

Copyright Responsibilities of Artificial Intelligence in the Digital Age

Cantika Aulia¹, Egi Nugraha², and Raja Siahaan³
^{1,2,3} Faculty of Law, Trisakti University, Jakarta
*Corresponding: cantikaaulia2223@gmail.com

Abstract

Currently Artificial Intelligence is growing very rapidly even today Artificial Intelligence can create works of art in the form of digital photos that can be protected by Copyright. This study aims to analyze artificial intelligence artwork in the current digital era in the concept of copyright. This research is made through a conceptual approach and uses normative, doctrinal, and comparative legal research methods, as well as using quality analysis techniques. The results showed that Indonesia has not accommodated regulations regarding works of art from Artificial Intelligence so that these arrangements are needed so that laws are created that are able to follow the flow of the times and create protection for Artificial Intelligence creations.

Keywords: *Copyright law; Artificial Intelligence; Digital Age;*

Abstrak

Dalam perkembangannya Artificial Intelligence berkembang sangat pesat bahkan dewasa ini Artificial Intelligence dapat membuat karya seni berupa foto digital yang bisa dilindungi Hak Cipta. Penelitian ini bertujuan untuk menganalisis karya seni artificial intelligence di era digital saat ini dalam konsep hak cipta. Penelitian ini dibuat melalui pendekatan konseptual dan menggunakan metode penelitian hukum normatif, doktrinal, dan studi perbandingan, serta menggunakan teknik analisis kualitas. Hasil penelitian menunjukkan bahwa Indonesia belum mengakomodir pengaturan mengenai karya seni hasil Artificial Intelligence sehingga dibutuhkan pengaturan tersebut sehingga tercipta hukum yang mampu mengikuti arus zaman dan tercipta perlindungan terhadap karya kreasi Artificial Intelligence.

Keywords: Hukum Hak Cipta; Kecerdasan Buatan; Era Digital.



This work is an open access article under the Creative Commons Attribution-ShareAlike 4.0 Generic License

A. INTRODUCTION

Copyright is one of the fundamental rights and needs to be owned by everyone who creates a value of valuable creations.^{1,2} Copyright regulates the rules of ownership of a copyrighted work that is based on its own creator.^{3,4} In Indonesia, the provisions regarding copyright themselves have existed since the second world war, more precisely during the Dutch colonial period in Indonesia. Provisions regarding copyright in Indonesia first emerged in *Auterswet* in 1912. This regulation continues to develop along with the development of the times, until now the copyright regulation in Indonesia is regulated in Law Number 28 of 2014 concerning Copyright. Copyright is included in the intellectual property rights.^{5,6} Copyright becomes important because this guarantees the rights of the creator, especially in the fields of science, art, and literature or discovery in the field of technology, it must be given an award or legal protection for the work created or discovered it.

Indonesia is one of the countries rich in different ethnic, cultural and community diversity. This makes the number of works created and influenced by the diversity. As a pluralistic country with all the development of art and literary works, Indonesia certainly requires copyright regulation born from this diversity. In Law Number 28 of 2014 it is stated that copyright is an exclusive right that is owned by its creator since its creation exists. Copyright also gives 2 main rights to the Creator, namely moral rights and economic rights.^{7,8} Moral rights are the right to recognize a copyrighted work as its creation, while economic right is the right of the creator to duplicate and disseminate his work to get economic benefits. With economic rights, the creator is also entitled to the economic rewards of those who use their creation.^{9,10} In the period of increasingly rapid technological developments today, copyright law regulations also need to adjust to the progress of the times.

At present, not only humans as legal subjects are able to make a copyrighted work in the form of musical instruments, again, paintings, writing, etc., but artificial intelligence also plays an important role in creating digital works based on computer technology that has been Programmed, so as to produce realistic works and quality can rival the work of human creation. Therefore, there is a need for further regulations regarding copyright over the work made by artificial intelligence in various parts of the world, including in Indonesia.

Previous research shows that artificial intelligence is now very developed in various lines of life and is no exception in the field of intellectual property^{11,12,13,14}. Copyright protection is

¹ Virendra Ahuja, "Artificial Intelligence and Copyright," *ILI Law Review* 1, no. 2020 (2021): 270–85, <https://doi.org/10.53456/dlb.vi1.7536>.

² Fakhira Meshara Salsabila, Ranti Fauza Mayana, and Laina Rafianti, "Copyright Commercialization of Songs Uploaded in TikTok Application Without the Creator's Permission," *Jurnal Sains Sosio Humaniora* 5, no. 1 (2021): 213–24, <https://doi.org/10.22437/jssh.v5i1.14129>.

³ Pavel Slutskiy, "Property Rights vs Intellectual Property: Copyright as Restriction of Communication Freedom," *Communication and Libertarianism*, 2021, 229–42, https://doi.org/10.1007/978-981-33-6664-0_15.

⁴ Salsabilla Deniesa et al., "Copyright Protection for Creators of Digital Artwork," *Indonesian Comparative Law Review* 4, no. 1 (September 2022): 43–58, <https://doi.org/10.18196/iclr.v4i1.15106>.

⁵ Maya Jannah, "Perlindungan Hukum Hak Kekayaan Intelektual (Haki) Dalam Hak Cipta Di Indonesia," *Jurnal Ilmiah Advokasi* 6, no. 2 (October 1, 2018): 55–72, <https://doi.org/10.36987/jiad.v6i2.250>.

⁶ Abdul Rochim Al Audah, "Hak Cipta Dan Perlindungan Hak Kekayaan Intelektual Dalam Perspektif Hukum Islam Dan Perundang-Undangan," *Al-Mashlahah Jurnal Hukum Islam Dan Pranata Sosial* 4, no. 08 (2017), <https://doi.org/10.30868/am.v4i08.163>.

not only for copyrighted works but also for broadcasts such as e-sports competitions.^{15,16} In addition, because of the breadth of parties related to copyright, previous research has also discussed legal options.¹⁷

B. METHOD

The method used in this research process is carried out through a conceptual approach that collects several opinions of expert concepts related to the topic of artificial intelligence. In addition, this research also uses a comparative study approach that compares copyright regulations on artificial intelligence in several developed countries in the world such as Japan and Saudi Arabia, as well as comparing it with copyright regulations on AI works in Indonesia. In addition, this study also uses normative legal research methods, doctrinal, and quality analysis techniques based on empirical evidence of the application of copyright regulations and overall AI regulations in some developed countries, and regulations and ethics of use of AI in the realm of regional level organizations up to some NGOs and international organizations.

C. RESULTS AND DISCUSSIONS

1. Intellectual Property Rights, Copyrights Law, and It's Regulation in Indonesia and in Any Other Countries

Sri Redjeki Hartono stated that Intellectual Property Rights are essentially rights with special characteristics, because these rights are granted by the state. The state, based on the provisions of the law, grants these special rights to those who are entitled, in accordance with the procedures and conditions that must be met. Intellectual Property Rights is a form of

⁷ Toebagus Galang Windi Pratama, "The Urgency for Implementing Cryptomnesia on Indonesian Copyright Law," *Saudi Journal of Humanities and Social Sciences* 5, no. 10 (October 2020): 508–14, <https://doi.org/10.36348/sjhss.2020.v05i10.001>.

⁸ Mohamad Nur Kholiq, Dinda Ajeng Puspanita, and Prawitra Thalib, "Copyright Protection of Art Containing Nudist Elements Under Positive Law In Indonesia," *Law and Justice* 6, no. 2 (March 2022): 161–73, <https://doi.org/10.23917/laj.v6i2.17480>.

⁹ Asrizal Saiin et al., "Wakaf Atas Royalti Sebagai Hak Ekonomi Dalam Intellectual Property Rights," *Al-Awqaf: Jurnal Wakaf Dan Ekonomi Islam* 12, no. 2 (February 2021): 165–76, <https://doi.org/10.47411/al-awqaf.v12i2.65>.

¹⁰ Nurul Hulwanita Sharfina et al., "Copyright Issues on the Prank Video on the Youtube," 2021, <https://doi.org/10.2991/assehr.k.211014.021>.

¹¹ Reza Octavia Kusumaningtyas et al., "Reduction of Digitalization Policy in Indonesian MSMEs and Implications for Sharia Economic Development," *Juris: Jurnal Ilmiah Syariah* 21, no. 2 (2022): 157–71, <https://doi.org/10.31958/juris.v21i2.6855>.

¹² Simon Chesterman, "ARTIFICIAL INTELLIGENCE AND THE LIMITS OF LEGAL PERSONALITY," *International & Comparative Law Quarterly* 69, no. 4 (October 1, 2020): 819–44, <https://doi.org/10.1017/S0020589320000366>.

¹³ João Quintais, "The New Copyright in the Digital Single Market Directive: A Critical Look," *SSRN Electronic Journal*, October 14, 2019, <https://doi.org/10.2139/SSRN.3424770>.

¹⁴ Salsabila, Mayana, and Rafianti, "Copyright Commercialization of Songs Uploaded in TikTok Application Without the Creator's Permission."

¹⁵ Tao Gong et al., "Copyright Protection of Live Esports Broadcast under China's New Copyright Law," *Technology in Society* 71 (November 1, 2022): 102123, <https://doi.org/10.1016/J.TECHSOC.2022.102123>.

¹⁶ Diandian Meng, "Neglected Performers in the Phenomenon of Live Game Broadcasting - From the Perspective of China and Europe," *SSRN Electronic Journal*, 2019, <https://doi.org/10.2139/ssrn.3415488>.

¹⁷ Joseph Lau, "(Let's) Playing by the Rules: A Choice of Law Rule for Communication of Copyright Material from Video Games to the Public, through Let's Plays," *Computer Law & Security Review* 49 (July 1, 2023): 105828, <https://doi.org/10.1016/J.CLSR.2023.105828>.

wealth/ownership even though the form is not tangible. In addition, this type of ownership can be distinguished from tangible objects and certain rights are attached to it. Intellectual Property Rights is broadly divided into 2 (two) categories, namely copyright and industrial property rights. Industrial property rights are divided into several forms, namely patents, brands, industrial designs, integrated circuit layout designs, trade secrets, and plant varieties. Copyright is given to creators who produce works in the fields of science, literature and art. In Indonesia, the law governing copyright is the Copyright Law. Legislation on Intellectual Property Rights in Indonesia Prior to the TRIPS Agreement, the Intellectual Property Rights law that first came into effect in Indonesia was a product of Dutch law, which was transferred and implemented in Indonesia by the Dutch East Indies colonial government during the colonial period. The Netherlands then also became a participant in the Paris Convention and the Berne Convention on behalf of its colonies. The Dutch colonial government implemented a pluralistic legal system in Indonesia. Dutch law applies to European and Asian citizens, while customary law itself is used for indigenous peoples except for a few things that cover them all or when customary law is deemed contrary to recognized western principles of justice. Customary law itself does not recognize the existence of IPR, so that most Indonesians rarely or do not have any dealings with IPR law, except for the Trademark Law.¹⁸ Changes in political policy towards Intellectual Property Rights in Indonesia began with the ratification of TRIPS (Agreement on Trade Related Aspects of Intellectual Property) which was part of the agreement to establish WTO (World Trade Organization). With Indonesia's participation in the WTO, it requires Indonesia to make adjustments to national legislation governing Intellectual Property Rights.

There are differences in the basic position between Indonesia and other developing countries and developed countries regarding the regulation of Intellectual Property Rights. Developed countries will usually push for TRIPS Plus arrangements, extension of the patent protection period, accession to UPOV 1991, clinical tests for generic drugs before they are marketed, ex-officio border measures, legal enforcement ACTA approach (border measures, criminal and civil). Meanwhile for developing countries, they will tend to maintain policy space in TRIPS according to interests, then encourage Communal IPR, namely Genetic Resources, Traditional Knowledge and Folklore (GRTKF) and Geographical Indications, as well as encourage technology transfer. within the framework of economic diplomacy itself, the issue of Intellectual Property Rights as part of the International Trade Agreement (PPI) is expected to encourage economic growth according to national interests. PPI itself reflects the tug-of-war of the trading interests of the parties without having to sacrifice the interests of Indonesian Intellectual Property Rights.¹⁹ The position of countries varies, according to economic development. The general position of developing countries like Indonesia tends to be more focused on affirming TRIPS, while developed countries want to continue to push for the implementation of TRIPS Plus regulations.

¹⁸ Imam Wicaksono, "Politik Hukum Pelindungan Hak Kekayaan Intelektual Di Indonesia Pasca Di Ratifikasinya Trips Agreement," *Pena Justisia: Media Komunikasi Dan Kajian Hukum* 18, no. 1 (July 21, 2020), <https://doi.org/10.31941/pj.v18i1.1088>.

¹⁹ Anton Pratomo Sunu, "Perdagangan Internasional Sebagai Aspek Kedua Dan Ketiga Dari Power," *Padjadjaran Journal of International Relations* 2, no. 1 (May 2020): 3, <https://doi.org/10.24198/padmir.v2i1.25602>.

One of the intellectual property rights regulated in Indonesia is copyright. The government's move to guarantee the exclusive rights of creators and related rights owners is to establish regulations governing Copyright as stipulated in Law Number 28 of 2014 concerning Copyright, hereinafter referred to as the Copyright Law. Currently, provisions regarding copyright law in Indonesia are regulated in Law Number 28 of 2014 concerning Copyright. Article 1 point 1 Law no. 28 of 2014 describes copyright as an exclusive right of the creator that arises automatically based on the declarative principle after a creation is realized in a tangible form without reducing restrictions in accordance with statutory provisions. The formation of the Copyright Law was based on the considerations of the Copyright Law letter b, with efforts to increase protection and guarantee legal certainty for creators, copyright holders and owners of related rights with the development of science, technology, art and literature. Every work that is produced uniquely by a person or several people has become intellectual property rights for him.²⁰ Works of intellectual property in the field of Copyright will receive legal protection if they are materialized or expressed in a real way, not just ideas.²¹ Copyright legal protection is an automatic protection system as based on the Berne Convention. In Article 1 number 1 of the Copyright Law it is explained that "Copyright is the exclusive right of the creator that arises automatically based on the declarative principle after a creation is realized in a tangible form without reducing restrictions in accordance with statutory provisions."

There are other parties who can take advantage of these rights without the permission of the Author. Exclusive rights consist of moral rights and economic rights. The results of copyright work that receive legal protection include in the fields of science, art, and literature as stipulated in Article 1 number 3 of the Copyright Law. The existence of copyright as part of the intellectual property rights (IPR) in relation to global development is important.²² In the economic field, especially in world trade which has now entered the era of the free market, the role and function of copyright is very closely related to how important these rights are for the success of marketing a product of goods or services. Basically copyright is the right to copy. Furthermore, it can be said that the translation into Indonesian (as a copyright, the right to create or rights related to creation) is a little misleading, and the right to copy may be more appropriate. The right to copy this gives the rights to the creator to control and use their creation, which is essentially preventing other parties copying their work without permission.²³ The party that copies the work of other people without permission usually aims to obtain

²⁰ Ida Nadirah, "Perlindungan Hukum Kekayaan Intelektual Terhadap Pengrajin Kerajinan Tangan," *DE LEGA LATA: Jurnal Ilmu Hukum* 5, no. 1 (January 2020): 37–50, <https://doi.org/10.30596/dll.v5i1.3444>.

²¹ nurwati S.H M.H, Adi Sulistiyono, And Martin Roestamy, "Model Pengembangan Jaminan Fidusia Bagi Pemilik Hak Cipta Karya Musik Dan Lagu Sebagai Objek Jaminan Untuk Mendapatkan Kredit Perbankan Di Indonesia," *Jurnal Sosial Humaniora* 11, no. 2 (October 12, 2020): 190, <https://doi.org/10.30997/jsh.v11i2.3123>.

²² Niru Anita Sinaga, "Pentingnya Perlindungan Hukum Kekayaan Intelektual Bagi Pembangunan Ekonomi Indonesia," *Jurnal Hukum Sasana* 6, No. 2 (December 14, 2020): 144–65, <https://doi.org/10.31599/Sasana.V6i2.385>.

²³ Ranti Fauza Mayana et al., "Intellectual Property Development & Komersialisasi Non-Fungible Token (NFT): Peluang, Tantangan Dan Problematika Hukum Dalam Praktik," *ACTA DIURNAL Jurnal Ilmu Hukum Kenotariatan* 5, no. 2 (2022): 202–20, <https://doi.org/10.23920/acta.v5i2.812>.

economic rights to distribute an illegal work.²⁴ Indonesia itself is the largest ASEAN market with the largest GDP no. 16 in the world and has a population of large medium income. With this fact, more and more Haki need to be protected and accommodated.

2. AI as the Legal Subject of Law

Regarding copyright ownership, those who are entitled to have copyright and are protected by copyright for their creation based on the provisions in the UUHC are the creators who are legal subjects. Sudikno Mertokusumo explained that the legal subjects were everything that could obtain rights and obligations from the law. In the Civil Code (KUHper) the legal subject consists of 2 things, namely human (*natuurlijk persoon*) and a legal entity (*recht persoon*). Thus, the work of copyright that can be protected by UUHC is a creative work produced by humans and legal entities as positive legal subjects in Indonesia.^{25,26} But along with its development, there is a new subject that can be likened to the legal subject because it can make a copyrighted work like a picture. Songs, writings and other works using technology-based intelligence called Artificial Intelligence (AI). AI is an issue in the world of law because with the development of technology, AI is able to produce objects protected by law. One of the results of AI that is a law protected object is the combination of AI and IPR. One of the results of the combination is an application that is able to produce paintings. Because AI can produce a work of art protected by law, especially copyright. So in this case AI technology can affect intellectual property rights. John McCarthy explains that Artificial Intelligence is The Science and Engineering of Making Intelligent Machines, especially intellectual intelligent computers programs. It is related to the similar task of computers to understanding human intelligence, but ai does not have to confine it alone to methods that are biologically observable. Based on this understanding it can be said that AI is an artificial intelligence based on computer programming created by humans and is intended to understand instructions and carry out tasks that are similar to what can be done with human intelligence, and can also exceed the ability of human biological intelligence. Stuart J. Russel and Peter Norvig (2010) explain AI as a device that has 4 categories of abilities, namely the ability to think like humans, act like humans, rational thinking, and act rationally. This understanding has given a clear picture that AI has the same ability even able to exceed humans in terms of thinking and acting rationally.^{27,28} Artificial intelligence cannot be overall to humans because AI has no humanist

²⁴ Giuseppe Colangelo and Mariateresa Maggiolino, "ISPs' Copyright Liability in the EU Digital Single Market Strategy," *International Journal of Law and Information Technology* 26, no. 2 (June 2018): 142–59, <https://doi.org/10.1093/ijlit/eay005>.

²⁵ Alvieta Dewina, Rika Ratna Permata, and Helitha Novianty Muchtar, "Perlindungan Hukum Bagi Production House Terhadap Penyiaran Film Yang Sedang Tayang Di Bioskop Tanpa Izin Melalui Media Sosial," *Law and Justice* 5, no. 1 (April 2020): 1–16, <https://doi.org/10.23917/laj.v5i1.10399>.

²⁶ Nuzulia Kumala Sari and Dyah Ochtarina Susanti, "Perlindungan Hukum Bagi Pemilik Karya Cipta Batik Tulis Dewi Rengganis Di Desa Jatiurip Kecamatan Krejengan Kabupaten Probolinggo," *SASI; Vol 24, No 2 (2018): Volume 24 Nomor 2, Juli - Desember 2018DO - 10.47268/Sasi.V24i2.127*, February 2019.

²⁷ Aditya Kurniawijaya, Alya Yudityastri, and Ayuta Puspa Citra Zuama, "Pendayagunaan Artificial Intelligence Dalam Perancangan Kontrak Serta Dampaknya Bagi Sektor Hukum Di Indonesia," *Khatulistiwa Law Review* 2, no. 1 (June 2, 2021): 260–79, <https://doi.org/10.24260/klr.v2i1.108>.

²⁸ Nazura Abdul Manap and Azrol Abdullah, "Ancaman Tort Kecerdasan Buatan Terhadap Manusia: Retorik Atau Realiti?," *Kanun: Jurnal Undang-Undang Malaysia* 32, no. 1 (January 2020): 1–28, [https://doi.org/10.37052/kanun.32\(1\)no1](https://doi.org/10.37052/kanun.32(1)no1).

nature like humans, but AI's position can be equated with a legal entity that is recognized as part of the legal subjects in law.²⁹ Legal entities are legal subjects who have the ability to take legal action.^{30,31} This is because AI's ability to take legal action. One example is the presence of a lawyer robot made by a company named Donotpay, where the AI creation created by the company is able to listen to the court argument and formulate a response to the defendant. The lawyer robot case shows that AI functions to carry out orders and activities that usually require human intelligence. The ability of AI that can carry out an activity like humans makes it like a legal subject that is able to carry out legal actions. Regulations regarding AI in law are a new concept for most countries in the world. However, some countries have made progress in regulating AI and recognize AI's existence legally. One example of progress in the formation of AI regulations is the provision of Saudi Arabian citizenship status to a robot named Sophia in Riyadh in 2017. In the same year, a robot named Shibuya Mirai in Japan received a residence permit through special regulations made by the Japanese government.³²

3. NGOs and International Organizations on the Regulations of AI

Various countries and international organizations have tried to advocate for the formation of AI regulations at the international level along with the development of technology. Countries, especially those that have an interest in AI growth for the development and scientific research, have their own regulations at the domestic level. Some Think-Thank Institutions and Institutions have also tried to help create the formulation of AI regulation formulation, such as the Center for Ai and Digital Policy which began to be formed in 2021 by a group of scientists in Michigan-United States, The Future Society, Equal AI, and The Global Partnership on Artificial Intelligence which are some of the many NGOs that focus on the formation of AI regulations.³³ At the level of international organizations, the United Nations plays a central role by initiating a separate research organization in the AI field located in the Hague, namely UNICRI Center for AI and Robotics. In November 2021, the United Nations Educational Scientific and Cultural Organization (UNESCO) formulated a global agreement that regulates the ethical aspects of AI. Although not naturally binding, the agreement is a shared guide for each UNESCO member country in terms of values and principles relating to AI development. In addition, other international organizations such as The Organization for Economic Co-Operation and Development (OECD) also adopted AI development recommendations in May 2019, namely the OECD Recommendation of the Council on Artificial Intelligence. At the regional organization level, the European Union is the most productive regulator in regulating AI. The first step taken by the European Union is to create a project called The Robolaw Project, which explores 5 AI fields where the formation

²⁹ Febri Jaya and Wilton Goh, "Analisis Yuridis Terhadap Kedudukan Kecerdasan Buatan Atau Artificial Intelligence Sebagai Subjek Hukum Pada Hukum Positif Indonesia," *SUPREMASI HUKUM* 17, no. 02 (July 21, 2021): 01–11, <https://doi.org/10.33592/jsh.v17i2.1287>.

³⁰ Jaya and Goh.

³¹ Itok Kurniawan, "Analisis Terhadap Artificial Intelligence Sebagai Subjek Hukum Pidana," *Mutiara : Jurnal Ilmiah Multidisiplin Indonesia* 1, no. 1 (July 2023): 35–44, <https://doi.org/10.61404/jimi.v1i1.4>.

³²Febri Jaya, Wilton Goh, Loc.Cit.

³³ András Hárs, "AI and International Law – Legal Personality and Avenues for Regulation," *Hungarian Journal of Legal Studies* 62, no. 4 (September 2022): 320–44, <https://doi.org/10.1556/2052.2022.00352>.

of regulations is possible. Since the end of the project, the European Union has continued to be involved in the formation of AI regulations. In October 2020 the European Union parliament adopted 3 different regulations regarding AI in the field of civil liability regimes, intellectual property rights, and in ethical aspects (ethical aspect) of AI. In early 2021, the proposal submitted by the Commission in the European Parliament stressed the importance of providing certainty to the process of using AI transparently, safety and security, and obligations in fulfilling human rights in the use of AI.

D. CONCLUSION

Regarding copyright ownership, those who are entitled to have copyright and are protected by copyright for their creation based on the provisions in the UUHC are the creators who are legal subjects. When looking at positive legal sources in Indonesia, especially those that regulate technology law is Law Number 19 of 2016 concerning Information and Electronic Transactions. The formation of this law is a government response to responding to technological developments. However, Law No.19 of 2016 does not explain in more detail about Artificial Intelligence. In this law AI is only classified into electronic information and is not a matter that is equated with the legal subject as stated in Article 1 number 1 of Law No. 18 of 2016. Therefore, in relation to the responsibility of copyright, there is a need for special regulations governing the accountability of the Job Creation Law made by AI in Indonesia. The Law on the current copyright has not thought about the protection of artificial intelligence so that it needs breakthroughs in the context of the protection of intellectual property rights. In addition, according to him, AI is currently in a phase where the law forming does not think of concrete events but there must be a reflection of philosophy that is none other than protecting all interests.

E. REFERENCE

- Abdul Manap, Nazura, and Azrol Abdullah. "Ancaman Tort Kecerdasan Buatan Terhadap Manusia: Retorik Atau Realiti?" *Kanun: Jurnal Undang-Undang Malaysia* 32, no. 1 (January 2020): 1–28. [https://doi.org/10.37052/kanun.32\(1\)no1](https://doi.org/10.37052/kanun.32(1)no1).
- Ahuja, Virendra. "Artificial Intelligence and Copyright." *ILI Law Review* 1, no. 2020 (2021): 270–85. <https://doi.org/10.53456/dlb.vi1.7536>.
- Audah, Abdul Rochim Al. "Hak Cipta Dan Perlindungan Hak Kekayaan Intelektual Dalam Perspektif Hukum Islam Dan Perundang-Undangan." *Al-Mashlahah Jurnal Hukum Islam Dan Pranata Sosial* 4, no. 08 (2017). <https://doi.org/10.30868/am.v4i08.163>.
- Chesterman, Simon. "Artificial Intelligence And The Limits Of Legal Personality." *International & Comparative Law Quarterly* 69, no. 4 (October 1, 2020): 819–44. <https://doi.org/10.1017/S0020589320000366>.
- Colangelo, Giuseppe, and Mariateresa Maggiolino. "ISPs' Copyright Liability in the EU Digital Single Market Strategy." *International Journal of Law and Information Technology* 26, no. 2 (June 2018): 142–59. <https://doi.org/10.1093/ijlit/eay005>.
- Deniesa, Salsabilla, Dela Rinanda Putri, Arqam Amrullah, Adriana Maisarah binti Mohd Farid, and Nor Audra Diana binti Md Hassan. "Copyright Protection for Creators of Digital Artwork." *Indonesian Comparative Law Review* 4, no. 1 (September 2022): 43–58. <https://doi.org/10.18196/iclr.v4i1.15106>.
- Dewina, Alvieta, Rika Ratna Permata, and Helitha Novianty Muchtar. "Perlindungan Hukum Bagi Production House Terhadap Penyiaran Film Yang Sedang Tayang Di Bioskop Tanpa

- Izin Melalui Media Sosial.” *Law and Justice* 5, no. 1 (April 2020): 1–16. <https://doi.org/10.23917/laj.v5i1.10399>.
- Gong, Tao, Zhenni Fan, Stevo Popovic, Agudamu, and Guangxing Wang. “Copyright Protection of Live Esports Broadcast under China’s New Copyright Law.” *Technology in Society* 71 (November 1, 2022): 102123. <https://doi.org/10.1016/J.TECHSOC.2022.102123>.
- Hárs, András. “AI and International Law – Legal Personality and Avenues for Regulation.” *Hungarian Journal of Legal Studies* 62, no. 4 (September 2022): 320–44. <https://doi.org/10.1556/2052.2022.00352>.
- Jannah, Maya. “Perlindungan Hukum Hak Kekayaan Intelektual (Haki) Dalam Hak Cipta Di Indonesia.” *JURNAL ILMIAH ADVOKASI* 6, no. 2 (October 2018): 55–72. <https://doi.org/10.36987/jiad.v6i2.250>.
- Jaya, Febri, and Wilton Goh. “Analisis Yuridis Terhadap Kedudukan Kecerdasan Buatan Atau Artificial Intelligence Sebagai Subjek Hukum Pada Hukum Positif Indonesia.” *SUPREMASI HUKUM* 17, no. 02 (July 2021): 01–11. <https://doi.org/10.33592/jsh.v17i2.1287>.
- Kholiq, Mohamad Nur, Dinda Ajeng Puspanita, and Prawitra Thalib. “Copyright Protection of Art Containing Nudist Elements Under Positive Law In Indonesia.” *Law and Justice* 6, no. 2 (March 2022): 161–73. <https://doi.org/10.23917/laj.v6i2.17480>.
- Kurniawan, Itok. “Analisis Terhadap Artificial Intelligence Sebagai Subjek Hukum Pidana.” *Mutiara: Jurnal Ilmiah Multidisiplin Indonesia* 1, no. 1 (July 2023): 35–44. <https://doi.org/10.61404/jimi.v1i1.4>.
- Kurniawijaya, Aditya, Alya Yudityastri, and Ayuta Puspa Citra Zuama. “Pendayagunaan Artificial Intelligence Dalam Perancangan Kontrak Serta Dampaknya Bagi Sektor Hukum Di Indonesia.” *Khatulistiwa Law Review* 2, no. 1 (June 2021): 260–79. <https://doi.org/10.24260/klr.v2i1.108>.
- Kusumaningtyas, Reza Octavia, Rahayu Subekti, Abdul Kadir Jaelani, Asron Orsantinutsakul, and Utkarsh K. Mishra. “Reduction of Digitalization Policy in Indonesian MSMEs and Implications for Sharia Economic Development.” *Juris: Jurnal Ilmiah Syariah* 21, no. 2 (2022): 157–71. <https://doi.org/10.31958/juris.v21i2.6855>.
- Lau, Joseph. “(Let’s) Playing by the Rules: A Choice of Law Rule for Communication of Copyright Material from Video Games to the Public, through Let’s Plays.” *Computer Law & Security Review* 49 (July 1, 2023): 105828. <https://doi.org/10.1016/J.CLSR.2023.105828>.
- Mayana, Ranti Fauza, Tisni Santika, Moh Alvi Pratama, and Ayyu Wulandari. “Intellectual Property Development & Komersialisasi Non-Fungible Token (NFT): Peluang, Tantangan Dan Problematika Hukum Dalam Praktik.” *ACTA DIURNAL Jurnal Ilmu Hukum Kenotariatan* 5, no. 2 (2022): 202–20. <https://doi.org/10.23920/acta.v5i2.812>.
- Meng, Diandian. “Neglected Performers in the Phenomenon of Live Game Broadcasting - From the Perspective of China and Europe.” *SSRN Electronic Journal*, 2019. <https://doi.org/10.2139/ssrn.3415488>.
- Nadirah, Ida. “Perlindungan Hukum Kekayaan Intelektual Terhadap Pengrajin Kerajinan Tangan.” *DE LEGA LATA: Jurnal Ilmu Hukum* 5, no. 1 (January 2020): 37–50. <https://doi.org/10.30596/dll.v5i1.3444>.
- Quintais, João. “The New Copyright in the Digital Single Market Directive: A Critical Look.” *SSRN Electronic Journal*, October 14, 2019. <https://doi.org/10.2139/SSRN.3424770>.
- S.H M.H, Nurwati, Adi Sulistiyono, and Martin Roestamy. “Model Pengembangan Jaminan Fidusia Bagi Pemilik Hak Cipta Karya Musik Dan Lagu Sebagai Objek Jaminan Untuk Mendapatkan Kredit Perbankan Di Indonesia.” *JURNAL SOSIAL HUMANIORA* 11, no. 2

- (October 2020): 190. <https://doi.org/10.30997/jsh.v11i2.3123>.
- Saiin, Asrizal, Pipin Armita, Muhammad Rizki, and Zulfa Hudiyani. "Wakaf Atas Royalti Sebagai Hak Ekonomi Dalam Intellectual Property Rights." *Al-Awqaf: Jurnal Wakaf Dan Ekonomi Islam* 12, no. 2 (February 2021): 165–76. <https://doi.org/10.47411/al-awqaf.v12i2.65>.
- Salsabila, Fakhira Meshara, Ranti Fauza Mayana, and Laina Rafianti. "Copyright Commercialization of Songs Uploaded in TikTok Application Without the Creator's Permission." *Jurnal Sains Sosio Humaniora* 5, no. 1 (2021): 213–24. <https://doi.org/10.22437/jssh.v5i1.14129>.
- Sari, Nuzulia Kumala, and Dyah Ochtarina Susanti. "Perlindungan Hukum Bagi Pemilik Karya Cipta Batik Tulis Dewi Rengganis Di Desa Jatiurip Kecamatan Krejengan Kabupaten Probolinggo." *SASI; Vol 24, No 2 (2018): Volume 24 Nomor 2, Juli - Desember 2018DO - 10.47268/Sasi.V24i2.127*, February 2019.
- Sharfina, Nurul Hulwanita, Hasbir Paserangi, Fitri Pratiwi Rasyid, and Muhammad Ikram Nur Fuady. "Copyright Issues on the Prank Video on the Youtube," 2021. <https://doi.org/10.2991/assehr.k.211014.021>.
- Sinaga, Niru Anita. "PENTINGNYA PERLINDUNGAN HUKUM KEKAYAAN INTELEKTUAL BAGI PEMBANGUNAN EKONOMI INDONESIA." *Jurnal Hukum Sasana* 6, no. 2 (December 2020): 144–65. <https://doi.org/10.31599/sasana.v6i2.385>.
- Slutskiy, Pavel. "Property Rights vs Intellectual Property: Copyright as Restriction of Communication Freedom." *Communication and Libertarianism*, 2021, 229–42. https://doi.org/10.1007/978-981-33-6664-0_15.
- Sunu, Anton Pratomo. "Perdagangan Internasional Sebagai Aspek Kedua Dan Ketiga Dari Power." *Padjadjaran Journal of International Relations* 2, no. 1 (May 2020): 3. <https://doi.org/10.24198/padjir.v2i1.25602>.
- Wicaksono, Imam. "Politik Hukum Pelindungan Hak Kekayaan Intelektual Di Indonesia Pasca Di Ratifikasinya Trips Agreement." *Pena Justisia: Media Komunikasi Dan Kajian Hukum* 18, no. 1 (July 2020). <https://doi.org/10.31941/pj.v18i1.1088>.
- Windi Pratama, Toebagus Galang. "The Urgency for Implementing Crytomnesia on Indonesian Copyright Law." *Saudi Journal of Humanities and Social Sciences* 5, no. 10 (October 2020): 508–14. <https://doi.org/10.36348/sjhss.2020.v05i10.001>.