

The Legal Landscape of NFTs: A Comprehensive Guide to NFTs' Regulation and Intellectual Property Law in Ecuador

El panorama legal de los NFT: una guía comprehensiva sobre la regulación de los NFT y el Derecho de Propiedad Intelectual en Ecuador.

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ABSTRACT

The technological and judicial systems of today are undergoing a revolution due to Non-Fungible Tokens (NFTs). Characteristics like non-fungibility and the use of blockchain technology create legal tension between NFTs and copyright. Among the legal dilemmas faced by these assets are the growing uncertainties over digital assets that may be protected, content ownership, and copyright assignment. This study focuses on the Ecuadorian copyright law and the challenges it confronts when NFTs enter the market. This paper addresses the question of how well-suited Ecuador's copyright laws and related norms are to handle disputes involving NFTs. It analyses the impact it has on the digital token and its copyright among buyers and sellers, in addition to the platform regulations that issue and trade digital tokens. Later, it examines the creator's rights, as well as the buyer's rights under an NFT purchase, and how copyrights are impacted. Finally, the paper concludes that although Ecuadorian law does not directly regulate NFTs, it is possible to regulate their disputes through related articles and the integration of other norms.

KEYWORDS

Nonfungible Token; blockchain; copyright; intellectual property; digital asset.

RESUMEN

Los sistemas tecnológicos y judiciales han revolucionado por los Non-Fungible Tokens (en adelante NFTs por sus siglas en inglés). Características como la infungibilidad y uso de blockchain, crean tensiones jurídicas entre NFT y los derechos de autor. Entre los dilemas jurídicos están las crecientes incertidumbres sobre los activos digitales que pueden ser protegidos, la propiedad del contenido y la cesión de derechos de autor. Este estudio se centra en la ley de derechos de autor ecuatoriana y desafíos a los que se enfrenta cuando los NFT entran al mercado. Este artículo responde a la pregunta sobre la adecuación de las leyes de derechos de autor de Ecuador y normas conexas para el manejo de las controversias sobre NFT. Analiza el impacto que tiene sobre el token digital y sus derechos de autor entre compradores y vendedores, además de los reglamentos de las plataformas que emiten y comercializan tokens digitales. Examina los derechos del creador, así como los derechos de los compradores, y cómo afectan a los derechos de autor. Por último, se concluye que, si bien la ley ecuatoriana no regula directamente los NFT, es posible regular sus controversias mediante artículos conexos e integración de otras normas.

PALABRAS CLAVE

Token No Fungible; *blockchain*; derechos de autor; propiedad intelectual; bien digital.

1. INTRODUCCIÓN

Non-Fungible Tokens (hereinafter NFTs) have brought about a revolution in the cybernetic world in multiple senses and have created a series of challenges for the modern legal system. The remarkable attention to NFTs garnered by scientific communities and the high trading volume has increased the importance of outlining the field in which NFTs operate¹. For a broad definition, they can be regarded as data units that authenticate the ownership of an asset through blockchain technology, yielding a distinctive digital certificate². In essence, NFTs are unique digital assets stored on a blockchain³. Regarding these features, the creation, ownership, and trading of these tokens raise questions about how laws should regulate NFTs' commercial operations.

According to recent studies, the NFT industry was valued at \$ 11.3 billion in 2021 and is expected to rise to \$ 231 billion by 2030⁴. NFTs represent ownership of a specific piece of digital content, such as art, music, videos, and more⁵. They are distinctive because they cannot be replicated or duplicated, and their ownership can be verified through the blockchain⁶. Despite the prominent of this market, the growing number of lawsuits concerning these tokens indicates infringement on the typical performance of digital token transactions⁷. For instance, when *Nike, Inc. v. Stockx LLC* first came to light in February 2021, Nike claimed that StockX was selling NFTs with graphics associated with its footwear without consent and sued for trademark infringement and related claims⁸. Therefore, there are legal and regulatory difficulties that must be handled to prevent disputes and protect these highly valuable assets.

In particular, the World Intellectual Property Organization (hereinafter WIPO) has inquired about the following: "Should IP laws adapt to NFTs or should NFTs adapt to IP laws?"⁹. The legal clarity has begun to dissipate since the beginning of the creation of an NFT. There are concerns about the exclusiveness of the authentication code, artwork copyright, rights over the original digital file, etc. In Ecuador, the *Código Orgánico de la Economía Social de los Conocimientos, Creatividad e Innovación* [Organic Code of the Social

1 Hamed Taherdoost, "Non-Fungible Tokens (NFT): A Systematic Review", *Information* 14, n.º. 1 (2023): 26, <https://doi.org/10.3390/info14010026v>.

2 Robert Herian et. al, "Nft-legal token classification", *EU Blockchain Observatory & Forum* (July 2022), <https://oro.open.ac.uk/79831/1/NFT%20-%20Legal%20Token%20Classification.pdf>.

3 Ali Muddasar and Sikha Bagui, "Introduction to NFTs: The Future of Digital Collectibles", *International Journal of Advanced Computer Science and Applications* 12, n.º. 10 (2021): 5-7, <https://doi.org/10.14569/ijcsa.2021.0121007>.

4 Shashank Bhardwaj, "NFT Market Worth \$231 Billion by 2030: Report", *Forbes India*, March 24, 2024, <https://www.forbesindia.com/article/crypto-made-easy/nft-market-worth-231-billion-by-2030-report/78191/1>.

5 Taherdoost, *Non-Fungible Tokens* (NFT), 26.

6 Muddasar and Bagui, *Introduction to NFTs*, 6-8.

7 Jackson Lanier, "The Ninth Circuit's Split Personality How NFTs Highlight a Concerning Split in the Court's Application of Trademark Law to Web 3.0", *SSRN Electronic Journal* (2023), <https://doi.org/10.2139/ssrn.4411021>.

8 *Nike, Inc. v. StockX LLC*, Civil Action 1:22-cv-00983-VEC (S.D.N.Y. Jul. 14, 2022).

9 Andy Ramos, "The Metaverse, NFTs and IP Rights: To Regulate or Not to Regulate?," *WIPO Magazine* (June 2022), https://www.wipo.int/wipo_magazine/en/2022/02/article_0002.html.

Economy of Knowledge, Creativity, and Innovation] (hereinafter COESCI) has no exclusive mention of tokenization and its copyright treatment, resulting in the adaptation of existing norms regarding NFTs. Therefore, the following interrogation is forced to surface given the NFTs' singularity: to what extent is Ecuadorian Intellectual Property Law suitable to address copyright problems arising from NFTs' transactions?

This article will provide an overview of some of the main problems related to copyright generated by NFTs when they are involved in transactions. It will focus on the regulation of Ecuadorian Intellectual Property Law and applicable norms, such as the Andean Community Decisions. First, there will be a review of definitions to establish a connection between the technological setting of the study and the current legal debate. Second, it will evaluate the relevant legal framework for the issue. Subsequently, the argumentation will be divided between the approach of NFTs to Intellectual Property Law and the copyright of the parties involved in a transaction whose main object is an NFT. In the end, there will be conclusions regarding the problem to be solved.

2. REVIEW OF DEFINITIONS

2.1. NON-FUNGIBLE TOKENS

To define NFTs, it is necessary to comprehend each word that constructs the acronym. First, the word fungible is not strange for Law, and for legal effects, the Ecuadorian Civil Code established the following: "*Art. 593.- Las cosas muebles se dividen en fungibles y no fungibles. A las primeras pertenecen aquellas de que no puede hacerse el uso conveniente a su naturaleza sin que se destruyan [...]*"¹⁰. (Art. 593.- Movable properties are divided into fungible and nonfungible. To the first belong those properties that cannot be used in a way convenient to their nature without being destroyed...; author's translation).

On the other side, Ethereum has defined the phrase 'non-fungible' as "an economic term that you could use to describe things like your furniture, a song file, or your computer. These things are not interchangeable for other items because they have unique properties"¹¹. In this sense, each definition brings its vision of fungibility; nonetheless, both reach the same point: the likeliness of being replaced.

These two concepts address the possibility that the asset would perish or could be replaced by another of the same kind, both in quality and quantity. This

¹⁰ Article 593, Civil Code, O. R. Supplement 46 June 24, 2005.

¹¹ "Non-Fungible Tokens (NFT) | Ethereum.Org", Ethereum.Org., accessed March 14, 2024, <https://ethereum.org>.

characteristic is essential to being considered an NFT. The token's blockchain, in principle, could not be modified and, at the same time, must be unique. In this respect, the non-fungibility of NFTs plays a primary role, especially when they are included in smart contracts. It facilitates the identification of the token when it is used in such transactions and helps to verify its authenticity in the market.

Having said that, it is precise to study the tokens as a unit of measurement for the NFTs. In the digital universe, tokens are considered assets whose structure is built through a blockchain. N26, a German bank, has defined tokens as digital assets¹². Despite its broad conceptualization, the difference between crypto coins, other types of assets that come from blockchain, and tokens is the genesis of its construction and how this last displays their functions¹³.

Additionally, it is necessary to highlight that the tokens' content is stored inside each block that conforms to the chain¹⁴. Its behaviour is governed by smart contract guidelines¹⁵. One of the effects of being created and stored like that is that tokens are not created with the blockchain but operate with the existing blockchain¹⁶. With this background, the creator will design the token in the platform. Now, a key point to remember is that the token and the cryptographic asset underlying it are two separate elements¹⁷. In this way, the NFT is the blockchain technology representation that holds the records of an incorporeal object, which is usually a piece of artwork¹⁸.

2.2. BLOCKCHAIN

A blockchain is a distributed database or shared ledger among computer network nodes¹⁹. Like a database, a blockchain electronically saves data in a digital format²⁰. Blockchains are most known for their essential function in preserving a secure, decentralized record of transactions²¹. One of the blockchain's innovations is that it ensures the accuracy and security of data records²².

The way data is structured differs significantly between a traditional database and a blockchain. A blockchain organizes information into groups called

12 "Your Ultimate Guide to Crypto Tokens", N26, accessed January 31, 2022, <https://n26.com/en-cu/blog/what-is-token>.

13 Muddasar and Bagui, *Introduction to NFTs*, 50-51.

14 *Ibid.*, 51.

15 *Ibid.*, 51-53.

16 *Ibid.*, 51-53.

17 PWC, Ryan Leopold, and Pascal Vollmann, "Cryptographic Assets and Related Transactions: Accounting Considerations under IFRS", *In Depth* 2019-05 (December 2019): 2-3, <https://www.pwc.com/gx/en/audit-services/ifrs/publications/ifrs-16/cryptographic-assets-related-transactions-accounting-considerations-ifrs-pwc-in-depth.pdf>.

18 *Ibid.*, 3.

19 Fred Steinmetz, Lennart Ante, and Ingo Fiedler, "Blockchain and the Digital Economy: The Socio-Economic Impact of Blockchain Technology", *Agenda Publishing*, (July 2020): 15-20, <https://doi.org/10.2307/j.ctv16qjxg0>.

20 *Ibid.*, 17.

21 *Ibid.*, 17.

22 Adam Hayes, "Blockchain Facts: What Is It, How It Works, and How It Can Be Used", *Investopedia* (december, 2023), <https://www.investopedia.com/terms/b/blockchain.asp>.

blocks, which contain sets of data²³. When a block's storage capacity is depleted, it is closed and linked to the preceding block, producing a data chain known as a blockchain²⁴. Following that newly added block, all new information is assembled into the most recent block, which, when filled, is also added to the chain²⁵. The blockchain's objective is to allow digital information to be recorded and transmitted, but not altered²⁶. As a result, a blockchain serves as the foundation for transactions that cannot be changed, deleted, or destroyed²⁷.

2.3. INTELLECTUAL PROPERTY

According to the WIPO, Intellectual Property refers to creations of the mind, for example: inventions, designs, and symbols used in commerce²⁸. Similarly, Valencia Zea defines it as “property or dominion over immaterial or incorporeal things; author's translation”²⁹. Also, this author expressed that Intellectual Property is classified as a special or different property since it does not protect or regulate corporeal or material assets as ordinary or common property does³⁰. As a result, it is necessary to know the difference between being the owner of what is generated with intellectual capacity and being the owner of a material or corporal asset.

To give an example, being the owner of a book is not the same as having written it. In other words, the idea materialized in the book is the property of the one who created it. The book is tradable in the common market since it is a corporeal asset in which the idea was produced. The idea for the book's creation can only be commercialized or reproduced by the author or the person that he or she authorizes³¹. Because of the nature of the assets, jurisdictions have faced the need to create special laws for Intellectual Property regulation and protection. This aspect highlights the specialty of Intellectual Property concerning property and its ownership.

2.4. COPYRIGHT

Copyright is a division of Intellectual Property. The General Assembly of the United Nations, through the 1948 Universal Declaration of Human Rights,

23 Sharma Ashish K., et al., “Blockchain technology: Myths, realities and future”, *Blockchain Technology*, (CRC Press, 2022):163-167, <https://doi.org/10.1201/9781003138082>.

24 Ibid.

25 Steinmetz, Ante, and Fiedler, “Blockchain and the Digital Economy”, 15-20.

26 Sharma Ashish K., et al., “Blockchain technology: Myths, realities and future”, *Blockchain Technology*, (CRC Press, 2022): 163-167, <https://doi.org/10.1201/9781003138082>.

27 Ibid., 168-169.

28 “What Is Intellectual Property (IP)?”, *World Intellectual Property Organization*, accessed March 14, 2024. <https://www.wipo.int/about-ip/en/index.html>.

29 Arturo Valencia Zea, *La Posesión* (Bogotá: Editorial Temis, 1968), 37-38.

30 Ibid.

31 Valencia Zea, *La Posesión*, 40-42.

elevated copyright to the status of a human right³². Copyright is a modern legal discipline that regulates the relationship of the author with his or her intellectual creation and its interaction with society³³. The U.S. Copyright Office defines it as “a set of exclusive rights awarded to a copyright holder or owner for an original and creative work of authorship fixed in a tangible medium of expression”³⁴. In the same way, WIPO expressed that copyright protection extends to expressions, procedures, methods of operation, or mathematical concepts as such³⁵.

It is worth mentioning that there are two types of rights underlying the copyright branch. On one hand, there are economic rights through which the grantees obtain economic rewards for their work³⁶. On the other hand, moral rights protect the author and his non-economic interests³⁷. In copyright law, some rules regulate that the author's rights may be exercised by authorizing or preventing particular uses concerning their work. Likewise, in some cases, the author chooses to receive remuneration for the use of the work.

According to the WIPO, copyright allows the protection of two types of rights: economic rights and moral rights³⁸. The first one allows the holders of these rights to receive economic retribution for the use of their work by third parties. In other ways, moral rights allow the author to take measures to protect and preserve the links that bind them to their work. In some regulations, moral rights can be retained by the author even if he has assigned his economic rights. The Ecuadorian Intellectual Property Law establishes that moral rights are inalienable, do not expire, and cannot be waived³⁹.

3. APPLICABLE LAW

Ecuador has several bodies of law that regulate copyright, starting with the Constitution, extending to the COESCI, and decisions submitted by the Andean Community.

32 United Nations, General Assembly, *Universal Declaration of Human Rights*, Paris: GA, 1994.

33 Rosemary J. Coombe, *The cultural life of intellectual properties: Authorship, appropriation, and the law* (Durham: Duke University Press, 1998).

34 United States Copyright Office. *Copyright Basics*. (Washington: Library of Congress, 2021). <https://copyright.gov/circs/circ01.pdf>.

35 “Copyright”, World Intellectual Property Organization, accessed March 21, 2024. <https://www.wipo.int/copyright/en/index.html>.

36 O'Hare, Michael, “COPYRIGHT AND THE PROTECTION OF ECONOMIC RIGHTS”, *Journal of Cultural Economics* 6, 1 (1982): 33–48, <http://www.jstor.org/stable/41810305>.

37 Ibid.

38 “Understanding Copyright and Related Rights”, *World Intellectual Property Organization*, accessed June 23, 2023, https://www.wipo.int/edocs/pubdocs/es/wipo_pub_909_2016.pdf.

39 See Article 118, Código Orgánico de la Economía Social de los Conocimientos, Creatividad e Innovación [COESCI], Código Orgánico, O.R. 899, December 9, 2016.

3.1. CONSTITUTION OF ECUADOR

Ecuador protects the rights of creators on a constitutional level; that is to say, it is embodied in the highest legal norm of the country. The Magna Carta of Ecuador, within Article 22, establishes that: “[...] persons have the right to benefit from the protection of moral and patrimonial rights resulting from their scientific, literary, or artistic creations...;author’s translation”⁴⁰. With this statement, the national authority secures intellectual property rights on a constitutional level.

3.2. INTERNATIONAL TREATIES

International treaties and conventions promote the protection of these rights and set guidelines to create a standard in most of the legal frameworks. Ecuador signed numerous international treaties and pledges pertaining to intellectual property, all of which have been preserved and upheld by the Constitution.

Between the set of international treaties that Ecuador has signed and ratified, the main highlights are:

- a. The Berne Convention addresses the safeguarding of creative works and the entitlements of their creators⁴¹. It rests upon three fundamental principles and encompasses a set of regulations determining the minimum level of protection, along with specific provisions accessible to developing nations interested in their application⁴². The Berne Convention permits some limitations and exceptions to economic rights. These are situations where protected works can be used without the copyright owner’s authorization and the need for compensation⁴³.
- b. The WIPO Copyright Treaty (hereinafter WCT) represents a specific arrangement derived from the Berne Convention that addresses the safeguarding of creative works and the entitlements of their creators, especially in the digital realm⁴⁴. Beyond the rights already acknowledged in the Berne Convention, it confers certain economic rights⁴⁵. This Treaty also focuses on two categories of copyright protection: computer programs, irrespective of how they are expressed or presented, and collections of data or other materials, known as “databases”⁴⁶.

40 Asamblea Constituyente, Constitución de la República Del Ecuador 2008, Decreto Ejecutivo, O.R. 449 October 20, 2008.

41 Article 1, Berne Convention for the Protection of Literary and Artistic Works, Paris Act. Amended on September 28.

42 Ibid.

43 Article 6, Berne Convention for the Protection of Literary and Artistic Works.

44 Article 2, World Intellectual Property Organization Copyright Treaty, Ginebra, December 26, 1996.

45 Article 3, WIPO Copyright Treaty.

46 Article 6 and 7, WIPO Copyright Treaty.

- c. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) came into force on January 1, 1995, and stands as the most comprehensive multilateral accord about intellectual property to date⁴⁷. The TRIPS Agreement is an international legal pact involving all member countries of the World Trade Organization (hereinafter WTO). It establishes the minimal standards for the governance of various forms of intellectual property as it relates to citizens of other WTO member countries, regulated by individual national governments.

3.3. ORGANIC CODE OF THE SOCIAL ECONOMY OF KNOWLEDGE, CREATIVITY, AND INNOVATION

The Ecuadorian norm that specializes in copyright and intellectual rights is the COESCI. In the recitals of this Code, it is foreseen that the Intellectual Property Law, enacted in 1998, is harmonized with the rights and guarantees established in the Constitution of the Republic of Ecuador of 2008. It provides a legal regime that has as its central point private rights and a mercantilist approach to intellectual property rights⁴⁸. Likewise, it establishes the need to make strategic use of Intellectual Property rights to ease the transfer of technology, the generation of science, technology, innovation, and the change of the productive matrix in the country⁴⁹.

In Book Three, titled “Knowledge Management: General Principles and Provisions,” Article 85 establishes the inclusion of intellectual rights and their protection in all forms⁵⁰. It indicates that intellectual rights encompass intellectual property and traditional knowledge⁵¹. This article determines that these regulations constitute a tool for adequate knowledge management, to promote scientific, technological, artistic, and cultural development, as well as encouraging innovation.

Furthermore, Article 88 of the same normative body⁵², foresees the purpose of intellectual property rights. It states that these are tools for the development of creative activity and social innovation, which promote technology transfer, access to knowledge and culture, innovation, and the reduction of cognitive dependence. The European Commission, conversely, claims that the primary function of intellectual property rights is to protect and promote the creation

47 World Trade Organization, Agreement on Trade-Related Aspects of Intellectual Property Rights. Annex 1C of the Marrakesh Agreement, April 15, 1994.

48 See Article 1 and 2, COESCI.

49 *Id.*

50 *Id.*, Article 85.

51 *Id.*

52 *Id.*, Article 88.

and distribution of innovative goods and the provision of new services based on the generation and commercialization of inventions, trademarks, designs, creative content, or other intangible assets⁵³.

Ecuadorian legislation also protects access to knowledge and culture. Going a step further, the Ecuadorian legislature establishes the importance of protecting and having access to ancestral knowledge. This contributes to the development of current science. Therefore, it is important to remember our roots and transmit the legacy of our ancestors. Moreover, the COESCI establishes a typology of intellectual property. It separates them mainly into copyrights and related rights, industrial property rights, and plant varieties⁵⁴.

The national legislator in Article 90 foresees the following typology of assets: assets that guarantee fundamental rights, assets related to strategic sectors, assets related to biodiversity and traditional knowledge, and other property⁵⁵. In this way, it is established that copyrights are linked to the persons who create works, whether artistic or literary, while related rights refer to natural or legal persons involved in the interpretation and reproduction of the original works.

With this preamble, the legislator devotes an article to copyright, explaining how it is created and how it is protected⁵⁶. Article 102 establishes that, with the simple fact of the creation of the work, the author's rights are born and protected⁵⁷. The method by which the author's ideas are described, explained, illustrated, and incorporated into works is protected. The exception here is that if an idea has only a single form of expression, that form will not be subject to any protection⁵⁸. Nor are the procedures or mathematical concepts themselves subject to the protection of Intellectual Property Law⁵⁹.

Then, Article 104 mentions which works are eligible for protection⁶⁰. The COESCI establishes that protection is granted to all literary, artistic, and scientific works that are original, and which may be reproduced or disseminated in any form or by any means known or to be known⁶¹. In this article, various works are included, such as works expressed in books, articles, collections of works, musical compositions, sculptures, illustrations, photographs, and software, among others⁶².

53 "Benefits of intellectual property rights", *European Commission*, accessed May 17, 2023, https://policy.trade.ec.europa.eu/enforcement-and-protection/protecting-eu-creations-inventions-and-designs/benefits-ipr_en.

54 Article 90, COESCI.

55 *Id.*

56 See Article 102, COESCI.

57 Article 102, COESCI.

58 *Id.*

59 *Id.*

60 Article 104, COESCI.

61 *Id.*

62 *Id.*

Article 120 recognizes, in favor of the author or successor of the title, certain exclusive rights over the work⁶³. In this case, it concerns the reproduction of the work by any process or practice⁶⁴. Reproduction is understood as the fixation of the work in a medium that allows its perception, communication, or obtaining of copies of all or part of it by any means or process, known or to be known⁶⁵.

3.4. DECISION 351 OF THE ANDEAN COMMUNITY

In addition, to the earlier international treaties, Ecuador is required to abide by the agreements made by the Andean Community of Nations as a member. The Andean Community's Decisions have direct and mandatory applicability to Ecuadorian intellectual property law. Among others, Decision 351 contains important resolutions pertaining to transfer and assignment rights, moral and economic rights, and other essential clauses.

Furthermore, Decision 351 establishes common provisions to enhance the protection of authors and other rightful owners of intellectual works. Article 4 declares that "protection granted by this Decision shall accrue to all literary, artistic and scientific works that may be reproduced or disclosed by any known or future means [...]"⁶⁶. This article is relevant because it mentions that all intellectual works shall be protected, disregarding how they might be contained or carried.

Following, Article 6 states that recognized rights "shall be independent of the ownership of the material medium in which the work is embodied"⁶⁷. As well, Article 7 indicates that only the form in which the ideas of the author are incorporated in the works shall be protected⁶⁸. Both articles are important to the present discussion since they help to clarify the difference between the means and the content, where the mean is the token, and the content is the intellectual work entitled to protection.

4. NFTS AND THEIR APPROACH TO INTELLECTUAL PROPERTY LAW

Following rapid growth in late 2017, NFTs crashed the world with its unique way of trading intangible assets, and with this, the clash between law and digital tokens continued⁶⁹. There are many discussions and approaches to how the Law should guide NFTs' behavior in the market. Contrary to general opinion,

63 See Article 120, COESCI.

64 Article 120, COESCI.

65 Id.

66 Article 4, Decision 351 Common Provisions on Copyright and Neighboring Rights. December 17, 1993.

67 Article 6, Decision 351 Common Provisions on Copyright and Neighboring Rights.

68 Article 7, Decision 351 Common Provisions on Copyright and Neighboring Rights.

69 "The Definitive Timeline of Early NFTs on Ethereum", ONE37pm, Accessed March 21, 2024, <https://www.one37pm.com/nft/the-definitive-timeline-of-early-nfts-on-ethereum>.

their existence may not alter the fundamental regulations of Intellectual Property Law. To understand this statement, it is necessary to acknowledge the content of these tokens and what this branch of law pursues to protect.

The development of new ideas and inventions requires the treatment of law to conduct their performance. According to the WIPO, “intellectual property law aims at safeguarding creators and other producers of intellectual goods and services by granting them certain time-limited rights to control the use made of those productions”⁷⁰. This division of Law establishes guidelines for creators to balance the exposure of their work in the market with the entitlements they have over them. In this same line, copyright pursues the protection of the intellectual creation by giving the author rights to control, protect, and exploit their work⁷¹.

It is without doubt that NFTs are inventions whose authors have ownership rights over their technological uptake. Leaving aside the software and blockchain development of the digital token, the interaction of NFTs and Intellectual Property Law goes further. The behavior of NFTs as assets is also relevant for Intellectual Property Law because of the content that the token carries and their susceptibility to copyright protection. The update that digital assets brought does not necessarily mean a law restructure, but a reinterpretation of the existing rules that define the core norms that give body to copyright.

As is well known, NFTs are usually created to be sold like artworks or collective tokens. One of the reasons artists choose them instead of another carrier of their work is because NFTs have the potential to provide transparency and reliance in digital assets markets. “For instance, an NFT might link to a piece of art and incorporate contractual rights that provide the original artist a commission on all future sales of that piece of art”⁷². Thus, one of the NFTs’ copyright implications is that their non-fungible condition and blockchain technology might introduce new conditions of copyright transference. This holds great significance for digital art, music, and other content creators, as they can now utilize NFTs to prove their ownership and explore novel avenues for monetization.

The disruption of NFTs in technology brought an effective way of commercializing and facilitating ownership exchange. As well as other art pieces that have been sold online, the NFTs trading system does not fundamentally change the way it has been regulated for other digital assets⁷³. To give an

70 “WIPO Intellectual Property Handbook: Policy, Law and Use”, *WIPO PUBLICATION* 489, 2 (2004): 3.

71 *Ibid.*

72 Daniel Barsky and Andrew Cummings, “Non-Fungible Tokens and Intellectual Property Law: Key Considerations”, *Bright Ideas* 31, n°. 1933-8392 (April 2022), 8-9.

73 Barsky and Cummings, *Non-Fungible Tokens and Intellectual Property Law*, 10.

example, what the NFTs contain most of the time are virtual images that are sold daily all over the globe without necessarily representing a change in the legislature and still being under the watch of copyright law⁷⁴. As mentioned before, the main object of NFTs is to offer a way to secure the ownership of a unique token; they might not contain extraneous elements that could alter the current legislation.

Therefore, it is useful to see NFTs as a new technology whose content is the substance of protection under the present copyright law and intellectual property regulations. For this research, NFTs should be seen as a record of digital property, and the files that the token holds are what copyright law should focus on. The minting process and digital creation of the tokens themselves are subjects that deserve another scope of study and different legal treatment that will not be analyzed this time.

Taking into consideration the technical features mentioned before, it is required to review how NFTs are protected under Ecuadorian norms. Intellectual property rights are safeguarded under the COESCI in all its forms, according to Article 85. Subsequently, it is explicitly stated in Article 102 that copyright protection is accorded to intellectual works regardless of their form of expression. Although there may not be an exhaustive list throughout any of these or any other Article, the COESCI offers a broad range of eligible creative works for which authors would be granted copyright instantly.

Consequently, if NFTs meet additional criteria—which will be examined later—they may constitute assets covered by copyright law. It should be emphasized that NFTs, not simply by their creation, are assets deserving of immediate protection. The creative work behind the tokenization is the undeniable object of intellectual property law's interest, as the above articles have noted. The primary factors that could result in copyright difficulties are the vast categories of creations that can be kept and the NFT technology utilized in smart contracts.

In addition, Decision 351 of the Andean Community, Article 7, strengthens Ecuadorian copyright legislation when it establishes that only how the author's idea is described is protected, wherever their form of expression is. Hence, in Ecuador, intellectual creations carried by NFTs are subject to the protection of Intellectual Property Law, regardless of their digital nature, while the coding and blockchain features of the token have a minor impact on this branch of law.

⁷⁴ Alexander Dolganin, "Non-Fungible Tokens (NFT) and Intellectual Property: The Triumph of the Proprietary Approach?", *Digital Law Journal* 2, 3 (November 3, 2021): 46-54, <https://doi.org/10.38044/2686-9136-2021-2-3-46-54>.

5. COPYRIGHT CONSIDERATIONS: UNWRAPPING RIGHTS BETWEEN TECH

The legal landscape of NFTs is still in its infancy, taking into consideration the length of their presence in the tech realm⁷⁵. The lack of standardization in the NFT market and the rise of its success create an equation from which many jurisdictions have taken a word, but no clear answer has been able to solve every copyright question⁷⁶. Moreover, the uncertainty that surrounds this topic has led to confusion and potential legal disputes. “Given the broad applicability of copyright law, it is critical for sellers and end users to understand what rights the purchaser is acquiring when purchasing an NFT”⁷⁷. As the value of NFTs continues to grow, the legal system needs to catch up and establish clear guidelines to ensure a fair and transparent market for all parties involved.

Currently, there is no specific regulation for NFTs in Ecuador. Nonetheless, the study of the Ecuadorian copyright norms and supplementary norms, like Decision 351 of the Andean Community, could help overcome some of the challenges that NFTs face in this matter. Such as determining when NFTs are shielded by copyright law and what parts involved in an NFT transaction are entitled to. These are some of the subjects that are being raised by this chapter and discussed in the fellow numerals.

5.1. COPYRIGHT OF THE CREATOR

Because multiple parties are involved in the development and trading of an NFT, copyright may fluctuate during the process. “When NFTs are created, or “minted,” they are listed on an NFT marketplace where NFTs can be sold, traded, etc., in accordance with “smart contracts” that govern the transfers”⁷⁸. Typically, the minter makes its services available via a website to publish the NFT in the market after codifying the token around a digital file that may or may not be a protected intellectual work. Consequently, the parties involved are the one providing the minting services (often tech firms like OpenSea), the one using the minter to create the NFT, and the party purchasing the NFT. As an outcome, ownership of the digital asset and the developer of the token may have different copyright approaches⁷⁹.

75 Miša Bajčetić, “Copyright and Non-Fungible Tokens (NFTs)”, *SSRN Electronic Journal*, 2022. <https://doi.org/10.2139/ssrn.4305712>.

76 Dolganin, “Non-Fungible Tokens (NFT) and Intellectual Property”, 46-54.

77 Barsky and Cummings, *Non-Fungible Tokens and Intellectual Property Law*, 11-12.

78 *Hermes Int'l v. Rothschild*, 22-CV-384 (JSR), United States District Court, S.D. New York, May 18, 2022, 2.

79 Miša Bajčetić, “Copyright and Non-Fungible Tokens (NFTs)”, *SSRN Electronic Journal* (2022), <https://doi.org/10.2139/ssrn.4305712>.

Generally, the author is the same individual who is going to create and save the digital asset in an NFT, resulting in this person being both the author of the work and the owner of the token. "For copyrightable works, except in the case of a work made for hire, the author of a work owns the copyright"⁸⁰. The NFT is first and foremost the property of the creator and has the right to control who can purchase, sell, and trade it, as well as the conditions under which those transactions take place. The author also has the right to decide how the NFT is used, including any copies or derivative works.

The hypothesis mentioned might be the perfect scenario where both author and token owner meet with the same individual, so copyright can be deployed in all its forms without interference. However, it should be taking into consideration the intervention of the minter company in the smart contracts. Depending on the clauses, the author can be entitled to a share of any future sales of it, give away copyrights, or just grant rights of use⁸¹. This is the case in the NBA Top Shots market, in which users can buy the underlying NFT, but its rights are limited, and no copyrights are extended⁸². It is important to note that these rights may differ depending on the marketplace platform and blockchain used to develop and distribute an NFT. Therefore, it is crucial to carefully consider and comprehend the terms and conditions of each platform before developing and offering an NFT.

For instance, OpenSea, one of the biggest NFT marketplaces, allows its users to manage their crypto wallets and assets under its terms and conditions. In the section of Terms of Service, numeral seven, this company states the following: "You represent and warrant that you have, or have obtained, all rights, licenses, consents, permissions, power and/or authority necessary to grant the rights granted herein..."⁸³. This type of platform would only appear as an intermediary between the creator and the buyer. In theory, the person who holds all copyrights will be the author of the NFT, not OpenSea.

This is an important aspect to remember since the minting process of NFTs may be confused with the creation of the artwork. Companies like OpenSea offer the services of minting and listing the work of an author through the mechanism of blockchain technology⁸⁴. Their services may be limited to generating a unique code to store the intellectual work. There is no interference or collaboration during the artistic creation of the resulting NFT; that is the sole creation of the author. To illustrate, it could be contrasted with the labor of the person who crafts frames. A frame is constructed by one person and

80 Barsky and Cummings, *Non-Fungible Tokens and Intellectual Property Law*, 12.

81 Michael D. Murray, "NFTs Rescue Resale Royalties? The Wonderfully Complicated Ability of NFT Smart Contracts to Allow Resale Royalty Rights", *SSRN Electronic Journal* (2022), <https://doi.org/10.2139/ssrn.4164029>.

82 Dapper Labs, "NBA Top Shot | Terms of Service", NBA Top Shot, n.d. <https://nbatopshot.com/terms>.

83 "Terms Of Service," OpenSea Inc., April 4, 2023, <https://opensea.io/tos>.

84 Ibid.

sold to an artist who wishes to protect his painting. The painter does not have copyrights over the frame just because he or she uses it as a carrier for his work, and vice versa unless they agree to the contrary.

Therefore, when the minting corporation requests a statement of authorship from the user, copyrights will come into play in the interaction between the company and the author⁸⁵. As a result, the user will be responsible for intellectual property issues, other rights will be mostly focused on distinctive contractual obligations and topics based on buying and selling NFTs⁸⁶. In general, whoever renders these services shall not seek copyrights from the generation of the token or presume that they shall have any copyrights over the file being stored simply because they minted the digital token.

The COESCI is explicit when it states that copyrights arise and are protected by the mere fact of the creation of the work⁸⁷. As a result, copyrights are granted to the individual whose creative work is embodied in the NFT⁸⁸. The party who provides the minting services does not hold copyright since its duties include are the blockchain development and coding features; it does not interfere whatsoever in the intellectual process of the file to be stored. Additionally, Decision 351 of the Andean Community, Article 8, establishes that, in case of doubt, the person whose name is visible in the work shall be presumed to be the author. In consequence, the creator and/or the person whose name is in the intellectual work of the NFT will retain copyrights and be entitled to use, sell, or license their work.

Following these lines of thought, generally, the creator of the creative work is the one who has all the copyrights over the design of the NFT content. Nonetheless, it might not always be the case; hence, the result may contain registered material that generates copyrights in favor of another person. Under these circumstances, the person whose copyrights have been violated is empowered to pursue a lawsuit against the infringer. To safeguard copyrights, Ecuadorian legislation provides for various injunctions and compensation⁸⁹.

Article 85 of the COESCI states that intellectual property rights are protected in all their forms⁹⁰. With this basis, no matter how malleable and mutable the NFT technology is, the legislator makes sure that all rights are preserved and protected. In this changing ecosystem, one of the scenarios that worries most traders are NFTs that contain parts of other registered work. For instance, in

85 Yanghuan Li et al., "A Decentralized Music Copyright Operation Management System Based On Blockchain Technology", *Procedia Computer Science* 187 (2021): 458-63, <https://doi.org/10.1016/j.procs.2021.04.084>.

86 Dolganin, "Non-Fungible Tokens (NFT) and Intellectual Property" 46-54.

87 See Article 102, COESCI.

88 Ramos, "The Metaverse, NFTs and IP Rights".

89 See Chapter III, COESCI.

90 Chapter III, COESCI.

the case *Hermès Int'l v. Rothschild*, the complaint claimed that Rothschild capitalized on customer misconceptions about the NFTs' affiliation with the Hermès trademark by using the brand name "MetaBirkins" and had permitted the artist to profit from Hermès's goodwill⁹¹.

The jury found that the "MetaBirkins" are more akin to consumer products, which are subject to trademark regulations, and rendered a decision in favor of Hermès⁹². It is important to notice that one of the main arguments for winning the case was that "MetaBirkins" was previously registered as a trademark⁹³. Although these case studies focus on industrial property rights, by registering their work, authors not only provide legal protection for their creations but also ensure the authorship of their inventions and expand enforcement to all areas, including the virtual one. On the other side, it could also happen that NFTs include registered material, which makes them susceptible to infringement of intellectual property norms.

On these grounds, a key factor in protecting inventions will always be registration with the local authority. In Ecuador, the Ecuadorian Intellectual Property Office, SENADI, has not offered an exclusive method or a closed section for token registration. While it is true that the core of the NFT could be created from almost any type of digital format, once a file is minted like an NFT, its code and its method of transfer change. "When an NFT is linked to digital media, the NFT and corresponding smart contract are stored on the blockchain and are linked to digital media files (e.g., JPEG images, .mp4 video files, or .mp3 music files) to create a uniquely identifiable digital media file".⁹⁴ The blockchain is uncharged to create another type of code and gives a different format for the file extension, after all, what the users are seeking is secure storage.

With this background, if somebody wants to obtain copyrights on an NFT and plans to enter the NFT market, applying to register the applicable work before the Ecuadorian Intellectual Property Office should be taken into consideration. Until this date, SENADI has not registered any type of NFT in its system, so the process and viability of registration are still uncertain in terms of its operation. The national authority made a statement about the creation of a Technical Standard for the valuation of NFTs, which is essential in terms of political awareness⁹⁵. Consequently, the state of registrability of NFTs in Ecuador may not be at risk of being denied, but the questions to be solved remain on bureaucracy issues rather than legal fundamentals.

91 *Hermès Int'l v. Rothschild*, 2.

92 *Hermès Int'l v. Rothschild*, 39-42.

93 *Ibid.*, 11-13.

94 *Hermès Int'l v. Rothschild*, 5.

95 Servicio Nacional de Derechos Intelectuales (@SENADI_Ecuador), "se implementó una Norma Técnica para la valoración de NFTs y uso de blockchain en la modalidad de derecho de autor. #SENADI #JuntosLoLogramos", Twitter, (accessed August 28, 2021), https://twitter.com/SENADI_Ecuador/status/1431434749495623689.

In terms of registrability, NFTs also embrace the possibility of containing digital assets created by non-human intelligence, which challenges the possibility of copyright existence across all cryptographic files. It is no secret that software and online servers can produce practically any type of file upon request. Ecuadorian laws set a clear limit for this type of creation when the COESCI, Article 108, states that “only natural persons may be authors. Legal persons may be owners of economic rights upon a work in accordance with this Title; author’s translation”⁹⁶. Thus, the requirement for copyright protection is that the invention must be a direct product of human hands-on craftwork. Computer-generated work cannot be included in the threshold for copyright jurisdiction⁹⁷.

The experience of international jurisprudence, like the case study *Feist Pubs., Inc. v. Rural Tel. Svc. Co., Inc.*, defines that law shields “the fruits of intellectual labor”⁹⁸ because of their originality, meaning that those creations are “founded in the creative powers of mind”⁹⁹. The compilation of those elements leads to the conclusion that original work finds its source in the human mind, and artificial works are derived from what another creative consciousness has already created. Monument advances in autonomous systems make it increasingly difficult to distinguish original creations worth copyright protection, independently from the nature of the author¹⁰⁰.

The intellectual work that NFTs convey depends on its originality and the human authorship that can be proven considering Ecuadorian norms. Identification and confirmation that the work is registrable in accordance with copyright laws and other intellectual property standards provide a problem for national authorities. Not all NFTs will be eligible to be registered, attributable to the presence of some preexisting creative work in the virtual world, and some writers may run into this problem when they apply for copyright surveillance.

Following the study of the copyright’s creator, the problematic work can also be analyzed from the perspective of a work created under a labor relationship or commission. Given the highly monetized nature of NFTs and other trading factors, these digital assets could be appointed by a third party and commission an author to create the intellectual content of the token. To address this issue, Article 115 of the COESCI declares that in the scenario of a commissioned work or labor relationship, ownership rights shall correspond to the author unless otherwise agreed¹⁰¹.

96 See Article 108, COESCI.

97 *Acohs Pty Ltd v. Ucorp Pty Ltd*, FCAFC 16 (2012).

98 *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, U.S. Supreme Court, March 27, 1991.

99 *Ibid.*

100 Joseph P. Fishman, “*Creating around copyright*”, *Harv. L. Rev.* 128 (2014): 1333.

101 Article 115, COESCI.

According to previous analyses, the author of the work shall be the first owner of copyrights. Unlike other legislation, Ecuadorian legislation states that no matter the commission or employment relationship, the author's status and his or her copyright will be found in the person who has created the work. Even if the author transfers part or all the copyrights, the right to utilize the works differently than what is specified in the contract will remain, so long as the author acts in good faith¹⁰². Although the author could waive other rights, he or she will always have the right to fair compensation for the use of their creations¹⁰³. It is important to mention that this is not the case for software.

Ultimately, the author of the intellectual work is a key character in the development of NFT within the current norms of Intellectual Property Law. The COESCI explicitly grants copyright protection to authors upon the creation of their works. Challenges arise when there is uncertainty about the NFT minter and the content creator. Nevertheless, the intention of surveillance of intellectual property is to protect the creative and original work that is coded and safely stored in the token. It is necessary to have certainty about when an NFT is an object of copyright protection since it could incorporate parts of other registered works, potentially leading to infringement issues. The diversity of tokens leads to a wave of creations whose authors may not benefit from copyrights; this is especially true for computer-generated work. In consequence, normative copyrights in Ecuador answer the main needs of NFT creative authors, giving access to rights recognition and injections if required.

5.2. RIGHTS OF THE BUYER

NFTs could perform differently when they encounter other assets and people who are part of their contractual agreements. The foundational principles of Contract Law serve as the inspiration for NFTs' legal framework¹⁰⁴. On one side is the seller, who in this situation is the digital token's creator and is the owner of all copyrights. On the other hand, there is the token purchaser, whose goal is to acquire legitimate rights because of the transaction.

The legal landscape surrounding NFTs, and intellectual property remains a dynamic and evolving field. However, the changing virtual realm means that the simplicity of Contract Law, which usually applies to the buyer-seller relationship, is modified, and the legal bases are applied differently. Given the broad possibilities of clauses in smart contracts and other types of agreements between buyer and seller, copyrights may not necessarily be included in the purchase.

102 Article 115, COESCI.

103 Article 115, COESCI.

104 "NFTs Are Legally Problematic with Steve Mould and Coffeezilla", *Youtube*, April 27, 2022. https://www.youtube.com/watch?v=C6aeL83z_9Y

An NFT buyer should first be familiar with the legal framework in which he or she would purchase the token. It is commonly recognized that these possessions hold more than just moral value for the author; dealers and collectors are drawn to them because of their high economic value. That is the case of Jack Dorsey, the former CEO of Twitter, who sold his very first tweet as an NFT for more than \$2.9 million¹⁰⁵. These extravagant prices inform the consumer that the impending transaction needs to be well-researched. It is advised to review all legal provisions if someone is purchasing an NFT that is of significant worth to be aware of all the rights and liabilities it will represent for any equity.

After purchasing an NFT, the most pressing concern is what the buyer genuinely owns. As previously stated, the set of rights will be determined by the smart contract and the constraints given by the NFT inventor or art designer. Transaction history demonstrates that it is common for someone to accept clauses claiming that copyrights are not included when purchasing an art piece¹⁰⁶. This occurs not only in NFT exchanges but also practically every time someone purchases a painting or song from the App Store¹⁰⁷. To grasp this idea, it should be remembered that the essence of copyrights is that they are the outcome of someone's creativity, and like their derivatives, moral and economic rights are entitled to the creator.

There are various reasons for the author to keep copyrights instead of transferring them with the NFT sale; one of them is the value of the intellectual work in the NFT and the market. It should be noted that one, several, or all the economic rights may be transferred exclusively or not, limited in time or not, in a certain jurisdiction or worldwide. "By relying on programmatic smart contracts, NFTs have the potential to recreate equity in the art market by ensuring that artists get a share of each resale of their pieces on the secondary market"¹⁰⁸. Because of the royalties and profits that NFTs produce, the artist may restrict the use, reproduction, and resale of the work. At this point, the position of the buyer could be restricted to that of a collector of tokens, hence the limitations of rights that holding a token could represent.

Ultimately, these statements are vital for a buyer to comprehend for future sales or other business that could involve the use of the NFT. Given the million possibilities in contracts, the clauses of the agreements should be analyzed one by one. However, there are general rules that could apply to most of the NFT transactions that do not include copyright transference.

105 "What Are NFTs and Why Are Some Worth Millions?", *BBC News*, accessed March 21, 2024. <https://www.bbc.com/news/technology-56371912>.

106 Richard Caves, "Creative industries: Contracts between art and commerce", *Massachusetts: Harvard University Press*, n°. 20 (2000): 297-301.

107 John Palfrey et al., "Youth, creativity, and copyright in the digital age", *Berkman Center Research Publication*, n°. 2009-05 (2009).

108 Louise Carron, "Entertainment, Arts and Sports Law Journal", *New York State Bar Association 2*, 32 (2021): 5. ISSN 1933-8546.

First, what the buyer owns, in simple words, is a receipt blockchain that includes his or her name in an immutable token that contains a digital file¹⁰⁹. All rights to display, modify, distribute, and reproduce the work are restricted unless the author gives any authorization¹¹⁰.

Then, taking into consideration that the actual purchaser could or may not be the first or last one to buy the token, blockchain technology allows the buyer to have access to the history of acquisitions. This is useful for those who want to know who the original author is, check if the seller is allowed to sell the NFT, and who holds the copyrights. NFTs serve as a distinctive identifier that enables the identification of goods and traceability across the supply chain¹¹¹. Servers and codes have found the way to solve traceability matters and enable buyers or sellers to identify who is behind the sale to protect their users and bring safety to the platforms¹¹².

While technology is improving, evolving, and taking care of the technical side of NFTs, Law has more space to worry about the loose cables that buying an NFT could leave behind. In scenarios where the buyer does not entitle copyrights, it is necessary to give this party tools to confront possible intellectual property rights conflicts. One of them is when the original minter uploads a digital file that is not his or her property. This might unleash copyright lawsuits and end with the seizure of the NFT, leaving the buyer with limited possibilities to defend his position.

When the competent authority finds an inconsistency in the NFT sale and decides, by resolution, to seize the digital file because of copyright infringement, one of the possibilities is for the buyer to file a civil lawsuit instead of a copyright claim. For instance, if the buyer is in the hypothetical case where the NFT is not registered and the seller does not hold copyright, it is unlikely that the buyer could defend his or her position before intellectual property authorities since the mentioned subject is not the author or was effectively transferred to this subject.

In this example, the main reason for the resort to the Civil Code is because of the absence of copyrights to protect. Neither the seller nor the buyer holds copyrights; consequently, the buyer cannot properly defend intellectual property rights that they do not possess. From the point of view of the person who holds the copyright, Article 581 of the COESCI provides sanctions to the infringers of the intellectual property norms¹¹³. In this way, the seller could be sanctioned for distributing NFT without the permission of the copyright holder.

109 Barsky and Cummings, *Non-Fungible Tokens and Intellectual Property Law*, 10-11.

110 Ibid.

111 Karthik Venugopal et al., "NFT For Collectibles", 2023 *5th Biennial International Conference on Nascent Technologies in Engineering (ICNTE)*, January 20, 2023, <https://doi.org/10.1109/icnte56631.2023.10146683>.

112 Usman W. Chohan, "Non-Fungible Tokens: Blockchains, Scarcity, and Value", *SSRN Electronic Journal*, 2021, <https://doi.org/10.2139/ssrn.3822743>.

113 See Article 581, COESCI.

The Civil Code provides the option to attend to the figures of conversion¹¹⁴ and reparation for moral or economic damage¹¹⁵. The buyer or the copyright holder has the option to be compensated for any damages that the seller may have caused. Since the NFT could have been impounded, the affected parties are entitled to be repaired and returned to the condition they were in before the purchase of the NFT¹¹⁶. This option addresses the obligation to repair the breach of the primary duty, which is the sale of the token without any underlying legal defect. Unfortunately, now, there are no registered cases in Ecuador that involve an NFT dispute to study them as jurisprudence.

Moreover, not only are civil norms concerned about the infringement of obligations, but also penal laws take a word in this issue. Irrespective of the quality of the author or buyer, Articles 208A, 208B, and 208C of the *Código Orgánico Integral Penal* [Organic Integral Criminal Code] determine that acts injurious to intellectual property are a criminal offense¹¹⁷. Article 208B refers to the reproduction, distribution, or modification of works performed by individuals who knowingly committed those acts in violation of the copyrights or related rights on a commercial scale¹¹⁸. Therefore, if an NFT is created based on pre-existing work under copyright protection, those individuals may face criminal prosecution for copyright infringement and be punished with imprisonment for a term of six months to one year and a fine¹¹⁹.

In this regard, the rights of the buyer are limited and conditioned by the terms and conditions of the platform that posts the NFT and its author. Considering that copyrights proportion moral and economic values to creators, it is understandable that they do not release or transfer these legal titles. Thus, an NFT buyer is likely to have limited rights to use the token and no copyrights at all. Given this situation, the buyer is confronted with an immediate lack of protection under Intellectual Property Law. However, this is not caused because Ecuadorian norms do not have a regime for these scenarios; the main reason is the apparent non-existence of copyrights to be protected.

6. CONCLUSION

As a result, Ecuadorian law addresses fundamental concerns regarding NFT copyright. The technological complexity of NFTs could be overcome through the adaptation of current copyright norms. The fact that NFT tokens are recognized by national regulations allows parties to trade safely knowing that they

114 See Article 1754, Civil Code

115 See Article 1572, Civil Code.

116 Barsky and Cummings, *Non-Fungible Tokens and Intellectual Property Law*, 10-11.

117 See Article 208A, 208B and 208C, *Código Orgánico Integral Penal* [COIP], O.R. Supplement 180 February 10, 2014, last reformed O.R. 180 March 8, 2023.

118 Article 208B, COIP.

119 Article 208B, COIP.

are entitled to law protection. From the point of view of the author of the NFT intellectual work, it is certain that copyright is secured by the fact of its creation. Even if they are covered by copyright laws, authors should be aware that not all works are suitable to be protected since NFTs may contain works created by non-human intelligence or previously registered work.

When it comes to an NFT buyer, the COESCI does not include results that deviate from the creative thinking and cutting-edge technology used to create the NFTs. Existing articles from other normative could be integrated and adapted to the NFTs' spirit to prevent unfavorable hypotheses. The Code does not provide guidelines for compensating injured parties when multiple parties are involved in technical transactions and copyright holders are rejected. In summary, copyright law contains sufficient safeguards to mitigate author issues with NFTs, but because smart contracts vary widely and include provisions limiting copyright assignment, its application is no longer ideal at the time of NFT purchase.