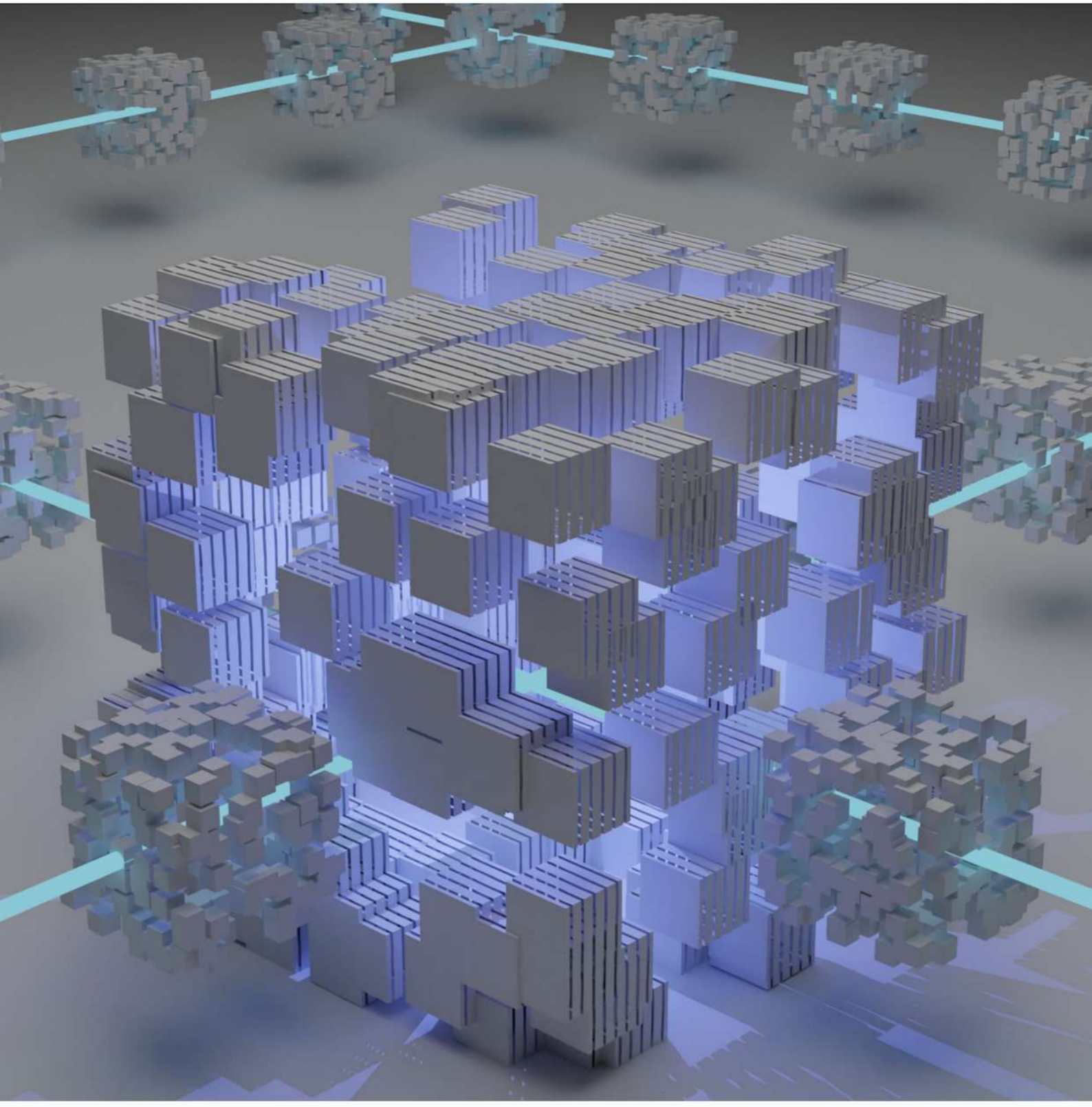
NFTS:

NEW REALITY OR JUST A METAVERSE TREND?



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This paper is an introduction to the Non-Fungible Tokens and to the Legal Concerns arising from them. In the following pages we will focus on the controversial aspects of NFTs, emerging from the rapid increase in technological advancements, on the uncertainties they create as to the scope of their eventual value -investment wise- and on whether Intellectual Property Law should adapt or not to these developments.

INTRODUCTION

Asset: a word with multiple facets; current, non-current, physical, intangible, operating, and non-operating. But, which type of asset interests us the most? Digital assets seem to prevail nowadays both in transactions & investments and, more specifically, in the form of **Non-Fungible Tokens,** (also known as **NFTs**), which will constitute the primary topic of this paper.

Digital assets forming NFTs could represent anything from a painting to a tweet. As said, *"Anything that can be digitalized can be turned into an NFT.* ***[1]***" A distinctive proof in case is Twitter's CEO, Jack Dorsey, who sold an NFT of his first tweet for $2.5 million, while the visual artist Mike Winkelmann -aka Beeple- sold his artwork *"Everyday - The First 5000 Days"* through Christie's for $69.3 million.

Furthermore, Mark Zuckerberg, following the same pathway and motivated mainly by his aspiration to adapt to the new virtual era, is in the process of creating the Metaverse ***[2]***.

The Metaverse will be "a place where people can work, play, and connect with others in immersive, online experiences," a space where NFTs will play a prominent role.In the Metaverse, people will have the ability to create their virtual home in the digital world. Their home could feature swimming pools, spacious gardens decorated with fountains and even swans, expensive furniture, and all the luxuries they could imagine. Also present in all homes, virtual or not, are closets full of clothes, footwear, bags, and accessories. All the above and much more not mentioned represent assets that could be digitized and sold in the Metaverse in the form of NFTs.

In other words, designers, creators, and artists will be able to sell their work in the Metaverse, thus expanding the reach of the audience both in the physical as well as the virtual world.

WHAT IS AN NFT?

Let us consider the basic features of NFTs and what they truly represent. Attempting a simplified definition, NFTs correspond to a set of metadata containing information encoded with a digital version of a work, **characterized by uniqueness and non-exchangeability.** NFTs cannot be traded or exchanged at equivalency, unlike fungible tokens such us cryptocurrencies.These tokens are always associated with a digital object or file (any digital work, even physical goods, which can be represented digitally) and stored electronically in digital format on a blockchain.

Through blockchain technology, illustrating the tokenization of assets and keeping an immutable ledger of an NFT ownership, each NFT will be followed by **a) a "smart contract"** in which its metadata is stored, **b) its token ID,** and **c) the cryptographic signature of the minter.** This type of contract, "smart contract," is an agreement written in code between different parties stored on a blockchain, unable to be modified. In other words, NFT is rendered as a **digital certificate of authenticity**, hence certifying the authenticity and singularity of the digital object to which it is linked.

A major advantage of forming an NFT is the possibility of authenticating digital content creating artificial scarcity and thereby **adding value to the original digital copy.** The authenticity of all such assets is verifiable online since purchases usually occur through cryptocurrencies, therefore recorded as part of transactional records.

The main concern that arises is the following: As mentioned, blockchain is a beneficial technological tool proving the creation of work, monitoring its use, and controlling the flow of revenue using "smart contracts." However, a significant drawback of blockchain is that it cannot determine whether the NFT is a product of intellectual property and whether the person who digitized it was, in fact, the minter (the creator). It is crucial to investigate the potential impact of NFTs on the intellectual property treatment of digital distribution, resale of intellectual property goods, and digital exhaustion, given that distribution will correspond not to the mere creation of digital copies but the distribution of original digital (intangible) works, meaning a unique digital embodiment.

INTELLECTUAL PROPERTY (propriété littéraire et artistique)

A. Legislative framework

Intellectual Property Law **(from now on "IP")** defines the exclusive rights to intellectual creations. In Greece, the legislative framework covering IP is divided into two categories: **a) industrial property** (governed mainly by Laws 146/1914, 1733/1987, 259/1997 and 4679/2020), including inventions (patents), trademarks, industrial designs, and geographical indications, **and b) copyright, related rights, and cultural matters** (governed mainly by Laws 2121/1993 and 4481/2017), covering artistic and literary works. Mentioning the French term in the subtitle was deliberately considering that the French legal system profoundly influenced Greek IP law. Furthermore, it is of great importance that **the major international intellectual property conventions,** such as the Berne Convention, the Rome Convention, the WIPO Copyright Treaty, the WIPO Performances, Phonograms Treaty, the World IP Genova Convention, and the TRIPS Agreement, have been all ratified by Greece.

Since NFTs are more associated with copyright issues, it is meaningful to have a deeper insight into the **dual nature of copyrights,** depicting one of the fundamental principles of the Greek IP legislation in general.

First and foremost, the creators are entitled both to their work's moral and economic rights. The **moral right is irrevocable**, and the creator cannot renounce it; however, it can be inherited [Article 12 of Law 2121/1993].

Unlike economic rights, it is not combined with an additional royalty for the creator and is not redeemable. On the other hand, **economic rights** provide the creator the power to authorize or prohibit [Article 3 of Law 2121/1993]:

- the recording and reproduction of their work
- the translation
- the adaptation or further modification of their work
- the distribution of the original work or its copies either by transferring the ownership or public lending
- the communication of their work to the public
- the overall performance of their work
- the transmission or retransmission to the public and
- the importation of copies.

>> It is essential to point out that **the moral right is independent of the economic right** and remains with the creator even after transferring the latter right.

The primary ways of exploiting a protected work are as follows:

- a simple or exclusive license with a limitation of exploitation in terms of space, time, and subject matter
- total transfer of the economic right
- aggregate or partial automatic transfer of ownership as an incidental consequence of another agreement
- contract of legalization and assignment to third parties for management purposes ***[3], [4]***.

Although there is an established regulatory framework for IP rights in Greece and Europe, the NFT's legislative picture is unclear. The possibility of infringing IP rights is strong, lacking specific case law in Greece and other jurisdictions. While in Europe, there is a willingness to set rulings on this matter from the European Court of Justice, it does not define the legislative framework nor solve the challenges that proclaim daily. It is obvious that NFTs are more associated with the concept of copyright rather than industrial property. However, it seems that it will prevail amongst other IP sectors in the future and raise vital questions regarding the legal protection of the involved parties.

B. Possible legal issues

In view of the above, it is very reasonable for investors who desire to enter the highly promising NFTs marketplace to raise questions about various aspects of NFTs essence. In particular:

Are the creators' IP rights protected in the new virtual marketplace where the NFTs prevail? Are the minters able to safely transfer and exploit their original protected work? In the event of an infringement of these rights, how is the violation cured?

On the other hand, what exactly is the purchaser buying? Do they obtain any rights over the NFT? If someone purchases an NFT whose alleged creator is not the real one and has illegally exploited a third one's work, are they protected, and how? If we consider that these transactions are made exclusively through online platforms, and the involved parties come from all over the world, which jurisdiction will be competent and which law is applicable in the event of a dispute?

FROM THE PERSPECTIVE OF THE MINTER

>> INFRINGEMENT OF THE MORAL RIGHT

According to article 1 of Law 2121/1993, the moral right protects the personal bond between creators and their work. Recognition of paternity is vital, among other specific powers derived from moral rights. Especially, the right of authorship (**"paternity right"**) represents the creators' power to demand that their name to be mentioned in each copy of their protected work and any public use of their work ***[5]***.

Consequently, someone can easily form an NFT of artwork without mentioning the creator's name, creating confusion about its origin, and violating the creator's moral right.

>> DIGITAL EXHAUSTION

One of the most recent concerns raised about the purchase of NFTs is the ability of the purchaser to resell the acquired digital asset without the need for constant permission from the minter. *Is the distribution of the digital asset attached to the NFT subjected to exhaustion? If so, are there any restrictions on resale? Does the minter have the right to prevent the resale of the digital asset that the purchaser has already purchased and possessed?*

To begin with, **digital exhaustion** illustrates one of the most controversial issues raised in the field of European copyright law. The exhaustion of the distribution right on the internet is reflected in article 3 of the Directive 2001/29/EC, implemented in the national legislation by Law 2121/1993. This right constitutes an individual power deriving from the creators' property right, which guarantees a wide range of economic exploitation rights from their works.

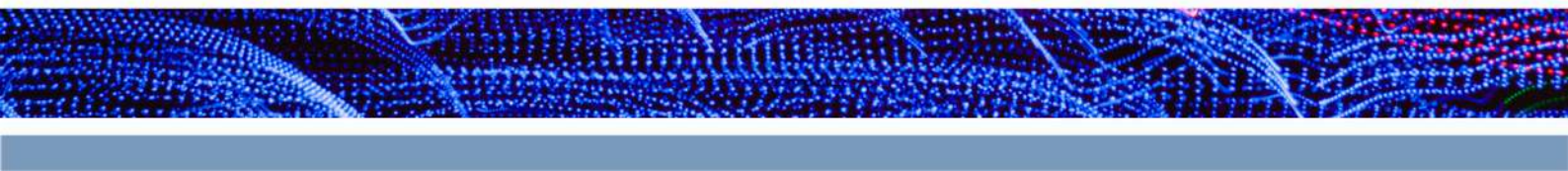
Notably, article 3 par.1 (h) of Law 2121/1993 refers to **a)** the right of non-material transmission of works made outside the interactive environment and **b)** the right to transmit the work interactively by direct communication and operation in the interactive digital environment. These rights integrate the provision of article 8 of the WIPO Copyright Treaty. As opposed to the right of distribution (article 3 par.1 (d) of Law 2121/1993), the right of communication to the public is **not subjected to the principle of Community exhaustion** by any act of communication or making available to the public. The scope of this provision aims to the creators' protection from the interactive retransmission or distribution of their protected works. In other words, when the distribution right is activated due to exhaustion, the creators cannot control any resale of their works (i.e., further sale of books in the bookstores). On the contrary, when the right of communication to the public is applicable, the purchaser is unable to resell the protected work without the creator's authorization ***[6]***.

Facing the difficulty of setting out digital exhaustion's guidelines, two significant judgments of the Court of Justice of the European Union **(from now on "CJEU")** were issued: **a) UsedSoft GmbH v Oracle (Case C-128/11) and b) Nederlands Uitgeversverbond, Groep Algemene Uitgevers v Tom Kabinet Internet BV, Tom Kabinet Holding BV, Tom Kabinet Uitgeverij BV (Case C-263/18).**

Under the UsedSoft case, the Court held that it is legal to resell a license to use a computer program downloaded by a user from the internet. To this extent, it becomes clear that the resale of standard software is possible even if the license states that the granted right of software usage is non-assignable.

The legal community raised plenty of critical questions upon the issuance of the above judgment. A crucial one is whether the reasoning followed for the UsedSoft judgment could be extended and applied -in accordance with the principle of proportionality- to other works, such as e-books, music files, and digital artworks. An initial approach to this key question is provided by the Tom Kabinet judgment, establishing the legal characterization of the distribution of 'second hand' e-books and the conditions under which the right to distribute or the right to communicate to the public triggered.

More specifically, in the Tom Kabinet case, the CJEU -based on a grammatical interpretation of the Directive 2001/29/EC (mainly focuses on the difference between the Articles 3 and 4) and the WIPO Copyright Treaty- **rejects the application of the distribution right** in the sale of second-hand e-books via a virtual marketplace.



On the other hand, the Court upholds its position that **such sale governs by the right of communication to the public**, which is not subjected to exhaustion. It rules that the distribution of an e-book to the public, which is available via download for permanent use, is covered by the concept of "communication to the public" ***[7]*** and, in particular, by the creators' right to make their works accessible to the public in such a way that anyone can access them wherever they choose.

Key points of the judgment are the following:

i. Primarily, the Court explicitly states that the UsedSoft judgment, introducing an **exception** to resell a computer program further, applies only to the protection of computer programs, rendering them as lex specialis concerning the Directive 2001/29/EC ***[8]*** and not to other digital assets. So, the UsedSoft decision is not deemed applicable as a precedent for the Tom Kabinet case.

ii. Subsequently, the Court focuses on the essential **difference between digital and material copies**. More specifically, according to par. 58 of the judgment:

"The supply of a book on a material medium and the supply of an e-book cannot, however, be considered equivalent from an economic and functional point of view. As the Advocate General noted in point 89 of his Opinion, dematerialised digital copies, unlike books on a material medium, ***do not deteriorate with use, and used copies are therefore perfect substitutes for new copies.*** *In addition, exchanging such copies requires neither additional effort nor additional cost, so that a parallel second-hand market would be likely to affect the interests of the copyright holders in obtaining appropriate reward for their works much more than the market for second-hand tangible objects, contrary to the objective referred to in paragraph 48 of the present judgment".* ***[8]***

Consequently, providing a book on a material medium and an e-book is not economically and functionally equivalent.

Since 'second-hand' e-books are sold at a much lower price and in perfect condition (as they have not suffered the decay of the material copy), the beneficiaries' right to receive appropriate remuneration for their protected works would also be affected in the case of the sale of 'second-hand' e-books based on the exhaustion rule.

iii. Furthermore, the Court examines the rationale behind the right of communication to the public by decoding the two required prerequisites to be activated; the first is the condition of *'new public'* and the second one of *'substantial number of people.'* In the Tom Kabinet case, both these prerequisites were met.

To sum up, the digital exhaustion of the online distribution of 'second-hand' e-books does not apply; assuming we adopt the Tom Kabinet decision to the NFTs market. In this case, a third purchaser of an NFT cannot legally obtain resale rights from the initial purchaser without the minter's license, because the right of distribution is not exhausted digitally. The minters will always control any further sale of their digital assets and will be able to authorize or prohibit any specific resale according to their interests. It could be argued that the NFTs' market has specificities and should set its own rules. Nonetheless, the digital asset attached to an NFT might be fully assimilated into the material medium of artwork in the future. In this way, digital exhaustion will be enforced, hence limiting the minters' control of the resale procedure.

FROM THE PERSPECTIVE OF THE PURCHASER

An issue that will be very much in the public eye in the future is the range of NFTs' uses by the purchaser. To be more explicit, how can the purchasers utilize the NFT they wish to buy, apart from the limited rights granted by law 2121/1993, such as the use of images and artworks in public places, that gives the right to the buyer, without the creator's permission, to reproduce and disseminate by mass media occasionally works permanently located in public space.

>> ASSIGNING INTELLECTUAL PROPERTY RIGHTS

An NFT minter is able to transfer certain intellectual property rights to the purchaser. However, the intellectual property must be assigned in writing to do so. The assignment will not automatically be completed when the purchase occurs, without explicit written terms, whether in the smart contract or elsewhere.

Although not common, an NFT minter may sell both the NFT and the underlying asset presenting **a digital proof of ownership.** This thought raises critical considerations regarding the potential ownership and possession issues.

Typically, an NFT does not include the sale of the underlying asset or any accompanying intellectual property rights. However, specific examples show NFTs sold together with the underlying asset. One striking example is Nike's patent, obtained in 2019, for a system called "CryptoKicks," where Nike could signify shoe ownership by pairing an NFT with a physical shoe. As far as we know, this scheme has yet to be launched by Nike, but it is an exciting idea that the retail sector would love to be successful.

The NFT purchaser should also seek to find the person who possesses the underlying asset, especially when the underlying asset is a digital file. As we have already mentioned, an NFT is associated with the underlying asset, either with the digital work being encoded in the NFT (not so common) or with the NFT containing a code that is associated with or can be used to authenticate the digital copy of the artwork (a more common approach).

In the latter scenario, the NFT will usually contain the so-called «hash» of the digital file. The hash is generated by applying a cryptographic mathematical function to a digital file to create an alphanumeric character string, a unique identifier for the original file.

The hash value certifies that the NFT is associated with that particular digital file. It is impossible to reverse-engineer the digital file from the hash, so the soup in the NFT does not give the buyer of the NFT the ability to own the digital file that the NFT relates to. The buyer still needs a separate copy of the digital file in addition to the NFT.

Given the above, the purchaser should consider:

- The **storage** of the digital file and **who will be responsible** for its preservation. In different cases, the digital archive is hosted on the internet, and the NFT will then contain a URI or URL pointing to the website where the digital library is hosted.
- What **assurances** would be provided for the digital file to continue to be hosted on that web page and that no alterations will occur. This should be included in terms of the sale of the NFT and the smart contract coded in the NFT ***[9]***.

>> IP LICENSE AGREEMENTS

Another approach is to allow the NFT's creator and owner of the intellectual property rights to license these rights of the underlying asset to the buyer of the NFT for specific purposes. Such permission should be set out in the smart contract or a separate agreement between the seller and the buyer of the NFT. The buyer's use of the underlying asset may be as free or restrictive as the rights holder chooses.

For example, the license for CrytoKitties allows the owner of the NFT to commercialize the "kitten," provided that such commercial use does not result in profits over US$100.000 per year. In contrast, the license for NBA TopShots grants the owner of the "snapshots" a license to "use, copy and display" snapshot but does not allow the owner to "reproduce, distribute or otherwise." So, if the buyer exerts the rights included in the license, the creator's specific IP rights might be violated.

A good question is what happens when people are purchasing NFTs, thinking they are getting it from the original creator, and then a third party appears and claims that the transaction is void, as the IP rights were not, in fact, the seller's but theirs. We should not forget that on many occasions, creators **"sell" their IP rights to third parties,** usually by signing an exploitation contract.

What about exploitation contracts concluded before the creation of NFTs?

A notable example is **Miramax's lawsuit against Quentin Tarantino**, which is currently pending. Miramax claims that the IP rights of the Pulp Fiction film are theirs by contract and not Tarantino's; therefore, he has **no right to sell as an NFT** the original script for his 1994 Oscar-winning feature film Pulp Fiction (consisting a breach of contract). *"What is unclear is how NFTs will fit into our previously enacted intellectual property laws and if Tarantino's auction violates the nearly 30-year-old contract"*, Heromag says ***[10]***, which is a good point as there were no NFTs 30 years ago.

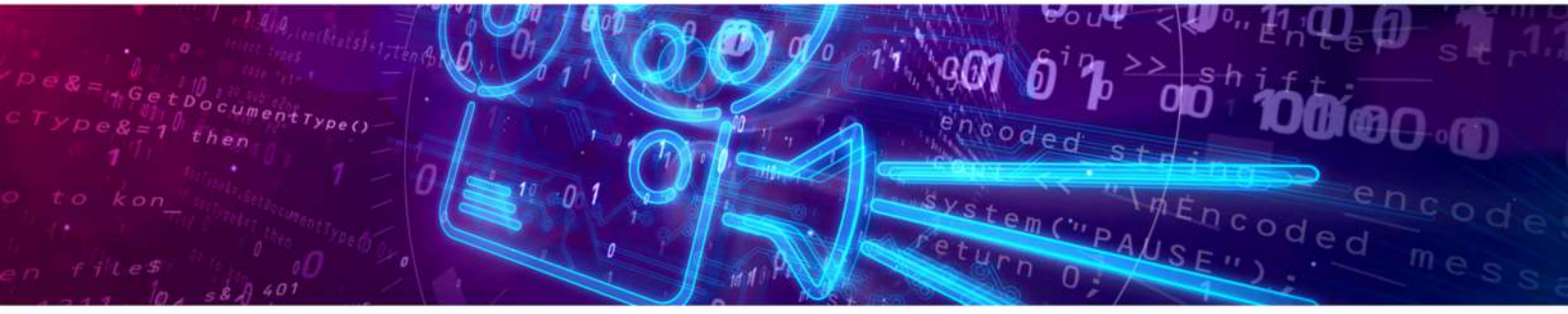
>> POTENTIAL MISUNDERSTANDINGS FOR NFT BUYERS

The way that an NFT can be monetized is by selling it to a third party. However, purchasing an NFT is often not as straightforward as buying a physical asset. While the owners of an NFT can prove that they own the NFT, that does not mean that they hold anything more than that.

As mentioned above, an NFT is essentially metadata about an asset added to a blockchain. This means that while an asset encodes the NFT to represent this particular asset uniquely, **the NFT is usually not the asset itself.** For instance, if a collector owns a physical limited-edition copy, the collector will own the physical copy itself; still, they usually have **no ownership rights to the original artwork**. This is an important distinction that is being missed by much of the media coverage of NFTs. **This coverage tends to incorrectly imply that ownership of an NFT is equivalent to the form of ownership of the underlying asset.**

To illustrate the above, it is worth reviewing Jack Dorsey's tweet. When Jack Dorsey sold his tweet, he put it on auction at the Valuables platform. Valuables described the purchase of this NFT as the purchase of "an autographed certificate of the tweet" and made it clear in terms of sale that any such investment did not transfer the copyright of the tweet to the buyer. Therefore, even if the buyer of Jack Dorsey's tweet spent millions of dollars on the NFT, the buyer could not use the tweet itself -by printing it on a T-shirt and then selling it to others, for example- without permission, as the copyright still belongs to Jack Dorsey and Twitter.

>> NFTs buyers should carefully evaluate and understand that the ownership of an NFT does not automatically create ownership rights to the underlying asset.



CONCLUSION

NFTs have introduced new ways of creating and exploiting works. It is quite uncertain whether they are considered a "trend" that will fade away or represent a revolutionary product of blockchain technology that could permanently transform businesses as cryptocurrencies have done over the last decade.

No one can argue that the interaction between NFTs and copyright's ambiguous relationship is inevitable. However, almost every dispute is handled between the auction house and the parties proving their legitimate interest, aiming primarily for an extrajudicial resolution. In this way, the market acts as a gatekeeper protecting both the investors and the minters by removing alleged infringements. Nonetheless, the complexion of the market and the incentive for significant returns indicate that the NFT marketplace may generate many copyright disputes. While there is no need to adopt new legislative provisions specialized in protecting NFTs' IP rights, the existing rules on copyright and related rights can easily be enforced to respond appropriately to economic realities, such as the emergence of new forms of digital assets exploitation.

NFTs could facilitate industries such as art and real estate, eliminating the need for auction houses to verify the authenticity of works as buyers and sellers can deal with each other directly. However, significant grey legal areas addressed above should be solved.

REFERENCES

[1] Guadamuz A. (2021), "Non-fungible tokens (NFTs) and copyright", WIPO MAGAZINE, Available here

[2] Raczynski J. (2021), "The Metaverse is coming: Is the legal market prepared?", Thomson Reuters, Available here

[3] Belessis L. and Papathanasiou A. (2021), "The Intellectual Property Review", 10th edn, published by Law Business Research, Available here

[4] Κοτσίρης, Λ. (2017) Δίκαιο Πνευματικής Ιδιοκτησίας και Κοινοτικό Κεκτημένο, 7th edn, Εκδόσεις ΣΑΚΚΟΥΛΑ

[5] Καλλινίκου Δ. (2005), Πνευματική Ιδιοκτησία & Συγγενικά Δικαιώματα, 2nd edn, Δίκαιο & Οικονομία Π.Ν. ΣΑΚΚΟΥΛΑΣ

[6] Χριστοδούλου Κ. (2018) Δίκαιο Πνευματικής Ιδιοκτησίας, Nomiki Bibliothiki SA

[7] Ribbert R. (2019), "European Court of Justice's Landmark Decision on the Resale of E-Books", Lexology, Available here

[8] "Nederlands Uitgeversverbond, Groep Algemene Uitgevers v Tom Kabinet Internet BV, Tom Kabinet Holding BV, Tom Kabinet Uitgeverij BV" (2019), CJEU, case C-263/18, Available here

[9] Mukaddam F. (2021), "NFTs and Intellectual Property Rights", Norton Rose Fulbright, Available here

[10] "Not For Trademarks? The truth about NFTs and IP" (2022), Available here

[11] Justine, P. and Torremans, P. (2019) European Intellectual Property Law, 2nd edn, Oxford University Press, Available here

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