LEGAL PROTECTION OF CRYPTO ART COPYRIGHT AS A DIGITAL ASSET INTELLECTUAL PROPERTY

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Abstract

At present the existence of the internet has disrupted various sectors of life in civilization which has changed human behavior and habits. One form of change that has occurred is the emergence of cryptocurrency and blockchain technology innovations in the digital economy industry, especially in the field of digital transactions. Both of these technologies were originally developed by digital artists to give birth to an invention in the form of crypto art which is given a Non-Fungible Token and has been encrypted via the blockchain and cannot be duplicated which shows the owner of the authenticity of someone's work. However, there are several NFT works that conflict with the concept of copyright law and violate copyright in the digital space. The research method used is normative juridical which is analyzed based on a qualitative approach. The focus of the research was carried out on secondary data in the form of library materials regarding intellectual property rights, digital copyrights, and virtual jurisdictions in their regulation and implementation in Indonesia. The result of this study is that NFT works have received legal protection through. However, Indonesian copyright law does not yet regulate the virtual jurisdictions, but in the Information and Electronic Transactions Acts it is possible to extend jurisdiction to the virtual world so that it reaches the imposition of laws on foreign marketplaces such as OpenSea and actors from other countries.

Keywords: Copyright, non-fungible token (NFT), virtual jurisdiction

Abstrak

Saat ini keberadaan internet telah mendisrupsi berbagai sektor kehidupan dalam peradaban yang mengubah perilaku dan kebiasaan manusia. Salah satu bentuk perubahan yang terjadi adalah munculnya inovasi teknologi cryptocurrency dan blockchain dalam industri ekonomi digital khususnya bidang transaksi digital. Kedua teknologi tersebut awalnya dikembangkan oleh para seniman digital hingga melahirkan suatu invensi berupa crypto art (seni kripto) yang diberi token Non-Fungible Token (NFT) dan dienkripsi melalui blockchain dan tidak dapat diduplikasi yang menunjukkan pemilik keaslian atas suatu karya seseorang. Namun, terdapat beberapa karya NFT yang bertentangan dengan konsep hukum hak cipta dan melanggar hak cipta di ruang digital. Metode penelitian yang digunakan adalah yuridis normatif yang dianalisis berdasarkan pendekatan kualitatif. Fokus penelitian dilakukan terhadap data sekunder berupa bahan-bahan pustaka mengenai hak kekayaan intelektual, hak cipta digital, dan yurisdiksi virtual dalam pengaturan dan implementasinya di Indonesia. Hasil dari penelitian ini adalah karya NFT telah mendapatkan perlindungan hukum melalui. Akan tetapi, hukum hak cipta Indonesia belum mengatur yurisdiksi virtual, namun dalam UU ITE dapat dimungkinkan perpanjangan yurisdiksi ke dunia virtual sehingga menjangkau pengenaan hukum terhadap marketplace asing seperti Open Sea dan pelaku yang berasal dari negara lain.

Kata kunci: Hak cipta, non-fungible token (NFT), yurisdiksi virtual

Introduction

The development of science, especially in the field of technology and information which has moved very rapidly in the last few decades has restructured the level of civilization which has changed human patterns and behavior. This can be seen from the changing times which are divided into 3 waves as proposed by Alvin Toffler (Toffler, 1984). The first wave was the agrarian wave which was marked by social

changes in the lives of people who initially lived sedentary (nomadic) livelihoods through hunting and gathering (food gathering) and then transformed themselves into people whose lives were sedentary with livelihood patterns carried out by farming (harvesting). The second wave was the industrial wave which was marked by the occurrence of the industrial revolution which in the end was able to move heavy machines so as to change the entire capitalist order that existed at that time. The third wave is the information age which is marked by the presence of the internet as a system for transferring information across borders between individuals quickly.

The emergence of the internet is one of the innovations that has a significant impact on the development of science and technology and changes the level of human life (Amirulloh, 2016). The presence of the internet today not only contributes to the field of communication but also to various aspects of life in society such as changing the way we do business, communicate, entertain, retrieve information, and even educate ourselves. In the internet we are connected in a cyber world. In the cyber world, it is possible for everyone to interact with various people regardless of geographical location and time and can carry out a large exchange of data sources, information and software. The influence of the existence of the internet has even disrupted various areas of life that are increasingly widespread.

One of the areas that was disrupted was the field of digital transactions in the current era of Society 5.0. In the field of digital virtual currency transactions, a called cryptocurrency has begun to develop. Virtual transactions from cryptocurrencies will be in a network system blockchain. Blockchain is a technology based on cryptography that uses the principle of distributed ledgers, it provides various advantages, especially in terms of security, which records all transactions that have been completed and verified by the rest of the network nodes. (Utomo, 2021). The data recorded in it is publicly accessible so that anyone can check further the information in each block (Chondrogiannis et al., 2022). Blockchain is a series of data blocks that contain unique information and are equipped with a hash code (hash = alphanumeric code that represents words, messages, or data) as proof of the linkage of each block that is generated. Blockchain was successfully popularized by a digital currency cryptocurrency called Bitcoin. Even though it started with problems with Bitcoin, the blockchain can stand alone without the use of cryptocurrency.

Digital artists then began to innovate to create an art movement that collaborated with crypto technology known as crypto art (crypto art). The embodiment of this crypto art movement is the Non-Fungible Token (NFT) technology. NFTs are cryptographic tokens stored on the blockchain that represent something unique such as a unique collectible, a blockchain in-game weapon, or a portion of digital land. NFTs are neither exchangeable nor divisible, so they are not the same as other cryptocurrencies.

In crypto art, NFTs express the scarcity and ownership of a digital work of art. Transferring an NFT is like transferring a certificate of ownership of a work of art. Such proprietary rights do not include intellectual property rights such as copyright claims and rights for any commercial reuse. When viewed from the concept of copyright protection, it can be seen that NFTs can be a good opportunity for digital copyright protection.

The concept applied in NFT is relatively new and it is still possible to carry out the process of development and updating. So that vou still find copyright can infringements committed. One example of a case that occurred in early 2021 was the case of plagiarism of Kendra Ahimsa's work, better known by the moniker "Ardneks" by Twisted Vacancy. Ardneks is a digital artist from Indonesia. Kendra felt very disadvantaged because several elements of her work were used by Twisted Vacancy. Apart from that, he also feels that Twisted Vacancy has taken away his visual identity in the art world. Kendra's original work was later deemed a fake because Twisted Vacancy registered her NFT first. This case is one of the clearest cases of copyright infringement and has resulted in a dispute that has been brought to court.

Apart from this case, there are also other cases such as the uploading of two portraits of

the Chancellor of ITB. namely Wirahadikusumah, to the OpenSea website without the approval of Wirahadikusumah. (CNN Indonesia, 2021). A similar case also occurred in the upload of six portraits of corruption convicts which were sold at a price of 0.059 Ethereum (ETH) or around Rp. 2.791 million to a price of 0.09 ETH Rp. 4.15 million Setya Novanto's NFT photo 2022). Meanwhile, if reviewed Indonesia, through the Copyright Law, it has been regulated that the photo is protected as an object of Copyright Law protection.

Departing from the background above, there are 2 problems to be studied in this study are as follows:

- 1. How is the legal protection of Non-Fungible Token copyrighted works as digital intellectual property assets from the perspective of the Indonesian legal system?
- 2. Can Indonesia's positive law reach international marketplace legal jurisdictions as a medium for Non-Fungible Token digital asset transactions?

Research Methods

This research was conducted using a normative juridical approach, namely research focused on examining the application of the rules or norms in positive law in Indonesia, especially in the aspects of Copyright Law and virtual jurisdiction (Ibrahim, 2013). The writing specification uses an analytical descriptive method, which describes the problems regarding cases of copyright infringement and how regulations in positive law in Indonesia regulate these actions. (Soekanto, 1984). The technique of collecting legal materials is carried out by the author with a literature study to obtain secondary data in order to obtain the data needed for research through the literature and applicable laws and regulations.

The legal materials used by the author are primary legal materials, secondary legal materials, and tertiary legal materials regarding virtual jurisdiction and protection of Intellectual Property Rights, and scientific journals regarding copyright and virtual jurisdiction. All legal material obtained from the literature study is then systematically compiled and analyzed juridically by referring to existing norms, doctrinal and statutory

regulations as positive legal norms that reach conclusions that are delivered qualitatively in the form of descriptions.

Discussion NFT Overview History of NFT Development

The emergence of inventions named Cryptopunks and CryptoKitties became the background for the creation of Non-Fungible Token (NFT) technology. Cryptopunks were discovered in 2017 by John Watkinson and Matt Hall which at that time there were 10,000 unique characters from ethereum that had nothing with in common each other (Kostopoulos et al., 2021). Meanwhile, CryptoKitties is an online game released by Axiom Zen, in the form of a virtual pet cat character that can be purchased with Ethereum (ETH). Just like the uniqueness and rarity system carried by Cryptopunks, Cryptokitties also makes the characters of each virtual cat have nothing in common with each other (Sakız & Gencer, 2021).

From these two inventions, innovations emerged with a similar system that uniqueness prioritized and rarity. technology is named NFT, because as the name implies, it means no tokens that cannot be exchanged. NFT is crypto art that can be in the form of photos, videos, images, audio, and the like. NFT transactions take place in both international and national marketplaces, one example is the OpenSea marketplace.

In March 2021, the development of NFT has accelerated after bringing success for digital artists to sell their works at high prices. For example, the success of Mike Winkleman (Beeple) who managed to sell his 10-second video for \$ 6.6 million or Rp. 94.3 billion (Bestari, 2021). Another success can also be seen from the sale of the first tweet from Twitter CEO Jack Dorsey, which was sold for \$ 2.9 million (two point nine million dollars) which was bought by Sina Estavi. (Kostopoulos et al., 2021).

In Indonesia itself, the phenomenon of the NFT trend began to emerge when a young man named Ghozali, who only sold a few of his self-portraits, became an NFT digital asset and could be sold for Rp. 1.5 billion. This phenomenon then began to be in great demand by the public because of the ease of marketing works through the marketplace and the highvalue benefits.

Transaction Process in NFT Digital Asset Trading

To be able to carry out NFT buying and selling activities, a digital work creator must have an account on a marketplace platform. Several marketplace sites that are quite famous internationally include OpenSea, Axie Infinity, SuperRare, Rarible, NBA Top Shot, Nifty Gateway, and Mintable. While national marketplace sites are available on several sites such as Enevti, Baliola, Paras.id, TokoMall, and Kolektibel. NFT transaction activities will be recorded in the blockchain system. After having an account, the creator of the digital work must have a cryptocurrency digital wallet to transact on the marketplace site. The digital wallet must be connected to an account created by the digital work creator through a marketplace.

In uploading a work so that it can be traded through a marketplace site, the digital work created must go through a Minting process. Minting process is the process of converting digital files into crypto collections or digital assets on the blockchain. In selling NFT, the account owner can sell directly with the "Fixed Price" option or with an auction scheme via the "Time Auction" Furthermore, the account owner can directly enter the price of his work in crypto currency units such as Ethereum (ETH). From each transaction there will be a fee of 2.5% of the NFT sales proceeds. Then the account owner can take a royalty of 10% of the sales of his work (Hardiansyah, 2022).

The Indonesian Ministry of Communication and Informatics has responded to the phenomenon of the rampant NFT buying and selling process, especially for content that is prohibited from being sold as NFT through a marketplace. Several things are prohibited in the NFT trading process according to the Information and Electronic Transactions Acts, namely content that violates decency, has elements of insult, defames, and has the potential to offend ethnicity, race, and religion. In addition, content that contains violations of personal data and intellectual property is also prohibited from being used as NFT. Violators of these legal provisions will be given administrative sanctions, even including termination of platform access for users from Indonesia.

NFT Digital Asset Copyright Protection Legal Aspects of NFTs as an Intellectual Property

Intellectual property is closely related to creative ideas because it arises from the ability to think creatively which results in a product or process in the form of discoveries in the fields of science, art, technology and literature. This is based on the view of John Locke as quoted by Ahmad M. Ramli and friends that the rights that a person has, both tangible and intangible, are the result of his intellect so that they will directly belong to him. (Ramli et al., 2021). As part of human rights, it is important that someone's intellectual property is protected by law as stated in Article 27 paragraph (2) of the Universal Declaration of Human Rights which aims to guarantee legal certainty regarding the relationship between intellectual property rights and creators, owners or users who use products. the intellectual property. In general, intellectual property rights are divided into two categories, namely industrial property rights (brands, patents, industrial designs, trade secrets, plant varieties, and integrated circuit layout designs) and copyrights (scientific, artistic, literary, and related rights). In today's technology-laden digital era, intellectual property has increased very rapidly with the emergence of various new innovations such as crypto art. Crypto art is a work of art in physical or digital form that is given an NFT token which has been encrypted via the blockchain and cannot be duplicated which shows the original owner of someone's work. Crypto art in the form of NFT is closely related to the legal aspects of intellectual property considering that even if someone buys an NFT, that person is not necessarily the owner of the asset he bought. (Aletha, 2021). The owner of the NFT only has a record and a hash code consisting of various random numbers and letters as a form of ownership of the digital asset tokens they own. This is because NFT is a digital asset that is very rare and exclusive, so it needs to be protected from all forms of plagiarism and conversion of works.

NFT Copyright Violation as a Form of Cybercrime

In general, cybercrime acts are carried out by utilizing information technology. This means that all forms of illegal and unlawful activities in a computer system that aim to commit crimes can be defined as cybercrime. According to Akbar Kurnia Putra, cybercrime can be committed by someone from various places, even a very personal place, but it can cause significant harm to an institution or someone who is in another location and thousands of kilometers. separated by territorial boundaries of a country (Putra, 2014). Therefore, as a crime that is transnational in nature (transnational boundaries), the Budapest Convention on Cybercrime was ratified in 2001 which regulates cybercrime.

The Budapest Convention classifies several actions as a form of cybercrime where one of them is a criminal act related to copyright and related rights (offences related to infringements of copyright and related rights) in Article 10. Referring to this, acts of copyright infringement on NFTs as a digital asset that is protected by intellectual property rights can be said to be a cybercrime that occurs in cyberspace.

Protection of Copyright for NFT Digital Assets in Indonesian Positive Law

a. Law of the Republic of Indonesia Number 28 of 2014 on Copyright (Copyright Acts)

So far in Indonesia we cannot find positive law that specifically mentions the terms 'NFT' or 'Crypto Art'. However, as a work of art in the form of a digital asset created through a creative process, the rights of the creators of NFTs are protected in the form of copyrights by the Copyright Acts. Referring to Article 1 number 1 of the Copyright Acts, copyright itself is an exclusive right of the creator where this right is divided into 2 rights, namely economic rights and moral rights. It is called a moral right because this right is attached to the creator of the NFT itself and this right cannot be removed even though the duration of copyright protection has ended. While economic rights are rights that have economic value because they protect NFT creators from depreciation in the economic value of crypto art works in NFTs due to piracy, imitation, plagiarism or other fraudulent acts committed by other people who are not entitled.

As previously described, creators of crypto art have exclusive rights in the form of copyrights so they have the right to give permission or prohibit other parties who, without their consent, reproduce or use their crypto art in accordance with Article 9 paragraphs (2) and (3) of the Copyright Acts. However, in practice this still creates controversy on the ground because the NFTs and blockchain technology used actually provide opportunities for irresponsible parties to carry out acts of exploitation without permission of other people's crypto art works. Even though Article 56 of the Copyright Acts states that content proven to violate copyright can be closed by the Ministry of Communication and Information Technology. This gap is caused because NFT which functions as a sign of ownership of a legitimate digital artwork is not regulated and not recognized in the Copyright Acts so that anyone can reproduce, sell, and display NFT tokens without the need to confirm the validity of the copyright of the work. Therefore, if the NFT is associated with crypto art and/or displays visualizations of crypto art, copyright protection is carried out on the digital crypto art and not on the **NFT** itself. According to Dewi Sulistianingsih Apriliana and Kinanti, the terms and conditions displayed on the marketplace platform have explained that people who buy works on NFTs have rights similar to a license to use images on the NFT exclusively (Sulistianingsih & Khomsa Kinanti, 2022). Buyers can show the crypto art they buy to the public and can use, display, or copy for personal use, but they cannot be used for commercial purposes (only for personal, non-economic Furthermore, purposes). Dewi Sulistianingsih and Apriliana Khomsa Kinanti also argue that the buyers of these works of art do not have the right to exploit, license, or design derivative works made from existing works of art in the NFT (Sulistianingsih & Khomsa Kinanti, 2022).

This is because crypto art buyers do not have the copyright on the intellectual property rights of the assets they have purchased so that the purchase of crypto art does not mean that there has been a transfer or grant of permission to use the copyright on a crypto art that has been linked to the NFT (Ashyira, 2022). With a note that it can be excluded if an agreement has been made on digital artwork linked to the NFT or there is also a transfer of copyright as stipulated in Article 16 paragraph (2) of the Copyright Acts between the buyer and seller of the work. Thus, all copyright or other artistic rights to crypto art in the NFT automatically become the property of the creator of the crypto art and anyone who violates this that they have violated intellectual property provisions contained in the Copyright Acts.

b. Law of the Republic of Indonesia Number 19 of 2016 on Information and Electronic Transactions (Information and Electronic Transactions Acts)

In the Information and Electronic Transactions Acts there are a number of articles that implicitly regulate NFT and crypto art, including Article 1 number 1, number 3, number 4, number 9, Article 25, and Article 26 of the Information and Electronic Transactions Acts. As a sign of ownership of a legitimate digital artwork, NFTs can be classified as electronic certificates as described in Article 1 point 9 Information Electronic the and Transactions Acts because NFTs can track token issuers, initial owners, and final owners of the crypto art.

In the context of cyberlaw, crypto art itself can be classified as an electronic document because the work created will be stored in digital form as described in Article 1 number 4 of the Information and Electronic Transactions Acts. In accordance with Article 25 of the Information and Electronic Transactions Acts, because crypto art is an electronic document that is compiled into a work that has intellectual value, crypto art works are protected as intellectual property

rights based on statutory provisions. Thus, any use of crypto art and NFT must be carried out with the consent of the owner of the crypto art because it involves his personal data according to Article 26 paragraph (1) of the Information and Electronic Transactions Acts.

The Virtual Jurisdiction of the State of Indonesia in Enacting Violations that Occur in Cyberspace Concept of Virtual Jurisdiction

In general, in the concept of jurisdiction, there are 2 (two) types of jurisdiction, namely traditional jurisdiction and virtual jurisdiction (cyber jurisdiction). According to Masaki Hamano, as quoted by Barda Nawawi Arief, jurisdictions based on traditional principles are divided into 3 (three) categories, namely legislative jurisdiction (jurisdiction to prescribe) relating to the authority to enact laws, judicial jurisdiction (jurisdiction to advocate) relating to the authority to conduct adjudication, and executive jurisdiction (jurisdiction to enforce) relating to the authority to enforce the law (Arief, 2006).

Masaki Hamano separates the definition of virtual jurisdiction from a cyber/virtual point of view and from a legal point of view. From the point of view of the cyber/virtual world, virtual jurisdiction is often defined as the power of system operators and users to impose rules and enforce them on a society in virtual space. From a legal perspective, virtual jurisdiction is defined as the government's physical power and authority to try internet users or their activities in virtual space (physical government's power and court's authority over Netusers or their activity in cyberspace) (Arief, 2006).

State Sovereignty in Virtual Cyberspace Jurisdiction

The issue of virtual jurisdiction often creates polemics because it relates to the rights and authorities of a country in determining and implementing laws according to the needs of the people and the country. Mirza Satria Buana argued that jurisdiction is a reflection of the basic principle of the sovereignty of a country, so that a country is not considered sovereign if it does not have jurisdiction (Buana, 2007). John

Perry Barlow as quoted by Siti Yuniarti and Erni Herawati then also described the position of the state with the internet, the state as a region while the internet as a link so that sovereignty in cyberspace is created because the internet connects all of these areas into one through links (Yuniarti & Herawati, 2020). Henry H. Perritt as quoted by Joel P. Trachtman then also believes that cyberspace is a sovereign territory that is protected and maintained (sovereignty-preserving) bv the (Trachtman, 1998). It is important to know which countries have jurisdiction and which laws can be used to resolve violations in cyberspace because it is difficult to determine which areas of cyberspace can be subject to jurisdiction.

Application of Virtual Jurisdiction in the Perspective of International Law

Dikdik M. Arief Mansur and Elisatris Gultom as quoted by Riko Nugraha stated that basically to determine which jurisdictions can be applied to activities in cyberspace, it is not necessary to use jurisdictions that have certain characteristics because international law is sufficient to use them (Nugraha, 2021). Riko Nugraha then also argues that to determine the virtual jurisdiction of an offense or crime in cyberspace can be reviewed from the principles of international law (Nugraha, 2021). There are 6 principles that can generally be used to determine the law that applies to virtual jurisdictions by a country (Effendi, 2019):

- a. The principle of subjective territoriality which explains that if there is a violation of law within the territory of a country, the state has jurisdiction and is authorized to take action against said violation of the law;
- b. The principle of objective territoriality explains that if a country becomes a victim of an event and/or criminal act occurring outside the territorial territory of the country concerned, that country has jurisdiction and has the authority to take action against the perpetrators of the crime. Muhammad Effendi stated that this principle is closely related to solving jurisdictional problems that occur in cyberspace;

- c. The principle of active nationality explains that if there is a violation of the law in a country, the country has the jurisdiction and authority to take action against the perpetrators based on their nationality;
- d. The principle of passive nationality explains that the state has jurisdiction and authority to take action against law violations based on the victim's nationality. This principle is rarely used in determining virtual jurisdiction in cyberspace because it is considered to lack respect for the laws of other countries and the victim is not the person who will be tried;
- The protective principle states that a country has the jurisdiction and authority to take action against all events and/or acts of crime that threaten the security and the country integrity of concerned regardless of the nationality of the perpetrators or where the events and/or acts of the crime are located. This principle is very rarely used in determining virtual jurisdiction in cyberspace because it can offend the sovereignty of other countries;
- **f.** The principle of universality states that every country can take action against all events and/or criminal acts that violate the principles of general law.

A State's Virtual Jurisdiction Handles Cybercrime in the Perspective of National Law

In Indonesia, provisions related to virtual jurisdiction are regulated in Article 2 of the Information and Electronic Transactions Acts by adhering to the extraterritorial principle. This is also confirmed by the elucidation of Article 2 of the Information and Electronic Transactions Acts which states Information and Electronic Transactions Acts has jurisdiction not only for legal actions that apply in Indonesia and/or are carried out by Indonesian citizens, but also applies to legal actions carried out outside the jurisdiction of Indonesia. because the use of information technology can be cross-territorial or universal. These provisions show that the Government of Indonesia has the authority to take action against crimes that occur in cyberspace because Indonesia's positive law does not only apply to the territory of Indonesia, but this can also be

applied to everyone, whether Indonesian citizens or foreign nationals and legal entities in accordance with with Article 1 number 21 of the Information and Electronic Transactions Acts who commits criminal acts outside the territorial jurisdiction of Indonesia. When formulating the Information and Electronic Transactions Acts, legislatures have the expanded the jurisdictional boundaries in cyberspace from territorial jurisdiction universal jurisdiction, bearing in mind that crimes in cyberspace are cross-territorial (transnational) in nature, thus enabling law enforcers to take action against acts that harm Indonesia's interests. Therefore, violations that occur in cyberspace, including international marketplaces such as Opensea, prosecuted by Indonesian law enforcers, even though the perpetrators are outside the jurisdiction of the Indonesian state, as long as this harms the Indonesian people as a form of protection for the entire Indonesian nation and all spills. Indonesian blood according to the mandate in the Preamble to the Constitution of the Republic of Indonesia.

Conclution

Positive law in Indonesia protects creations in the form of NFT digital assets through the Copyright Acts and Information and Electronic Transactions Acts. In the digital assets Copyright Acts, NFT protected as works, whereas in the Information and Electronic Transactions Acts NFT digital assets are protected as electronic information or electronic documents. The virtual jurisdiction of Indonesia's positive law to protect NFT can reach outside the territory of Indonesia so that if there is a legal action that harms Indonesia's interests, law enforcers can take firm action against perpetrators from abroad with the law currently in effect in Indonesia. This shows that Indonesia is an independent country and has sovereignty and guaranteed protection of Intellectual Property Rights for NFT digital assets for its people. However, according to the author, the Indonesian people must increase digital literacy to find out what content or works can be published as NFTs so that copyright infringement does not occur. If copyright infringement occurs, the victim has the right to report it to the authorities to get

their rights back, because the reporting system uses complaint offenses. If there are legal problems with actors from abroad, the public does not need to be afraid to report them immediately because based on the theory of virtual jurisdiction in the Information and Electronic Transactions Act, Indonesia's positive legal jurisdiction can reach outside the territory of Indonesia if there are indeed things that are detrimental to the parties originating from Indonesia.

Bibliography

Aletha, N. O. (2021). *Memahami Non-Fungible Tokens (NFT) di Industri CryptoArt*. Center for Digital Society.

Amirulloh, M. (2016). Hukum Teknologi Informasi Dan Komunikasi (TIK) Sebagai Hukum Positif Di Indonesia Dalam Perkembangan Masyarakat Global. UNPAD Press.

Arief, B. N. (2006). *Tindak Pidana Mayantara Perkembangan Kajian Cybercrime di Indonesia*. RajaGrafindo Persada.

Ashyira, A. (2022). Legal Protection for Artists Whose Digital Works Are Issued Without Permission In The Form of Non-Fungible Token (NFT) (Juridical Review on Law of The Republic of Indonesia Number 28 of 2014 on Copyrights). SSRN Electronic Journal.

https://doi.org/10.2139/ssrn.4084550.

Bestari, N. P. (2021). Geger Dunia! Video Klip 10 Detik Ini Terjual Rp 94,3 Miliar. CNBC Indonesia.

https://www.cnbcindonesia.com/tech/20 210301184040-37-227031/geger-dunia-video-klip-10-detik-ini-terjual-rp-943-miliar.

Buana, M. S. (2007). Hukum Internasional Teori dan Praktek. Nusamedia.

Chondrogiannis, E., Andronikou, V., Karanastasis, E., Litke, A., & Varvarigou, T. (2022). Using Blockchain and Semantic Web Technologies for the Implementation of Smart Contracts Between Individuals and Health Insurance Organizations

- Efthymios Chondrogiannis. *Blockchain: Research and Applications*, 3(2), 100049. https://doi.org/10.1016/j.bcra.2021.100049.
- CNN Indonesia. (2021). *Muncul NFT Rektor ITB diduga bentuk Protes Kepemimpinan*. CNN Indonesia. https://www.cnnindonesia.com/teknologi/2021111111317-185-719631/muncul-nft-foto-rektor-itb-diduga-bentuk-proteskepemimpinan.
- CNN Indonesia. (2022). Viral Dijual NFT Foto Koruptor, Setya Novanto Paling Mahal. CNN Indonesia.
- Council of Europe. Convention on Cybercrime 2001.
- Effendi, M. (2019). Pembatasan Hak Atas Informasi Elektronik Dalam Yurisdiksi Cyberspace. *JURIDICA: Jurnal Fakultas Hukum Universitas Gunung Rinjani*, 1(1), 44–54. https://doi.org/10.46601/juridica.v1i1.17
- Hardiansyah, Z. (2022). Begini Cara Jual Beli di OpenSea Beserta Syaratnya. Kompas.Com. https://tekno.kompas.com/read/2022/01/18/13160047/begini-cara-jual-beli-nft-diopensea-beserta-syaratnya?amp=1&page=2&jxconn=1*1a41zna*other_jxampid*Mi0zZGIFakN3ZDVwWHdWVUZWNExYcW03SUFxZXo4NjdfSjBGR0wyb1Zsd2xvd09KaXVTR0l2NTJvMXNSR2k5Tw.
- Ibrahim, J. (2013). *Teori dan Metodologi Penelitian Hukum Normatif.* Bayumedia Publishing.
- Indonesia. Undang Undang Dasar Negara Kesatuan Republik Indonesia 1945.
- Indonesia. Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta.
- Indonesia. Undang-Undang Nomor 19 Tahun 2016 tentang Perubahan Atas Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik.

- Kostopoulos, N., Damvakeraki, T., Dionysopoulos, L., Charalambous, M., Giaglis, G., Noszek, Z., Papoutsoglou, I., Votis, K., Roy, I., Graubins, J., Szego, D., Anania, A., Costello, A., Joshi, A., & Bandman, J. (2021). *Demystifying Non Fungible Tokens (NFTs)*. https://digitalstrategy.ec.europa.eu/en/library/eublockchain-observatory-and-forum-publishes-report-non-fungible-tokens-nfts.
- Nugraha, R. (2021). Perspektif Hukum Indonesia (Cyberlaw) Penanganan Kasus Cyber di Indonesia. *Jurnal Ilmiah Hukum Dirgantara*, 11(2), 44–56. https://doi.org/https://doi.org/10.35968/jihd.v11i2.767.
- Putra, A. K. (2014). Harmonisasi Konvensi Cyber Crime Dalam Hukum Nasional. *Jurnal Ilmu Hukum Jambi*, 5(2), 95–109.
- Ramli, A. M., Permata, R. R., Mayana, R. F., Ramli, T. S., & Lestari, M. A. (2021). Pelindungan Kekayaan Intelektual dalam Pemanfaatan Teknologi Informasi di Saat Covid-19. *Jurnal Penelitian Hukum De Jure,* 21(1), 45. https://doi.org/10.30641/dejure.2021.V21 .45-58.
- Sakız, B., & Gencer, A. H. (2021). Blockchain Beyond Cryptocurrency: Non-Fungible Tokens. In S. Sarı & A. H. Gencer (Eds.), International Conference on Eurasian Economies 2021 (pp. 144–151). Eurasian Economists Association.
- Soekanto, S. (1984). *Pengantar Penelitian Hukum*. UI Press.
- Sulistianingsih, D., & Khomsa Kinanti, A. (2022). Hak Karya Cipta Non-Fungible Token (NFT) Dalam Sudut Pandang Hukum Hak Kekayaan Intelektual. *KRTHA BHAYANGKARA*, *16*(1), 197–206. https://doi.org/10.31599/krtha.v16i1.107 7.
- Toffler, A. (1984). *The Third Wave: The Classic Study of Tomorrow*. Bantam Books.

- Trachtman, J. P. (1998). Cyberspace, Sovereignty, Jurisdiction, and Modernism. *Indiana Journal of Global Legal Studies*, 5(2), 561–581. https://doi.org/http://www.jstor.org/stable/25691120.
- United Nations General Assembly. Universal Declaration of Human Rights.
- Utomo, T. P. (2021). Implementasi Teknologi Blockchain di Perpustakaan: Peluang, Tantangan dan Hambatan. *Buletin Perpustakaan Universitas Islam Indonesia*, 4(2), 173–200.
- Yuniarti, S., & Herawati, E. (2020). Analisis Hukum Kedaulatan Digital Indonesia. Pandecta Research Law Journal, 15(2), 154– 166.
 - https://doi.org/https://doi.org/10.15294/pandecta.v15i2.18293.