

NON-FUNGIBLE TOKEN AND COPYRIGHT; NAVIGATING THE MURKY WATERS OF OWNERSHIP AND THE TRANSFER OF RIGHTS.

*Mawaddah Munirah binti Zulfakar**

Introduction

Imagine that, after several hundred hours of hard work, you have successfully created a digital image. You post the image on your personal page. Unbeknownst to you, one of your followers takes the image from your page and uploads it to a digital trading platform. The image is then minted with lines of codes (blockchain) and transformed into a token. The token is later displayed on the trading platform and advertised for purchase. Eventually, it was bought by a buyer for RM1 million.

In this situation, your digital image is exploited by unscrupulous individuals without your consent and for profit. This occurs in a virtual setting, which is very new and unfamiliar to some internet users. Furthermore, not all digital users understand the extent of use and application of legal positions such as contracts and intellectual property in the virtual world.

The internet has evolved through constant changes, innovation, and advancement. A new segment of the internet is the metaverse Mark Zuckerberg explained the new concept of metaverse as an integrated ecosystem with seamless interaction between virtual and real worlds. It also allows the use of avatars and holograms in everyday interaction and simulated experience.¹ However, the uncertainty of the virtual space requires new laws, procedures, and strategies. This uncertainty also raises considerable concerns regarding the protection of rights and its enforcement in the virtual space. As seen in the situation above, the reproduction of the artwork into a token without the owner's consent may lead to copyright infringement. There is a need to observe compliance with all applicable laws not only regarding monetary assets but also from the aspect of intellectual property, especially copyright.

This article attempts to answer the two questions below.

Issue 1: Whether Malaysia Copyright Act 1987 is sufficient to protect Intellectual property rights associated with the digital image that has been minted to become a non-fungible token.

Issue 2: Whether the copyright of the owner will be transferred to the buyer upon purchase of NFT.

Further to answering the question, this article will also put provide suggestions to harmonise the understanding of the application of NFT to copyright in its application in Malaysia. This will enhance the rights of the copyright owner as well as protect the rights of the buyer of NFT in the virtual space.

¹ Yogesh K. Dwivedi et al, 'Metaverse beyond the hype: Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy' (International Journal of Information Management, October 2022) Volume 66, 102542

Non-Fungible Token and Digital Images

Non-fungible tokens (NFT) have been associated with or referred to as ‘bitcoin²’. Both share the characteristics of containing tangible metadata, often in the form of digital currency. However, the key distinction lies in the fact that Bitcoin is interchangeable, functioning as a token while a non-fungible is characterised embedded metadata minted into a unique image, music, or photograph. The exclusivity of NFTs, which can only be owned by one single individual, adds to their appeal for buyers, as they are not interchangeable.³

The inception of NFTs dates back to 2017, with the introduction of pixelated images of characters known as ‘CyberPunks’⁴. To transform a digital image into NFT, the author uploads the image onto trading services or NFT marketplaces, for example, OpenSea⁵ and Rarible⁶, following its creation. The resultant work encompasses a series of encoded metadata, some of which may involve copyright elements.⁷ The NFT blockchain records the encrypted digital identity of the uploader of the work and generates a “unique and reproducible alphanumeric value from a specific data set “derived from the artwork.”⁸

The inherent nature of NFT as a token allows them to be transferred to another individual when sold by the owner to a new buyer. This transaction is facilitated through smart contracts⁹, a feature that not only renders the token tradeable across different marketplaces¹⁰ but also ensures traceability and monitoring of any associated transactions.¹¹ Moreover, all recorded data on the blockchain is secure from tampering and is auditable. This feature miraculously tracks the exchange record of the property represented by the NFT on a public ledger.¹² The platform Rarible employs ERC-721 and ERC-1155 smart contracts, which is applicable to their users, facilitating the minting of their own NFTs.¹³ The utilisation of digital images linked to NFTs in metaverses is governed by contractual terms provided by the platform hosting the assets.¹⁴ The change in ownership from seller to buyer is documented with the details regarding the buyer’s wallet.

Discussion: Legal Issues

² Bitcoin is a new kind of virtual money that incorporates innovative payment. It utilized peer-to peer technology without a centralized banking system. (bitcoin.org)

³ Catherine Flick, “A critical professional ethical analysis of Non-Fungible Tokens (NFTs)” (Journal of Responsible Technology, 2022) 12, 100054

⁴ It is a non-fungible token (NFT) collection on the Ethereum blockchain.

⁵ OpenSea < <https://opensea.io/> > accessed 20 December 2023

⁶ Rarible < <https://rarible.com/> > accessed 1 November 2023

⁷ Guadamuz, A. (2021) Non-fungible tokens (NFTs) and copyright, WIPO. < https://www.wipo.int/wipo_magazine/en/2021/04/article_0007.html > accessed: 14 June 2023.

⁸ Di Arianna Alpini, “NFT and NFTed Artworks between property and copyright liability” (Persona e-Mercato, 2023)/1-Saggi

⁹ Shenzhen Qice Diechu Cultural Creativity Co., Ltd. v Hangzhou Yuanuzhou Technology Co., Ltd. (2022) Zhe 0192 Min Chu 1008

¹⁰ Ali, O. et al., “A review of the key challenges of non-fungible tokens” (Technological Forecasting and Social Change, 2023), 187, p. 122248. doi: 10.1016/j.techfore.2022.122248.

¹¹ Yupeng Dong and Chunhui Wang, “Copyright protection on NFT Digital Works in the metaverse” (Security and Safety, 2023) Vol. 2, 2023013

¹² Ali, O. et al. (2023) ‘A review of the key challenges of non-fungible tokens’, Technological Forecasting and Social Change, 187, p. 122248. doi: 10.1016/j.techfore.2022.122248.

¹³ “What is an ERC-721 contract” (Rarible) < <https://help.rarible.com/hc/en-us/articles/16878754770445-What-is-an-ERC-721-contract> > accessed 31 August 2023

¹⁴ Runhua Wang, Jyh-An Lee, Jingwen Liu, ‘Governing the NFT Market by Static and Dynamic IP Laws’ (The Chinese University of Hong Kong, Faculty of Law, 2023) Research Paper No. 2023-16

From the aspect of intellectual property rights, the author who created the digital image possesses automatic copyright. The copyright owner has the option to upload their image to a platform and mint it as an NFT. However, several concerns arise, including (1) the potential for copyright infringement when an anonymous user utilised a copyright-protected digital image and mints it on the platform and (2) uncertainties regarding the transfer of ownership and copyright entitlements after the sale and purchase of an NFT.

Ambiguities persist concerning the transfer of rights and the entitlements of buyers post-NFT purchase.¹⁵ Clarity is imperative not only for buyers but also for the creators of the digital images, and the trading platforms or sellers. Making copies of the work available for public downloading over an electronic network constitutes a form of public distribution. The digital image creator may seek to prevent the unauthorised use of their art as an NFT. Additionally, the platform itself may aim to establish sufficient terms and conditions that safeguard all contracting parties. For instance, terms regarding the rights and limitations granted to the buyer after the purchase of NFT¹⁶, sales terms, assignment of rights, and the allocation of subsequent royalties should be clearly outlined in the transaction terms.¹⁷

Issue 1: Whether Malaysia Copyright Act 1987 is sufficient to protect the digital image that has been minted to become a non-fungible token.

A digital image becomes eligible for copyright protection only if it is created by the author and reduced into a tangible form. Additionally, both the author and the owner are entitled to exclusive moral and economic rights arising from the digital image. This principle is established in Section 13 of the Copyrights Act 1987 and is exemplified in the case of **Designers Guild Ltd v Russel Williams (Textiles) Ltd**¹⁸. According to copyright law, individuals who, through skill and labour, create an original work, irrespective of its nature, have the right to exclusive reproduction for a limited time. Thus, by law, NFT creators can mint their digital art to prevent copyright infringement.¹⁹ The legitimacy of NFTs on the platform, from an intellectual property perspective, is contingent upon the ownership of copyright.

In Malaysia, **Section 7(1) of the Copyright Act 1987** specifies eligible works for copyright protection, including literary works, musical works, artistic works, films, sound recordings, and broadcasts. Any graphic work, whether functional or aesthetic, qualifies for copyright protection as long as it falls within the definition of graphic works. To be eligible for copyright and its associated privileges²⁰, a work exhibit originality, fixation, and protectable

¹⁵ Guadamuz, A. (2021) Non-fungible tokens (NFTs) and copyright, WIPO. < https://www.wipo.int/wipo_magazine/en/2021/04/article_0007.html > Accessed: 14 June 2023

¹⁶ “Five legal considerations for businesses taking a lead on NFTs” (EY Global, 1 February 2023) < https://www.ey.com/en_my/tax/five-legal-considerations-for-businesses-taking-a-lead-on-nfts > accessed 5 July 2023

¹⁷ Alif Muhammad Gultom, Fitri Astari Asril, “Key Issues of Non-Fungible Token (NFT): How Transfer of Copyright Should Adapt? Perspektif Hukum” (Fakultas Hukum Universitas Hang Tuah Surabaya, (2023), P-ISSN: 1411-9536

¹⁸ [2001] All ER 700

¹⁹ “NFTs and Intellectual Property: Things that IP Owners and NFT Creators Need to Know” (Pintas IP, 3 December 2021) < <https://pintas-ip.com/nfts-and-intellectual-property-things-that-ip-owners-and-nft-creators-need-to-know/> > accessed 4 October 2023

²⁰ Tom W. Bell, “Copyrights, Privacy, and the Blockchain” (Ohio Northern University Law Review, 2016), Volume 42, Issue 2, Article 3

expression.²¹ Exclusive rights, as guaranteed in **Section 13(1)(e)**, empower the owner to control the distribution of the work and provide legal standing for the author²² to address infringements under to **Section 36** of the same Act. These principles also apply in the metaverse. As Tay Pek San articulated in his book, the right to control encompasses making copies in a different form, including electronic format.²³ In the case of **Onestop Software Solutions (M) Sdn Bhd & Anor v Masteritec Sdn Bhd & 2 Ors**²⁴, computer screen displays, and graphic user interfaces were recognised as graphic works within the definition of an artistic work.²⁵

The use of digital images transcends jurisdictions and different countries adopt different approaches to Copyright and NFT regulation. Moreover, due to the novel nature of the metaverse, many countries are yet to establish comprehensive guidelines and IP framework concerning NFT. The Berne Convention for the Protection of Literary and Artistic Work requires exclusive rights to be granted to authors, irrespective of the quality and the form of their expression. **Article 1(4) of the WIPO Copyright Treaty** further stipulates that the approval of the copyright holder is necessary, even for the storage of a copyrighted work in digital form such as the metaverse, as it can be deemed a form of reproduction.²⁶ Given the slow progress in regulatory development and enforcement, NFT contracting parties face risks, particularly in cases of IP infringements or breaches of contract.

The case of **Hermes v Rothschild** is illustrative, involving the “MetaBirkin” NFT. In this instance, a Manhattan Federal Judge ruled that Rothschild’s creation of digital art collection featuring fur-covered Birkin Bags, known as “MetaBirkin” NFT, infringed Hermes’ “**BIRKIN**” and “**HERMES**” trademarks. The court considered widespread inaccurate media coverage linking Hermes to “MetaBirkin”, holding Rothschild liable for trademark infringement and cybersquatting.²⁷ Consequently, the judge permanently blocked the sales of the ‘MetaBirkin’ NFT by the artist Mason Rothschild.²⁸

Another illustrative case example involves the auction house Sotheby and a crypto artist, Kevin McCoy. In 2014, McCoy had created his first NFT, Quantum, using the Namecoin blockchain. Subsequently, McCoy opted to preserve the original metadata by tokenising it on Ethereum. When McCoy sold Quantum at Sotheby’s in 2021, the Ethereum token was included. A month before the sale, Free Holdings generated a new NFT on the Namecoin blockchain, using the same namespace McCoy had employed seven years earlier and replicating McCoy’s original metadata. Free Holdings claimed ownership of the ‘first-ever NFT,’ but the court dismissed this

²¹ Ida Madiha bt Abdul Ghani Azmi, *Copyright Law in Malaysia, Cases and Commentary*, (Intellectual Property Series, 2nd edn, Sweet & Maxwell Asia)

²² Section 26 (1) Copyright Act provides that copyright shall vest initially in the author, and it can be commercially exploited or dealt with in the same manner as any moveable property.

²³ Tay Pek San, *Intellectual Property Law in Malaysia*, (2nd edn , Sweet & Maxwell, 2020)

²⁴ [2009] 3 AMR 547

²⁵ Tay Pek San, *Intellectual Property Law in Malaysia*, (2nd edn , Sweet & Maxwell, 2020)

²⁶ Ramos A, “The Metaverse, NFT and IP Rights: To Regulate or Not to Regulate?” (WIPO, June 2022) <https://www.wipo.int/wipo_magazine/en/2022/02/article_0002.html> accessed 19 June 2023

²⁷ Shearn Delamore & Co, Legal Update, March 2023

²⁸ Blake Brittain “Hermes wins permanent ban on 'MetaBirkin' NFT sales in US lawsuit”(Reuters, 24 June 2023) <[4](https://www.reuters.com/business/hermes-wins-permanent-ban-metabirkin-nft-sales-us-lawsuit-2023-06-23/#:~:text=June%2023%20(Reuters)%20%2D%20A,in%20its%20famed%20Birkin%20handbags.> accessed 1 August 2023</p></div><div data-bbox=)

assertion and ruled in favour of McCoy and co-defendant Sotheby's.²⁹

From a legal standpoint, the law in Malaysia clearly delineates the rights of digital image authors and their associated rights. The law outlines instances of infringement applicable to digital platforms. However, due to the lack of clarity regarding the technical aspect of metaverse platforms, enforcing the copyright law can still pose a challenge, especially in cases involving the sale and assignment of copyright. As of now, there are no reported cases of copyright infringement for NFTs in Malaysia. Recognising the increasing interest in NFTs among digital users, major law firms have taken the opportunity to educate the public on the legality of NFTs, given their association with cryptocurrency.

The issue of uncertainty is further compounded by debates over whether the sale and purchase of an NFT confer copyright ownership of the digital image to the buyer. This will be addressed in the following discussion.

Issue 2: Whether copyright of over the digital art will be transferred from the owner to the purchaser upon purchase of NFT.

Ownership can be transferred through assignment by way of sale or gift, and such terms must be documented in writing as stipulated by Section 27(2). The original owner retains the right to restrict the rights conveyed to the buyer, including limitations on duration or geographical area, as highlighted in Issue 1. The exclusive rights of an author encompass both moral and economic dimensions, beyond the right to copy, display, or use the acquired image, even for commercial purposes.³⁰

The sale and purchase of a copyrighted work are governed by the first sale doctrine and the exhaustion of rights. The first sale doctrine permits the buyer to sell or transfer a copyrighted work to another party without the author's consent, thereby safeguarding the buyer from potential copyright infringement and preventing the author from impeding subsequent sales following the initial purchase.³¹ Additionally, the distribution of work is also subject to the exhaustion of rights doctrine, wherein once copies are circulated by the owner, they lose the authority to control subsequent circulations.³²

The discussion also revolves around the first sale doctrine, exploring whether the rights granted to the buyer encompass the entirety of copyright-related rights or if there are limitations. Any copyright associated with a work of art does not automatically transfer to the purchaser unless the contract explicitly provides for it and adheres to the applicable law's requirements for copyright transfer. The contract should incorporate appropriate limitations in the legal agreement

²⁹ Kinsella E, "A U.S. Court Has Handled a Legal Victory to Digital Artist Kevin McCoy in an Ownership Challenge over the First-Ever NFT" (Artnet News, 22 March 2023) <<https://news.artnet.com/art-world/kevin-mccoy-sothebys-quantum-lawsuit-win-2273861>> accessed 19 June 2023

³⁰ Guadamuz, A., "Non-fungible tokens (NFTs) and copyright", (WIPO, 2021) <https://www.wipo.int/wipo_magazine/en/2021/04/article_0007.html> accessed 14 June 2023.

³¹ Parker J, "New Kids on the Blockchain: How NFTs Might Bring about a Digital First Sale Doctrine: Published in Houston Law Review" (Houston Law Review, 30 November 2022) <<https://houstonlawreview.org/article/66219-new-kids-on-the-blockchain-how-nfts-might-bring-about-a-digital-first-sale-doctrine>> accessed 20 June 2023

³² Tay Pek San, *Intellectual Property Law in Malaysia*, (2nd edn, Sweet & Maxwell, 2020)

governing the NFT, along with technical safeguards embedded in the smart contract itself.³³

Different perspectives on the transfer of copyright on NFT are presented in various literatures. According to Maya Ruthiani (2023), post-sale, the creator loses the right to commercialise the work although retaining moral rights.³⁴ Importantly, the author argues that the buyer, having purchased the copyrighted work using digital money, acquires the work itself, not the right to use of copyright or the permission to utilise it. It is erroneous to assume that the purchase automatically includes the transfer of the rights in its entirety.³⁵

In contrast, Runhua Wang et al. (2023) assert that owning on NFT does not equate to owning the digital assets represented by those NFTs. The acquisition of an NFT typically does not grant ownership or possession of the underlying asset, nor does it transfer any intellectual property associated with that asset. Instead, an NFT transaction is seen as a limited non-exclusive license to display and use the underlying art. It is crucial to recognise that an NFT is not the digital assets itself; for instance, if an NFT is acquired for a digital art, the NFT does not only represent the image file but serves as a record of ownership and authenticity stored on the blockchain.³⁶

Tobias Lantwin (2021) emphasises that the acquisition of an NFT does not grant ownership of the digital artwork itself. The buyer lacks exclusive rights or licensing rights and cannot assert ownership over the artwork. Rather, the NFT serves as a representation of the artwork, allowing the buyer the capability to alter the NFT's ownership status and not the actual artwork. The NFT mainly comprises references to a metadata file, posing a risk for the buyer if the files containing the artwork or metadata are deleted from servers. Using Beeple's artwork as an example, \$ 69 million NFT entitled the buyer only to a token created by Beeple, confirming the artwork's provenance in the blockchain, and demonstrating that the buyer can view only one unique copy.³⁷

In an IIPRD article (2022), it is asserted that the copyright owner remains the author, and purchasing an NFT does not grant the buyer the right to sue for any copyright infringement.³⁸ The metadata within the NFT itself indicate the author / creator and tracks subsequent transactions. Acquiring an NFT does not confer copyright or other special rights to the holder unless stipulated in the smart contract, which govern the owners' ability to replicate or profit from the artwork. Rob Haniver from EY Law Ireland affirms that the intellectual rights associated with the NFT do not automatically transfer; such transfers must be explicitly outlined in the smart contract.³⁹

Yupeng Dong and Chunhui Wang (2023) highlighted that in outright selling-buying

³³ Rory O'Keeffe, Carlo Salizzo, "NFTs and Intellectual Property Law", (Matheson, 2022) <<https://www.matheson.com/insights/detail/nfts-and-intellectual-property-law>> accessed 23 October 2023

³⁴ Maya Ruthiani, "Transferring Copyright Ownership of NFT on the Perspective of Positive Law in Indonesia", (Perspektif Kajian Masalah Hukum dan Pembangunan, 2021) Volume 28, Number 1

³⁵ Tay Pek San, *Intellectual Property Law in Malaysia*, (2nd edn, Sweet & Maxwell, 2020)

³⁶ Runhua Wang, Jyh-An Lee, Jingwen Liu, 'Governing the NFT Market by Static and Dynamic IP Laws' (The Chinese University of Hong Kong, Faculty of Law, 2023) Research Paper No. 2023-16

³⁷ Lantwin T, "Beyond the Hype: Nfts, Digital Art and Copyright" (dusIP, 16 June 2021) <<https://www.dusip.de/en/2021/06/16/beyond-the-hype-nfts-digital-art-and-copyright/>> accessed 28 June 2023

³⁸ Admin, "NFTs : The Latest Technology Challenging Copyright Law" (IIPRD, 8 October 2022) <https://www.iiprd.com/nfts-the-latest-technology-challenging-copyright-law/> accessed 14 June 2023

³⁹ "Five Legal Considerations for Businesses Taking a Lead on Nfts" (EY Global, 1 February 2023) <https://www.ey.com/en_my/tax/five-legal-considerations-for-businesses-taking-a-lead-on-nfts> accessed 19 June 2023

agreement, there is indeed for the transfer of ownership rights limited to enjoying commercial value, without transferring moral rights. The creator retains moral rights even after selling of work, as evidenced by the copyright certificate remaining in the creator's name, untransferable even after a sale. Additionally.⁴⁰ Additionally, due to the absence of a tangible carrier, transactions in a metaverse scenario are classified as information network communication behaviour. The buyer's secondary sales behaviour in the metaverse remains under the control of the exclusive rights of copyright owners.⁴¹

The existing literatures consistently emphasises that the conversion of a copyrighted artwork into a NFT and its sale to a buyer does not automatically transfer the underlying copyright to the buyer. Unless explicitly stipulated in the terms of the smart contract, the copyright remains with the original owner. Thus, if brands wish to mint and sell their own NFTs, they should ensure that the contractual terms are drafted properly to define the scope of rights to buyers.⁴² For illustrative example is the NBA Top Shot platform, which explicitly stated that NFTs buyers do not possess the right to reproduce, distribute or commercialize their purchases without prior consent.⁴³ NFT Creators or marketplaces typically provide terms of use governing the sales and purchase, copyright, and NFT use. For instance, Linkin Park's lead vocalist, Mike Shinoda, sold NFTs of a 75-second clip of his song 'Happy Endings' granting buyers limited personal non-commercial use and resale rights within the NFT while retaining all copyrights to his song.⁴⁴ Creators and NFT owners wield significant influence over their creations. Importantly, Furthermore, owning an NFT does not inherently confer any legal right over the digital or physical object references.⁴⁵

As highlighted in Issue 1, the purchase of NFT is only limited to the associated metadata. The ownership of an NFT does not necessarily imply ownership of the digital or physical object which it refers.⁴⁶ If someone mints and sells a copyrighted work on a platform without the owner's consent, it encroaches on the exclusive rights granted to the copyright owner under Section 13 of the Copyright Act. This act may be deemed a form of reproduction and, by uploading it on a public platform, may be considered as communication to the public.⁴⁷ Without approval from the copyright owner, such actions could constitute infringement⁴⁸ under Section 36 of the Copyrights Act.

However, establishing copyright infringement for artworks uploaded in the virtual spaces

⁴⁰ Maya Ruthiani, "Transferring Copyright Ownership of NFT on the Perspective of Positive Law in Indonesia", (Perspektif Kajian Masalah Hukum dan Pembangunan, 2021) Volume 28, Number 1

⁴¹ Yupeng Dong and Chunhui Wang, "Copyright protection on NFT Digital Works in the metaverse" (Security and Safety, 2023) Vol. 2, 2023013

⁴² "China: Metaverse, NFT and Intellectual Property Issues" (Baker McKenzie InsightPlus) <<https://insightplus.bakermckenzie.com/bm/intellectual-property/china-metaverse-nft-and-intellectual-property-issues-in-china/>> accessed 14 June 2023

⁴³ Admin, "Non-Fungible Tokens – 3 Legal Considerations" (Pcalaw, 25 March 2021) <<https://www.pcalaw.com.my/2021/03/25/non-fungible-tokens-3-legal-considerations/>> ; accessed 14 June 2023

⁴⁴ Lim K and Loo HH, "NFTs, Arts and Copyright Laws in Malaysia" (Ming & Partners, 10 August 2021) <https://mingpartners.com/nfts-arts-and-copyright-laws-in-malaysia/> ; accessed 14 June 2023

⁴⁵ Idelberger, F. & Mezei, P., "Non-fungible tokens", (Internet Policy Review, 2022) 11(2)

⁴⁶ Guadamuz, A., "Non-fungible tokens (NFTs) and copyright" (WIPO, 2021). <https://www.wipo.int/wipo_magazine/en/2021/04/article_0007.html > Accessed 14 June 2023.

⁴⁷ Offering access to digital copies is treated as the making available of that copy to the public.

⁴⁸ Loh YS, "Legally Speaking – NFT and Copyright Protection" (thesunday, October 2022) <<https://www.thesunday.my/business/legally-speaking-nft-and-copyright-protection-HN9906900/>> accessed 14 June 2023

poses challenges. Guadamuz (2021) asserts that proving the minting of art without the creator's approval as copyright infringement is difficult. This difficulty arises due to the unique features of NFTs, where art is linked to a number, making it less likely to be considered an adaptation of the original work. Additionally, it fails to satisfy the elements of infringement which are (1) the unauthorised advantage taken by the infringer from the author, (2) a causal connection between the NFT, and (3) the potentially infringing work being directly created from the original artwork.⁴⁹

If cases where the copyright owners' original works have been distributed in the NFT form without authorisation, the way process for claiming rights involves requesting the deletion of relevant infringing links for information network transmission of the works. Simultaneously, there is a requirement to destroy flawed certificate of title and transaction contract. However, the destruction of NFT digital works may give rise to another consequence - the NFT purchased by the buyer is destroyed, leading to legitimacy issues concerning virtual property ownership. NFTs can serve as manifestations of digital asset certificates in the metaverse.

Suggestion

Drawing from the aforementioned discussion, it is imperative for authorities, NFT platforms, and artists to formulate a well-defined IP strategy. This strategy should explicitly delineate what is being sold, specify the rights granted to NFT holders, and identify the rights that the issuer, artist, and secondary market platforms may retain.⁵⁰ IP law stands as the ideal instrument for aligning the interest of stakeholders in the NFT market, with IP rights serving a crucial factor for NFT owners to maximise the value of their assets. Authorisation from the IP holder of the underlying artwork is essential for the minting of an NFT. The institutional design of NFT transaction should encompass both the NFT itself and the license of the underlying IP, enabling legal display or use the digital asset by the NFT owner.⁵¹

Andy Ramos, in his WIPO Magazine Article, emphasises that the builders of the metaverse must respect the rights of the inventors, designers, and owners of the IP. Right holders have the entitlement to prosecute the exploitation of their rights in the metaverse.⁵² This issue is intertwined with the challenges of copyright authentication and verification mechanisms, both by the platform and the buyer.⁵³ In the case of China's fat tiger case, the NFT platform does not bear the obligation to review whether the user-uploaded content possesses copyright or authorization of copyright owners. However, if a third party raises an objection to the copyright, the NFT platform retains the right to delete the relevant content. To address this, the platform should conduct a consistency survey to verify identity consistency whether the uploader of the work and the copyright owner of the original copy, ensuring proper authorisation. The platform should establish an effective intellectual property review mechanism for preliminary assessments of NFT digital works traded on the platform. Users applying for NFT minting should provide evidence, such as

⁴⁹ Guadamuz, A., "Non-fungible tokens (NFTs) and copyright" (WIPO, 2021). < https://www.wipo.int/wipo_magazine/en/2021/04/article_0007.html > Accessed 14 June 2023

⁵⁰ "Five Legal Considerations for Businesses Taking a Lead on Nfts" (EY Global, 1 February 2023) < https://www.ey.com/en_my/tax/five-legal-considerations-for-businesses-taking-a-lead-on-nfts > accessed 19 June 2023

⁵¹ Runhua Wang, Jyh-An Lee, Jingwen Liu, "Governing the NFT Market by Static and Dynamic IP Laws" (The Chinese University of Hong Kong, Faculty of Law, 2023) Research Paper No. 2023-16

⁵² Ramos A, "The Metaverse, NFT and IP Rights: To Regulate or Not to Regulate?" (WIPO, June 2022) < https://www.wipo.int/wipo_magazine/en/2022/02/article_0002.html > ; accessed 19 June 2023

⁵³ Idelberger, F. & Mezei, P., "Non-fungible tokens", (Internet Policy Review, 2022) 11(2)

copyright manuscripts, originals, legal publications, copyright registration certificates, and certificates issued by certification authority, to demonstrate ownership of copyright and copyright-related rights and interests.⁵⁴

The International Trademark Association (INTA) NFT White Paper, as updated by WIPO, suggests that amendments are essential across jurisdictions in the legal framework governing IP. These changes are crucial to facilitating the effective and sustainable commercialisation of IP Rights through NFTs. It is proposed to initiate model legislation that countries can adopt, modifying or adapting their existing frameworks to accommodate commercialisation of rights through NFT. Consequently, both national and international laws should be applicable in emerging digital ecosystems, necessitating a harmonised cross-jurisdictional approach for recognising and enforcing various types of IP rights within these ecosystems. NFTs plays a pivotal role in build consensus on IP Rights for Blockchain and Metaverse.⁵⁵ The imperative need for legal amendments is underscored by considering NFTs in digital works as the starting point for industrial development of the metaverse.⁵⁶

Ms Lisa Jorgeson, the WIPO Deputy Director General, highlights the increasing complexity of the IP landscape, emphasising the need for greater accessibility, relatability, and understanding, especially given the flow of intangible assets across borders and industries.⁵⁷

Conclusion

The sale and purchase of NFTs transcend geographical boundaries, but the legal system and law enforcement remain jurisdictionally limited. Overcoming these barriers is vital for the materialisation of NFT.⁵⁸ NFT sales, being largely uncontrolled at both locally and international levels, expose potential issue in the realm of IP. The absence of specific rules governing NFTs compels owners to seek remedies under the copyright law, utilising avenues such as damages or interlocutory injunctions.⁵⁹ When novel technologies such as NFTs emerge, a transformative shift is imperative, promoting innovation and creativity while balances private and public interests such fair competition and consumer protection. A moderate IP strategy that tolerates unauthorised uses of NFTs benefits not only IP holders but also overall NFT ecology, embracing both technological and economic features.

⁵⁴ Yupeng Dong and Chunhui Wang, "Copyright protection on NFT Digital Works in the metaverse" (Security and Safety, 2023) Vol. 2, 2023013

⁵⁵ Tom Barrett, Moish Peltz, "INTA NFT White Paper. WIPO CWS/10 Update", (International Trademark Association, 15 November 2022) < https://www.wipo.int/edocs/mdocs/cws/en/cws_10/cws_10_item_9b_inta.pdf > accessed 19 June 2023

⁵⁶ Yupeng Dong and Chunhui Wang, "Copyright protection on NFT Digital Works in the metaverse" (Security and Safety, 2023) Vol. 2, 2023013

⁵⁷ WIPO, "*WIPO Conversation on Intellectual Property (IP) and Frontier Technologies*," (5th Session, Geneva 5 and 6 April 2022 < https://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ip_conv_ge_22/wipo_ip_conv_ge_22_www_582746.pdf >

⁵⁸ Ali, O. et al., "A review of the key challenges of non-fungible tokens" (Technological Forecasting and Social Change, 2023), 187, p. 122248. doi: 10.1016/j.techfore.2022.122248.

⁵⁹ Admin, "NFTs : The Latest Technology Challenging Copyright Law", (IIPR, 8 October 2022) < <https://www.iiprd.com/nfts-the-latest-technology-challenging-copyright-law/> > accessed 10 July 2023