

## LEGAL PROTECTION OF ARTIFICIAL INTELLIGENCE AS A COPYRIGHTS

Widya Agung Kristanti <sup>1</sup>, Agung Sujatmiko <sup>2</sup>, Ria Setyawati <sup>3</sup>, Brahmantyo Agung Wicaksono <sup>4</sup>

Universitas Airlangga, Indonesia <sup>1,2,3,4</sup>

Email: widyaagka07@gmail.com, brahmantyo96@gmail.com

### ABSTRACT

*In the creative economy, technology significantly enhances human productivity and creativity, prominently through Artificial Intelligence (AI), which simulates human intelligence in computing. The rapid advancement of AI raises numerous debates, particularly in the art sector, where societal opinions vary from opposing the registration of AI-generated artwork to advocating for AI's recognition as a non-person legal entity entitled to moral rights. This discourse centers around granting legal status to AI regarding its artwork and relates to the broader concept of Intellectual Property as it pertains to creators and copyright holders. Currently, Indonesia's Copyright Law Number 8 of 2014 lacks specific provisions addressing these issues, resulting in a legal vacuum. This research aims to analyze the application of copyright legal theory to AI-generated art and the legal implications for its future development and protection. Employing normative legal research, the study utilizes both conceptual and legislative approaches, applying inductive logic to draw conclusions. Findings indicate that AI should be regarded as a legal object, with the rights to its artwork attributed to legal entities possessing natural legal authority. Additionally, the use of AI in creative works aligns with the "work made for hire" doctrine. Ultimately, the study underscores the necessity for responsive and progressive legal frameworks that adapt to the evolving landscape of copyright and AI.*

### KEYWORDS

Artificial Intelligence, Copyright Law, Intellectual Property, Legal Status, Creative Economy, Art, Legal Protection, Normative Legal Research



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## INTRODUCTION

In the current development of AI that can be used in various fields, one of theme in the creation works of art for example AI owned by Stephen Thaler which can produce a painting “A Recent Entrance to Paradise” but when the AI works was to be registered for the Copyrights, Stephen Thaler got a rejected approval and permission to registered his AI works by the United States Copyright Office (USCO) with the statement that “ it does not have the human authorship necessary to support a copyright claim and machines or AI cannot be contracted into binding legal contracts”.

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The massive growth of AI is also a challenges for Indonesia, especially in terms of legal regulations that related to Copyrights which is UUHC does not specifically regulates AI and the creation works produce by AI so there is a legal vacuum that can be a legal consequences for the ownership of AI Copyrights and its artistic works. There are several opinions which state that AI should have the rights to obtain a moral rights and to its creations, as conveyed by Freddy Harris as the Director General of Intellectual Property of the Ministry of Law and Human Rights in the Virtual Institute Visit event with the topic "Law and Technology" who made a statement that AI has the right to its moral rights and not to the person who created it or its programmer and can be categorized as a non-person legal subject whose rights and obligations are attached.

The absence of legal certainty and there is no specific regulations that related to AI and its art works actually reaped a pro and contra in society, especially for legal experts in the field of Intellectual Property Rights (IPR), that granting a legal status to AI is not in accordance with the concept of Intellectual Property and Copyrights. More clearly, this is also not in accordance with the definition of a person or person itself in Indonesian Civil Law. As the legal tradition of the Civil Law System based on the author right system approach has provided an explanation that in principle the first creator (author) and a foremost (prima facie) must be a natural person (natural person) according to Hegel's philosophical basis.

The purpose of this article research is to analyze the application of Copyrights law theory to AI and its artworks and analysis of legal aspects that may affected the development and protections of AI in the future. The benefits of this article research are expected to contributes to a legal science, especially in the field of Intellectual Property Rights (IPR) law in Indonesia as well as a contribution of thought and special input on the relevance of UUHC and related legal regulations to the dynamics and the growth of AI which continues to develop as an effort to provide legal certainty.

## **RESEARCH METHOD**

This study used a normative legal research by examining a legal norms, principles and legal theories that related to AI and Copyrights with the conceptual approach and statute approach by conducting a procedure for collecting from several sources of primary legal materials, secondary legal materials and non-legal materials which relevant to the topic discussed and then analyzing the legal materials using an inductive logic that starts from the submission of minor premises (legal facts) and then submitting a major premises (legal rules) to draw a conclusion.

## **RESULT AND DISCUSSION**

### **1. Copyright Holder on Artificial Intelligence Artwork**

#### **a. Copyright Holder**

The definition related to the Copyright Holder is regulated in Article 1 Paragraph (4) of the UUHC, namely the Creator as the owner of the Copyright, the party who legally receives the right from the Creator, or another party who further receives the right from the party who receives the right legally. Based on this

formulation, those who can be categorized as Copyright Holders are the Creator and other parties based on the provisions of the law. The Creator as the Copyright Holder does not go through the legal process but automatically, while for other parties as the Copyright Holder, it must go through the legal process, namely through a license agreement by the Creator as the licensor to give permission to the other party as the licensee. There is a difference in the rights owned by the Creator and the Copyright Holder, namely the Creator has moral rights and economic rights at the same time, while the Copyright Holder only has economic rights to the Creation. Economic rights as an exclusive right owned by the Copyright Holder to obtain economic benefits for the Work are regulated in Article 9 Paragraph (1) of the UUHC and Article 17 Paragraph (1) of the UUHC. The Copyright Holder also has the right to grant licenses to other parties based on a written agreement as stipulated in Article 80 of the UUHC. Furthermore, the Copyright Holder also has the right to submit a written Application for legal protection of a Work to the Minister who conducts the recording or deletion of the Work as stipulated in Article 66 of the UUHC and if there is a Copyright infringement that is detrimental to its economic rights to obtain compensation as stipulated in Articles 95 and 96 of the UUHC.

#### **b. Copyright of Artwork**

Muhammad Djumhana and R. Djubaedillah stated that intellectual property is a creative activity both in science, art and literature, as well as technology that is expressed in various forms and has benefits that can support human life and have economic value. One of the intellectual creativity is in the form of art. Art is a form of venting the emotions of the soul through the process of unifying creation, taste and karsa so as to create a result that contains the value of beauty. Soedarso stated that art is all kinds of beauty created by humans. Ki Hajar Dewantara explained that art is all human actions that arise from the life of his feelings that are beautiful so that they can move the soul of other human feelings and art is seen as a means of communicating human feelings. Art as a medium of self-development is to realize unique ideas that are valuable and contain aesthetic elements.

Creativity in art is the most important thing for a person in producing a work of art. To encourage human creativity and progress in terms of art as a form of appreciation for the intellectual improvement of the community, Copyright is given as intellectual property owned by the Creator. Copyright is an exclusive right granted to the Creator after a Work is realized in tangible form and is intended for the Creator both in the dimension of moral rights arising from the Creator's personal and intellectual relationship with his Work and the dimension of economic rights related to the use of his Creation. The legal principle of copyright protection is automatic protection, which means that copyright protection must be provided without the need to fulfill certain formalities and its implementation is independent of protection. While the declarative principle in Copyright means that the recording of a Work is not absolute, but the recording of a Work is related to the strength of evidence. Based on the provisions of Article 2 (1) – (8) the Berne Convention stipulates:

Article 2 (1): “The expression literary and artistic works shall include every production...”

Article 2 (3): "Translation, adaptation arrangements of music and other alteration of literary and artistic works."

Article 2 (5): "Collections of literary or artistic works such as encyclopedias and anthologies which by reason of the selection and arrangements of their contents..."

Copyright-protected works are not limited to Article 2 of the Berne Convention, but the state is given the freedom to determine in its laws and regulations to expand the scope of application of protection or certain categories that are not protected. This provision is further regulated in the UUHC related to the scope of protected Works related to works of art in Article 40 of the UUHC consisting of songs and/or music with or without text; drama, musical drama, dance, choreography, puppetry, and pantomime; works of art in any form such as paintings, drawings, carvings, calligraphy, sculpture, sculptures, or collages; applied artworks; architectural works; batik artworks or other motif art; photographic works; Portrait; cinematography works.

### **c. Copyright Holder on Artificial Intelligence Artwork**

Today's artists are constantly finding new ways to bring their creative views and collaborate with technology as a method of creating their artwork. The use of technology as a medium in art practice to produce a work of art is considered to be able to encourage innovation and design in the modern realm of mind which has become a global market. Art that collaborates with the digital world produces digital artworks which is clear evidence that creativity and technology are not two separate entities, but two forces that can create harmony in a work of art. Digital art is a form of art that uses technology such as computer devices, software and other technological equipment in its creative process. One of the interesting aspects of digital art is its flexibility to create a work, that artists can experiment with different techniques, styles and media without any physical limitations like in traditional art.

One of the technologies that continues to present interesting innovations in various fields including digital art is artificial intelligence or Artificial Intelligence (hereinafter referred to as AI). The use of AI as a medium in art practice has proven to have a lot of positive impacts through the way AI algorithms work. The term AI is a broad terminology that refers to a field of study in the family of computer science that consists of various techniques for building systems that can simulate human intelligence including reasoning, thinking, decision-making, classification, behavior and perception in computers. AI was developed with the aim that computer systems can be independent and intelligent like humans so that the works produced by AI involve creative works. AI can provide similar or parallel results independently by mimicking the function of the human brain through the processing of given information or called neural networks. The basic concept of AI in its use is to be able to act and behave like a human (acting humanly), to be able to think like a human (thinking humanly), to be able to think rationally (thinking rationally) and to be able to act and behave rationally (acting rationally). There are 4 (four) basic problem-solving techniques in AI, namely searching, reasoning, planning, and learning, with AI capabilities grouped into 3 (three) categories, namely Weak AI or Artificial Narrow Intelligence which focuses on certain tasks based on parameters

set by the programmer, General AI or Artificial General Intelligence, has the ability to learn, see, understand and carry out intellectual tasks given by humans, and Strong AI or Artificial Super Intelligence is superior intelligence that has been refined between Weak AI and General AI.

The characteristics of a work based on the UUHC are closely related to the Creator's knowledge of his distinctive and personal creation. This test of distinctive and personal characteristics is associated with people who know the purpose, process and meaning of the work produced by the Creator which is formed through the human senses and does not extend its meaning to the computer senses or animal senses. The first copyright law theory that regulates related to the standard of copyright legal protection is the requirement of authenticity or originality of a Work as a manifestation of an idea or idea that is truly from the creator's self and mind. Indonesia as a country adhering to the Civil Law System emphasizes the existence of aspects of the Creator's personality that can only be possessed by humans in their works in order to be recognized as a Creation. The second condition is the copyright creativity requirement which refers to personal intellectual creation, meaning that the work is formed based on human creation, *karsa* and taste, not works that are produced outside of humans such as computers or animals. The third condition is the condition of embodiment as a material form that Copyright does not protect the Creator's idea, but to the expression in material form. These three conditions are basic and must be met to obtain copyright legal protection. In line with the theory of Copyright law, AI digital artworks can only meet the requirements for realization, while the requirements for originality and creativity cannot be met by AI because the concept of originality in AI digital artworks is a combination of previous works through algorithms provided by humans to be subsequently modified by machines so that the works cannot reflect the characteristics and personality of the Creator.

The ability of AI to produce a work is inseparable from human intervention in the creation of AI to the input of data and algorithms in the system so that the work produced by AI is not copyrighted, but it is the human who creates AI who has the right to the Copyright on his computer program, so that the AI digital artwork subsequently becomes the public domain or becomes common property as stipulated in Article 41 of the UUHC that for copyrighted works that are not protected by Copyright Rather, it becomes public property or public domain. The public domain refers to all creative and intellectual works that have become common property because they are not protected or are no longer protected by the exclusive UUHC. The next public domain work is an Open Access License which means that if the work is to be used for commercial purposes, no explicit and royalty-free permission is required. Works that are difficult for the Creator and/or Copyright Holder to determine or impossible to contact can also be called Orphan works. Orphan works can occur due to the identity information of the Creator that is not known to the public, works that are published anonymously or works that have never been published at all.

Based on the tradition of the Civil Law System through the author right system, it is explained that in principle, the first and main Creator (*prima facie*) must be a natural person (natural person) in accordance with Hegel's philosophical



basis that Copyright is a personality for which a human being exists. The World Intellectual Property Organization (hereinafter referred to as WIPO) defines intellectual property as "creations of mind" which means that the essence of intellectual property is the product of human thought, not animals or machines. The provisions of the USA's Copyrightable Authorship Compendium in terms of AI can produce a Work stipulate that a copyrighted work is a work that must be made by humans, while the use of AI in the field of art to be able to produce a Work still requires human contributions to ideas, imagination, inspiration and creativity used in the form of data to be processed by AI. Article 9 bis 3 The Copyright, Designs and Patents Act 1988 referred to as the Creator or Copyright Holder is the person who makes the necessary arrangements for the creation of the work. This provision does not grant Copyright to AI but rather to the person who has the "necessary arrangements" for the creation of a work. The meaning of "necessary" in this case is clearly defined for people to be recognized as Creators and Copyright Holders of works generated by AI, while computer programs or AI are simply tools used to help produce a work such as a pen as a tool used to write a letter cannot be said to be a letter maker. Article 12 of the explanatory note of the United Nations Commission on International Trade Law explains that a person, whether an individual or a legal entity on behalf of whom the computer is programmed, must ultimately be responsible for any messages generated by the machine. Computers and electronic communication media cannot be possible as subjects of rights and obligations. Section 7 of the EC Treaty as a normative rule of harmonization of the European Union stipulates that: "The person who creates the work should be deemed the author".

In line with these provisions, it can be concluded that AI programmed by humans in decision-making and execution cannot be ensured if there is no human intervention. AI-equipped machines are not the bearers of legal rights, obligations and capacities because they cannot participate independently in legal traffic, have no constitutional rights and cannot perform legal acts. Algorithms in AI only qualify as legal objects as stipulated in Article 1 Paragraph 9 of the UUHC related to computer programs and Article 40 letter (s) of the UUHC that computer programs are protected Works.

To determine the parameters of who is the Creator or Copyright Holder in AI for a Work has been regulated based on Article 33 of the UUHC that in the event that a Work consists of 2 (two) or more people, then the person who is considered the Creator is the person who leads and supervises the completion of the entire Work, but if the thing in question does not exist, then the person who is considered as the Creator is the person who collects the Work without reducing the respective Copyright on the part of the Work. In the event that AI is created on an order or work for hire, the doctrine of "work made for hire" can be applied which regulates the ownership of Copyright on works produced by employees or third parties who work under the orders and control of the superior or assignor by granting exclusive rights to the work to the superior or assignee, not to the original Creator. There are main criteria to qualify as "work made for hire", namely the work made is within the scope of work or project delegated to the Creator on the order of the superior or assignor by providing the limits of command and control, including supervision and

direction to the Creator by the assignor in the creation process. If a Work is specifically ordered or assigned, the Creator and the Copyright Holder are the ordering party and if the Work is not a work made based on an order, then the ordering party is not entitled to the ownership of the Copyright of the work. There is a restriction on the doctrine of "work made for hire", which is dependent on the agreement of the parties in a written agreement that the work made is the work ordered. The existence of a written agreement in the application of the doctrine of "work made for hire" is in line with the concept of copyright ownership based on a legal event regulated in Article 16 Paragraph (2) of the UUHC that Copyright can be transferred or transferred, either in whole or in part, one of which occurs because of a written agreement either through an authentic deed or under hand.

The application of the "work made for hire" doctrine can provide incentives to individuals to protect works and encourage innovation in AI technology, as well as transparency for Copyright Holders to be responsible for the use of AI in creating works that are in accordance with the ethics and restrictions in the applicable written agreements. In Indonesia, the application of the doctrine of "work made for hire" is implied in Article 34 of the UUHC regarding Works made to be ordered or rented that if the Work is designed by a person and realized and done by another person under the leadership and supervision of the person who designed it, then the person who is considered the Creator is the person who designed the Creation. Furthermore, in the provisions of Articles 35 and 36 of the UUHC, for Works made by the Creator in an official relationship or employment relationship or based on an order, the Creator is considered a government agency and the party that makes the Creation. Unless it is proven otherwise, in the case of a legal entity that makes Announcements, Distributions or Communications of Works originating from such legal entities, based on Article 37 of the UUHC, the Creator who is considered as a legal entity is a legal entity. Based on the explanation above, it can be concluded that to obtain appreciation and protection of Copyright for intellectual works is not enough in terms of the realization of the work, but based on the theory of Copyright law, there are three main components that must be fulfilled for the acquisition of Copyright protection, so that the regulation of who is the Creator and/or Copyright Holder of AI given to the legal subject of persons and legal entities is to ensure that only humans have the right to moral rights and incentives for intellectual activities and their creations to continue to innovate in various fields of science, art, and literature.

## **2. Legal Protection of Copyright Ownership in Artificial Intelligence for Artworks**

### **a. Copyright Law Regulation in Indonesia**

The legal regulation of IPR is marked by the birth of the TRIPs convention which contains norms and standards for the protection of intellectual works as the minimum standard protection principle that must be applied by member countries of the World Trade Organization (hereinafter referred to as the WTO). TRIPs are the main legal umbrella in the regulation of IPR as a whole and require all WTO members, including Indonesia, to accept the protection standards that further regulate specifically related to Copyright in the Berne Convention for the Protection

of Literary and Artistic Works (hereinafter referred to as the Berne Convention). Indonesia ratified the Berne Convention through Presidential Decree No. 18 of 1997 ratifying the Berne Convention with the requirements of Article 33 Paragraph (1) of Presidential Decree No. 18 of 1997. The ratification of the Berne Convention is a continuation of Indonesia's participation as a member of the WTO and Indonesia's active involvement in TRIPs. TRIPs stipulates that the Berne Convention is the minimum basis for copyright protection consisting of three basic principles, namely:

- 1) National Treatment or Assimilation (Article 3), that each member state of the convention provides the same protection in the field of IPR to its citizens from the member states of the convention and citizens of non-member countries of the convention are also protected if they are domiciled or have a real and effective industrial and commercial establishment in the member state of the convention.
- 2) Automatic Protection (Article 5) which means that protection must be provided automatically without the need to meet certain formalities.
- 3) Independence of Protection (Article 6) that protection is provided regardless of the provision of legal protection in the country of origin of the convention member to the Creation.

Based on the provisions of Article 1 of the Berne Convention, membership is open to all countries that provide protection for Creators and Copyright Holders of their works. The protection of copyright-protected works is also not limited to Article 2 of the Berne Convention, but the state is also given the freedom to expand the application of protection and regulate related protection restrictions on certain works as regulated in the Indonesian Law. The provisions of the scope of Copyright protection are stipulated in Article 40 of the UUHC. The Berne Convention also stipulates restrictions (limitation) for the public to be able to access works protected by Copyright as stipulated in Article 26 of the UUHC regarding restrictions on protection, Articles 41 and 42 of the UUHC related to works that are not protected by Copyright and Article 43 of the UUHC related to copyright restrictions, Article 57 regarding the validity period of the Creator's moral rights which are valid indefinitely and Articles 58-61 related to the validity period of the economic rights of Works. In the event of a violation of the law on Copyright, the resolution of Copyright disputes in the Commercial Court can be carried out through two legal processes, namely civil dispute resolution in the form of alternative dispute resolution, arbitration or court as stipulated in Article 95 of the UUHC with remedial efforts to compensate for economic losses that have been regulated in the provisions of Articles 96-100 of the UUHC. In addition to civil settlement, it can also be settled by criminal prosecution of infringement against a person who violates the Copyright that the Creator or Copyright Holder can file criminal charges and sanctions in the form of fines and/or imprisonment as stipulated in Articles 112-120 of the UUHC.

#### **b. Legal Aspects That Can Affect the Development of Artificial Intelligence in the Context of Copyright**

Based on data from the Organization for Economic Cooperation and Development (hereinafter referred to as the OECD), as of April 2023, there are



1,422 new AI models that show that the development of AI in the modern world is developing rapidly and rapidly. The development and ability of AI in the field of art to produce digital artworks is a challenge for humans, especially Creators and/or Copyright Holders related to the absence of special regulations on AI as a copyright and several legal views that seek to analogize AI as a legal subject which further becomes a complex problem with the implications of legal liability. The first is to analogize AI as a legal subject for the acquisition of Copyright, which begins with the existence of AI associated with Copyright in its development, such as the personification of AI as a non-person legal subject or legal entity to be able to attach rights and fulfill obligations, which in turn AI can have a legal standing to hold its Copyright. The regulation of legal subjects in Indonesia consists of human beings themselves who have subjective rights and legal authority as stipulated in Article 1 Paragraph (1) BW and legal entities as legal subjects regulated in Article 1654 BW that legal entities are interpreted as private persons and have the power to carry out civil acts, without prejudice to the law, in the event that the power has been changed, restricted, or subdued. Van Apeldoorn explained that only humans can have subjective rights in the sense of authority and obligation.

Some views personify AI as non-human legal subjects or legal entities by transplanting two legal entity theories to be the basis for the view that AI can be categorized as legal subjects. The first is the theory of fiction put forward by Frederich Carl von Savigny that a legal entity is an abstraction created by the state that actually does not exist but people bring their shadows to life to explain something and it happens because humans make it based on the law. The second is the theory of concession or organ theory proposed by Otto von Gierke that a legal entity is something that exists abstractly from the construction of law in legal association to realize its will through its fittings, namely human beings. The point transplanted from these two theories is that basically the concept of the legal subject given is based on a consensus that is born together so that AI as an entity other than humans can be designed to be categorized as a legal subject. The probability of AI as a non-person or legal entity legal subject further refers to its ethical and sovereign basis that there is no natural basis for AI to be granted rights. AI is not an entity that has a spirit but a fictitious system created by humans so that it is not a natural organism that is born and does not have nutritional properties like humans have. Atsar and Sutrisno argue that AI only works according to programs that have been regulated by humans and does not adhere to values and ethics and conscience so that if there is an act that violates the law or harms other parties, humans are responsible. Based on criminal law, AI does not have inner responsibility in the form of *actus* and *mens rea* as qualifications for its actions and responsibilities. When associated in the context of Copyright based on the tradition of the Civil Law System through the author right system, it is explained that in principle, to be categorized as the first and foremost Creator, it must be a natural person. Therefore, based on this explanation, it can be concluded that to personify AI through fiction theory and concession theory or organ theory in AI does not have a natural basis to be given its rights as a legal subject who has legal authority to subsequently be categorized as a Creator and/or Copyright Holder.

The second analogy is that AI is analogous to a worker who has a relationship with his employer as regulated in Article 1367 Paragraph (1) and (3) BW. Based on the provisions of the article with the attribution of the "worker" characteristics contained in AI, if AI is analogized as a worker, the issue of legal liability is charged to the owner who is analogous to the "employer". However, if you look at the analogy of AI as a worker, you indirectly consider AI as a human. Based on the Great Dictionary of Indonesian (hereinafter referred to as KBBI), the definition of a worker is a person who works and/or a person who receives wages for the results of his or her work or in the sense that the worker in question is a person or human. In addition to workers who have a legal relationship with their employers, AI that is analogous to workers must also be able to be held legally accountable fully and independently. This can certainly be an issue in itself if there is a loss due to an error in the AI system, whether AI can compensate for losses or in the event of a dispute over whether AI can have an identity and litigate in court. If it is associated in the context of Copyright, if the Creator and/or Copyright Holder is proven to have committed infringement of Copyright or harmed other parties, based on Article 99 Paragraph (3) of the UUHC, it is explained that the compensation in question is in the form of a request to hand over all or part of the income obtained from the proceeds of Copyright infringement. Articles 112-118 of the UUHC that every person who without the right to commit an unlawful act or violation of economic rights shall be punished with imprisonment and/or a fine. AI as an entity created by humans, the supervision and legal responsibility lies with the human Creator, so it can be concluded that the analogy of AI as a worker is practically difficult to apply.

The fourth view is to interpret and relate AI to the regulation of Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions (hereinafter referred to as the ITE Law) that AI can be categorized as an electronic system and an electronic agent based on the characteristics and how AI works. Article 1 Paragraph (5) of the ITE Law explains that electronic systems are a series of electronic devices and procedures that function to prepare, collect, process, analyze, store, display, announce, transmit, and/or disseminate Electronic Information. Article 1 Paragraph (8) of the ITE Law explains that an electronic agent is a device of an Electronic System that is made to perform an action on a certain Electronic Information automatically organized by a Person. The person in question is an individual person, both Indonesian citizens, foreign citizens, and legal entities as regulated in Article 1 Paragraph (21) of the ITE Law. The Electronic Information referred to as stipulated in Article 1 Paragraph (1) of the ITE Law is one or a set of Electronic Data, including but not limited to writing, sounds, images, maps, designs, photographs, electronic data interchange (EDI), electronic mail (electronic mail/e-mail), telegram, telex, telecopy or the like, letters, signs, numbers, access codes, symbols or perforations that have been processed that have meaning or can be understood by people who are able to understand them. The classification of AI in the scope of electronic systems in question describes that AI needs other devices to support its function in analyzing data collection in the form of electronic information as the focus of AI's work for further in the scope of electronic agents, AI works as software

that performs an action based on commands given automatically by people. The opportunity to classify AI as electronic systems and electronic agents can be possible because AI activities designed and regulated by humans are the responsibility of the electronic system operators who provide AI services. Article 1 Paragraph 6 letter (a) of the ITE Law explains that an electronic system operator is any Person, state administrator, Business Entity, and community who provides, manages, and/or operates an Electronic System. Based on the above exposure, if it is associated in the context of Copyright, it can be categorized as the Creator and/or Copyright Holder in the development of AI is the operator of the electronic system to subsequently have legal authority and can be responsible for its legal acts, so it can be concluded that to categorize AI as an electronic system and electronic agent in the ITE Law and PP PSTE in terms of Copyright ownership and legal liability has appropriate. However, by categorizing AI as an electronic system, it only focuses on the functional and technical aspects of the operation, development and application of AI which emphasizes its role as a tool or mechanism to perform a specific task and this arrangement only regulates the technology in general and does not discuss specifically related to AI as a Copyright.

The last view is to apply AI as an object, namely as an object and not a subject so that it does not have rights and obligations as carried out by humans and legal entities as subjects of civil law. Salim HS explained that an object is defined as an item that can be seen or manifested as a person's wealth in the form of rights and income and as an object of law, the opponent of the subject of law. Based on Article 503 of the BW, objects are divided into tangible objects and intangible objects. Article 504 BW objects are divided into movable objects and immovable objects. Specifically, AI can be categorized as tangible and intangible objects and can be categorized as moving objects. In the context of Copyright, if AI is categorized as an object, it is in line with Article 1 Paragraph (16) of the UUHC that Copyright is an intangible moving object and AI as a Creation in the form of a computer program in accordance with Article 40 letter (s) of the UUHC. Based on these provisions, it can be concluded that if AI is categorized as an object, the implication of legal responsibility lies with the owner of the object or legal subject who has legal capacity and the categorization of AI as an object or legal object, then this focuses more on the legal protection of AI as a Copyright, including copyright ownership, licensing, infringement and protection of a work produced, as well as the rights owned by the Creator and/or the AI Copyright Holder.

### **c. The Future of Artificial Intelligence Copyright Law Protection in Indonesia**

The purpose of legal protection is to realize legal functions consisting of law as a tool to regulate the order of public relations that law is coercive and provides instructions on what human beings should and should not do, law as a means of realizing social justice born and inner because of the binding power of the law, law as a driver of development and the critical function of law that supervises government apparatus and law enforcement. Legal protection in Indonesia consists of two (2) types of sources of legal protection, namely internal legal protection whose existence is formed by the parties themselves through the medium of agreement so that its enforcement is limited to the parties. The essence of internal

legal protection that is packaged by the parties themselves in making an agreement, all types of risks can be accommodated through clauses packaged upon agreement so that the parties obtain balanced legal protection. The second type is external legal protection whose existence comes from the ruler through laws and regulations made on the basis of authority so that its enforcement is intended for the general public. In addition to internal and external legal protection, according to Philipus M. Hadzon, there are two means of legal protection, namely preventive legal protection which aims to prevent disputes and repressive legal protection which aims to resolve disputes.

Regarding the development of AI in Indonesia in the context of Copyright, AI legal protection refers to the theory of copyright law protection which regulates the standard of copyright's ability which consists of originality or originality, creativity, and fixation. Basically, the starting point of copyright legal protection is in the form of exclusive rights given to natural person creators or *natuurlijkpersoon* who have "intellectual personal creation". In accordance with the legal tradition of the Civil Law System by Hegel through the concept of "right, ethic, and state" that the existence of personality is a basic right granted to the Creator. Legal protection of Copyright is the legal protection regarding the ownership and use of Copyright from infringement of the Creator's rights by other parties. In the event of an unlawful act or harm to another party caused by AI, repressive legal protection can be applied based on Article 1365 BW that every act that violates the law and brings harm to another person, obliges the person who caused the loss due to his fault to replace the loss.

The development of AI in 2023 has provided various breakthroughs and improvements that focus on technical performance such as accuracy to advanced AI natural language capabilities such as GPT-4 by the research company OpenAI which has the capacity to think language equivalent to humans at the professional and academic levels, Google Bard which is a virtual assistant to provide personal advice and recommendations to users, and Gemini GenAI which is able to receive input in the form of text, audio, images and video to interact and accelerate innovation in various industries. According to Cathy O'Neil, the author of "Weapons of Math Destruction", it is important to know who is involved in creating AI code, this is related to humans as programmers must have a sense of responsibility and not override the criteria of trust in building AI or Trustworthy AI. Trustworthy AI is a framework for thinking to produce AI technology that can be trusted as a product, service or solution. The way AI works that can perform actions and deeds like humans underlies a country to be able to form special legal arrangements regarding AI.

The Organization for Economic Cooperation and Development (hereinafter referred to as the OECD) has defined policies on AI starting at the Technology Foresight Forum on AI in 2016 and the international conference on AI: Intelligent Machines, Smart Policies in 2017. The OECD has conducted analyses and measurements that provide a technical overview of AI, mapping the economic and social impacts of AI and its application, identifying policy considerations as well as explaining government and stakeholder initiatives at the national and international levels, so that in this case the OECD provides recommendations to

promote a human-centred approach to AI that can be trusted, encourage research, maintain economic incentives to innovate and propose stable policies at the international level to foster trust and adoption of AI in the community. The recommendations given by the OECD include two substantive parts, namely:

- 1) Principles for responsible stewardship of Trustworthy AI, that there are relevant principles for "AI actors" or those who play an active role in the AI system creation cycle, including organizations and individuals or who operate AI in promoting it, is to apply the principles of Trustworthy AI.
- 2) National policies and international co-operation for Trustworthy AI, this section provides recommendations to be applied in each country's national policies and international cooperation to invest in AI research and development, fostering an AI digital ecosystem, establishing a policy environment that supports AI, building human capacity and preparing for labor market transformation, as well as international cooperation based on the principles of Trustworthy AI.

The principle of accountability for AI management, the OECD refers to Trustworthy AI that all members and non-members are obliged to apply the following principles in full:

- 1) Inclusive growth, sustainable development and well-being, this principle focuses on the potential of trustworthy AI or is related to the principle of Trustworthy AI to contribute to the growth and well-being of individuals and communities, as well as advance global development goals.
- 2) Human-centred values and fairness, that all AI systems must be designed in accordance with the rule of law, human rights, democratic values and diversity, and include appropriate protection efforts for the certainty of a just society.
- 3) Transparency and explainability, this principle is related to the transparency and accountability of AI systems.
- 4) Robustness, security and safety means that all AI systems can function properly, safely and securely throughout their use, as well as the potential for manageable risks.
- 5) Accountability refers to individuals or organizations that develop, implement or operate AI systems must be responsible for the proper use of the system in accordance with OECD AI principles.

To respond to the development and dynamics of AI, especially in the context of copyright legal protection, an external legal protection is needed based on responsive legal theory and progressive legal theory. The theory of responsive law developed by Nonet and Selznick explains that law is the facilitator of various responses to social needs and aspirations. Responsiveness can be interpreted as serving social needs and interests or containing a commitment to "the law from the perspective of the consumer". Responsive law is oriented towards the results or goals to be achieved both in the legal order and seeks the values contained in regulations and policies. The application of responsive law in the context of AI law enforcement in Indonesia emphasizes the importance of developing a legal framework to be able to respond to the dynamics and development of AI by applying several responsive legal principles, namely:



- 1) Clarity and public order, namely by creating clear and firm regulations related to the development, implementation and use of AI technology, as well as establishing a legal framework that provides guidelines on the ethical use of AI.
- 2) Protection of privacy and data security, as a guarantee of the protection of individual privacy data by setting high security standards to prevent misuse or leakage of data.
- 3) Transparency and accountability, namely by providing requirements related to clarity of AI-generated works and establishing legal responsibilities for AI owners and developers related to the impact that AI can cause.
- 4) Community participation and engagement, to encourage community participation in the development of AI policies to ensure that the values and needs of society are set out in clear regulations by involving stakeholders including technology experts in the process
- 5) Legal education and public awareness, namely by encouraging legal education to legal and non-legal professionals and increasing public awareness of the rights and obligations in the use of AI.

In addition to the application of responsive law as an effort to protect external law, the theory of progressive law developed by Satjipto Rahardjo can also be applied, that progressive law is a law that is forward-looking and the presence of law is to integrate and coordinate interests that clash with other interests. The basic characteristic of progressive legal theory is the basic assumption that law for humans and law is not an absolute and final institution because law is always in process and problems so that law must always be reviewed and improved. Progressive law is intended as a reference for thinking in the development of science, huku education, the formation and enforcement of laws that aim to realize justice for society. Regarding the development of AI as a copyright in the context of Copyright protection that has not been specifically regulated in Indonesia, based on progressive legal thinking, specific legal arrangements about AI are needed based on social goals desired by the community in the sense that the government and legislative institutions are bottom-up or listen to the aspirations and needs of the community. Progressive law in the context of AI law enforcement in Indonesia includes applying several progressive legal principles, namely:

- 1) Legal adaptability, that the law must be able to adapt quickly to the development of AI accompanied by regulations and policies that can be updated and adjusted to various aspects.
- 2) Human rights protection, explaining that progressive laws can ensure that the development and implementation of AI still adheres to human rights principles including the rights to privacy, fairness and non-discrimination, as well as ethical considerations in the use of AI.
- 3) Openness and accountability, that the law must encourage transparency in the development and use of AI, openness of the public to understand how AI works, and accountability that can ensure the consequences and responsibilities of AI-generated products.
- 4) The establishment of joint policies related to AI by involving collaboration between the government, the private sector, academia and the community to

ensure that stakeholder perspectives can be accommodated and provide justice in the application of AI.

- 5) The development of AI ethics that includes clear ethical standards related to the development, implementation and use of AI without prejudice to the interests of society is an important aspect of progressive law.
- 6) Legal education and public awareness, that with a progressive legal approach, the government and the legal system can ensure that the development of AI can be positively integrated in society along with risk mitigation and ensuring justice.

Efforts to add laws and regulations means that judges fill the gaps in the formal legal system by not changing the system in essence. Because the law is incomplete or unclear, the judge must search and find the law (*rechtsvinding*) which is interpreted as the process of law formation by the judge or other legal officers who are given the task of implementing the law on concrete events. In the event that the judge makes an understanding of the law is an act that seeks the legal principle that is the basis of the relevant legal regulations or legal construction (*rechtsconstructie*) which consists of 3 (three) forms, namely:

- 1) Legal construction or analogous interpretation of a legal regulation by giving likeness (*figurative*) to words that are in accordance with its legal principles or expanding the validity of the meaning of law or legislation as the creation of a new construction.
- 2) Refinement of the law (*rechtverfijning*) by narrowing the validity of an article to fill a gap in the legal system that cannot solve problems fairly or in accordance with social reality. Legal refinement is the improvement of the legal system by judges.
- 3) Contrary disclosure (*argumentum a contrario*) which is based on the denial that the problem of the case at hand does not include the article in question but the problem is outside the laws and regulations. The interpretation of *argumentum a contrario* narrows the formulation of laws or legislation with the aim of emphasizing the existence of legal certainty so that it does not cause doubt.

Currently, there are several policies regulating the use and use of AI that have been ratified by the Government of Indonesia in the form of the National Strategy for Artificial Intelligence 2020 – 2045 (hereinafter referred to as Stranas KA) which regulates artificial intelligence which is expected to facilitate policy direction and the use of artificial intelligence in all aspects including the field of artificial intelligence talent development, ethics and artificial intelligence studies, Artificial intelligence infrastructure and data, artificial intelligence industry research and innovation, as well as priority programs and quickwins for the implementation of artificial intelligence. The Stranas KA Regulation refers to the Asilomar Artificial Intelligence Principles as one of the earliest and most influential AI governance principles that can be a reference and basic principle in the preparation of AI legal regulations specifically. The principles that are regulated are to prioritize human existence towards the development of AI which consists of 23 principles.

The development of Stranas KA is currently in the process of becoming a Draft Presidential Regulation and in line with the focus on the development and

application of the AI ecosystem, the Ministry of Communication and Information of the Republic of Indonesia has issued Circular Letter Number 9 of 2023 concerning Artificial Intelligence Ethics. This ethical guide to artistic intelligence is a form of mitigation of the impact and losses that can be caused both in terms of changes in social, economic and defense life due to the implementation of AI so that threats to AI can be minimized. This artificial intelligence ethics is the foundation that regulates ethical principles and norms in the implementation of AI-based programming based on the values of inclusivity, transparency, humanity, and security in the management of available data resources related to research, product development, marketing, and the use of AI. In the implementation of AI, it is mandatory to pay attention to the value of Artificial Intelligence Ethics which consists of 9 values, one of which is that the implementation of AI is subject to the principle of protection of Intellectual Property Rights in accordance with the provisions of laws and regulations. The implementation and responsibility in the implementation of AI is based on ethics and codes of ethics that apply to business actors and electronic system operators accompanied by supervision carried out by the Government, operators, and users to prevent the abuse or utilization of AI that violates the provisions of laws and regulations. The responsibility in the implementation of AI is to provide protection to the public, especially related to the use of data by providing information related to the development of AI by developers to prevent negative impacts and losses from the resulting technology on users, the Ministry of Communication and Information Technology and the public, prevent racism and all forms of actions that harm humans, ensure that AI is not held as a policy determinant or takeer decisions related to humanity, as well as paying attention to risk management and crisis management in the development of AI. Regulation of the Minister of Communication and Information of the Republic of Indonesia Number 3 of 2021 concerning Business Activity Standards and Product Standards in the Implementation of Risk-Based Business Licensing in the Post, Telecommunications, and Electronic Systems and Transaction Sectors (hereinafter referred to as Permenkominfo 3/2021) which regulates aspects of licensing or business standards for business actors that utilize AI includes consultation followed by analysis and programming of artificial intelligence technology Including a subset of artificial intelligence such as machine learning, natural language processing, expert system, and other subsets of artificial intelligence.

## CONCLUSION

The Copyright Holder in the AI artwork is given to the State by law for the benefit of the Creator and/or the Copyright Holder, while the Copyright Holder in AI as a Work in the form of a computer program protected by Copyright is given to a legal subject who by nature has authority or can be associated with the initial process of making AI and/or for the use and use of AI ordered or rented, the Creator and/or the Copyright Holder refers to in the provisions of Articles 33-37 of the UUHC and for AI artworks that are not entitled to legal protection based on Copyright legal theory, then the work becomes a public/public domain that is an Open Access License. Furthermore, the legal protection of Copyright ownership in

AI is the protection of AI technology as an intangible movable object that is included in the scope of protection of Works in the form of computer programs. To respond to the dynamics and development of AI, this is in line with the responsive and progressive legal theory that an adaptive and renewable legal regulation is needed and reviewed on various aspects of AI development in accordance with the principle of Trustworthy AI as a framework of thinking to produce AI technology that can be trusted as a product, service or solution.

To ensure that the provisions of the UUHC remain relevant and effective in the development of AI, it is necessary to update and affirm in writing added to the UUHC regarding the requirements for obtaining protection for a Work and the scope of protection that can and cannot be protected by Copyright, especially for works of art produced by AI. An effort to find a law by a judge (*rechtsvinding*) is needed to ensure that the law is always reviewed and updated, especially on the development of AI as a legal umbrella against the risk of abuse and sanctioning violations resulting from the use and utilization of AI and the application of artificial intelligence ethics, as well as the need for collaboration between the government, industry and the public on AI regulations that provide a balance to continue to encourage innovation. protect the legal rights and responsibilities of AI both by AI Creators, developers or service providers and stakeholders.

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