

## NAVIGATING THE NTF LANDSCAPE: INTELLECTUAL PROPERTY CHALLENGES AND OPPORTUNITIES

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**Abstract:** *This article delves into the dynamic realm of Non-Fungible Tokens (NFTs) and the significant ramifications they have on the protection of intellectual property. By analyzing the convergence of non-fungible tokens (NFTs), smart contracts, and blockchain technology, this article aims to explore the legal ramifications and potential advantages that emerge from the utilization of NFTs for the commercialization and exploitation of intellectual property. The article provides an examination of the legal aspects of NFT transactions, encompassing details such as ownership transfer, copyright, trademark, and patent considerations, in addition to the complexities of minting and ownership transfer. The necessity for precise agreements to delineate the scope of intellectual property rights conveyed is emphasized in the article, which also stresses the significance of transparency, due diligence, and clarity. Moreover, it underscores the convergence of common law principles and NFT transactions, prompting inquiries regarding the conveyance of intellectual property rights and emphasizing the need for exhaustive investigation. In light of the ongoing transformation of digital ownership on the NFT market, the article emphasizes the need for a cautious and well-informed strategy to tackle legal intricacies, promote openness, and cultivate trust within the NFT ecosystem.*

**Keywords:** *NFTs, intellectual property, law, smart contracts, blockchain, ownership, rights, digital assets.*

### INTRODUCTION

Similar to other technical breakthroughs in the past, especially the digital dissemination of music, NFTs are stretching the boundaries of intellectual property law. The use of NFTs as a tool for commercializing breakthrough IP assets and exploiting existing IP portfolios has grown more productive in recent years. Notwithstanding this, the reaction to NFTs under intellectual property law has trailed behind their popularity.

NFTs create particular issues for individuals engaged in the development (minting) and monetization of intellectual property as well as IP owners, since many NFTs validate the creation of digital artwork, video, and other forms of media. Most of the time, such assets are protected by intellectual property rights, which, as a general rule, enable exclusively the owner of the IP to dictate the commercialization of the asset. Minting, selling or purchasing an NFT without first legally licensing or otherwise securing its underlying intellectual property rights may result in significant implications, including the possibility of infringement lawsuits. These costs can vary based on the intended application of the NFT.

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**LEGAL FOUNDATIONS OF NFT TRANSACTIONS**

Legal literature (Reuters, 2023) describes smart contracts as technology that embeds computerized instructions in the NFT to digitally facilitate, verify and enforce its terms without any third-party interaction.

When an NFT passes through, the smart contract that surrounds it automatically executes itself and transmits ownership, as well as payment, at the moment of the transfer. Because non-fungible token transactions (and any future transfers) are tracked and made publicly accessible on the blockchain, ownership of NFTs may be readily verified (Reuters, 2023). The code that is embedded inside the NFT just detects the underlying asset, defines where it is kept, and verifies that it is legitimate.

As digital assets that evidence title, NFTs may exist independently from the underlying intellectual property asset that they are used to validate. For instance, the buyer is shown to have legitimate ownership of a certain digital media file after purchasing a collection of NFTs from the NBA Topshot website, which has video excerpts from illustrative moments in the history of sports. Even if it is possible to find copies of the films online, having an NFT validates that a person is the owner of a particular clip, which increases the content's worth on the market. Even though many people have access to the video clip, the original copy still has significant value on the collectors market.

NFTs may also be used to represent the digital ownership of a tangible item (such a piece of real estate, for example). Tokenization of tangible assets is a more recent use of non-fungible tokens that enables enhanced asset liquidity while also maintaining a record of ownership that is both visible and safe.

The process of releasing an NFT on a blockchain in order to enable its purchase is known as minting. First, a minter will build a wallet on a marketplace in which they may keep newly created NFTs. After the money has been received by the marketplace, the NFT will be connected to the actual asset, that will be kept in a different location. After this step, the NFT that represents the rights to the asset in question is published and subsequently deposited in the wallet of the minter. Transfer of the NFT is possible from that location. Because IP owners possess particular rights, for instance the authority to use, trade, and duplicate the underlying IP resource, the IP protections linked with it may restrict who may mint or circulate it as an NFT. These exclusive rights include: the right to use the IP asset, the right to sell the IP asset and the right to replicate the IP asset (Bainbridge, 2012).

In most cases, the transfer of ownership of an NFT does not result in the transfer of any intellectual property rights associated with the underlying asset. As a result, the most important question that a stakeholder should ask is whether or not the underlying asset is covered by intellectual property laws and, if it is, whether or not the rights to preserve it are transferred along with the NFT. The law governing intellectual property (“IP”) confers some exclusive rights on the IP owner, such as the authority to reproduce and disseminate the work in question. Even while the purchaser of an NFT that covers a work that is subject to the aforementioned rights is granted the right to possess their copy of the work, this does not automatically provide the purchaser exclusive

rights to the work itself (Reuters, 2023). However, the buyer is permitted to show the work and may later transfer or trade their copy via the use of a license. When it comes to NFT transactions, licenses may be created either via the explicit wording of the sales conditions or, in certain cases, through the relevant legislation. Nearly all of the conditions of NFT licenses include the direct transfer of rights from the owner of the intellectual property to the purchaser.

### **INTELLECTUAL PROPERTY RIGHTS AND NFTS**

After determining whether or not the underlying asset is protected by intellectual property law and minting the NFT, the person selling it is obliged to explicitly identify the extent of any intellectual property rights that are part of the transaction. If this is not done, the rights of the owner of the intellectual property may be harmed, and the marketplace, the buyer, or both may be held liable for infringement. The vast majority of creators do not transfer any exclusive intellectual property rights associated with the underlying item to a buyer (Reuters, 2023). In most cases, purchasers are only granted a restricted license for the NFT that allows for personal usage.

However, the creator may explicitly transfer these and other intellectual property rights, such as the capacity to mint new NFTs and edit the underlying asset, via an assignment, a permit, or some other kind of stated agreement. This might include the power to modify the underlying product. It is not apparent if this technique fulfills the legal criteria for a proper IP rights assignment; nevertheless, certain platforms do provide authors with the ability to disclose these rights inside the listing description of NFTs. In order to be legally enforceable against other parties, assignments of intellectual property rights must often be lodged with the relevant register (either at the United States Patent and Trademark Office (“USPTO”) or the Copyright Office).

It is fairly unusual for the intellectual property (“IP”) owner to maintain some extra interests in the underlying asset, such as royalty payments or future resale fees (Reuters, 2023), alongside their present rights to use the IP in the domain of non-fungible tokens. Keeping supplemental interests is a common habit. However, if the transfer of these rights is not specifically specified or if the parties involved fail to ascertain the degree to which the underlying asset is protected by intellectual property, misunderstandings may occur. When the NFT transaction fails to properly represent or reflect exclusive intellectual property rights linked to the underlying asset, the situation becomes very unclear. This uncertainty in intellectual property rights transfers inside NFT transactions might lead to misunderstandings and lawsuits. Without adequate clarity and transparency, both the IP owner and the buyer may have different interpretations of the NFT and the underlying asset. To avoid ambiguity, all parties participating in NFT transactions must produce precise agreements and paperwork that properly explain the extent of the intellectual property rights being transferred. Determining the scope of the IP owner's rights, any extra interests held, and the buyer's entitlements are all part of this process. Potential disputes and ambiguities may be reduced by guaranteeing openness and accuracy in the transfer of intellectual property rights. To protect their respective interests and prevent ambiguity in the transfer process, both the IP owner and the buyer must have clear communication and a thorough grasp of the terms and circumstances regulating the NFT transaction. As the NFT market evolves, established methods

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and standards for defining intellectual property rights in NFT transactions will be critical in encouraging transparency, allowing easier transactions, and fostering confidence within the NFT ecosystem.

The terms of transferring ownership rights for an NFT are spelled out in the smart contract that is integral to the coding of the NFT (Levi et al., 2022). The terms of the smart contract cannot be changed, and it goes into effect immediately when a certain set of circumstances has been satisfied. The NFT is used to execute smart contracts and its execution takes into account ownership changes of the NFT. This might result in the triggering of occurrences like the payment of buyback royalties or fees. As the underlying item is not kept on the distributed ledger, the agreements regulating the transfer must additionally cover duties in the event that the NFT buyer is unable to display or acquire the digital file in any other way.

If a person or business wants to mint NFTs encapsulating copyrighted content but does not hold the copyright to the underlying asset, and does not get the right to copy via a transfer or license (Reuters, 2023), then they run the danger of directly infringing on someone else's copyright. In addition, marketplaces as well as other third parties might get held liable for unintentional copyright infringement whenever an unlawful NFT is mined via their platform. This responsibility may result in a financial penalty.

In addition, it is important to note that a creative work may involve multiple authors, and it is essential for all those authors to be involved in the licensing or rights transfer process. When it comes to the purchase and sale of non-fungible tokens (NFTs), both buyers and sellers have a responsibility to ascertain whether the transfer includes exclusive ownership of the copyright or if it simply involves a duplication of the digital file with a restricted personal license. It is crucial to disclose any information regarding the inclusion of exclusive rights.

Failing to obtain the necessary copyright through a license, delegation, or another form of transfer, puts the buyer at risk of infringing the intellectual property rights associated with the underlying asset. In such cases, legal action may be pursued against the buyer for unauthorized use or reproduction.

To ensure compliance with copyright laws and protect both parties involved, it is crucial for buyers to acquire the necessary copyright rights before engaging in any transfer of ownership of NFTs. This may involve obtaining a license or receiving explicit permission from the copyright owner. By adhering to these measures, potential legal disputes and intellectual property infringements can be avoided.

In the ever-evolving landscape of NFTs, where the ownership and rights associated with digital assets are being redefined, it is paramount for all stakeholders to remain vigilant and informed about the legal implications and obligations surrounding intellectual property rights. By respecting copyright ownership and acquiring the necessary permissions, both buyers and sellers can foster a fair and legally compliant environment within the NFT ecosystem.

There is a chance that in the future, the Marketplace may provide more enforcement methods but, in accordance with the Digital Millennium Copyright Act ("DMCA"), some content creators have been successful in contesting notice-and-takedown requests.

NFTs are being used more often by businesses in order to sell their brands, introduce new items, and improve their present procedures. In addition, robust enforcement processes stop companies from getting their marks diluted in the market by unlawful usage, which protects the value of the brands' marks. Even in situations in which the NFT is not tied to a product associated with the brand, NFTs covering assets that include representations of the company nonetheless cause worry for the owners of the trademark (see *Hermès International v. Rothschild* case).

Although non-financial transactions have had a less significant impact on the landscape of patents, they continue to bring fresh issues for those who are considering NFTs involving patent-protected assets. The major function of patents within the area of NFTs has been to provide an additional layer of protection for underlying assets that are tied to NFTs. Since non-fungible tokens are just used to prove ownership but cannot actually make up the underlying asset, the fundamental question is whether or not the underlying asset proper may be patented (Reuters, 2023).

The vast majority of non-financial transactions related to patented assets imply design patents instead of patents for utility. This is due to the fact that the widespread use of NFTs is associated to the aesthetic appeal of the underlying assets rather than their function. Furthermore, although the protection offered by a utility patent entitles the patent holder to recoup lost income and expenses incurred by the patent attorney, the supplementary remedy of restitution of the infringer's profits is available only under design patents. Other aspects of intellectual property ("IP"), such as the following, might be complicated by NFTs: trade secrets and publicity rights.

If the minter does not possess the underlying asset within its whole or can not adequately account for the rights held by each owner in the underlying asset, then an NFT should not be issued. As a consequence of minting unlicensed NFTs, the minter may be subject to an infringement claim, which will make the NFTs worthless and expose the minter to potential damages awards, legal expenses or injunctive relief (Reuters, 2023), in addition to the costs associated with the minter's own defense. There are a variety of scenarios that might lead to an IP owner giving a digital producer a commission to develop NFTs that embody the IP. The party doing the commissioning need to have specific agreements specifying ownership of the intellectual property rights in the commission project, like work produced for hiring and labor contracts, or outright assignments. These should be in place before the project is started. The scope of the project involving the NFT should be specified in writing for the parties involved in this scenario so that any possible misconceptions may be avoided.

### **COMMON LAW PRINCIPLES AND NFT TRANSACTIONS**

Despite both non-fungible tokens and intellectual property falling under the umbrella of property rights, there is limited understanding regarding the application of common law principles to NFT transactions (Reuters, 2023). One example of this is the concept in common law where the original owner of an object has the right to reclaim ownership from a subsequent buyer if the asset was initially purchased from someone who did not have clear ownership of the asset.

This notion implies that a seller cannot transfer a title that they do not possess, which would have implications for NFT buyers. It means that an NFT buyer would only acquire the intellectual

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property rights that the seller is legally able to convey, regardless of what the NFT contract or specifications may state. Thus, an NFT buyer might receive only the IP rights that the seller legitimately possesses.

The application of common law principles to NFT transactions raises questions and uncertainties regarding the extent of intellectual property rights transferred through the sale of an NFT. It emphasizes the importance of conducting due diligence to ensure that the seller has the legal authority to sell and transfer the intellectual property rights associated with the NFT.

Understanding the intersection of common law and NFTs is an evolving area that requires further exploration and clarification. As NFTs continue to gain prominence and reshape digital ownership, legal frameworks and precedents will likely emerge to address the complexities surrounding property rights, intellectual property, and the legal implications of NFT transactions.

Due to the irreversible characteristic of blockchain transactions, parties will still be faced with ambiguity over the resolution of the dispute even in the event that any transfer of IP rights is amended or cancelled after the sale of the NFT (Reuters, 2023). In spite of this, the parties involved are obligated to perform exhaustive research on the ownership of the IP and should carefully examine any alleged transactions and NFT specifications.

### **METaverse CHALLENGES IN NFT OWNERSHIP**

When data and ownership are transferred throughout the Metaverse via NFTs, this will give rise to unique legal challenges, particularly in terms of intellectual property. Brands will encounter challenges in the realm of intellectual property protection and enforcement, including the complexities of identifying potential anonymous infringers (jdsupra.com) and demonstrating dilution within a decentralized network. When it comes to protecting their intellectual property rights, brands may face hurdles in locating and identifying individuals who engage in infringement activities anonymously. Additionally, brands may encounter challenges in proving dilution within a decentralized network. Dilution refers to the blurring or tarnishing of a brand's distinctiveness or reputation caused by unauthorized use or association with inferior goods or services. Demonstrating dilution in a decentralized environment, where content may be widespread and difficult to track, can pose unique obstacles for brand owners.

### **CONCLUSIONS**

The emergence of NFTs has brought about a significant change in the field of intellectual property. This change is characterized by the combination of smart contracts, blockchain technology, and digital ownership, which has resulted in a transformational period. This analysis of NFT transactions explores the complex network of difficulties and possibilities that stakeholders face in the changing environment.

Smart contracts, celebrated as technological wonders, incorporate digital instructions into NFTs, streamlining the process of transferring ownership and settling payments. As these transactions occur on the blockchain, transparency becomes a fundamental aspect, offering a verifiable documentation of ownership. Nevertheless, the combination of NFTs with intellectual

property brings up intricacies, underscoring the essential requirement for accurate agreements to define the extent of rights.

The NFT landscape is heavily influenced by intellectual property considerations, particularly in relation to ownership, licensing, and replication rights, which require careful attention to detail. Although the transfer of NFT ownership does not automatically grant intellectual property rights, parties must carefully handle licensing complexities to prevent infringement claims. The utmost importance lies in the clarity of agreements, as it serves to prevent any potential misunderstandings and disputes that may develop due to the distinctive convergence of NFTs and intellectual property.

The inclusion of common law rules introduces additional intricacy, necessitating a more thorough analysis of the rights lawfully transferred by sellers. Conducting due diligence is crucial to determine the legal authority to transfer intellectual property rights linked to an NFT. The impact of NFTs on digital ownership necessitates the utilization of common law and the formation of legal precedents to determine the scope of intellectual property rights involved in these transactions.

Amidst this changing environment, the need for openness, thorough investigation, and effective communication arises as a fundamental concept for all individuals and groups concerned. With the increasing use of NFTs by brands for marketing and asset representation, ensuring the security of intellectual property becomes of utmost importance. Difficulties remain, particularly in decentralized networks, where the identification of infringers and the establishment of dilution are particularly challenging.

The future of NFTs depends on the development of legal frameworks and precedents. In order to cultivate a just and legally robust environment within the NFT ecosystem, stakeholders must wholeheartedly adopt principles of transparency, precision, and adherence to regulations. The permanent characteristic of blockchain transactions requires extensive investigation, emphasizing the requirement for strong enforcement techniques and systems to handle conflicts.

Within the constantly expanding Metaverse, the introduction of NFTs will add complexity to the intellectual property domain, necessitating inventive approaches to safeguarding trademarks and enforcing rights. Traversing the NFT terrain highlights the significance of continuous inquiry, flexibility, and cooperative endeavors in shaping a future where digital ownership and intellectual property rights peacefully coexist.

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