

**REIMAGINING INTELLECTUAL PROPERTY LAW IN THE AGE OF
ARTIFICIAL INTELLIGENCE: CHALLENGES AND THE WAY FORWARD**

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ABSTRACT

The rise of **Artificial Intelligence** (AI) as an innovator and creator brings **novel challenges** to the prevailing legal frameworks in Intellectual Property Rights (IPRs). Historically, IP legislations—especially copyright and patent legislations—are based on the idea of human creativity, authorship, and inventorship. However, with the growing capability of AI systems to autonomously generate literary, artistic, musical, and even technological inventions, legal scholars and policymakers are now confronted with fundamental questions: Can AI be recognized as an author or inventor? If not, who should own the rights to **AI-generated works**? Do current IP regimes provide adequate protection for such outputs, or is there a need for a novel legal framework?

This article critically analyses the intersection of IP law and artificial intelligence both theoretically and practically. It explores the shortcomings of current Indian IP legislations, i.e., the Copyright Act, 1957 and the Patents Act, 1970, to include AI-created content. In addition, it undertakes a comparative examination of other jurisdictions' legal positions such as the United States, the European Union, China, and South Africa with special reference to the breakthroughs such as the DABUS case that challenged the interpretation of “**inventor**” during the era of AI.

The research also delves into the general implications of AI on legal principles like originality, inventive step, moral rights, and public interest. Ethical and policy concerns, such as responsibility, algorithmic bias in AI systems, ownership of training data, and over-

propertisation risk, are examined thoroughly. Against this background, the paper suggests potential legal reforms, such as enacting a **sui generis** regime for works generated by AI and revisiting international IP standards under TRIPS and WIPO.

Finally, the research contends that as AI goes on transforming the boundaries of innovation and creativity, so the IP regime must change in kind. Without prompt and responsive reform, the law threatens to become antiquated in the wake of technological change, thus compromising both incentive structure and equity which IPRs are meant to maintain.

INTRODUCTION

In the 21st century, the sudden emergence of Artificial Intelligence (AI) is not just revolutionizing industries—it is rewriting the very fabric of creativity and innovation. From writing symphonies and creating visual works of art to designing intricate inventions and producing coherent texts, AI machines are now performing tasks once believed to be the sole province of human minds. Though such developments amount to a quantum leap in technological abilities, they at the same time throw up some deep legal, ethical, and philosophical questions, especially in the field of Intellectual Property Rights (IPRs).¹

Intellectual Property (IP) legislations are essentially predicated on the presumption of human agency. They are framed with the idea of recognizing and rewarding the mind, effort, and personality of human creators and innovators by providing them with exclusive rights over their work. This human-centric foundation is embedded in core legal principles such as authorship, inventorship, originality, and moral rights.²

However, the advent of AI-generated works—where AI systems independently produce artistic, literary, or scientific content with little or no human involvement—calls into question the applicability of these long-standing legal doctrines. Can an AI be considered an “author” or an “inventor” under the law? If not, who owns the rights to the output generated by AI? Should existing IP frameworks be adapted, or is there a need for an entirely new legal regime?

¹WIPO, *Policy and Legal Issues in Artificial Intelligence* (2023), https://www.wipo.int/about-ip/en/artificial_intelligence/.

²Ryan Abbott, *The Reasonable Robot: Artificial Intelligence and the Law*, 71 Am. U. L. Rev. 51 (2021).

The issue is not merely academic. Across the world, AI-generated innovations are entering the market, and disputes are already emerging over ownership and recognition.

Among these notable is the DABUS case in which the AI system was listed as inventor in patent applications in various jurisdictions. While others, such as South Africa, have accepted such applications, there are those like the United States and the United Kingdom that have rejected them, reiterating the need for human inventorship. In India, the legislative and judicial reaction to these trends continues to be in its infancy, underlining the imperative of academic and policy reflection on the issue of AI and IP.

This paper attempts to critically analyze the changing dynamic between Intellectual Property Law and Artificial Intelligence, specifically within the context of the Indian legal system against the backdrop of international trends. It seeks to examine the limitations of current IP legislation in dealing with AI-generated works and determine whether or not such limitations are overcome by reinterpretation or need to be changed through substantive legal reform. Through doctrinal, comparative, and policy analysis, the paper will respond to essential concerns on authorship, inventorship, ownership, and the more general implications of AI on IP jurisprudence.

The purpose of this research is tripartite:

1. To examine if AI-created outputs are eligible for IP protection under existing Indian and global legal regimes;
2. To compare the approaches taken by various jurisdictions and determine their applicability to the Indian situation;
3. To suggest legal and policy proposals that make the IP system resilient, equitable, and responsive in the AI era.

KNOWING AI AND ITS INVENTIVE/CREATIVE FUNCTIONS

Artificial Intelligence (AI), which was a far-off idea of science fiction, has now established itself firmly in contemporary technological and creative environments. By definition, AI is the capability of machines or software programs to execute tasks that are normally subject to human intelligence. Such tasks involve problem-solving, decision-making, language processing, learning from data, and in more advanced applications, the creation of original

content.³ In order to adequately analyse the intersection of AI and Intellectual Property Rights (IPRs), one must identify what AI is, how it works, and the extent to which it can be creative and invent.

1. DEFINITION & CATEGORIZATIONS OF AI:

AI falls into three broad categorizations:

- Narrow AI: Computer programs that can be created to complete a specific task, for example, facial recognition or translation (e.g., Siri, Google Translate).
- General AI: Speculative systems capable of doing any intellectual activity a human might.
- Super AI: A speculative type of AI exceeding human intelligence in every way.

Most existing applications are classed as Narrow AI, such as AI systems creating artworks, producing music, writing books, or creating technical innovations.

2. THE MECHANICS OF AI CREATIVITY & INNOVATION:

AI systems currently employ technologies like Machine Learning (ML), Deep Learning, Natural Language Processing (NLP), and Generative Adversarial Networks (GANs) to execute creative tasks. These systems are trained on huge datasets and can recognize patterns, replicate styles, and generate outputs that seem to display originality.⁴

Examples of AI-generated works are:

- Visual Arts: AI-generated paintings (e.g., "Portrait of Edmond de Belamy," sold at Christie's).
- Music Composition: Systems like OpenAI's MuseNet and Google's Magenta compose music in multiple genres.
- Literary Works: AI models such as ChatGPT and Sudowrite can write coherent articles, poetry, and fiction.
- Inventions: AI systems like DABUS (Device for the Autonomous Bootstrapping of Unified Sentience) have been used to generate novel product designs and concepts.

3. CHARACTERISTICS OF AI-GENERATED WORK:

AI-generated outputs often display several qualities associated with human creativity:

- Originality: The content is not a verbatim reproduction of the training data.⁵
- Complexity: The output may embrace subtle styles or multi-step reasoning.

³ Organisation for Economic Co-operation and Development (OECD), *Recommendation of the Council on Artificial Intelligence*, Annex §1 (2019), <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449>.

⁴ Pamela Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 14 Berkeley Tech. L.J. 519 (1999).

⁵ Ibid.

- Autonomy: The AI works without human real-time direction.
- Unpredictability: The exact output is not pre-determined, even to its creators.

These characteristics threaten to upend classic IP suppositions, specifically the need for human intelligence and intention as the foundation of protection.

4. THE HUMAN-AI COLLABORATION SPECTRUM:

It is worthwhile to note that AI does not exist in a vacuum very often. Human intervention is involved at some stage or the other—choosing the data, training, fine-tuning, or selecting the output. Questions of a subtle sort arise:

- Where does the human input cease, and the machine's commence?
- Can a human be said to be the author or inventor just because it operates or codes the AI?

The range of participation varies from

- Completely autonomous AI output, with no human touch in the final product;
- Semi-autonomous systems, where human input shapes or refines the output;
- Human-in-the-loop systems, where the AI is a tool but the human is still the main creator.

5. IMPLICATIONS FOR IP LAW:

AI's ability to create content and ideas not only pushes the boundaries of existing legal definitions of “author” and “inventor” but also calls into question the very justification for providing IP rights—i.e., to reward human creativity and foster innovation. Where the creative agent is a machine, not a human, established rationales such as labour theory, personhood theory, and incentive theory can no longer be applied or may require reinterpretation.

CURRENT IP FRAMEWORK & ITS LIMITATIONS IN ADDRESSING AI-GENERATED WORKS

The contemporary legal frameworks governing Intellectual Property Rights (IPRs) were conceived in an era when human creativity and innovation were the exclusive sources of

original works and inventions.⁶ As such, these laws are heavily anthropocentric, designed to recognize and reward the intellectual labour of natural persons. Yet, as the power of Artificial Intelligence (AI) to create creative works and new inventions independently continues to grow, the sufficiency of current IP legislations is being questioned. This section critically analyses the shortcomings of current IP regimes—especially in the case of copyright, patent law, and neighbouring rights—in dealing with AI-generated products.

A. COPYRIGHT LAW:

1. Human Authorship Requirement

Copyright law has long protected “original literary, dramatic, musical and artistic works,” as long as they are the product of human intellectual labour. The test of originality, creativity, and fixation is one that is accepted worldwide, with the majority of jurisdictions either expressly or impliedly requiring a natural person as author.⁷

- In India, the Copyright Act, 1957 does not use the term “author” in a way that specifically caters to AI systems. Section 2(d) defines various authors for various classes of works (e.g., composer, artist, filmmaker), all of which are assumed to be human beings.
- For the United States, the Copyright Office has unequivocally declared that works produced by non-human actors, such as AI, are not protected. This was also reaffirmed in the 2023 ruling⁸ refusing copyright to a work produced by the AI system “Creativity Machine.”
- In the UK, the Copyright, Designs and Patents Act 1988 (Section 9(3)) does recognize “computer-generated works,” whose author is “the person by whom the arrangements necessary for the creation of the work are undertaken.”⁹ But that provision is out of date and fails to capture the facts of current AI systems with independent operation.

2. Issues Arising from AI-Generated Works

- No legal subjectivity: AI systems are not legal persons and have no rights or liabilities.
- No human author who can be identified: In highly autonomous outputs, there can be no human with a direct creative role.

⁶ WIPO, *Policy and Legal Issues in Artificial Intelligence* (2023), https://www.wipo.int/about-ip/en/artificial_intelligence/.

⁷ Andrew Chin, AI and Copyright: Who Owns AI-Generated Art, 67 J. Copyright Society U.S.A. 1 (2020).

⁸ *Thaler v. Comptroller-General of Patents, Designs and Trade Marks*, [2023] UKSC 18.

⁹ Copyright, Designs and Patents Act 1988, c. 48 (UK).

- Ownership uncertainty: Who owns the rights—the programmer, the user, the owner of the training data, or the AI system itself?

B. PATENT LAW:

1. Inventorship and Patentability

Patent law is more stringent than copyright in demanding a human inventor. Most significant requirements for patentability—novelty, inventive step, and industrial applicability—also assume a human source.

- Under the Patents Act, 1970 of India, the applicant must be the “true and first inventor,” a phrase which has not been judicially construed to cover non-human inventors.¹⁰
- The case of DABUS is at the centre of this controversy. Patent applications specifying DABUS, an artificial intelligence system, as the inventor were rejected by the United States Patent and Trademark Office (USPTO), European Patent Office (EPO), and the UKIPO, based on the fact that an inventor should be a natural person. Nevertheless, South Africa was the first nation to award a patent to an invention credited to DABUS, thus sparking new debates regarding AI inventorship.
- The WIPO Draft Issues Paper on AI and IP (2020) recognized the issue but saw no consensus regarding whether AI systems ought to or could be awarded inventorship.

2. Other Patent Issues

- Disclosure Requirements: It can be hard to explain how an AI arrived at an invention because of the “black box” aspect of machine learning.
- Non-obviousness Test: Artificially created inventions may not lend themselves well to the conventional tests of obviousness, which involve a comparison with the ideal "person skilled in the art."

C. OTHER IP RIGHTS:

1. Trademark Law

Trademark law is less immediately affected but could be challenged in the future by AI-created brand names or logos. Generated automatically, questions of authorship and ownership of the mark arise.¹¹

¹⁰ Indian Patent Office, *Manual of Patent Office Practice and Procedure* (2023), https://ipindia.gov.in/writereaddata/Portal/Images/pdf/manual_patent_office.pdf.

¹¹ Jorge L. Contreras, Artificial Intelligence and the Patent System, 103 J. Pat. & Trademark Off. Soc’y 435 (2021).

2. Trade Secrets and Data Ownership

- AI systems depend on huge datasets, which tend to be proprietary. The legal status of training data, protection as a trade secret, and rights of providers of data are still not fully regulated.
- The intersection of data ownership, privacy rights, and IP rights is unclear, particularly in the Indian scenario.

D. LIMITATIONS THROUGHOUT THE IP SYSTEM:

- **Doctrinal Inflexibility:** The majority of IP legislations do not envision non-human agents as right-holders.
- **Absence of Precedent:** Indian and most jurisdictions' courts have not yet established jurisprudence on AI inventorship or authorship.
- **International Inconsistency:** Varied global approaches leave stakeholders working across borders uncertain.
- **Policy Vacuum:** Neither the Draft National Strategy for AI (NITI Aayog) nor the National IPR Policy (2016) of India contains clear directives on AI-generated IP.

COMPARATIVE JURISDICTIONAL ANALYSIS:

With the development of Artificial Intelligence (AI), nations everywhere are trying to grapple with the status of AI-generated works within their own intellectual property (IP) regimes. Whereas most jurisdictions continue to adhere to anthropocentric conceptions of authorship and inventorship, a handful of jurisdictions have started testing or discussing reforms. This part discusses and compares the legal status of AI-created IP in some key jurisdictions, noting significant legal milestones, statutory concepts, and court rulings that define the international discussion.

1. UNITED STATES OF AMERICA:

The United States has adopted a human-centred and conservative policy on IP rights in the context of AI.

- Copyright: The U.S. Copyright Office outright denies registration of works by non-human authors. In 2023, it denied protection for a painting produced by an AI system called the Creativity Machine, citing that copyright law mandates “human authorship.”¹²
- Patent: In 2020, the U.S. Patent and Trademark Office (USPTO) denied the DABUS patent applications, confirming that an “inventor must be a natural person.” This stance was defended by the federal courts in the case of *Thaler v. Hirshfeld* (2021)¹³, stating that statutory language under the U.S. Patent Act does not include AI systems.
- Implication: The U.S. stance categorically rules out AI as an author or inventor, leaving the responsibility on human agents who employ AI as a tool.

2. EUROPEAN UNION:

The European stance is similar to that of the U.S. but includes a more formal policy discussion on the future of AI and IP.

- Copyright: Human authorship is highlighted in the EU Copyright Directive. Works created by AI, although original, are not eligible for protection unless accompanied by an evident human creative input.
- Patent: The EPO rejected the DABUS applications, as the inventor according to the European Patent Convention has to be a natural person.¹⁴
- Policy Developments:
 - The European Parliament discussed the necessity of a sui generis regime to safeguard AI-generated content.
 - The AI Act (2021/2023), while centred on AI use regulation, can indirectly affect future IP discourse through the creation of legal thresholds for AI accountability.
 - Implication: While presently holding onto human authorship, the EU is proactively exploring long-term legislative adjustments.¹⁵

3. UNITED KINGDOM:

- Copyright: The UK Copyright, Designs and Patents Act 1988 is peculiar in granting limited protection to computer-generated works. Section 9(3) establishes that "in the case of a literary,

¹² U.S. Copyright Office, *Compendium of U.S. Copyright Office Practices* § 313.2 (3d ed. 2023).

¹³ 2 F.4th 1227 (Fed. Cir. 2021).

¹⁴ European Patent Convention, Oct. 5, 1973, 1065 U.N.T.S. 199.

¹⁵ European Parliament, Resolution on Intellectual Property Rights for the Development of Artificial Intelligence Technologies, 2021 O.J. C 272/57 (2021).

dramatic, musical or artistic work which is computer-generated, the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken."¹⁶

- Patent: The UK Intellectual Property Office refused the DABUS application, reiterating that a system of AI cannot be an inventor. This ruling was upheld by the UK Supreme Court in *Thaler v. Comptroller-General of Patents, Designs and Trade Marks* (2023).
- Implication: The UK is among the limited jurisdictions statutorily recognizing AI-generated work in copyright law, albeit patent law is still human-centered.¹⁷

4. SOUTH AFRICA:

South Africa was in the news in 2021 as the first nation to issue a patent to an AI system (DABUS) as the inventor.

- The Companies and Intellectual Property Commission (CIPC) embraced the contention that excluding AI inventorship might hinder innovation.
- This administrative ruling, however, has not yet been tested in court, and no legislative amendments have been proposed to back the policy change.
- Implication: South Africa's position is a stark departure from the world norm, presenting a potential model of reform but without doctrinal clarity.

5. AUSTRALIA:

- Patent: First, the Federal Court of Australia in *Thaler v. Commissioner of Patents* (2021) held in favour of acknowledging DABUS as an inventor. Nevertheless, this was later overruled by the Full Federal Court in 2022, which stated that only natural persons may be inventors under the existing Patents Act.
- Implication: Australia showed judicial transparency but ended up reaffirming the prevailing worldwide perception that existing IP laws do not provide for AI inventorship.

6. INDIA:

India has yet to adopt a definite legal stance on AI-generated IP, and there is no explicit statutory mention of non-human creators.

- Copyright Act, 1957 and Patents Act, 1970 are silent regarding the role of AI.

POLICY, ETHICAL, & LEGAL CHALLENGES

¹⁶ UK Intellectual Property Office, *Artificial Intelligence and Intellectual Property* (2020), <https://www.gov.uk/government/publications/artificial-intelligence-and-intellectual-property>.

¹⁷ Copyright, Designs and Patents Act 1988, c. 48 (UK).

The application of Artificial Intelligence (AI) in creative and innovative activities triggers a sophisticated set of policy, ethical, and legal issues that are broader than the technical and doctrinal boundaries of conventional Intellectual Property (IP) law. This part discusses these multidimensional challenges, highlighting their implications for lawmakers, creators, users, and society as a whole.¹⁸

1. POLICY CHALLENGES:

a. Balancing Innovation Incentives and Access

One of the underlying functions of IP law is to encourage innovation by providing creators and inventors with exclusive rights. But to apply this incentive mechanism to works created by AI is problematic because AI systems don't need the same motivational incentives as humans. This leads one to question whether providing IP rights for AI work would actually foster innovation or just produce legal monopolies that obstruct access and competition.

b. Uncertainty and Legal Predictability

Inadequate rules regarding AI authorship and inventorship result in uncertainty in the law for certain innovators, businesses, and investors. Inconsistent or uncertain IP protections can deter investment in AI technologies or result in lengthy and expensive litigation, hindering technological development and market growth.

c. Global Harmonization

Varying countries' varied stances on AI and IP risk dividing the international IP system, making cross-border trade and cooperation difficult. Converging legal requirements—particularly under the umbrella of organizations such as WIPO and TRIPS—is a critical policy task to guarantee cross-border certainty and equity.

2. ETHICAL CHALLENGES:

a. Authorship and Moral Rights

The conventional IP law acknowledges the individual attachment of the creator to the creation, including moral rights of attribution and integrity. In case of content produced by AI systems, ascribing these rights becomes morally problematic. Can an AI “merit” credit or protection of

¹⁸ Oskar Liivak, Artificial Intelligence and Intellectual Property (2022).

its “creativity,” and if so not, who should be accorded moral rights? Neglecting this could denigrate the human values inherent in IP law.

b. Accountability and Responsibility

AI systems can generate outputs independently that violate current IP rights or ethical standards (e.g., plagiarism, creating offensive material). Establishing responsibility—whether it is with the developers, users, or owners—is a major ethical and legal challenge.

c. Bias and Fairness

AI algorithms tend to mirror biases in the training data, and hence may result in discriminatory or unjust results in AI-generated content. There is the ethical question of whether these biases are to be policed under IP law or by other regulatory measures.

3. LEGAL CHALLENGES:

a. Legal Personhood and Rights Attribution

IP law necessitates identifiable inventors or creators, normally natural persons or legal persons. AI systems, being devoid of legal personhood, are incapable of owning rights or shouldering legal burdens. This leaves a legal gap where AI-generated works lie outside the ambit of protection or enforcement mechanisms.

b. Ownership and Licensing Issues

Where an AI creates a work independently, ownership is unclear. Potential claimants are:

- The programmer or developer of the AI system
- The user who initiated the AI output;
- The data owner from whom data was used to train AI;
- The AI system itself (not yet recognized legally).

This uncertainty makes it difficult to license, transfer, and enforce IP rights.

c. Disclosure and Transparency

Patent statutes mandate the disclosure of details of inventions, while AI “black box” operations frequently complicate describing how inventions were developed. This limited transparency tests patentability norms and potentially lowers the credibility of the patent system.

d. Duration and Scope of Protection

If AI-created works are entitled to IP protection, the extent and duration come into question. Extremely broad or extended protection could repress follow-on innovation, but extremely narrow protection might discourage investment.

4. BROADER SOCIETAL IMPLICATIONS:

- **Economic Impact:** Awarding IP rights to AI-generated works has the potential to redirect wealth and influence towards tech owners, with a risk of making inequality worse.
- **Cultural Impacts:** AI creativity can potentially undermine conventional concepts of art and authorship, influencing cultural heritage and identity.
- **Technological Advancement:** An inflexible IP regime could either obstruct or spur AI advancement based on how rights are assigned and enforced.

WAY FORWARD

Contesting the threats to the current Intellectual Property (IP) regime by Artificial Intelligence (AI) calls for an active, well-balanced, and multidisciplinary response. The dynamic development of AI technology needs the law to be adaptive enough to follow technological development while maintaining the underpinning principles of IP law. The recommendations below provide a possible way forward for policymakers, legal professionals, and stakeholders:

1. DEFINE LEGAL TERMS & FRAMEWORKS:

- Enlarge the legal definition of “author” and “inventor” to specifically include AI-generated works, possibly adding new categories like “AI-assisted creation” or “AI-generated invention.”
- Consider granting authorship or inventorship to human operators or developers of AI, based on their degree of creative control and participation.
- Alternatively, consider sui generis rights specifically tailored for AI-generated works that offer limited protection separate from regular IP rights.

2. CREATE A REGULATORY FRAMEWORK FOR AI IN IP:

- Develop explicit guidelines on ownership and responsibility for works produced by AI to eliminate confusion and ensure fairness among creators, users, and developers.
- Foster transparency through disclosure provisions regarding the contribution of AI towards the creation of a work or invention, enhancing trust and accountability.
- Facilitate global collaboration to harmonize the laws on AI-related IP and prevent conflicts across jurisdictions.

3. DEVELOP HUMAN-AI COLLABORATION MODELS:

- Identify the range of human contribution to AI-created works and adapt IP protection accordingly, differentiating between:
 - Autonomous AI creations (potential sui generis rights)
 - Human-controlled AI works (conventional IP rights with human rights holders)
- Promote creators and AI developers to document their creative input to clearly identify ownership of rights.

4. BALANCE INCENTIVES & ACCESS:

- Develop legal frameworks that reward innovation without overly limiting access, so AI-generated works make contributions to the public domain and humanity.
- Expand on limitations and exceptions for AI-generated works, such as fair use or compulsory licensing, to avoid monopolization and ensure competition.

5. SOLVE ETHICAL & SOCIAL ISSUES:

- Embed ethical principles in AI and IP policymaking, including accountability, fairness, and lack of discrimination in AI output.
- Foster public education and awareness regarding the effects of AI on creativity and IP rights to enable informed discussion by stakeholders.

6. FOSTER INTERDISCIPLINARY RESEARCH & DISCUSSION:

- Sponsor research that integrates law, technology, ethics, and economics to gain a full understanding of the implications of AI on IP.
- Enable continued dialogue amongst governments, industry, academia, and civil society to dynamically adjust IP frameworks as AI technology changes.

CONCLUSION

The rapid advancement of Artificial Intelligence (AI) has brought profound challenges and opportunities to the field of Intellectual Property (IP) law. AI's capacity to autonomously generate creative works and inventive solutions disrupts traditional legal concepts that are

deeply rooted in human authorship and inventorship. This disruption exposes critical gaps and ambiguities in existing IP frameworks, which currently do not adequately recognize or accommodate AI as a creator or inventor.

By comparative analysis, it becomes clear that the majority of jurisdictions maintain a human-based model of IP rights, confining them to natural persons. Yet, new cases—like South Africa's AI inventorship recognition—illustrate how different models are coming into consideration, a testament to the pressure to innovate the law. The policy, ethical, and legal issues of AI-generated works—ranging from issues of ownership and responsibility to fairness and societal effect—highlight the sophistication of this new area of endeavor.

In the future, a harmonized approach is necessary. This includes making clear definitions in law, creating specialized regulatory models, and promoting human-AI collaboration frameworks and solving broader ethical issues. Global collaboration and interdisciplinarity will be important for harmonizing legislation and allowing an IP system that both stimulates innovation and protects human creativity and human dignity.

Ultimately, IP law in the era of AI depends on its capacity to adapt wisely, embracing innovation while protecting the fundamental values of intellectual property. In doing so, the legal system can both preserve innovation and enable a new generation of creativity—one wherein humans and machines synergistically work together to push the boundaries of knowledge and art.