creation*, TEKÖÄLYN HYÖDYNTÄMINEN KONE- JA LAITEVALMISTUSTEOLLISUUDESSA SUOMESSA : TEKÖÄLY KESTÄVÄN ARVONLUONNIN VÄLINEENÄ (2023), <https://lutpub.lut.fi/handle/10024/165560> (last visited Nov 14, 2024).

⁶ Kenneth W. Dam, *The Economic Underpinnings of Patent Law*, 23 THE JOURNAL OF LEGAL STUDIES 247 (1994),

<https://www.journals.uchicago.edu/doi/10.1086/467923> (last visited Nov 14, 2024).

⁷ Michael McLaughlin, *Computer-Generated Inventions*, 101 J. PAT. & TRADEMARK OFF. SOC'Y 224 (2019), <https://heinonline.org/HOL/Page?handle=hein.journals/jpato101&id=228&div=&collection=> (last visited Nov 14, 2024).

⁷ Anna Carnochan Comer, *AI: Artificial Inventor or the Real Deal?*, 22 N.C. J.L. & TECH. 447 (2020), <https://heinonline.org/HOL/Page?handle=hein.journals/ncjl22&id=471&div=&collection=> (last visited Nov 14, 2024).

⁸ Naomi Haefner et al., *Artificial Intelligence and Innovation Management: A Review, Framework, and Research Agenda*, 162 TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 120392 (2021), <https://linkinghub.elsevier.com/retrieve/pii/S004016252031218X> (last visited Nov 14, 2024).

amount of heed to develop the following algorithm⁹.

- *Utility:*

The utility needs an invention to be helpful and capable of rendering service¹¹. For instance, the use of a patent for a new chemical entity, such as a new pharmaceutical compound, will require providing evidence of the therapeutic effect of the new compound. For instance, an AI may suggest several prospective molecular compounds in drug discovery, of which few will positively impact culture. Evaluating the usefulness of each AI output it generates is time-consuming and unfeasible due to the abundance of options.¹⁰

- *AI in Business Innovation and its impact on the Patent Landscape¹¹:*

- *Enhanced R&D:*

AI enables businesses to speed up R&D processes¹² by automating complex analyses. Machine learning techniques, predictive analysis, and other AI solutions are now unique breakthroughs in research and development that have sharply reduced cost and time factors in innovation. In fields like drug discovery, AI algorithms can parse large numbers of entries, essential chemical compounds, and drug interactions compared to the number of years generated for R&D. AI simulations help discover new materials with specific characteristics without actual experimenting.¹³ For instance, modern drug makers use AI to scan through millions of potential compounds to determine their potential in curing particular diseases¹⁴. AI has contributed significantly to fastening conventional drug discovery processes that require lots of trial and error to get the most appropriate medicine.

Conventional research and development are very costly and time-consuming compared to IT-enabled R&D. Using AI in R&D can lower the expenditures within the technology

development cycle through the early determination of feasible technologies, which reduces the probability of performing unnecessary tests or prototyping. For instance, in the construction industry, designs can be tested through physical conditions simulations, allowing researchers to minimize their options before spending resources on physical testing. The inclusion of AI has made parameters in the R&D departments file patents every time AI has come up with new compounds, materials, or designs to use.¹⁵ These inventions blurred the conventionally prescribed role of an inventor since human researchers and AI algorithms work collaboratively to create documents that suggest invention by an autonomous AI system. Along with AI's contribution to creative and technical product design, patent laws face challenges in addressing it, recognizing inventions that arise without human intervention. Businesses use AI in significant demand to analyze the patent landscape, thus providing insights into the competitors' strengths, weaknesses, and innovative trends.¹⁶

B. Patent law and AI-generated Inventions:

The recent rise of human inventions through artificial intelligence has dramatically challenged the traditional flow of patent laws¹⁷. Advanced inventions that are part of artificial intelligence technology have presented a series of questions concerning inventorship, ownership, patentability, and even ethical questions.

- *The Dilemma of Inventorship:*

When Artificial Intelligence Creates Inventions¹⁸: It is well known that for a long time, patent law has provided for invention only for people (humans). In order to be considered an inventor, one must have a role to contribute to invention – an act that requires human creation and decision-making. This principle is affirmed in most of the patent systems of the global world, which admit only natural persons as inventors.

⁹ W. Michael Schuster, *Artificial Intelligence and Patent Ownership*, 75 WASH. & LEE L. REV. 1945 (2018), <https://heinonline.org/HOL/Page?handle=hein.journals/wasl75&id=1991&div=&collection=>. (last visited Nov 14, 2024).

¹⁰ S. V. Vasyliiev, *Patenting of an Invention and an Utility*, 2021 BULL. KHARKIV NAT'L. UNIV. INTERNAL AFF. 95 (2021), <https://heinonline.org/HOL/Page?handle=hein.journals/bkkv2021&id=95&div=&collection=>. (last visited Nov 14, 2024).

¹¹ Dean Alderucci & Douglas Sicker, *Applying Artificial Intelligence to the Patent System*, 20 TECHNOLOGY & INNOVATION 415 (2019).

¹² Garikai Chimuka, *Impact of Artificial Intelligence on Patent Law. Towards a New Analytical Framework – [the Multi-Level Model]*, 59 WORLD PATENT INFORMATION 101926 (2019), <https://linkinghub.elsevier.com/retrieve/pii/S0172219018300814> (last visited Nov 14, 2024).

¹³ Yong Suk Lee et al., *When Does AI Pay off? AI-Adoption Intensity, Complementary Investments, and R&D Strategy*, 118 TECHNOVATION 102590 (2022), <https://linkinghub.elsevier.com/retrieve/pii/S0166497222001377> (last visited Nov 14, 2024).

¹⁴ Adarsh Sahu, Jyotika Mishra & Namrata Kushwaha, *Artificial Intelligence (AI) in Drugs and Pharmaceuticals*, 25 CCHTS 1818 (2022), <https://www.eurekaselect.com/198644/article> (last visited Nov 14, 2024).

¹⁵ Jonathan P. Osha, *Artificial Intelligence and Patents : An International Perspective on Patenting AI-Related Inventions*, 1 (2023), <https://www.torrossa.com/it/resources/an/5628871> (last visited Nov 14, 2024).

¹⁶ Daryl Lim, *AI & IP: Innovation & Creativity in an Age of Accelerated Change*, 52 AKRON L. REV. 813 (2018), <https://heinonline.org/HOL/Page?handle=hein.journals/aklr52&id=837&div=&collection=>.

¹⁷ Patent protection for ai-assisted and ai-generated inventions: a patent examination guidelines approach | Moffat & Co, <https://moffatco.com/2024/09/30/patent-protection-for-ai-assisted-and-ai-generated-inventions-a-patent-examination-guidelines-approach/> (last visited Nov 14, 2024).

¹⁸ Daria Kim, *'AI-Generated Inventions': Time to Get the Record Straight?*, 69 GRUR INTERNATIONAL 443 (2020), <https://academic.oup.com/grurint/article/69/5/443/5854752> (last visited Nov 14, 2024).

The legal question arises as to whether AI is an inventor; as AI systems have advanced, they have developed the capacity to generate novel and inventive ideas with minimal human input, raising the claiming that when an AI single-handedly generates a patentable new invention, it is right to award the AI inventor to ensure a more realistic representation of the invention. However, the Offices and Courts remain reluctant to accept AI inventions owing to the lack of legal, ethical, and even conceptual models that allow AI inventors to be put on the same footing as human beings. If AI cannot become an inventor for one reason or another, then who is eligible to become one becomes the new question. One way is to claim inventorship to the humans or business entity that has set about creating the AI, training the AI, or deploying the output of the AI for beneficial use. For example, the programmer who coded the algorithm that underpins the AI or the business that funded and used the output of the AI could be deemed the 'inventor.'¹⁹ However, this raises a problem, such as this individual or entity may not be directly related to the inventive stage of the invention; moreover, recognizing a business entity as an inventor could distort the conventional inventorship model and, thus, the relationship between individual creativity and patent rights²⁰.

➤ Patentability of AI-Driven Inventions:

Utility states that an invention must be original, meaning it has a nature to be publicly revealed.²¹ Another way the relative opacity of AI systems could cause a problem is that it could be challenging for the patent examiner to determine whether the output from the AI is novel. This leads to further arguments over whether an invention is an innovative concept or a logical output via an algorithm. As discoveries and solutions that would have taken people centuries to develop individually become simple, several industries, including pharmaceutical and medicine, material science, and engineering, rely significantly on AI²².

The competitive landscape for those who first invested in the AI systems that produced The intention may be distorted if AI-generated inventions are patentable since

companies with sophisticated AI tools and utilities may duplicate and use them. Patentable AI inventions ensure that those who invest can keep their innovations exclusive.

➤ Breaking Down Obstacles to Promote Quick Development in Intensive Areas:

AI is already enhancing several fields, such as engineering, healthcare, and environmental studies, by offering practical answers to significant worldwide issues humans may cause. By enabling businesses and academics to own and profit from AI-driven innovations, this exclusion of AI-driven ideas could hasten the advancement of the relevant industry. It would encourage the application of AI to solve issues about healthcare, the environment, and the general growth of humankind.²³ This model could increase access to solutions and foster collaboration across sectors by allowing organizations to sell AI-developed products to other entities. In the context of AI-crafted discoveries across several industries, such an approach would encourage synchronized creation dissemination by forcing AI-centric organizations to monetize their technological advancements through licensing.

C. Enhancing Intellectual Property (IP) Protections in the AI Era²⁴:

In the realm of innovation and creativity, introducing artificial intelligence into the practice setting is revolutionary. The legal norms and principles guiding this innovation must also be continuously modified in light of the present and anticipated trends toward ever broader acceptance and application of AI technologies. The most important is intellectual property (IP)²⁵ law, particularly about patent protection. This essay examines why it is critical to strengthen the protections for discoveries created by AI, how doing so will boost global competitiveness, and why patent law is still vital in the AI era.

Countries that support patenting and acknowledge AI-generated discoveries can become more competitive than those that adopted new technologies far earlier. For instance, countries that grant patents for AI-generated ideas encourage

¹⁹ Francesco Banterle, *Ownership of Inventions Created by Artificial Intelligence*, (2018), <https://papers.ssrn.com/abstract=3276702> (last visited Nov 14, 2024).

²⁰ Jeremy A. Cubert & Richard G.A. Bone, *The Law of Intellectual Property Created by Artificial Intelligence*, in RESEARCH HANDBOOK ON THE LAW OF ARTIFICIAL INTELLIGENCE (Woodrow Barfield & Ugo Pagallo eds., 2018), <https://china.elgaronline.com/view/edcoll/9781786439048/9781786439048.00028.xml> (last visited Nov 14, 2024).

²¹ Stefano Bianchini, Moritz Müller & Pierre Pelletier, *Artificial Intelligence in Science: An Emerging General Method of Invention*, 51 RESEARCH POLICY 104604 (2022), <https://linkinghub.elsevier.com/retrieve/pii/S0048733322001275> (last visited Nov 14, 2024).

²² Tom Tombekai, *The Ownership of Artificial Intelligence (AI) Generated & Created Inventions*, (2020), <https://papers.ssrn.com/abstract=3772947> (last visited Nov

14, 2024).

²³ Enrico Bonadio, Luke McDonagh & Plamen Dinev, *Artificial Intelligence as Inventor: Exploring the Consequences for Patent Law*, (2021), <https://papers.ssrn.com/abstract=3798767> (last visited Nov 14, 2024).

²⁴ Sushma Singh & Anushka Singh, *Intellectual Property Rights and Artificial Intelligence: Contemporary Convergence and Probable Challenges*, 10 in 2023 10TH IEEE UTTAR PRADESH SECTION INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONICS AND COMPUTER ENGINEERING (UPCON) 1279 (2023), <https://ieeexplore.ieee.org/abstract/document/10434754> (last visited Nov 14, 2024).

²⁵ Hassan Kibirige, *The Delving Conundrum of Intellectual Property Rights in The Transformative Era of Artificial Intelligence*, (2024), <https://papers.ssrn.com/abstract=4841535> (last visited Nov 14, 2024).

businesses to invest in AI advancements and solutions. Technological experts and industry representatives stress that obtaining patent protection is crucial to safeguarding businesses' intellectual property and ensuring investors that their investment in using artificial intelligence may result in financial gains²⁶. Additionally, it increases a country's attractiveness to corporations, especially when considering the potential for increased employment, massive investment, and a stronger country's position as a center of technology. Furthermore, educational institutions and companies actively collaborate because they are contemporary and well-defined. It can also aid in creating additional connections that can boost innovation and, in turn, generate financial gains that sustain the long-term growth of an environment that attracts AI experts and talent²⁷.

➤ Case Study

The DABUS Case:²⁸ The current paper unravels and examines the interrelated themes regarding the redefinition of inventorship in patent law with the following objections. In addition to becoming the first AI to seek a patent, the DABUS case presents inventorship issues, intensifying the discussion of AI in patent law. An artificial intelligence system called DABUS filed for a patent on ideas it came up with. The following debates highlight the need to modify patent law to make it more compatible with AI-developed ideas, even though its applications have been rejected in the US and Europe. Businesses have found it eye-opening how AI raises issues about the legal meaning of creation. Before implementing their innovation agenda, companies who take AI as a tool for innovation seriously must understand the consequences of not recognizing AI-generated inventions.

This indicates that as AI advances, the lines between authorship and creativity are becoming less distinct. The legal status of inventions made by artificial intelligence robots capable of inventing independently is still being determined. New inventions will likely remain unutilized since IP protection laws must adequately cover them for AI. The current legal systems need to be updated and revised to make patent laws applicable to AI inventions because they are becoming outdated due to time.

➤ Statement of Problem:

AI is one of the most rapidly developing technologies that reshape numerous industries, and the impact on various businesses has been increasing. However, there is fundamental legal and strategic issues concerning the use of AI in patent law. AI technologies often contain extremely complex algorithms and correspondingly vast sets of data, issues of ownership and inventorship arise along with patentability. The established legal standards of patents applicable in more conventional inventions hitches on the

peculiarities of inventions engendered by artificial intelligence, causing uncertainties in ownership rights.

Therefore, this paper aims to clarify and explain how the analytical drivers of AI-aimed integration on patent practices become strategically crucial for businesses to manage legal risks during the convergence, facilitate innovation, and maintain competitive advantage. The strategic outlook of AI inside the business innovation of patents and the legal frameworks that follow when using the new invention is thus necessary to be examined in this study.

➤ Research Objective:

This research will seek to determine how AI interacts with the legal domain of patents and the various opportunities and risks it poses to various firms. Since AI technologies are steadily assuming the role of innovators, key issues emerge in the realms of ownership and personhood of inventions according to traditional patent laws and in concerns to eligibility and liability for patent of inventions for autonomous machine usage. This research aims at establishing such legal issues; evaluating legal grey areas present within the existing patent systems; and examining how different jurisdictions deal with the protection of AI-associated IP. Further, the research will assess how companies manage and protect, as well as leverage AI-related IP, such as patenting techniques, licensing, and other methods such as trade secrets and open-source models. Answering these dimensions is the objective of this research, which aims at offering policy implications to promote both innovation and decent legal rights for the development of AI technology. Besides, the study will include how these patent issues affect various sectors including health, automobile among others in analyzing the specific approaches to dealing with modifications in the legal field. Overall, this study helps to extend the knowledge of the consequences of AI on the framework of patent law as well as provides some suggestions for enterprises which operate in this unsteady environment.

II. RESEARCH METHODOLOGY

This study also presents a qualitative study design which combines legal prescription with case study research to investigate the AI and patent law as well as their business context. Respondent data are an original analysis of legislative records, case law, and patents concerning AI technologies to establish primary legal issues in patenting and intellectual property. Also, secondary data will be research articles focusing on the strategic business analyses of these emerging legal structures. Employing thematic analysis, central themes on patentability, inventorship and enforcement - all in relation to AI will be deduced and

²⁶ Scientific Center of Innovative Research et al., *NAVIGATION IN E-GOVERNMENT: THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE FORMATION OF THE LEGAL FRAMEWORK FOR THE PROTECTION OF INTELLECTUAL PROPERTY RIGHTS*, PALR 17 (2024), <https://public.scnchub.com/palr/index.php/palr/article/view/228> (last visited Nov 14, 2024).

²⁷ Teesha Soni, *Impact of AI on IPR Framework*, (2024), <https://papers.ssrn.com/abstract=4831898> (last visited Nov 14, 2024).

²⁸ The latest news on the DABUS patent case | IP STARS, <https://www.ipstars.com/NewsAndAnalysis/The-latest-news-on-the-DABUS-patent-case/Index/7366> (last visited Nov 14, 2024).

analyzed. The paper is further supported by case of DABUS who have adopted AI-driven patent strategies examples their methods of managing legal risks and exploiting new possibilities in patent law.

III. CONCLUSION

➤ *Proposals for Enhanced IP Protections*

- **Defining AI-Inventorship:** Identifying the inventor is typically the first consideration among all the criteria that must be considered while adapting a foreign patent law. After that, lawmakers and intellectual property organizations need to start thinking about how to handle ownership of AI creations. A machine, its designers, or its operators—who should be considered an inventor? One of the main issues to be resolved is the issue of how much autonomy is appropriate, where traditional human monitoring will still be crucial.
- **Customizing Patent Criteria:** In adhere to the current patentability criteria of novelty and industrial applicability, ideas about additional criteria for verifying the non-obviousness of inventions, including those created using artificial intelligence, should be examined. Based on its ability to scan vast amounts of data and its potential to create countless combinations of existing knowledge, artificial intelligence (AI) might produce rapid advances that conventional indicators might seem non-obvious. This might promote a different interpretation of these standards concerning AI, where they serve as catalysts for further advancement.
- **Simplifying Application Processes:** Since AI is all about high-speed processes, the current patenting structures need to be modified to promote the development of AI advances. AI technology could advance rapidly, and waiting a long time for a patent could be more effective. Rapid and sufficient protection can be offered by the expedited process of evaluating inventions artificial intelligence produces.
- **International Cooperation on Standards:** The reality is that AI and technology are a global phenomenon, necessitating cooperation on IP safeguards. Companies looking to invest in cross-border AI will find it easier if the standards of patents in different jurisdictions are standardized. There might be a chance to consider an international agreement dealing with the issue of intellectual property associated with AI.

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