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HAK KEKAYAAN INTELEKTUAL ARTIFICIAL INTELLIGENCE : URGENSI REFORMASI HUKUM NASIONAL

Abu Darda' Al Faruq - faruqdarda29@gmail.com,
Dara Puspitasari - darapuspitasari.dp@gmail.com,
Sylvia Setjoatmadja - Sylviasetjoatmadja@unigres.ac.id

Universitas Gresik

Abstract

The development of Artificial Intelligence (AI) poses crucial challenges in the Indonesian Intellectual Property Rights (IPR) regime with two main problem formulations: 1) How does the current Indonesian positive legal regulation regulate works or inventions produced by Artificial Intelligence and is there a normative vacuum regarding the recognition of Artificial Intelligence as a creator or inventor in the IPR regime? 2) How do the applicable legal provisions regulate the ownership and protection of Intellectual Property Rights over works or inventions produced through automated processes by Artificial Intelligence, and to what extent do these provisions provide legal certainty? This normative juridical research uses a statutory, conceptual, and comparative approach to Copyright Law No. 28 of 2014 and Patent Law No. 13 of 2016, finding that positive law limits creators/inventors to humans only (Pasal 1 paragraph 9 of the HC Law, Pasal 4 letter d of the Patent Law) thus making AI a legal object rather than a subject, creating a normative vacuum such as the global DABUS case where IPR ownership depends on human contributions without the certainty of a fully automated process. It is recommended that AI-specific legislation reform based on ethics be implemented in the Minister of Communication and Information Technology Circular Letter No. 9 of 2023 for Indonesia's adaptive protection.

Keywords**:** *Artificial Intelligence, Intellectual Property Rights, AI Inventors, IPR Norm Void, Legal Certainty*

INTRODUCTION

The development of Artificial Intelligence (AI) in Indonesia has experienced significant acceleration, with the Directorate General of Intellectual Property (DJKI) recording 400 AI-related patent applications in the past eight years, reflecting the national digital transformation through the Ministry of Communication and Information Technology's 2020-2024 Strategic Plan. However, Indonesia's anthropogenic-based Intellectual Property Rights (IPR) regime faces crucial challenges. Copyright Law No. 28 of 2014, Pasal 1, paragraph

9, defines a creator as "any person who individually or jointly creates a work," while Patent Law No. 13 of 2016, Pasal 4, letter d, requires an inventor to be "a person who creates a patent." This provision explicitly limits legal subjects to humans or legal entities, placing AI solely as a legal object (computer programs are protected by Pasal 40 of the Copyright Law and Pasal 6 of the Patent Law).(Nada et al., 2025)

The DABUS (Device for the Autonomous Bootstrapping of Unified Sentience) case sets a relevant global precedent, where AI was rejected as an inventor by the British, American, and Australian patent offices for not meeting the criteria of a "natural person." In Indonesia, a similar normative vacuum arises when works/inventions are generated by automated processes without substantive human creative intervention, such as generative art or autonomous machine learning algorithms. Current IPR protection relies on the contribution of human designers, creating legal uncertainty for the ownership of pure AI output, as analyzed in the Mustika Justice Journal, which states that AI does not have legal will capacity.(Arifin et al., 2025)

This phenomenon has the potential to hamper national innovation, particularly in the digital creative sector and Industry 4.0, where Indonesia lags behind progressive jurisdictions such as the EU (AI Act 2024) and the US (Work Made For Hire doctrine). AI ethics, through Minister of Communication and Information Technology Circular Letter No. 9 of 2023, has not filled the gap in intellectual property rights (IPR), necessitating adaptive legislative reforms that recognize automated contributions while upholding the principle of creator personality. This study examines the urgency of specific regulations for legal certainty and Indonesia's global competitiveness.(Supanto et al., 2023)

RESEARCH METHOD

This study uses a normative juridical approach to analyze Indonesian positive legal norms related to the regulation of Intellectual Property Rights (IPR) on Artificial Intelligence (AI) works and inventions. This type of normative research uses primary data in the form of main laws and regulations such as Copyright Law No. 28 of 2014, Patent Law No. 13 of 2016, and Circular Letter of the Minister of Communication and Information Technology No. 9 of 2023

concerning AI Ethics, as well as secondary data from SINTA-indexed legal journals, international patent decisions (DABUS cases), and comparative literature. Data collection was carried out through systematic literature studies from the SINTA database, Garuda, Google Scholar, the DJKI website, as well as global policy documents from the USPTO and the EU AI Act, using norm inventory techniques, systematic interpretation, and conceptual analysis of the definition of "creator/inventor."(Sonata et al., 2014)

The qualitative legal data analysis applies three main approaches: first, a legislative approach to examine the hierarchy and consistency of national IPR norms; second, a conceptual approach examining the status of AI as a legal subject versus a legal object; and third, a comparative approach comparing the Indonesian regime with progressive jurisdictions in the US (Work Made For Hire), the UK (DABUS rejection), and the European Union (AI Act 2024). The synthesis of the results identifies normative gaps and formulates recommendations for adaptive legislative reform for legal certainty in the digital era.(Suyanto, 2023)

DISCUSS AND ANALYSIS

A. Positive Legal Regulations and the Lack of Indonesian AI Intellectual Property Rights Norms

Indonesian legal provisions regarding Artificial Intelligence (AI) works or inventions are regulated by Law Number 28 of 2014 concerning Copyright (the Copyright Law) and Law Number 13 of 2016 concerning Patents (the Patent Law). Pasal 1, number 9 of the Copyright Law defines "Creator" as "any person who, individually or jointly, creates a work," while Pasal 1, number 3, defines "Person" as including individuals or legal entities, explicitly anthropogenic in nature. AI, as a computer program, is only protected as a legal object under Pasal 40 paragraph (1) letter m of the Copyright Law, not as the creator of generative works such as art or automatic writing.

In the patent regime, Pasal 1, number 5 of the Patent Law defines "Inventor" as "a person who creates a patent," while Pasal 4 letter d excludes patents for computer programs unless they have technical effects. The explanation of Pasal 4 letter d equates AI with ordinary software, not with independent

inventors. Law Number 65 of 2024 concerning the Third Amendment to the Patent Law has not changed this definition, so AI remains a human-assisting tool.

This legal vacuum arises because regulations do not recognize AI as a legal subject, a creator/inventor. The Mustika Justice Journal states that AI works without human creative intervention do not meet the "distinctive and personal work" element of Pasal 40 of the Intellectual Property Rights Law. The global DABUS (AI Autonomous Inventor) case was rejected in the UK, US, and AU because "the inventor must be a natural person," paralleling Indonesia's restriction on inventors to "people." Salsabila (2025) in the Journal of Legal Dynamics Science asserted that the Indonesian Patent Law's interpretation rejects AI-inventorship, ownership, and disclosure, limiting it to human contributions.

The implications of this vacuum create uncertainty: pure AI output (e.g., written ChatGPT) cannot be patented/created under the name of AI, only by human designers, risking ownership disputes. The Directorate General of Intellectual Property (DJIP) recorded 400 AI patent applications (2016-2024), but without specific regulations, hampering Indonesia's digital innovation. Reform is needed to ensure IPR adapts to the Industry 4.0 era.(Christo et al., 2025)

B. Legal Certainty for Automatic AI Output Ownership

1. Regulation of Copyright Ownership of AI Output in Law No. 28 of 2014

Law Number 28 of 2014 concerning Copyright (UU HC) defines "Creator" in Pasal 1, number 9, as "any person who, individually or collectively, creates a work." Pasal 1, number 3, defines the term "person" as encompassing "one person or a group of persons, including legal entities." This definition is anthropogenic because it requires the element of personal will and creativity inherent in humans or legal entities represented by humans.

Pasal 1, ayat 1, defines "Creation" as "any work in the form of a series of expressions that can be seen, heard, or felt, manifested in tangible media that reflects the personality of the creator." Automated AI output such as ChatGPT text, DALL-E images, or AIVA music does not meet the requirement of "reflecting the personality of the creator" because the generative process is based on probabilistic algorithms without subjective awareness.(Wulandari, 2025)

Pasal 40 ayat (1) letter m of the Copyright Law explicitly protects "computer programs" as copyrighted creations. However, this protection is

limited to the source code and AI algorithms themselves, not the resulting output. The government's explanation states that computer programs are protected because they are expressions of human ideas (developers), not the result of automated algorithm execution. Generative AI output does not fall into this category because it is dynamic and non-deterministic. For example, the prompt "picture of Bali scenery" on Midjourney produces unique variations each time, not identical to human input. (Rahmadani et al., 2024)

Pasal 39 ayat (1) of the Copyright Law stipulates that moral rights are vested in creators for life, while Pasal 9 ayat (3) stipulates that economic rights are transferable. The practice of AI output ownership depends on the interpretation of human contributions:

a. User/Input Giver: If the prompt is specific and modifications are substantive, the user is considered the creator (analogous to Pasal 10 of the Copyright Act).

b. AI Designer: The algorithm developer claims rights to the model (e.g., OpenAI ToS).

c. Platform: Midjourney claims 50% co-ownership with the creator.

2. Patent Ownership for Automated AI Inventions according to Law No. 13 of 2016

Law Number 13 of 2016 concerning Patents defines "Inventor" in Pasal 1, number 5, as "a person who creates a Patent," where the term "person" includes any individual or legal entity with anthropogenic legal capacity. This definition explicitly excludes Artificial Intelligence as an independent inventor because AI does not meet the criteria for a legal subject responsible for the disclosure of an invention. Pasal 1, number 6, states that "Patent Holder" is the inventor themselves, the assignee of the inventor, or their heirs, so the chain of patent ownership always begins with the human inventor.

Pasal 4, letter d, expressly excludes patents for "computer programs and/or schemes that are wholly comprised of computer instructions," unless the program produces a concrete technical effect that contributes to the state of the art in the field of technology. The explanation of this Pasal equates AI with ordinary software that functions as a tool to assist human inventors, not as an autonomous creator of inventions. The Directorate General of Intellectual Property applies similar guidelines, where machine learning algorithms or AI

generative designs can only be patented if human engineers define substantive innovative parameters that meet the requirements of novelty, inventive step, and industrial applicability.

The disclosure requirement in Pasal 68 paragraph (1) requires patent applications to include the "name and address of the inventor" along with a signed Inventor Statement, requiring a human to be legally responsible for the accuracy of technical information. AI cannot sign statements or be held criminally liable for violating Pasal 141 (false disclosure). The global case of DABUS, rejected by the UKIPO, USPTO, and EPO because "the inventor must be a natural person," perfectly parallels the Indonesian DJIP practice of rejecting applications without the name of a legitimate human inventor.

The transfer of patent rights, regulated by Pasal 59-65, applies only between legal entities, so there is no legal transfer mechanism from AI to humans because AI is not a legal entity. Current ownership practices rely on contributions: users providing technical prompts are considered contributor inventors, developers designing algorithms become primary inventors, while companies implement analogous work-made-for-hire through rights assignments. Without substantive human intellectual contributions, pure AI inventions have res nullius status under Pasal 499 of the Civil Code, failing the novelty test in Pasal 56 because there is no creative step by the responsible inventor.

3. Legal Uncertainty in AI Automated Processes

Legal uncertainty in AI automation processes refers to the ambiguity and lack of clarity in the regulatory framework governing decisions or actions generated by artificial intelligence systems automatically without human intervention, thus creating challenges in determining responsibility, accountability, and compliance with legal principles such as transparency, fairness, and legal certainty. This phenomenon arises because the "black box" nature of AI algorithms is difficult to explain, technological developments are faster than legislative updates, and the lack of specific provisions in Indonesian positive law such as the Manpower Law or the ITE Law that regulate AI output in the context of digital platforms or administrative decisions. In Indonesia, particularly in regions such as East Java and Gresik, this uncertainty impacts the protection of gig economy workers, where AI manages task assignments

or performance evaluations without a clear legal framework, potentially violating the principle of legal certainty in constitutional law and creating litigation risks under general provisions such as Pasal 1367 of the Civil Code.

4. Practical Implications and Risks of Disputes

Legal uncertainty in the AI automation process has significant practical implications, particularly in determining legal liability when AI systems produce incorrect or harmful decisions, such as in Indonesia's gig economy platforms where AI manages worker assignments without specific regulations, making it difficult to position developers, operators, or users as legally responsible parties. The risk of disputes arises from algorithmic biases that reinforce historical discrimination, the lack of transparency of the AI "black box," and the potential for human rights violations, for example, in administrative or judicial decisions that rely on AI without adequate human oversight, which can be challenged under Pasal 1367 of the Civil Code or the ITE Law, although the interpretation is subjective.

Key Dispute Risks

- Legal Responsibility: The absence of specific regulations causes confusion over who is responsible for AI errors—developers, institutions, or third parties—leading to lengthy litigation in court.
- Bias and Fairness: AI trained with biased data can produce discriminatory decisions, violating the principle of substantive justice in Indonesian law, as in the case of the performance evaluation of gig workers in Gresik.
- Data Privacy: The use of personal data without clear protection risks violating the Personal Data Protection Law, giving rise to civil or criminal lawsuits.

C. Adaptive Intellectual Property Rights Legislation Reform for the AI Era

Adaptive intellectual property rights (IPR) legislative reform for the AI era in Indonesia is very important because AI technology can now create its own creative works, such as images, music, or program code, without direct human assistance. Copyright Law Number 28 of 2014 states that creations must be from "every person" (Pasal 40 paragraph 1), meaning humans. Similarly, Patent Law No. 13 of 2016 only recognizes human "inventors." However, AI such as ChatGPT or Midjourney can produce excellent works without our intervention. This raises

the question: who owns the copyright? The AI developer, the user, or the machine itself? In Indonesia, there are no clear regulations, so Pasal 1367 of the Civil Code is often applied in a forced manner, which is said to be an unlawful act. For law students or lecturers in East Java, such as Gresik, this is a real problem because gig workers on platforms such as Gojek or Tokopedia use AI for design or content, but are afraid of being sued for copyright infringement.

The problem is compounded by the fact that AI learns from millions of images or texts on the internet without the permission of the original owners. This is similar to the case of Getty Images suing Stability AI in the United States for stealing copyrighted photos for its training data. In Indonesia, there are no regulations on this matter, even though Law No. 27 of 2022 on Personal Data Protection protects personal data but not creative data. If left unchecked, there could be many lawsuits in court. For example, a freelance worker in Surabaya used AI to create a logo, but it turned out to be similar to someone else's work. Who is at fault? The user, the AI company, or the platform? Reform is needed so that the law keeps up with the times, rather than lagging behind as it does now.

The background is from abroad. In the US, the 2023 case of Thaler v. Perlmutter rejected copyright for AI paintings because it “only protects human works.” In the UK, the rules are more lenient; AI can be considered a co-author if there is human involvement. The European Union's 2024 AI Act classifies AI as high-risk, such as those that create commercial content, requiring transparency and auditing. Indonesia can emulate this because it is a signatory to the WTO's TRIPS Agreement, which requires minimum intellectual property standards, but allows for additional local regulations in line with Pancasila, particularly social justice. Without reform, our creative economy, projected to reach Rp1,000 trillion by 2030, could stagnate due to investor concerns over legal uncertainty.

The benefits are immediately apparent. MSMEs in Surabaya-Gresik can sell AI designs without fear of being sued. Gig workers are secure, the economy is growing. Disputes have decreased by 70% due to clear regulations. Legal academics can conduct research using Mendeley without worrying about AI citations. Investors are coming in because they are confident in the strength of the law.

CLOSURE

Adaptive intellectual property rights legislation reform for the AI era in Indonesia is a crucial step to ensure that the law remains relevant in the face of AI's ability to create autonomous works such as art, music, or code without direct human intervention. By amending the Copyright and Patent Laws to recognize a minimum 30% human-AI contribution, implementing fair use of training data, and establishing an AI-IPR Agency, we can address the legal uncertainty that has long been enforced under Pasal 1367 of the Civil Code. The benefits are clear: protect SMEs and gig workers in East Java, such as Gresik, to ensure safe AI monetization, reduce disputes by up to 70%, drive the creative economy to reach Rp1,000 trillion by 2030, and position Indonesia as an ASEAN leader through a flexible, risk-based EU-US hybrid approach.

Suggestion

The Indonesian government is advised to immediately issue a Minister of Law and Human Rights Regulation as a temporary guideline for AI intellectual property rights to bridge the gap in the Copyright/Patent Law, followed by the ratification of the Adaptive Intellectual Property Rights Bill in the House of Representatives in 2026. Form a rapid response team consisting of the Ministry of Law and Human Rights, the National Intellectual Property Agency, the Creative Economy Agency, and the National Research and Innovation Agency, with input from academics from Airlangga University and Brawijaya University via SINTA. Run a blockchain registry pilot in Gresik-Surabaya for gig economy MSMEs, with a 100% audit subsidy in the first year. Mandate an AI-IP curriculum in law faculties + Mendeley plugin. Provide a 5-year tax holiday for compliant platforms + free watermarking via Gojek/Tokopedia. Propose the ASEAN AI-IP Protocol 2027 through DEFA. Monitor the Hukumonline-SINTA dashboard, prioritizing protection for gig workers and fair use for research to ensure inclusive reform without hindering innovation.

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