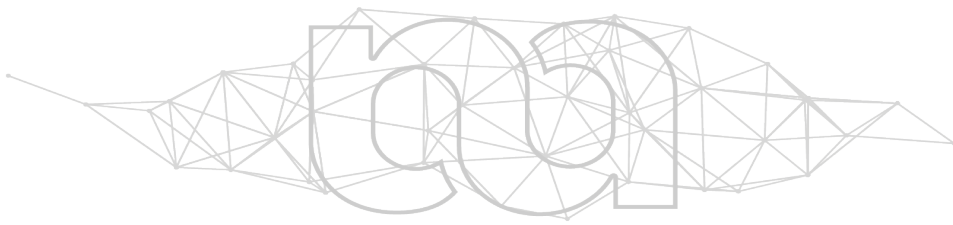
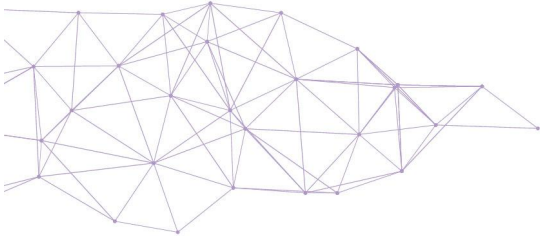


**The use of artworks NFTs in the metaverse.
A critical review of Judgment No. 11/2024 of the
Ninth Commercial Court of Barcelona**

**Proceedings of the International Congress Towards a Responsible
Development of the Metaverse, 13-14 June 2024, Alicante**

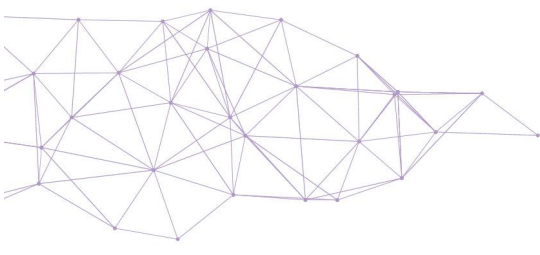
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Abstract

The metaverse emerges as a disruptive and heterogeneous virtual environment, raising the need to evaluate the key elements supporting it and whether current legal regulation sufficiently protects creative works in this space. This article examines NFTs of plastic art as key pieces of the metaverse, in light of the recent judgement of the Commercial Court No. 9 of Barcelona. In light of the questions raised by the case before the judicial body, the definition, nature, functioning, and typology of NFTs are explored, demystifying preconceived ideas. The intellectual property rights that could be infringed by the generation and sale of these NFTs under current Spanish legislation and CJEU jurisprudence are addressed. Different analytical aspects of the conflict and its judicial resolution, erroneously presented as a pioneering case in Spain in the field of NFTs, are clarified. It is concluded that an adequate interpretation of existing legal regulations allows for the assertion that they provide sufficient protection to rights holders against infringements associated with the commercialization of NFTs of plastic art in the metaverse.

Keywords: Metaverse, tokenization, NFT, intellectual property, work

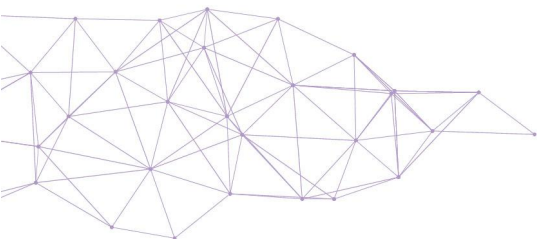


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1. Introduction

An approach to digital development in recent years shows that the Metaverse has emerged as an innovative and expansive virtual space that redefines human interaction and online experience. With its growing relevance comes the need to understand and address the regulatory challenges accompanying this constantly evolving environment. In this context, Non-Fungible Tokens (NFTs) have captured attention as a key tool for the representation and transfer of digital assets, including works of art.

This paper aims to explore the intersection between the Metaverse, NFTs, and intellectual property (hereinafter IP) rights, focusing on the relevance of the use of NFTs of artwork in the Metaverse for IP Law. To this end, we will delve into the examination of NFTs as a disruptive technology, using as a starting point the case resolved by the recent Judgement No. 11/2024 of the Ninth Section of the Commercial Court of Barcelona on January 11, 2024. Through the questions raised by this case, this article aims to unravel the complexities surrounding the use of NFTs in the metaverse and propose solutions on the way forward in terms of protecting the IP rights of authors of virtual works in this area.

2. The NFT as an indispensable element in the metaverse economy

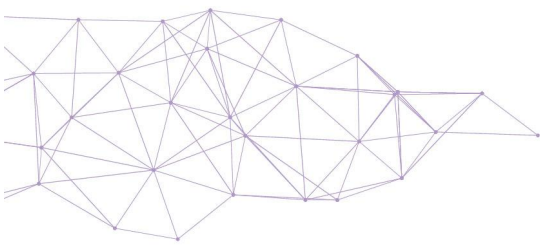
In simple terms, the metaverse can be understood as a virtual universe offering an immersive experience to its users by replicating aspects of the real world in the digital environment. This simulation of the real world involves a series of distinctive characteristics that allow its identification mainly: immersive, realistic, and interactive virtual character. In its broader definition, the metaverse represents a future rather than a current reality. It is expected that the metaverse will be a dynamic and constantly developing environment that has its virtual economy.¹ This means that the Metaverse, as foreseen, must have an independent economic system that operates alongside the real-world economy. Here, users can exchange virtual goods and services and also earn income and profits within the Metaverse.

In the context of the metaverse, it seeks to provide interactive character not only to user relationships as mentioned previously but also to the virtual worlds themselves that coexist within it. These virtual worlds materialise through specific platforms, the so-called interactive virtual world platforms (IVWP), one of the main actors of the Metaverse². The native environment of virtual worlds are the IVWPs, which manage them, in such a way that they control access by users as well as their accounts.

The legal regulation of the Metaverse may initially seem complex, given its integration by various elements of interest to the law. Consider, for example, the plurality of actors that are involved in the Metaverse (infrastructure providers, platforms, developers, users) with the difficulties this presents for delimiting and attributing responsibility. Furthermore, the development of the Metaverse will involve a considerable increase in the amount of information generated, processed, and transferred, mostly consisting of personal data. Additionally, the use of avatars by users will inevitably lead to identity-related issues that may arise in the Metaverse, such as identity theft. These and other questions have raised the issue of whether it is necessary to regulate this new environment and how to do so.

¹J. Acevedo Nieto, 'Una introducción al metaverso: conceptualización y alcance de un nuevo universo online' (2022) (24). Revista Científica de Estrategias, Tendencias e Innovación en Comunicación. 44. It means the ability of computer systems to exchange information and use it.

²Ibid 35.



In the current embryonic stage in which the development of the Metaverse finds itself, it may be unfruitful to start regulating it immediately as such.³ It would be legislating for a reality that has not materialised and whose conflicts will not be known exactly until it develops. It is providing solutions to problems that do not even exist, at least from the perspective of IP.

However, it would be necessary to assess whether the same applies to the case of those technologies that, for the development of the Metaverse, have been generated and have led to real conflicts with implications for IP. We refer to Non-Fungible Tokens (NFTs) of artwork. This is the purpose of this article.

It has been said that the Metaverse will have its virtual economy. Well, this economy will be based on the generation of a market of digital assets created by developers (individuals or companies), to be exchanged with users of virtual worlds. Creating a digital environment as described requires tools that contribute to this end. Thus, the Metaverse as a disruptive phenomenon will rely on equally disruptive technologies such as NFTs. Although they will be defined in detail later, it is important to highlight now that NFTs are a technological solution based on blockchain, whose use is associated with digital goods that can be found in interactive virtual worlds, facilitating their exchange.

NFTs constitute an indispensable element in the Metaverse economy precisely because, as explained, this economy essentially relies on digital goods transactions within it. RAMOS GIL DE LA HAZA aptly compares the relationship between the Metaverse and the NFTs to what e-commerce once was for the Internet⁴, a market niche that made the latter even more attractive to its users.

Although the Metaverse as defined is not yet a reality, as noted, there are currently IVWP platforms providing access to authentic immersive virtual environments where NFTs can be traded. These platforms, such as Decentraland, represent the closest current environment to what the Metaverse will be in the future, hence they are called by some authors 'metaverses' with a lowercase m.⁵ These platforms allow an initial approach to what the Metaverse⁶ will be, and NFTs are an essential element in them, as they are expected to be in the future Metaverse.

3. The case **Mango vs. VEGAP: The conflict delimitation by the adjudicating judicial body**

The case resolved by the judgement of the Commercial Court of Barcelona on January 11, 2024, involved a dispute between Mango's Group and VEGAP, the entity that manages the rights of visual artists in Spain. Mango's Group, a renowned textile company, owns the physical media of several artworks by notable visual artists (Joan Miró, Miquel Barceló, and Antoni Tàpies i Puig). The copyright on these artworks remains in force and is managed by VEGAP. One of the companies in the group commissioned the creation of new digital works by certain crypto artists to merge, as stated in the Court ruling, art, fashion, and Mediterranean culture based on the original works. From these artworks, lazy NFTs were created to be displayed on Decentraland and Opensea,⁷ during the inauguration of a Mango

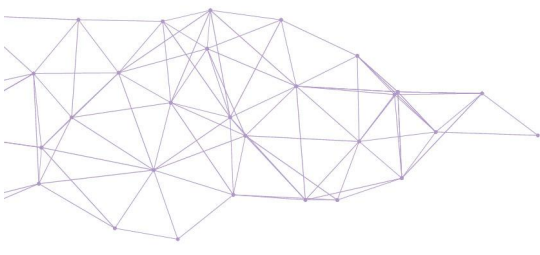
³ A. Ramos Gil de la Haza, 'Definiendo el metaverso' in *Protección y gestión de la propiedad intelectual en el metaverso* (REUS 2023) 122.

⁴ *Ibid.* 138

⁵ A. López-Tarruella Martínez, *Protección y gestión de la propiedad intelectual en el Metaverso* (Reus 2023) 10.

⁶ Note that they do not meet the defining features of the metaverse: interoperability, concurrency, immersiveness, permanence, synchronisation.

⁷ It is an NFT trading platform.



store on Fifth Avenue in New York. The idea was to hold a synchronized exhibition of the physical artworks along with the new digital works, both at the physical store location and on digital platforms via the created lazy NFTs, and this was done. Additionally, publications related to the digital works were made on various digital platforms and social networks (LinkedIn, Instagram, and TikTok), informing that these were reinterpretations of the original works. All this was done without the authorization of the authors of the artworks for such uses and without previously obtaining the consent of their heirs or the management entity.

VEGAP filed a lawsuit against Mango, arguing that the online exhibition infringed the moral rights of integrity and disclosure, as well as the economic rights of reproduction, transformation, and public communication existing over the works of Miró, Barceló, and Tàpies. Conversely, the defendant claimed that the acts did not constitute any infringements, arguing primarily that first, as the rightful owner of the physical media, they had the right to publicly display the artworks; second, the creation of digital works from the originals and their subsequent dissemination constituted an "innocuous use"; and third, the NFTs in question are digital files that did not become blockchain assets, and therefore could only be viewed through the platform but not downloaded, acquired, or reproduced.

After the conflict was revealed before the Court issued a judgement, and based on the parties' arguments, important questions about NFTs of artworks resurfaced, such as: What are NFTs? Are there acts of exploitation of the artwork in the creation and sale of NFTs through platforms? Does the tokenization of assets constitute, per se, a new form of exploitation of IP rights? Are lazy NFTs truly a type of NFT?

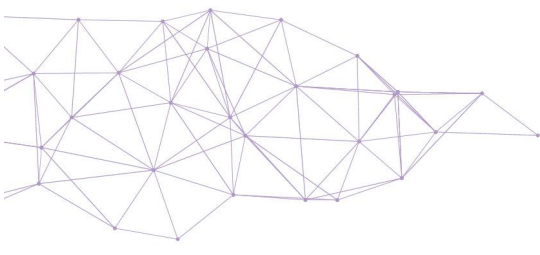
According to the approach of the Commercial Court of Barcelona, the main controversy lies in defining the scope of Mango Group's rights as the owner of the original paintings. Specifically, it must be determined whether converting a work of art into an NFT constitutes a modification of the work that could impact the author's rights or whether the ownership of a physical work includes the right to transform it into an NFT. Therefore, in this case, it is questioned whether Mango Group, by acquiring the original paintings, obtained an absolute right of enjoyment and exploitation in any form and context and whether their use of the works can be considered innocuous and not require the authors' authorization.⁸

This approach by the Court was first articulated in its order of October 21, 2022, which addressed the plaintiff's request for the adoption of certain interim measures *inaudita parte* in the complaint⁹. Having been reiterated by the Court in two judicial rulings, it is worth focusing on this particular aspect, as the way the controversial issue is framed generates confusion.

Firstly, it raises the question of whether creating an NFT from the physical medium owned affects the monopoly of exploitation of the work, i.e., whether making an NFT has any impact on the author's economic or moral rights. If the answer is negative, the second question posed by the Court becomes irrelevant, that is, whether ownership of a physical work allows it to be "transformed" into an NFT. If it is determined that creating an NFT does not affect the work as an intangible asset, then it makes no sense to determine whether the owner of the physical medium had sufficient rights over the work to generate the NFT;

⁸ Commercial Court No 9 of Barcelona, Judgment of 11 January 2024, Ordinary Proceedings, Appeal No 776/2022, Id Cendoj: 08019470092024100001, Presiding Judge: Montserrat Morera Ransanz, ground of law number four.

⁹ Commercial Court, Barcelona, Order of October 21, 2022, Interim Measures, Case No. 89/2022, Resolution No. 468/2022, Id Cendoj: 08019470092022200154, Judge: Montserrat Morera Ransanz.



or whether the owner's rights over the physical medium support such an act. In summary, a negative answer to the first question makes it unnecessary to examine the second.¹⁰

Secondly, it is questioned whether the right acquired by Mango through the purchase of the physical medium of the work encompasses the use made and whether such use could be considered innocuous. Again, the Court seems to confuse two distinct issues, as the doctrine of innocuous use is incompatible with the ownership of rights over the work. This doctrine is invoked precisely when there are not sufficient rights to use the work as intended.¹¹

Ultimately, the first question that arises from the literal delimitation of the conflict by the Court is whether the creation of an NFT involves the exercise of any IP rights over the work. Or, in other words, whether the creation of an NFT affects the author's monopoly on the economic or moral exploitation of the artwork. If the answer is affirmative, the second question to determine would be whether the owner of the physical medium of the work has sufficient powers, under their title of ownership, to generate an NFT.

4. Myths and reality: What is and what is not an NFT?

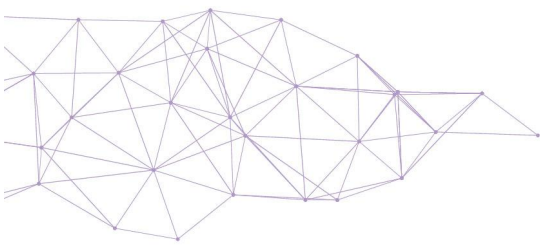
The phenomenon of NFTs has invaded the financial sector, but it has also emerged in the world of visual arts, music, the audiovisual sector, and video games. The widespread confusion about their definition and nature has further highlighted the need to provide answers from the intellectual property perspective. The reason for the aforementioned confusion lies in the existing speculation around NFTs, as they are presented by the media as authentic digital works of art. The value of the NFT per se then became associated with the value of the digital artwork, creating an incorrect identity relationship between the work and the NFT. The NFT has been mistakenly presented by the media as a solution to an old problem of digital art: its easy reproduction without authorization, and the absence of a certificate of authenticity regarding authorship. Digital plastic artists expect that their works will be revalued thanks to NFTs and that, in turn, the possibility of reproduction and plagiarism will disappear.

Based on an incorrect identification between the artwork and the NFT, there are three main myths about this disruptive technology. Firstly, it has been argued that they constitute a transformation of the artwork. In this regard, it is worth pointing out the error made by the Court in the case at hand. Thus, in setting the dispute, the Court understands that the controversial issue is to determine, among other issues already addressed, whether a work of art has been "converted" into an NFT and whether ownership of a physical work allows it to be "transform it into an NFT." Secondly, it has been said that they constitute the medium of digital artwork. Lastly, NFTs have been considered unique and public certificates that prove the authorship of the digital artwork, belonging to the one who created them, and prevent the easy reproduction of the work.

All the above statements must be rejected. NFTs are not works, therefore, they do not constitute an original intellectual creation from an objective or subjective point of view. This assertion allows us to automatically dismiss the idea that NFTs result from an act of transformation. Transformation, as such, implies a creative act through which an original

¹⁰R. Sanchez Aristi and J.A. Eguiluz agree with this. See R. Sanchez Aristi,, R and J. Andoni Eguiluz. 'Posible infracción de derechos de autor en la preparación de NFT sobre obras de arte' (2024) <https://www.cuatrecasas.com/es/spain/propiedad-intelectual/art/posible-infraccion-de-derechos-de-autor-en-la-preparacion-de-nft-sobre-obras-de-arte> accessed 5 May 2024.

¹¹Ibid.



work is modified, giving rise to a derivative work. A different matter is that, based on a work in physical support, a digital derivative work is created from which an NFT is generated. In this case, which is not general today in the NFT environment, the right of transformation is exercised with the creation of the digital work, not with the generation of the NFT. On the other hand, the NFT does not constitute the medium of digital work nor does it certify the authenticity of the work, as will be seen later.

At this point, we must ask ourselves, what are NFTs then? NFTs can be defined as units of information, specifically, asset registration codes integrated with metadata, whose main characteristic is their non-fungibility, and whose native environment is blockchain networks. We will explain this idea in more detail.

The term "token" has its origin in the analog world, being used to refer to chips or vouchers in the physical environment. The prototypical example of this is casino chips, which represent a certain amount of fiat money only valid within a specific environment, the casino. This same idea has been attempted to transpose to NFTs, as "intangible goods" that "represent" other goods digitally (a plastic work, for example) in a specific environment: the blockchain network.

Blockchain is a technology based on a distributed digital storage network that functions as a large virtual ledger. In this network, information is encoded or encrypted, which ensures its integrity and inalterability, though not its truthfulness when introduced into the distributed network. Information is organised in blocks, which contain grouped metadata and are identified by a hash, a unique alphanumeric combination.

The process of creating tokens through blockchain technology is called tokenization. Asset tokenization is the process by which goods are "represented" digitally on the blockchain. This "digital representation" involves recording the asset digitally on a distributed network (the blockchain)¹². So, if the blockchain is understood simply as a sort of digital ledger of data, tokenization would be the digital annotation in that ledger of a good, which is represented (referenced) by another unit of information called a token. "Tokenizing assets" and "minting assets" are two typical expressions used in the token environment. Both even have the same meaning. The person who mints or tokenizes an asset is called a minter.

The legal nature of tokens has been a concern before the rise of NFTs. According to PASCUAL MALDONADO, under the Spanish *ius civilis* classification, tokens are considered transferable things, movable, intangible, fungible or non-fungible, present, of private property, and within the commerce of humans, except if they represent a prohibited asset.¹³

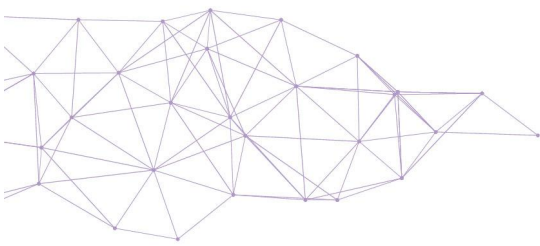
In this sense, the token, as a unit of information, will be fungible as long as it is susceptible to being exchanged for another token of the same kind and quality. A typical example of a fungible token is cryptocurrencies like Bitcoin and Ether.

On the other hand, non-fungible tokens (NFTs) are digital assets whose main peculiarity is their non-fungibility.¹⁴ The value of this type of token as an asset lies in this characteristic: being unique and non-exchangeable. Not only can the existence and

¹²J. P. Maldonado, "Tokenización de activos: Naturaleza jurídica del token y del activo", [2019] *LegalToday*, <https://www.legaltoday.com/legaltech/novedades-legaltech/tokenizacion-de-activos-naturaleza-juridica-del-token-y-del-activo-2019-11-20/> accessed: 15 February 2022

¹³ *Ibid.*

¹⁴ Non-fungible goods are understood as those that are not susceptible to being exchanged; that is, those that cannot be substituted by another of the same species or kind. The prototypical counterexample usually given in the literature is money, which is considered a fungible good. L. Diez- Picazo and A. Gullon, L. Diez, *Sistema de Derecho civil Vol.I: Parte general del Derecho civil y personas jurídicas* (Editorial Tecnos 2016). 400.



authenticity of the created token be certified, thanks to the advantages of blockchain, but it is also a non-reproducible digital good.

Once the NFT is created, any transaction that occurs with it will be recorded on the blockchain, the data about the transactions made with it, and the data of the created NFT and its creator, cannot be modified. For this, no third party is needed to control and verify the authenticity of the transactions; this task will be performed by the blockchain network users themselves. None of the aforementioned issues had been previously achieved in the digital realm, but they all refer to the NFT, not to the good referenced on the blockchain from which the first is generated.

All of the above is significant for NFTs of artwork and allows this technology to be demystified. If it is understood that an NFT with artwork is a set of unique metadata that identifies a work of art in a digital registry, it does not seem reasonable to assert that an NFT is a digital work of art based on blockchain technology. Tokenization, as addressed, does not constitute a creative act that gives rise to a work.

It is also a mistake to understand an NFT as the medium of digital artwork. Strictly speaking, even when it is stated that the NFT is the digital representation of the work, what is being said is that the NFT is the representation of the work's medium. This corresponds with the separation made in IP matters between *corpus mysticum* and *corpus mechanicum*, where the former is what is protected. Indeed, most scholars agree that strictly speaking, NFTs have little to do with IP rights. Property rights over metadata are not the concern of this branch of law. Property rights over metadata are not of interest to this branch of law.

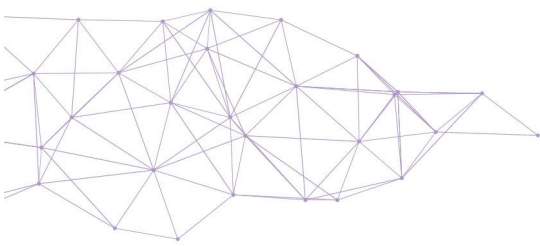
The above precision transcends the understanding of the impact of NFT creation on the monopoly of exploitation. Indeed, if it were mistakenly understood that creating an NFT implies a change of medium (the work goes from being in its original medium to another different medium, which would be the NFT), this would inevitably lead to the argument that the NFT results from an act of reproduction, applying the logic followed by the Court of Justice of the European Union (hereinafter CJEU) in the case *Art & Allposters International BV v Stichting Pictoright*.¹⁵ This reasoning is incorrect. Tokenization is not digitization. That is, while in the latter the work, initially in any format, goes on to have another: a different medium consisting of a binary code, without any creative activity; in tokenization, the work continues to have its digital medium, only a fragment of code is generated that gives it, in a blockchain, a unique identifier.

On the other hand, NFTs do not certify the authenticity of the tokenized work; it is possible to tokenize works over which the NFT creator does not hold copyright, either originally or derivatively¹⁶. As BRIAN FRYE asserts: '...NFTs fetishize the mechanics of certificates of authenticity, while ignoring their purpose. They are intended to enable secure transactions in artworks by ensuring that work is authentic. But they can't actually accomplish that purpose, because they lack any meaningful connection to the work they are supposed to authenticate. NFTs are gangbusters at authenticating themselves, but utterly incapable of authenticating anything else. Knowing who owns an NFT tells you nothing about who owns the artwork it ostensibly authenticates. Or at least, nothing you didn't already know.'¹⁷

¹⁵Court of Justice of the European Union, Judgment of 22 January 2015, Case C-419/13, *Art & Allposters International BV and Stichting Pictoright*, ECLI:EU:C:2015:27.

¹⁶A.Guadamuz, "Ceci n'est pas une pipe: Adventures in NFT-land" (TechnoLlama, 2021) <https://www.technollama.co.uk/ceci-nest-pas-une-pipe-adventures-in-nft-land>.

¹⁷ B. L. Frye, "NFTs & the death of art" (2021). SSRN: <https://ssrn.com/abstract=3829399> or <http://dx.doi.org/10.2139/ssrn.3829399.6>.



Furthermore, the work can be infinitely reproduced, and it is also possible to create different NFTs from the same virtual work.¹⁸

Likewise, the digital representation of goods (tokenization) in a digital registry such as the blockchain does not give rise to any rights over the referenced goods. A distinction must be made between ownership of the token and ownership of the good it represents. Whoever owns the first does not necessarily hold ordinary or intellectual property rights over the second. Possession of an NFT as an owner grants its holder exclusivity over the token, not over the good.

5. Monopoly of exploitation of intellectual property rights and NFTs

5.1. Acts of Exploitation in the Commercialization of NFTs. Distinguishing the Different Types of NFTs

Starting from the idea that minting or tokenizing a virtual artwork strictly involves the generation of a digital record associated with it, it can be deduced that, strictly speaking, asset tokenization, and therefore the creation of the NFT, does not in itself constitute an infringement of any right within the monopoly of exploitation.

However, the commercialization of NFTs through marketplace platforms may involve prior acts of reproduction and public communication¹⁹ of the artwork, these being the only acts that, in this context, affect the author's monopoly of exploitation. In the digital environment, following the doctrine of the CJEU, there are generally no acts of distribution²⁰ To generate an NFT on marketplaces like Opensea, which uses the Ethereum blockchain network,²¹ users must upload a copy of the artwork to the platform and have the option to add enriched metadata. Enriched metadata refers to additional information associated with the artwork that is incorporated into the NFT's smart contract. The NFT's smart contract is an executable code on the blockchain that defines the rules and characteristics of the token. In the case of NFTs, this smart contract incorporates the enriched metadata of the information provided by the NFT creator before the tokenization process. Thus, when an NFT is listed for sale on a marketplace like Opensea, this additional information, or optional elements as they are also called, is used to provide details about the artwork.

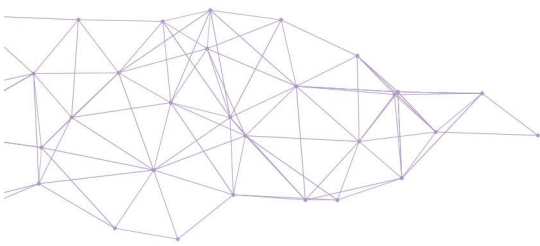
The additional information that translates into enriched metadata in the smart contract can include the title of the work, an image, video, or gif of it, a detailed description, and even a link to the work, which can be stored on the platform itself or an external

¹⁸ See: A. Guadamuz, 'The Treachery of Images: Non-fungible Tokens and Copyright' (2021) 00(0) Journal of Intellectual Property Law & Practice, jpub152, <https://ssrn.com/abstract=3905452> or <http://dx.doi.org/10.2139/ssrn.3905452>.

¹⁹ It should be noted that, under Spanish law, interactive making available does not constitute an autonomous right within the author's exploitation monopoly, but rather one of the modalities that make up the right of public communication.

²⁰ Distribution always presupposes the existence of a tangible medium, which is not the case with digital works of art, as there is no transfer of possession. In cases where works are made publicly accessible on the Internet, what occurs is interactive making available, a modality of communication to the public. See. Court of Justice of the European Union, Grand Chamber, Case C-263/18, *Nederlands Uitgeversverbond and Groep Algemene Uitgevers v Tom Kabinet Internet. BV, Tom Kabinet Holding BV, and Tom Kabinet Uitgeverij BV*, ECLI:EU:C:2019:1111 (Dec. 19, 2019).

²¹ Each platform uses its own blockchain network. One of the most widely used blockchain networks for asset tokenization today is Ethereum. Ethereum has its own technical standard for NFTs (ERC-721) and its own cryptocurrency (Ether).



network, among other relevant details. These elements are not necessary for the tokenization of the work, as one can choose to create the NFT and not sell it on the platform or simply not add those elements.

The way enriched metadata is obtained on OpenSea is through the ERC721 specification (Ethereum Request for Comments 721). This is a standard used in the creation of NFTs on the Ethereum network, through an extension called ERC721Metadata, which defines a function that essentially generates a link to the token's metadata outside the blockchain.²²

Thus, the platform provides options to the NFT creator that, if chosen, allow for the creation of the NFT listing. This includes all the information that will be available on the platform about the NFT in an organized and attractive manner so that anyone who accesses it can identify the work and proceed with the purchase. However, the so-called NFT listing, or the information about the NFT published on the platform, is not the NFT itself.

Based on the enriched metadata incorporated into the NFT, we can distinguish between NFTs that contain a publicly accessible link to the location of the work and those that do not. The former are known as open metadata NFTs²³ and are of interest to IP because the CJEU doctrine on links applies to them, and therefore their sale is considered an act of public communication.

According to established CJEU jurisprudence, public communication requires the concurrence of two cumulative elements: an act of communication of a work and the existence of a public to whom the work is communicated. In the specific context of links directing to protected works or performances, the CJEU has held that it constitutes an act of public communication if these links can bypass the restriction measures adopted by the website where the protected work is located, aimed at limiting public access²⁴, or if they direct to a work made available elsewhere on the Internet without the rights holder's authorization, provided that the person who posted the link knew or should have known about this circumstance, which is presumed in the case of those acting for profit.²⁵

Regarding the position on links, the Court of Justice of the European Union has unequivocally stated that posting a work online on a website, which was previously communicated on another website without restrictive measures and with the authorization of the copyright holder, does not constitute an infringement of the right of public communication. The Court argues that in this case, there would not be an act of communication to a new public, as the public considered by the rights holder was exclusively those accessing the work on the site where the initial communication occurred.²⁶

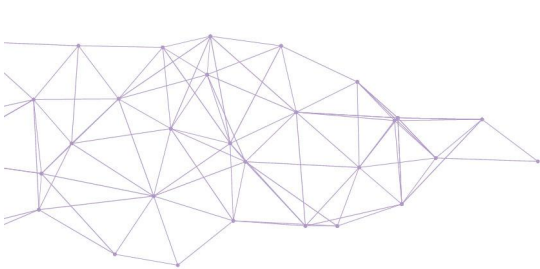
²² In this regard see: "Adding metadata and payments to your contract" [Online], OpenSea Documentation, available at: <https://docs.opensea.io/docs/part-3-adding-metadata-and-payments-to-your-contract> accessed 27 April 2024.

²³ These are those where public access to the full token ID, i.e. its unique identifier, and its smart contract is possible, hence the link contained in the token's metadata can be accessed.

²⁴ Court of Justice of the European Union, Judgment of 13 February 2014, Case C-466/12, Nils Svensson and Others v Retriever Sverige AB, ECLI:EU:C:2014:76, para. 31. The same principle was reiterated in the Court of Justice of the European Union, Judgment of 8 September 2016, Case C-160/15, GS Media BV v Sanoma Media Netherlands BV and Others, ECLI:EU:C:2016:644, para. 50.

²⁵ Court of Justice of the European Union, Judgment of 13 February 2014, Case C-466/12, Nils Svensson and Others v Retriever Sverige AB, ECLI:EU:C:2014:76, para. 31. The same is reiterated in the Court of Justice of the European Union, Judgment of 8 September 2016, Case C-160/15, GS Media BV v Sanoma Media Netherlands BV and Others, ECLI:EU:C:2016:644, para. 50.

²⁶ Court of Justice of the European Union, Judgment of 7 August 2018, Case C-161/17, Land Nordrhein-Westfalen v Dirk Renckhoff, ECLI:EU:C:2018:634, final statement.



Additionally, in line with the evolution of CJEU jurisprudence, the assessment of the existence of an act of public communication is individual. This individualized assessment must consider several complementary criteria, of non-autonomous nature, applied both individually and in their reciprocal interactions. This always depends on the specific case, according to which the intensity of these criteria varies. Thus, the main elements are: an act of communication (an effective making available) and a public to whom it is communicated (an indeterminate, potential, considerable, and receptive number of people or recipients), and the complementary elements are mainly: the existence of a new public, the use of a specific and different technical means in the act of communication, the profit motive, the indispensable role of the user, and their deliberate intervention in the act of communication.

Based on the above, it can be argued that facilitating the link through the NFT, as long as it provides direct access to the digital artwork, is an act of communication. In this context, the type of link and its destination must also be analyzed. The specific characteristics of the link, such as whether it bypasses access restrictions or leads to an unauthorized copy of the work, further determine the nature and legality of the communication act.

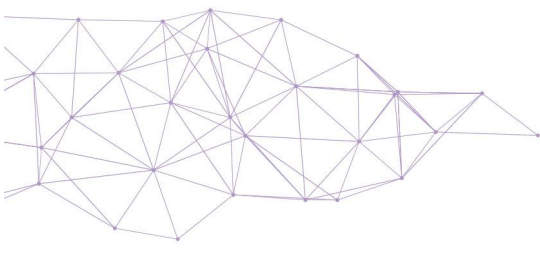
One might ask whether the digital file containing the minted work should follow the rules of ordinary property transfer. In this regard, it should be noted that the purchaser of an NFT that contains a link to the work accesses a copy of it, which is not the same as the one from which the work was minted. It is also not possible to assert that this is an act of alienation. It is challenging when the act of uploading the work to a server constitutes its reproduction. The author does not part with the original medium at any time.

The concept of alienation of ordinary property, therefore, becomes blurred in the digital environment. Applying CJEU jurisprudence²⁷ logically, there will only be a digital transfer (and therefore a transfer of property rights over the medium) when the file that originated the transfer is disabled so that once acquired by the buyer, the file becomes unusable by the seller. Conversely, any acts that deviate from this scenario, whereby a file or document containing the work is "acquired" (i.e., accessed) in the digital environment, imply that the title of ownership is held over the latter and not over the medium that served as the basis for the act of reproduction.

In the case of NFTs that do not contain public links to the work, they are also relevant for IP, to the extent that, for their offering for sale, the optional elements used constitute reproductions of the tokenized work. In such cases, the prior act of reproduction is followed by a subsequent act of public communication when the NFT is put up for sale. With the availability of the "NFT image" on the platform, it will not be necessary to acquire the latter to directly access a copy of the tokenized work.

Therefore, the commercialization of NFTs under such conditions implies a form of exploiting the work, that is, extracting value from accessing, using, and enjoying the artwork, as it affects the faculties that integrate IP rights, specifically the rights of reproduction and public communication in the modality of making available interactively. The NFT does not constitute a new modality of exploitation of the work. It is the prior acts to its generation and subsequent sale that imply pre-existing modalities of exploitation rights coming into play.

²⁷ See. Court of Justice of the European Union, Grand Chamber, Case C-128/11, *UsedSoft GmbH v Oracle International Corp*, ECLI:EU:C:2012:407 (July 3, 2012).



When the tokenized work belongs to someone else, the sale of the NFT will infringe on the author's economic rights if the reproductions of the tokenized work are publicly communicated on the marketplace.

Moreover, the possibility of infringing the author's moral rights when commercialising NFTs linked to others' works through marketplaces seems clear. This is based on the premise that those who tokenize someone else's work usually claim authorship of the tokenized work, as reflected in the information published when listing the NFT on the platform. Therefore, presenting the NFT as the unique identifier of a work and claiming authorship, at least, would infringe the author's moral right of paternity over the tokenized work without their authorization.

The authors of the tokenized work could thus oppose not only possible infringements of economic rights that may occur in the commercialization of the NFT but also the violation of the moral right of paternity implied by the sale of the NFT, presenting the other's work as their own. The same analysis would apply if, for example, an NFT of a work that has not been previously disclosed by its author is put up for sale. The possibilities are diverse, but they will largely be related to the aforementioned acts of reproduction and public communication. In any case, the violation of moral rights will always be linked to the infringement of economic exploitation rights.

Concerning the topic at hand, special consideration should be given to lazy NFTs, also known as lazy minted NFTs. In fact, rather than being a new type of NFT, lazy NFTs are the result of a new functionality that NFT marketplaces offer to users who generate them.²⁸ This technique allows the tokenization to be delayed until the moment the NFT is sold so that the first buyer of the token covers the gas fees for the token's creation with their purchase. "Gas" is the fluctuating fee that is charged to write new data onto a blockchain. In this way, the NFT creator never has to pay to mint.²⁹

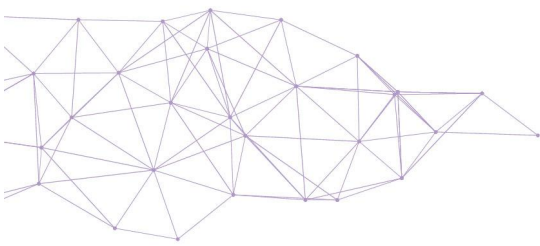
There is a common element between lazy NFTs and regularly generated NFTs. In both cases, the prior act of communicating the virtual work is preceded by an act of reproduction as a preparatory act step for the commercialization of the NFT, specifically, uploading the work to the platform for both its tokenization and the generation of the NFT listing. In both scenarios, the act of making the NFT available occurs with the generation of the NFT listing, which coincides with the moment of sale. They differ in that, at the time of offering for sale, the NFT has already been generated in one case, while in the other, tokenization is delayed until the moment of purchase. In other words, in the latter case, the NFT does not exist until the act of purchase generates it.

5.2. Corpus mysticum, corpus mechanicum, and NFT's

At this point, we can ask whether the owner of the physical medium of the work has sufficient powers, under their title of ownership, to generate an NFT from it. In this regard, the owner of the medium will be subject to the provisions of Article 56.2 of the Consolidated

²⁸See "Introducing the Collection Manager" [Online], OpenSea Blog, available at: <https://blog-v3.opensea.io/articles/introducing-the-collection-manager> accessed 26 April 2024.

²⁹See "Lazy Minting: How It Works" [Online], NFT School, available at: <https://nftschool.dev/tutorial/lazy-minting/#how-it-works> accessed 26 April 2024.



Text of the Law on Intellectual Property³⁰ along with Articles 10 and 3.1, of the same legal text.³¹

These articles establish that, except for the right of public exhibition, the remaining economic rights that have not been expressly transferred to the acquirer of the material medium continue to belong to the author, thus imposing a limitation on the powers of the owner.³² This limitation is defined as a moderating effect of IP rights over the work, concerning the ordinary property right over the medium and the powers it contemplates, when the holders of the *corpus mysticum* and *corpus mechanicum* do not coincide.³³

The scope of application of the provision contained in Article 56.2 of the Consolidated Text of the Intellectual Property Law (TRLPI) is clear: it only refers to the owner of the original of a work of visual art or a photographic work, whether published or unpublished and only if the author has not expressly excluded this right in the act of alienation of the original. Given these conditions, the legal consequence is the transfer of the right of public exhibition of the work to the owner of the medium, although the author may oppose the exercise of this right, through legally established means, when the exhibition is carried out in conditions that harm their honor or professional reputation.

It should be noted that the object of the right that is permitted to be exercised constitutes the original work, not its reproductions. Therefore, there is no doubt that the right of reproduction in any of its modalities remains within the author's monopoly. Hence, the owner of the physical medium may publicly display the work, but for this purpose, they are not authorized to obtain reproductions of it without the author's permission.³⁴

Moreover, regarding the creation of NFTs through marketplaces, the common acts of public communication with the sale occur in the Internet environment, as we have verified. Thus, it is peacefully accepted in doctrine and jurisprudential interpretation that such acts correspond to the modality of interactively making available.

Introduced in the Spanish Intellectual Property Law by Law 23/2006, the interactively making available provided for in Article 20.2 letter i) comes from Article 3.1 of Directive 2001/29/EC and the WIPO Treaties of 1996. It reflects the legislator's will to regulate those cases of public communication that do not behave according to traditional systems but according to Internet practices, websites, and platforms, among others.³⁵ The

³⁰ Royal Legislative Decree 1/1996, of 12 April, approving the revised text of the Intellectual Property Law, regularising, clarifying and harmonising the legal provisions in force on the matter, BOE no. 97, of 22 April. (Drafting in accordance with Law 21/2014, of 4 November)(hereinafter CTLIP). It is a special law that regulates intellectual property in Spain.

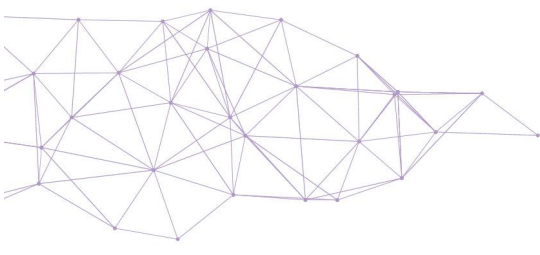
³¹ Article 3 and the expression "material thing" must be interpreted in the light of Article 10 of the CTLIP, which states that any type of work shall be protectable regardless of the type of medium in which it is expressed, tangible or intangible, or even any medium or support likely to be created in the future. Vid. Articles 3, 10 and 56 Royal Legislative Decree 1/1996, of 12 April, approving the revised text of the Law on Intellectual Property, regularising, clarifying and harmonising the current legal provisions on the matter, BOE no. 97, of 22 April. (Drafting in accordance with Law 21/2014, of 4 November).

³² Or the derivative holder of the intellectual property rights.

³³R. Sanchez Aristi, *Comentario al artículo 19*^o (2017). *Comentarios a la ley de propiedad intelectual: Real decreto legislativo 1/1996, de 12 de abril, por el que se aprueba el texto refundido de la ley de propiedad intelectual, regularizando, aclarando y armonizando las disposiciones legales vigentes sobre la materia* (4th ed.), in B. Rodríguez- Cand, R & A. Conradi, Madrid: Tecnos, 339

³⁴J. J. Hualde Sanchez, "Comentario al artículo 56" in Bercovitz Rodríguez-Cano, R. & Amores Conradi, M. (2017). *Comentarios a la ley de propiedad intelectual: Real decreto legislativo 1/1996, de 12 de abril, por el que se aprueba el texto refundido de la ley de propiedad intelectual, regularizando, aclarando y armonizando las disposiciones legales vigentes sobre la materia* (4th ed.). Madrid: Tecnos, 339.

³⁵ J. M. Rodríguez Tapia, "Comentario al artículo 20", in Rodríguez Tapia JM, et al (eds), *Comentarios a la Ley de Propiedad Intelectual, Texto Refundido, Real Decreto Legislativo 1/1996, de 12 de abril*, 2nd edn. (Editorial Aranzadi SA, Pamplona, 2009).



subject who issues the communication uploads content on which the public decides where and how to access it. As already addressed, such a modality will be preceded by at least one act of reproduction not covered by Article 56.2 of the CTLIP, which is the uploading of the work to the marketplace's storage.

Having demystified the technology under analysis and its impact on the work as an intangible asset, we will now examine the most relevant aspects of Judgement No. 11/2024 of the Ninth Commercial Court of Barcelona for the matter in question.

6. Judgment No. 11/2024 of the Ninth Commercial Court of Barcelona. Critical evaluation: between expectation and reality

From everything discussed so far, several questions can be extracted for the analysis of the judgement issued by the Commercial Court of Barcelona in the case of Mango vs. VEGAP.

Concerning the proven facts, it should be noted that the case in question, which is the subject of the judgement under analysis, is a common and well-known case in the field of IP law, where the defendant has commissioned a third party to create an artistic work, inspired by a pre-existing work, which was subsequently disseminated in both physical and digital environments.

The dissemination of the work in the digital environment, through Opensea, using lazy NFTs, is what adds a characteristic note to this case, apparently separating it from classic cases. These lazy NFTs had a specific peculiarity that set them apart from those defined in the previous section: the purchase option could not be exercised, so the NFTs were never actually minted. Furthermore, the digital work used in the publication of the lazy NFTs on the marketplace could not be downloaded either.

Strictly speaking, it cannot be said that the Court decision under analysis resolves the first case in the field of NFTs of artworks in Spain, as the defendant correctly asserted, the digital files never became blockchain assets. However, this is how it has been presented in the media, blogs, and websites on topics of legal interest³⁶. To be sure, this is not a pioneering court case in Spain on NFTs of this type, as some authors had already warned before the judgement was handed down.³⁷

Consequently, the Court could not be expected to rule on whether tokenization, as an action generating the NFTs, per se, constitutes an infringement of IP rights. Hence, no conclusion could be drawn from the judgement on this issue, with a view to future cases of tokenization of works of art. Nor could it be expected that the outcome of this litigation would lay the foundations for the legal nature of NFTs, as was also anticipated by some.³⁸ However, it was to be expected that the Court decision would provide some clarification as to what constitutes a lazy NFT and its impact on intellectual property.

³⁶ Some examples: Periscopio Fiscal y Legal (PwC), 'Primer resolución judicial en España sobre los NFTs: reproducción y transformación', <https://periscopiofiscalylegal.pwc.es/primera-resolucion-judicial-en-espana-sobre-nfts-reproduccion-y-transformacion/> accessed 12 May 2024. Safe Creative, 'Sentencia pionera sobre NFT y copyright en España', <https://www.safecreative.org/tips/es/sentencia-pionera-sobre-nft-y-copyright-en-espana/> accessed 12 May 2024.

³⁷ S. Artisti and A. Eguluz, 'Posible infracción de derechos de autor en la preparación de NFT sobre obras de arte' (2024) <https://www.cuatrecasas.com/es/spain/propiedad-intelectual/art/posible-infraccion-de-derechos-de-autor-en-la-preparacion-de-nft-sobre-obras-de-arte>.

³⁸ See: "Primera resolución judicial en España sobre los NFTs: reproducción y transformación" <https://periscopiofiscalylegal.pwc.es/primera-resolucion-judicial-en-espana-sobre-nfts-reproduccion-y-transformacion/>.

Regardless of the expectations generated, which were more or less aligned with the specific judicial case, the fact is that the judgement under analysis contributed nothing regarding NFTs, neither in general nor in particular. Despite the expectation that, given the conflict's relation to NFTs of artworks, its impact would be significant.³⁹

An analysis of the Court's decision reveals the Court's misunderstanding of the technology of non-fungible tokens, their nature, and their definition, as evidenced by repeatedly confusing NFTs and digital artworks (see the second and fourth grounds of law). Hence, from the very determination of the dispute, the levels of analysis about the case were intermingled, as it was held that the substance of the issue lay in determining whether the right of ownership over the physical medium of the work entitles the holder to transform the work into an NFT.

The Court should have separated the first level of analysis, the act of "reinterpretation" of the work, from the subsequent dissemination of its results. Thus, the Court should have ruled on the act of "reinterpretation" carried out by the defendant, to determine whether the results of that act constituted new works and whether they were, in fact, derivative or independent works. Having determined this, it should have analyzed the circumstances and characteristics of the dissemination in each channel used, that is, Mango's physical store, the metaverse, and the NFT marketplace. The analysis of each dissemination channel separately would have made it possible to identify the acts of exploitation carried out in each one, both of the original works and of the derivative works, where applicable.

Concerning the dissemination on Opensea, specifically lazy NFTs, it would have been an excellent opportunity to discuss this type of NFT, their definition, and main characteristics, as well as the acts required to generate them, in contrast to the particularities of the case outlined above, to explain how the absence of a sale option precluded the possibility of generating the NFT.

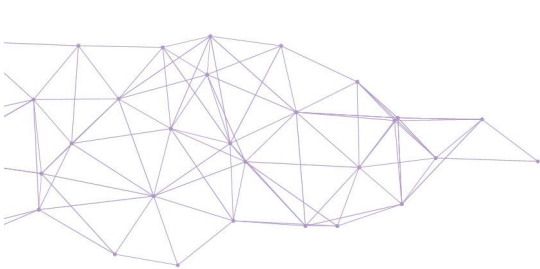
Based on the foregoing, it would have been appropriate for the Court to orient its reasoning along the above logic, to understand, as would be appropriate, the acts carried out through the Opensea platform as preparatory acts for the final realization of the NFT. This is irrespective of the fact that in the end the sale option was never enabled by the defendant. Such reasoning would have made it possible to extract some elements of interest with a view to the generation of artwork NFTs.

Although the disputed issue was wrongly established, the Court first reasoned that the original works had been transformed by the plaintiff. Accordingly, it observed that, although the infringement of IP rights over the original works is alleged, both moral rights (integrity and disclosure) and economic rights (reproduction, public communication, and transformation), it is not necessary to examine either the moral right to integrity or the right to reproduction, since the right to transformation excludes both. If there is an act of transformation, there will be no reproduction, and the right to integrity of the original work will not be affected, since a new work has been created.

Given the above, the Court concludes that the conflict between, on the one hand, the right of disclosure, public communication, and transformation of the work held by the holder of the IP rights and, on the other hand, the right of public exhibition held by the owner of the physical medium of the pre-existing work of art, is what is sought to be resolved.

On this basis, the Court analyzes each of the aforementioned rights of the authors of the original works. It determined that there was no infringement of the moral right to disclosure of the work, with good reason, since the work had been made accessible to the

³⁹S. Artisti and Eguiluz, 'Posible infracción de derechos' (2024).



public for the first time before the events that took place. Likewise, it reasons that in all environments (channels of dissemination of the original and derivative works) there has been a communication to the public in the modality of public exhibition and, therefore, about the original works, they are protected by Article 56.2 of the CTLP. Finally, the Court considers that despite the existence of an unauthorized act of transformation in the creation of the works in dispute, the "lawfulness of the transformation" is protected by the doctrine of the harmless use of the right and of "fair use," although it is not included in our legal system. The greatest argumentative effort of the judgment was aimed at illustrating why the Court accepted this thesis, which was the one put forward by the defendant.

We must even list the errors made by the Court, as some of them have a certain relevance to the issue at hand.

Having established the fact that derivative works have been made without authorization, the question of whether the owner of a derivative work may carry out acts of reproduction and communication to the public of the derivative work without the authorization of the owner of the original work cannot be left open. In short, the Court had to assess the existence of acts of even indirect exploitation of the original work in the uses made of the derivative work. This is just another classic problem concerning derivative works, i.e., to determine whether any act of exploitation of the derivative work requires the authorization of the owner of the original work. This is irrespective of whether the act of transformation was not authorized. Neither of these questions was addressed by the Court.

On the other hand, the Court treated the public communication that occurred in Mango's physical shop, on the Opensea platform, and in the metaverse as the same modality, understanding it as a public exhibition as established in Article 20.2) paragraph h) of the CTLP along with Article 56.2. This is incorrect for several reasons, all of which are already addressed in this work. Firstly, Article 56.2 only covers the traditional modality of public exhibition of the physical medium work; any act necessary for the exercise of this right requires the author's authorization, which includes acts of reproduction. Secondly, making available works on the Internet, through NFT marketplaces or the metaverse, constitutes a communication to the public in the modality of interactively making available. Lastly, the public exhibition right provided for in Article 56.2 of the CTLP does not entitle the holder to create reproductions of the original work or to make such reproductions available on NFT marketplaces, in the metaverse, or any Internet domain.

The criterion upheld by the Court disregards both the letter and the spirit of Article 56.2 CTLP by considering that the acts of reproduction and public communication carried out before the sale of the NFT would be permitted. Perhaps the fact that the NFT was neither created nor put up for sale was what erroneously influenced the Court's decision.

Despite the criticisms of the reasoning in the judgement, we should not overlook an observation made by the Commercial Court of Barcelona:

...la infracción de derechos de autor en el metaverso (ya sea en el interior o en el exterior; esto es, ya sean obras creadas dentro del metaverso por un usuario a través de su avatar o ya sean obras creadas en el mundo "real" y después insertadas en el metaverso, como ha sucedido en el presente caso) se regirá por nuestro régimen jurídico actual, aplicándose de la misma manera a estos derechos generados en entornos virtuales, sin ninguna especialidad (por el momento), tal y como hasta ahora se ha venido haciendo ante las infracciones cometidas en entornos digitales clásicos, como Internet o los videojuegos. Por lo tanto, un titular ostenta los mismos derechos y las mismas herramientas procesales para defender sus derechos ante una infracción en el metaverso causada por obras y creaciones (...), pues nuestra LPI no establece un catálogo cerrado de

*actos infractores, de modo que bastará con que exista un acto de explotación de la obra protegida por parte de un tercero sin contar con la autorización del titular de la obra y que no esté sujeta a ninguno de los límites que establece la LPI para que opere el art. 17 LPI, que reconoce al titular de una obra el derecho exclusivo y excluyente sobre su creación, que le faculta para prohibir el uso y explotación sin su consentimiento...*⁴⁰

The Court is right to uphold this reasoning, which can be applied to future cases of infringement related to the generation of NFTs of works of art, both in the metaverse and on platforms that market them directly. With the current legislation on IP in Spain and, it should be added, with the case law handed down by the CJEU, it is possible to respond to a conflict of infringement of rights in disruptive environments such as the metaverse, which also includes those cases where an NFT artwork has been made available for sale without the author's authorization in this area.

For future cases of NFTs of works, the important thing will be to properly enlighten the Court on the technology it is adjudicating and its true impact on intangible property. This burden, of course, will be on the parties, as part of their burden of proof.

7. Conclusions

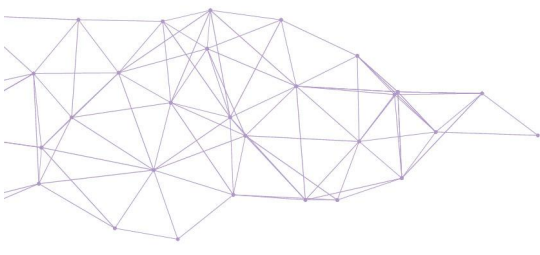
NFTs are essentially metadata. Consequently, they are not identified with the minted work, are not a reproduction or transformation of the latter, and do not constitute a result of creative activity. Additionally, possession of an NFT does not, by itself, imply ownership of the work. The technology with which the NFT was created certifies the authenticity of the NFT itself, but not the work it is linked to or its authorship. This is evidenced by the technical possibility of tokenizing third-party works.

Tokenization in itself does not affect the monopoly on the exploitation of the work, either economically or morally. It essentially involves assigning a unique identifier in a distributed ledger. Therefore, asset tokenization does not constitute a new modality of exploiting IP rights and cannot generally be considered an infringing activity.

According to Union law and current Spanish law, the generation and sale of NFTs may involve acts of reproduction and public communication, depending on the type of NFT and the information provided on the marketplace. Acts related to the generation and sale of NFTs affecting reproduction rights mainly involve unlawful uploading and downloading of content to a marketplace. Acts of communication to the public are specific to NFTs containing publicly accessible links or using reproductions of the work as the visible image. Moral rights may be infringed if an NFT is offered for sale as the unique identifier of someone else's work.

In the Barcelona Court case, it cannot be said that the NFTs of the artwork were traded. However, the NFTs were listed for sale, although the referencing of the published information and the digital work on the blockchain was postponed and ultimately not carried out. Although this case did not allow the Court to rule on the scope of tokenization for intangible property, it highlights preparatory acts, those common procedures preceding the generation of NFTs that affect IP rights. These procedures, in contrast to the tokenization itself, extract value from the access, use, and enjoyment of the artwork

⁴⁰ Commercial Court No 9 of Barcelona, Judgment of 11 January 2024, Ordinary Proceedings, Appeal No 776/2022, Id Cendoj: 08019470092024100001, Commercial Court, Section 9, Presiding Judge: Montserrat Morera Ransanz, ground of law number four.



mainly through public communication. It was a great opportunity for a Spanish court to rule on such acts, even though the dispute didn't strictly focus on NFTs of artworks.

Finally, acts of exploitation that may arise from the generation and sale of an NFT through a marketplace, inside or outside the metaverse, are covered under Article 17 of the CTLIP. The existing legal framework that is applicable is sufficient to address infringements that may occur in these virtual environments. In the current state of technological development, proposing legislative amendments to regulate these aspects from an IP point of view seems unnecessary. For now, the emerging issues related to NFTs do not arise from a lack of copyright regulation. Any contrary view could indicate a fundamental misunderstanding of the essential nature and functioning of NFTs.

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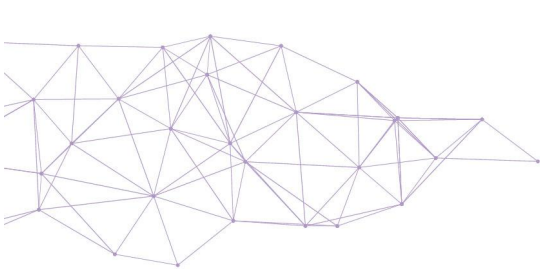
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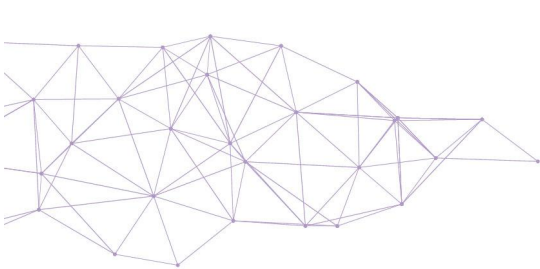
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