

A CRITICAL APPRAISAL OF THE LEGAL FRAMEWORK FOR THE PROTECTION OF INTELLECTUAL PROPERTY RIGHTS OF NON-FUNGIBLE TOKENS (NFTS) AND METAVERSE*.**

Abstract

The world in recent times has become increasingly focused on digitalization. The evidence became obvious with the advent of the distortive Covid-19 pandemic which not only maximize the use of the digital space but even became the breeding ground for more technological inventions and development such as the Metaverse, NFTs, Cloud computing, robotics, artificial intelligence etc. However, the surges of these inventions present so many legal and ethical issues that seek attention. For instance, the "tokenmania" that has had strong footings within the gaming and art industries as well as the minting and trading of NFTs currently provokes issues of intellectual property rights protection and regulation at national, regional, and global levels. It is, therefore, in the light of the foregoing that this research adopted the doctrinal research methodology in critically appraising the legal framework for Intellectual Property Rights¹ and Protection in the era of Non Fungible Tokens² and the Metaverse. The study found out that although there are no specific laws for these inventions, available ones could be gleaned to form a regulatory regime whilst recommending areas of improvement such as the adoption of smart contract, issuing of licenses, etc. for transactions involving these inventions. It is recommended also that Laws on inventions must be proactive and timeously made to adverse the occasions of mismanagement and abuse. Inventors of the NFTs and the metaverse should ensure their creations are registered accordingly, and infringement of IP rights should be addressed within the ambit of the law.

1.0. Introduction

The Collins Dictionary in 2021 named NFT, an abbreviation for non-fungible token, as word of the year³. Consequently, it has become the subject of considerable discussion and for many in recent times. The concept first appeared around 2014 when a video clip was registered on the Namecoin blockchain and was later sold for \$4.⁴ In March of 2021, Crypto entrepreneur Sina Estavi purchased the first-ever Tweet by founder Jack Dorsey⁵ for US\$2.9m, but his plans to resell the Tweet for huge profit fell through when he received a top bid of just US\$6,800 on the NFT marketplace Open Sea. Estavi was originally asking \$48m⁶. In Nigeria, there are also records of this invention. For

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¹ Hereinafter referred to as IPR or IP Rights

² Hereinafter referred to as NFT(s)

³ Stefann Dittman *IP rights at the interface of Artificial Intelligence and NFTs: The good, the bad, the smart'* April 13, 2022. Denton-ACAS, available from <<https://www.dentons.com/en/insights/articles/2022/april/13/ip-rights-at-the-interface-of-artificial-intelligence-and-nfts>> Accessed 16th January 2023

⁴ Read Solicitors, *Are Non-fungible Tokens legally regulated?* Lexiology. (2022) Available from <<https://www.lexology.com/library/detail.aspx?g=abdac300-8b09-40d2-853d-98a0db241fb2>>. Accessed 16th January 2023

⁵ ibid

⁶ ibid

instance, the famous Nollywood star, Osita IHEME (Paw Paw) minted his meme as an NFT⁷. Interestingly, the 2021 NFT Market Report released by block chain Data Company Chainalysis shows that the NFT market has climbed to more than \$40 billion in value⁸. In fact, there is a promising value of the market going forward.

On the other hand, the metaverse has become what is best described as the “inevitable evolution of the internet⁹”. It became notorious in the October of 2021 when Facebook rebranded its corporate identity to it and announced plans to pump into the concept about \$10 billion for only that year alongside other tech industries like Google, Microsoft, etc¹⁰. McKinsey and Company, a consulting firm of globally acclaimed repute at that same time projected that by 2030 the metaverse economy will be around \$5 trillion¹¹.

So we have come to contend with the reality of these inventions in the tech space such that in the case of the metaverse, we will have a network of 3D virtual worlds, with humans interacting with each other socially and economically, mainly through avatars¹². While cryptographic units of data with unique metadata bring the space of the NFTs into existence¹³. Interestingly, they can be distinguished from one another and can hold other kinds of information, like the identities or artwork of different individuals, and may become marketable¹⁴.

Expectedly, these inventions present some turbulent issues that need urgent concern in the legal space. The question of IP rights and regulation in the invention and operation of the metaverse and NFTs has become quite notorious in recent times and begs for attention and consideration, the need for a specific and formidable legal regime that determines questions of liability in the adoption and use of the inventions, etc. This research will critically appraise the legal framework for the IP Rights of NFTs and the Metaverse. Accordingly, the research paper is organized into the following parts; part one introduced the work while the second part discusses the concepts of NFTs and the metaverse. Here, a thorough review of the understanding of Metaverse and NFTs will be made so as to inform and guide the research. In the third part of the work, an appraisal of the legal regime for the IP Rights and Protection in the era of NFTs and the metaverse is examined while the fourth part proposes/presents an ideal model legal regime for the IP Rights of NFTs and metaverse. The last part concludes the research and proffers useful recommendations and at the same time brings the research to an end.

⁷ Theo, *Nigerian Meme King Ostia IHEME Turns his Viral Content into NFTs*, (Sep 2022) available at <<https://nftevening.com/nigerian-meme-king-ostia-iheme-turns-viral-content-into-nfts/>>. Accessed 16th January 2023

⁸ Chainalysis, *Report Preview: The 2021 NFT Market Explained*, (2021) available from <<https://blog.chainalysis.com/reports/nft-market-report-preview-2021/>> accessed 16th January 2023

⁹ Linda Tuchi & David Needle, *What is the Metaverse? An explanation and in-depth guide*, (Nov 18, 2022) available from <<https://www.google.com/amp/s/www.techtargget.com/whatis/feature/The-metaverse-explained-Everything-you-need-to-know%3famp=1.>> Accessed 16th January 2023

¹⁰ibid

¹¹ibid

¹² Andy Ramos, *The metaverse, NFTs and IP rights: to regulate or not to regulate?* (June 2022) WIPO-Magazine Available from <https://www.wipo.int/wipo_magazine/en/2022/02/article_0002.html> accessed 16th January 2023

¹³ibid

¹⁴ibid

2.0. Understanding Metaverse and NFTs

Metaverse made its first debut in 1992 when it was coined by author Neal Stephenson in his sci-fi novel *Snow Crash*, and work on the technologies that underpin a virtual reality-based internet dates back decades¹⁵. Metaverse is a portmanteau of meta and universe, which means 'beyond reality'¹⁶. It is built on the existing infrastructure of the internet using the emerging technologies of blockchains, cryptocurrency, and NFTs.¹⁷

The term is used today to refer to many different types of enhanced online environments. These range from online video games like Fortnite to fledgling virtual workplaces like Microsoft's Mesh or Meta's Horizon Workrooms to virtual dressing rooms and virtual operating rooms¹⁸. It is a vision of what many in the computer industry believe is the next iteration of the internet: a single, shared, immersive, persistent, 3D virtual space where humans experience life in ways they could not in the physical world¹⁹.

However, some of the technologies that provide access to this virtual world, such as virtual reality (VR) headsets and augmented reality (AR) glasses, are evolving quickly; other critical components of the metaverse, such as adequate bandwidth or interoperability standards, are probably years off or might never materialize²⁰. Access to the Metaverse will depend on expensive, proprietary gadgets, so tech giants like Facebook, Apple, and Google are investing heavily in building it²¹.

There are about four components of the metaverse²²;

- i. Metaverse enables social connectivity.
- ii. Metaverses provide virtual space
- iii. Metaverses can contain digital marketplaces
- iv. Interoperability which will be greatly driven by NFTs

NFTs on the other hand are a secure type of digital asset based on the same blockchain technology used by cryptocurrency²³. However, the NFTs are not currencies but digital assets such as a piece of art, a song, or digital real estate²⁴. An NFT is capable of being owned as such it gives the owner some kind of digital deed or proof of ownership that can be bought or sold in the metaverse.

Interestingly, NFTs are currently used in the metaverse as collectibles, access keys, investments, deeds of ownership, voting and governance tokens for decentralized autonomous organizations

¹⁵ *Op cit n7*

¹⁶ Godstime Nwaeze, *NFTS, and Metaverse: Exploring the Challenges and Prospects for IP Lawyers in the Digitalized World*

¹⁷ Janna Anderson & Lee Rainie, *The metaverse will fully emerge as its advocates predict*, Pew Research Center - The Metaverse in 2040 (Jun. 30, 2022)<, <https://www.pewresearch.org/internet/2022/06/30/the-metaverse-will-fullyemerge-as-its-advocates-predict/>> accessed 18th January 2023 (the metaverse will be an evolutionary development from the current cyberspace and crypto community).

¹⁸ *Op cit n7*

¹⁹ *ibid*

²⁰ *ibid*

²¹ *Op cit no7*

²² Charles R. Macedo, Douglas A. Miro, and Thomas Hart, *The Metaverse: From Science Fiction to Commercial Reality—Protecting Intellectual Property in the Virtual Landscape*, 2022

²³ *ibid*

²⁴ *ibid*

(DAOs), and facilitators of services or experiences.²⁵ In these robust applications, NFTs have exposed gaps in the crypto community's knowledge of trademarks and other unfair competition laws regulating the commerce of the metaverse²⁶. Forbes advisor recorded that the market for NFTs was worth \$41 billion in 2021 alone, an amount that is approaching the total value of the entire global fine art market²⁷.

It is interesting to note that NFTs are ideal vehicles to drive the emerging digital economies in the Metaverse, where a crypto-wallet might carry digital assets like avatars, their clothing, animations, decorations, and weapons²⁸.

3.0 Understanding Intellectual Property Rights

A discussion on IP Rights will not be complete if Intellectual Property itself is not understood. To this end, some definitions of IP will be considered; Intellectual property refers to anything created by the human mind, including inventions, musical compositions, literary works, symbols, names, designs, images, and even concepts²⁹. The World Intellectual Property Organization defined Intellectual property (IP) as the creations of the mind, such as inventions, literary and artistic works, designs, symbols, names and images used in commerce³⁰.

3.1 IP Rights

The WTO defines IP Rights as the rights given to persons over the creations of their minds. The organisation went on to say that the rights usually give the creator an exclusive right over the use of his/her creation for a certain period³¹. Intellectual property rights (also known as "IP rights") are exclusive proprietary rights provided by law to the owners of industrial, scientific, literary and creative works that are innovative brain or mental products³².

IPR refers to the legal rights granted to the inventor or manufacturer to protect their invention or manufacture product. These legal rights confer an exclusive right on the inventor/manufacturer or its operator who makes full use of it's his invention/product for a limited time³³. These rights include trade secrets, utility models, patents, trademarks, geographical indications, industrial

²⁵ Georgia Weston, *NFTs and their Role in the "Metaverse"*, 101 Blockchains (Dec. 24, 2021), <<https://101blockchains.com/nfts-and-metaverse/>> accessed 18th January 2023

²⁶ Michael D, *Trademarks, NFTs, and the Law of the Metaverse*, 2022

²⁷ *Op cit, n14*

²⁸ Non-fungible tokens (NFTs) and the Metaverse, Explained', Getsmarter (Blog Post, 14 June 2022) <<https://getsmarter.com/blog/market-trends/non-fungible-tokens-nfts-and-the-metaverse-explained/>> accessed 19th January 2023.

²⁹ Dayo Adu and Esther Randle, *Nigeria: Protection Of Intellectual Property Rights In Nigeria* (15 August 2022 available from <[th January 2023](https://www.mondaq.com/nigeria/trademark/1221590/protection-of-intellectual-property-rights-in-nigeria#:~:text=Intellectual%20property%20rights%20(also%20known,innovative%20brain%20or%20mental%20products>.)

³⁰ <https://www.wto.org/english/tratop_e/trips_e/intel1_e.htm

³¹ *ibid*

³² *Op cit n26*

³³ Legal Pedia, *Intellectual property right*, available from <<https://timesofindia.indiatimes.com/readersblog/lawpedia/intellectual-property-right-47005/>> accessed 18th January 2023

design, layout design of integrated circuits, copyright and related rights and new varieties of plants³⁴

3.2 Notable cases with IP Rights Concerns

For instance, a person who puts up an NFT for sale or a buyer of the same, even up to the proprietor of the platform where the NFT is sold is to ensure that he or she is not in breach of the laws governing intellectual property (IP) protection in Nigeria³⁵.

Two trademark applications were filed in the US in November 2021 by third parties seeking to use the Gucci and Prada logos in a range of Metaverse-related arenas, including “downloadable virtual goods”, virtual worlds and virtual clothing used in virtual spaces. Gucci and Prada are now challenging these applications³⁶.

Currently on Metaverse platforms with user-generated content, such as Roblox, creators are trading in clothes that feature logos from brands like Louis Vuitton, Prada, and Chanel, without the consent of the brand owners³⁷.

Hermès took legal action against Mason Rothschild, whose Birkin bag-inspired NFT artwork that previously sold for \$23,500 in June 2021, launched a December follow-up collection³⁸.

Other notable brands that have filed for protection include American Express who applied for their mark to cover virtual payment cards, financial services NFTs, and virtual concierge services, and Jay-Z the popular American Music artist who applied for JAY-Z, covering music, clothing and jewelry goods for use in online virtual worlds³⁹.

4.0 Legal Framework for Protection of IP Rights of NFTS and The Metaverse

IP Rights protection in the metaverse and NFTs is an integral part of the development of these innovations. This is because issues of ownership will have to be determined in the world physical objects and things are represented virtually. Although there are no specific laws for these new technologies, the ones available can be gleaned to provide a legal structure for determining IP Rights in the making and using of the technologies.

The protection of IP receives support first from the Berne Convention which is been supplemented by other international agreements, including the WIPO Copyright Treaty, adopted in 1996, which adapts the Berne Convention to the digital environment. This agreement (Agreed Statement concerning Article 1(4) of the WIPO Copyright Treaty) makes it clear that the storage of a protected work in digital form in an electronic medium (such as an NFT or a file, the content of which is

³⁴ibid

³⁵ Raphael Irenen, *Non-fungible Tokens in Nigeria and Regulatory concerns.*(2022) available from <<https://www.google.com/amp/s/legal.businessday.ng/amp/2022/01/06/non-fungible-tokens-regulatory-concerns-in-nigeria/>> accessed 18th January 2023

³⁶ Davidson Oturu and Agboola Dosunmu, *The Metaverse – considering trademarks and brand protection for virtual goods & services*, (21 March 2022) available from <<https://legal.businessday.ng/amp/2022/03/31/the-metaverse-considering-trademarks-and-brand-protection-for-virtual-goods-services/>>accessed 20th January 2023

³⁷ibid

³⁸ibid

³⁹ibid

displayed in the metaverse) constitutes a reproduction which needs the prior approval of the copyright holder.

4.1 Specific IP Rights in the Metaverse and NFTs

4.1.0 Copyrights

Original expressions of virtual objects can potentially be protected by copyright law, like any other digital object. For example, NFTs used in the metaverse— such as accessories for digital avatars— may be eligible for copyright protection as pictorial or graphical works⁴⁰. Copyright owners can make use of existing laws, such as the Copyright Act⁴¹, which can be used to remove the infringing material from metaverse platforms. Specifically, section 15(1)(d) of the Copyright Act, provides that:

... a person is liable for copyright infringement where he or she without the license or authorization of the owner of the copyright distributes by way of trade, offers for sale, hire or otherwise or for any purpose prejudicial to the owner of the copyright, any article in respect of which copyright is infringed.⁴²

On this ground, the sale of an NFT must be such that the NFT being sold is not one which the seller does not have an intellectual property right (IPR) over or has infringed on the IPR of another person or entity⁴³. There is already recognition in the metaverse space of this right. The copyright of an NFT resides in the creator of the token and will enforce the copyright⁴⁴. The Sandbox, for example, notes that “it would be a violation of international copyright and trademark laws” to “make an ASSET of a copyrighted character⁴⁵.”

It should be noted that the registration of copyrights in Nigeria affords the owner protection across the globe following the Berne Convention for the Protection of Literary and Artistic Works.

In addition to the above, section 25 of the Cybercrime Act⁴⁶ prohibits IP infringement on the internet. This provision makes the seller of an NFT liable for IP breach on the internet, where such seller uploads for sale, an NFT in respect of which he or she does not have an IPR over or is in breach of the IPR of another.

4.1.1 Trademarks

In the case of *Ferodo Limited & Anor v. Ibeto Industries Limited*⁴⁷, Musdapher, J.S.C. held thus, "The essence of a Trade Mark is that it indicates a connection in the course of trade between the goods and some person having the right to use the same. A mark in this connection includes a device, brand, heading; label, ticket, name, signature, word, letter, numeral or any combination thereof. Goods and services which are made available in a metaverse which include NFTs can be protected with source identifiers like names, images, and sounds, using trademark law. Here brands

⁴⁰ Charles R. Macedo, Douglas A. Miro, and Thomas Hart, *The Metaverse: From Science Fiction to Commercial Reality—Protecting Intellectual Property in the Virtual Landscape*(2022)

⁴¹ Cap C28, LFN 2004

⁴² S 15(1)(d)

⁴³ *ibid*

⁴⁴ LindenLab, *Second Life Terms, and Conditions*, <<https://www.lindenlab.com/legal/second-life-termsand-conditions>>accessed 20th January 2023

⁴⁵ The Sandbox, *Rights Ownership, and Copyrights of Assets*, <<https://sandboxgame.gitbook.io/the-sandbox/assets/what-areassets/rights-ownership-and-copyright-of-assets>> accessed 20th January 2023

⁴⁶ Cybercrime (Prohibition, Prevention, etc) Act 2015

⁴⁷ (2003-2007) 5 I.P.L.R Pg 158, 159

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that have been registered in real life should also register in the metaverse. The Court in *Patkum Industries Ltd. v. Niger Shoes Manufacturing Ltd*⁴⁸ and *Dyk Trade Ltd. v. Omnia (Nig.)*⁴⁹ held that Trade Mark when registered entitled the proprietor to sue or institute an action for an infringement. In the earlier cited *Ferodo* case, the Court also held that "an action for infringement will therefore lie where a competitor uses registered Trade Mark in connection with proprietor's goods to compete them with his goods in the same class"⁵⁰.

Just like the U.S. Patent and Trademark Office has provided sample descriptions that cover goods and services related to the metaverse, Nigeria's equivalent body can adopt the same. For example, avatar accessories can be covered under the description of class 9 goods of the nice classification: these include "Downloadable virtual goods, namely computer programs featuring (specify nature, type, e.g., articles of clothing) for use in online virtual worlds"⁵¹. Trademarks in Nigeria are registered at the Nigerian Trade Marks Registry. Those involved in the metaverse and NFTs value chain can register their trademarks for protection.

4.1.2 Patents

The innovative technology used to access and implement metaverses can potentially be protected by patent law⁵². Companies producing Virtual Reality technologies like VR headsets, haptic gloves, etc. should consider getting their patented right protected.

In addition to traditional IP tools, other legal mechanisms like business torts, trade secret law, right of publicity, user rules, private dispute mechanisms, technological solutions and contract law are also available to protect and enforce IP rights in the real world against violations of virtual spaces.

5.0 Conclusion

NFTs and metaverse have increasingly grown to become household words in recent times. The evidence is seen in the number of attentions they have drawn manifesting in high records of investments. However, the rise in these innovations has also continued to generate a series of legal concerns, notably amongst the concerns is the issue of intellectual property rights and protection of the inventions and innovations in the metaverse as well as the operation of the NFTs. This research has critically analyzed these inventions and identified the IP rights available for them as well as how they can be protected. In essence, the research provides a clue on how to stay abreast of these innovations and how the legal system can gear up to meet the demands of the times. Although these inventions are still very much in their growth stage, it is not out of place to start considering questions of law and how to manage breaches involved in their dealings.

6.0 Recommendations

This research recommends that the various agencies of the government involved in the managing and protection of IP Rights of inventions be upright in discharging their roles. They must be

⁴⁸ (1988) 5 NWLR (Pt 93) 139 at 141

⁴⁹ (2000) 12 NWLR (Pt 680) 1 at 9

⁵⁰ See also *Bismag Ltd v. Amblins (Chemists) Ltd.* (1940) Ch 667.

⁵¹ USPTO, *Trademark ID Manual*, available from <<https://idm-tmng.uspto.gov/id-master-list-public.html>>accessed 18th January 2023

⁵² *Op cit no 38*

equipped with the changing circumstances to be able to strike a balance and meet up with the demands of the times.

Also, laws on inventions must be proactive and timeously made to adverse the occasions of mismanagement and abuse.

The users of the NFTs and metaverse should endeavor to carry out due diligence before purchasing things in the space. For instance, due diligence should be carried out on who owns the underlying asset, as typically, the sale of the NFTs does not include the sale of the underlying asset or any intellectual property rights that are vested in it.

It is also recommended that to ensure a clear chain of IP ownership, the sale of the trading on these spaces should of necessity involve the use of a smart contract and a deed of assignment transferring copyright ownership or a license agreement with the description of copyright use.

Legal professionals must arm themselves with the knowledge of these inventions so as to provide direction and expertise to clients. You cannot give what you do not have (*nemo dat quod non habet*). Inventors of the NFTs and the metaverse should ensure their creations are registered accordingly. While infringement of IP rights should be addressed within the ambit of the law.