

NON-FUNGIBLE TOKENS

A REPORT FROM INTA



APRIL 2023



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Non-Fungible Tokens (NFTs) White Paper

April 4, 2023



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Acknowledgments

This INTA White Paper on Non-fungible Tokens is an INTA cross-committee effort, led by the Blockchain Subcommittee.

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1. Executive Summary

The massive, sudden growth of non-fungible tokens has left the legal community - the intellectual property (IP) community in particular—looking for answers. This white paper explores NFTs, how they fit into the current legal landscape, and legal interpretations of them, and provides information for brand owners and lawyers.

To date, NFTs have been largely shoehorned into existing doctrines, combining notions of physical and digital, downloadable goods. But NFTs do not always fit neatly together with existing legal doctrines, especially when considering elements such as fair use, nominative fair use, artistic freedom, and the first sale doctrine (to name a few). Moreover, new and emerging technologies do not fit neatly on current structures for brand protection and enforcement. Existing legal frameworks struggle to keep up with the fast-developing platforms and landscape of NFTs.

Adding to the difficulty of the quick expansion of NFTs is the overarching ethos of the metaverse, which emphasizes decentralization. Without centralized control and governance, scams and infringements can proliferate without common methods of control and adjudication. Brand owners are left with a “whack a mole” problem of addressing infringements as they pop up on myriad platforms often without the ability to trace an actual person.

In this white paper, we identify the various legal issues associated with NFTs—their protection, trademark filings, infringement issues, and more. Our goal is to identify key takeaways for brand owners and to frame this emerging asset so as to identify potential high-level guidance for policymakers and lawmakers.

Recommendations and Next Steps

Issues related to IP rights in emerging digital ecosystems such as NFTs and decentralized communities (aka Metaverse) continue to rapidly evolve. Regulations are also starting to emerge for consumer safety in the metaverse.

Recommended Statement of IP Principles

As an immediate priority, INTA could communicate to relevant stakeholders that existing IP rights should be fully recognized and enforceable on the blockchain. We propose that the following principles form the basis for these communications.

IP Principles regarding Intellectual Property Rights in Emerging Digital Ecosystems

- IP is capable of existing and being exercised in emerging digital ecosystems. Therefore, IP should be respected in such ecosystems.
- National and international laws and treaties for the recognition and enforcement of IP rights should apply in emerging digital ecosystems.
- To the extent that IP may be protected by more than one type of IP right, enforcement of some or all applicable IP rights should be permissible in emerging digital ecosystems, at the discretion of the IP rights owner. (See, e.g., INTA Board Resolution of September 12, 2017 on [Copyright Protection for Trademarked Material \(inta.org\)](#))
- To the extent practicable, a harmonized cross-jurisdictional approach should be developed for the recognition and enforcement of each type of IP right in emerging digital ecosystems.

For background on these principles, please see the Annex of this report.

Coordination with INTA staff for 2023 Initiatives

The NFT White Paper team is prepared to work with the appropriate INTA departments, such as Advocacy, Knowledge and Development, Member Experience, Digital Business Solutions, and Legal Resources to develop programs in 2023 for member outreach, such as: webinars, panels, roundtables, INTA Bulletin articles, Board Resolutions, etc.

Specific Policy Recommendations

Each chapter of this report includes recommendations for next steps for INTA advocacy committees to explore. A summary of these recommendations follows:

Trademark Application Filings and Best Practices

Harmonization among trademark offices globally would greatly benefit filers and trademark offices in enabling filers to both protect their trademarks for NFTs and to maintain the resulting registrations (e.g., proving use and defending against non-use cancellations). In order to do so, best practices include:

- One should file in Class 9 for the digital token associated with an NFT, and should ensure that the trademark appears on the face of the digital token and/or the access, download, or purchase screen associated with it. The majority of countries consider the digital token itself to be classified in Class 9 and, as such, obtaining a registration in Class 9 is likely the best approach for obtaining protection.
- Filing in Class 35 is also recommended for individuals providing platforms and outlets to sell NFTs. Doing so can help protect the trademark for retail sales associated with NFTs.
- It is recommended that countries consider a harmonized approach for classifying NFTs, potentially through providing new language through the Nice Classification System.

Channels of Distribution

Policy points or recommended actions with respect to Channels of Distribution include:

- Monitoring and/or advocating for consistent takedown policies across the various NFT marketplaces.: This does not have to be governmental action, but could be something akin to the Uniform Dispute Resolution Process (UDRP) for domain names. This may go against the basics of an open blockchain marketplace, but having some way to follow serial infringers and monitor or manage their actions could be helpful, too, if it is achievable.
- Monitoring and/or advocating for regulation of the use of NFTs as collateral for loans.
- Monitoring how countries handle the marketing of NFTs in the case of giveaways.

Design and Trade Dress Rights in NFTs

In general, the laws governing design rights and trade dress rights in each jurisdiction do not (yet) explicitly cover or apply to the unique assets identified by NFTs. Therefore, it is premature for INTA to offer specific guidance to NFT owners claiming such rights.

However, it is recommended that INTA support, create, and facilitate policy dialogues with governments, international organizations, and multi-national stakeholders, to discuss these issues and develop/offer possible solutions. The output of the dialog discussions may result in an INTA Board Resolution on each issue.

Ownership of NFTs

Amendments may be required in nearly every jurisdiction's extant IP framework to facilitate the effective and sustainable commercialization of intellectual property rights through NFTs. Such legislative changes need to pave the path for the recognition of IP rights, their license, transfer or assignment, and adequate protection against infringement in the NFT ecosystem. We recommend that INTA develop model legislation that can be adopted by countries to amend or adapt their existing frameworks to facilitate commercialization of rights through NFTs.

Web3 Domain Names

In collaboration with WIPO, a global trademark dispute resolution policy, akin to the URS, should be adopted for the emerging digital ecosystems of NFTs and the metaverse.

Infringement and Enforcement vs. Fair Use

Reference Guide

We recommend that INTA quickly issue a reference guide on the INTA website for brand owners with some basic definitions and recommendations relating to NFTs, including:

- Prosecution guidance that brands should expand trademark protection over their top brands to cover virtual goods and services in Nice Classes 9, 35, or 41 in order to be better positioned to control and monetize their trademarks, as well as to prevent potential exploitation in the metaverse;
- An INTA resource for brand owners that provides information and links to NFT platform takedown processes and
- An INTA database of relevant NFT-related case law summaries and periodic updates.

Policy Advocacy

- Advocate that NFT platforms all maintain trademark, counterfeit, and copyright notice and takedown processes in alignment with INTA's position, and that they be required to respond promptly to any legitimate complaints.
- Consider a policy position that both traditional trademark infringement and fair use principles should and do carry over into the NFT realm.
- Consider a policy position that confusion can be potentially dispelled through the use of prominent disclaimers in the context of NFTs linked to physical goods, given that the NFT is merely allowing owners to track ownership without having to possess the physical goods.

Outreach

- Liaise with EU lawmakers to determine how the implementation of the Digital Service Act (DSA) will affect platform requirements and liability with regard to NFTs.
- Follow the work of the WIPO Nice Classification Committee of Experts and recommend either the introduction of a class including virtual goods or the inclusion of virtual versions of all of the existing goods and services into the current relevant classes in the Nice Classification.
- Reach out to key trademark offices to collaborate on their handling of applications for virtual goods, and their recommendations for how brand owners should be filing for such goods.

2. Defining Terms

Participants

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Definitions

What is the Blockchain?



A blockchain is a system for storing data in a chain of data blocks, in which the blocks cannot be changed. Blocks can only be added to the end of the chain. A block often contains multiple transactions, which are the result of broadcast transaction requests/commands. For the current status of an entry in a block, all subsequent blocks must be taken into account because they can contain changes insofar as they are possible by their nature. Blockchains are “immutable,” meaning that previous blocks in a blockchain (and the corresponding information stored in those previous blocks) cannot be modified or deleted. Using different “consensus

mechanisms,” blockchains allow distributed parties to agree on each successive block in the peer-to-peer network.

As a database, a blockchain stores information electronically in digital format. Blockchains are best known for their crucial role in cryptocurrency systems, such as Bitcoin, for maintaining a secure and decentralized record of transactions. Blockchains guarantee the fidelity and security of data records and generate trust without the need for a trusted third party.

What is a Smart Contract?

Smart contracts are computer programs hosted and executed on a blockchain. Each smart contract consists of code specifying predetermined conditions that, when met, trigger outcomes. By running on a decentralized blockchain instead of a centralized server, smart contracts allow multiple parties to come to a shared result in an accurate, timely, and tamper-proof manner.

Smart contracts are a powerful infrastructure for automation because they are not controlled by a central administrator and are not vulnerable to single points of attack by malicious entities. When applied to multi-party digital agreements, smart contract applications can reduce counterparty risk, increase efficiency, lower costs, and provide new levels of transparency.

What is a Digital Asset?

[Riker Danzig](#) defines the term “digital asset” as an asset that is issued and transferred using blockchain technology, including, but not limited to, virtual currencies, coins, and tokens.

Digital assets include but are not limited to digital documents, audible content, motion pictures, and other relevant digital data that are currently in circulation that are or will be stored on digital appliances such as personal computers, laptops, portable media players, tablets, data storage devices, telecommunication devices, and any and all apparatuses that are or will be in existence once technology progresses to accommodate the new modalities that would be able to carry the digital assets, notwithstanding the proprietorship of the physical device on which the digital asset is located.

What are Tokens?

Native tokens are a [blockchain's foundational digital currency](#). Every blockchain has its own native coin used to reward miners and validators adding blocks to the blockchain and for payment. These are also known as base tokens or intrinsic tokens because a blockchain's design functions with a particular token. So for example, the Ethereum blockchain has a native "coin" called "Ether" or "ETH." The Ethereum blockchain also allows for the creation and use of various other "tokens" that can be used on it. Smart contracts generally govern the issuance and rules for each token type. Different blockchains may allow for different token types to be run on top of it using various smart contracts. Given the interoperable and composable nature of cryptocurrency tokens, they can represent virtually any digital asset, including notably:

- reputation points in an online platform
- skills of a character in a game
- lottery tickets
- financial assets, like a share in a company
- a fiat currency like USD
- an ounce of gold
- a work of art

See: <https://ethereum.org/en/developers/docs/standards/tokens/erc-20/>

What are Fungible Tokens?

Fungible tokens are tokens that are fully divisible and non-unique. This would be akin to a commodity, such as gold, that can be divided into fractions.

On the Ethereum blockchain, the primary fungible token standard is represented by the ERC-20 standard: <https://ethereum.org/en/developers/docs/standards/tokens/erc-20/>

What are Non-fungible Tokens (NFTs)?

A Non-Fungible Token is a non-interchangeable token; it is one of a kind. NFTs represent ownership of unique items. Such as:

- *Digital*: pictures, GIFs, videos, or songs
- *Tangible*: deeds, tickets, legal documents
- *Representative*: that exist in the real world; collectibles, product features

On the Ethereum blockchain, the primary non-fungible token standard is represented by the ERC-721 standard: <https://eips.ethereum.org/EIPS/eip-721>

If you *own* an NFT: Each NFT is verifiably unique, and ownership of each NFT can be verified and proven via blockchain technology. In theory only owners of a given NFT can authenticate that they are the owners. The creator and transaction dates are verified by the blockchain.

If you *create* an NFT (“minting”): Your status as “creator” is verified on the blockchain. You can set preferences for resale royalties with any subsequent sale of the NFT (via smart contract or secondary marketplace tools, however this is not universally enforced). You can sell your NFT on various NFT marketplaces.

What are “Digital Goods” or “Digital Services”?

Digital goods are any products that are electronically transferred to purchasers and generally include versions of products historically produced and transferred as articles of tangible property. For example, images, games, music, and videos.

Digital services are solutions that are delivered through the Internet or an electronic network that, by their nature, are automated and require little to no human interaction. Examples of digital services include Microsoft Office, Adobe Photoshop, e-books, and video games.

How are Digital Goods or Services “Authenticated” by NFTs?

Digital goods and services can be authenticated through NFTs by use of blockchain and smart contracts. When a digital good is attached to an NFT, purchasers can verify proof of ownership through the NFT’s blockchain history. Purchasers can see where the goods originated, and who the owners have been. The smart contract that controls the NFT (that is attached to the goods or service) can be programmed only to convey ownership or access under specific conditions.

For example, if a musician wants to sell their new album, they can sell it as an NFT. Purchasers know that they are buying an authentic and non-pirated version of the album by verifying on the NFT’s ownership history that it originated from the musician. Smart contracts that govern the NFT can dictate whether a purchaser can resell or transfer ownership of the album. The musician can also use smart contracts to deny access to the album if the listener does not possess a valid NFT.

What is the “Metaverse”?

Various virtual spaces currently claim to be preeminent “metaverse.” Although there is no universal definition of a metaverse, one commentator describes the necessary attributes as “a massively scaled and interoperable network of 3D-rendered, real-time virtual worlds, which can be experienced persistently and synchronously by an effectively unlimited number of users, each with an individual sense of presence.” See: <https://conversationswithtyler.com/episodes/matthew-ball/>

This concept describes a parallel virtual world which allows users to participate in various activities at the same time. Blockchain technology promises to introduce the concept of the metaverse funded by a virtual economy enabling ownership of digital assets such as NFTs.

3. Use Cases

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A. NFTs Linked to Digital Assets

The quintessential use case for NFTs, to date, has been the sale and trade of digital assets like art, design, music, and digital fashion. In particular, NFTs have been used to claim ownership of the digital assets, providing a number of benefits for both NFT sellers and buyers, as well as for the public.

With respect to this use case, the value of NFTs stems from creating digital scarcity for digital assets, which, unlike physical ones, can ordinarily be infinitely disseminated online.

For the buyers, minting NFTs represents an opportunity to claim “bragging rights” in the digital world, where there are more obstacles for monitoring and claiming ownership.

For sellers of NFTs, these tokens represent an opportunity to increase revenue by introducing digital scarcity in the virtual environment. Furthermore, the smart contracts that govern NFTs can be customized to include royalty payments on future sales to the creator of the digital asset. Authors can include in smart contracts a provision containing a specific resale right (so called “droit de suite”) reserving an agreed royalty on further sales of the NFTs. In this regard, smart contracts governing NFTs play a pivotal role because blockchain technology ensures the fulfillment of various conditions, including potentially the payment of the compensation to the holder. Through an innovative and secure technology such as blockchain, there is a guarantee that any subsequent sales will be duly logged and that an NFT’s initial creators will receive all the due royalties. There is no way to defraud the system, because every transfer or movement is recorded in the blocks.

B. NFTs Linked to Physical Assets

Another popular and functional use case is to link NFTs to physical assets and to trade and transfer them as proxies for the already existing products or for products that have still to be manufactured and created.

This use case is beneficial for several reasons:

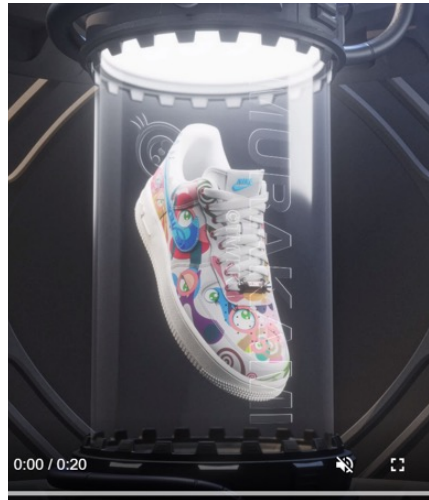
- An NFT can be easily traded and distributed without the need for the purchaser to deal with the physical product;
- The NFT purchaser can decide whether to trade the NFT on the blockchain or to redeem the NFT for a physical product as the NFTs constitute certificates of ownership for the product;
- Security, transparency, and traceability over the purchase because the purchaser is entitled to redeem the NFT for the original product;
- Each physical product, thanks to the NFT, is uniquely identifiable and tethered to a unique NFT and the blockchain technology mitigates any risk of infringement of the original product.

However, there may be some challenges in linking the physical product to the NFTs. Indeed, the physical product itself could be a copy of the authentic product.

In light of the above mentioned benefits, many industries \ have started to mint NFTs linked to physical products allowing consumers to redeem an NFT for the corresponding physical products.

1. The Fashion and Sports Industries

Companies in the fashion and sports industries have started to realize very



original models of shoes, firstly creating the virtual assets by minting NFTs that depict very original designs and then selling the NFTs to consumers, giving them the opportunity to redeem the NFT for physical merchandise. NFTs play a new key role and can be interesting for collectors because they introduce a new vision of art and creativity in the footwear environment, with shoe designs that are virtual and that are authenticated through blockchain technology. The consumer is in the position to collect the sneakers both in the real world and in the metaverse.

RTFKT x Nike Air Force 1 - Murakami DNA [LINK](#)

2. Wine and Spirits Industries

The wine and spirits industries have started to trade NFTs linked to some of their most prestigious wine and/or spirits, trying—through the introduction into the global crypto-asset market—to reach new types of consumers. NFTs could be created as limited editions and linked only to rare wine or spirits products and then traded on blockchain platforms. Products can be kept safely stored until redemption, which is beneficial because luxury wines and spirits can then be stored in specific conditions and come with guarantees of authenticity, integrity, and traceability (which also helps fight counterfeiting).



Johnnie Walker Masters of Flavors [LINK](#)

3. Art Collections

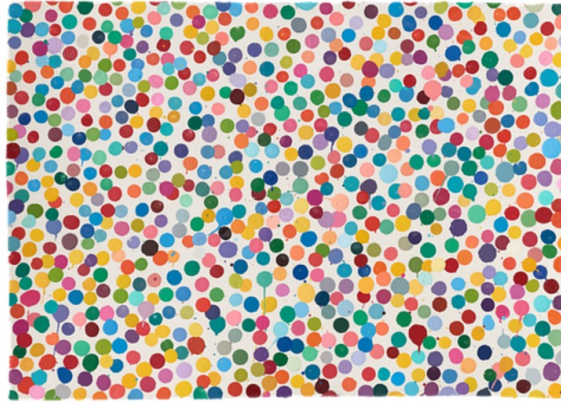
The multifaceted nature of NFTs enable the possibility to have redeemable tokens that can be exchanged with consumer goods. Indeed, NFTs could also be exchanged to obtain real artworks.

In one example, the well-known English artist Damien Hirst created an NFT-based art collection, “The Currency,” which gave buyers of the NFT a choice in choosing to keep the unique NFT or the corresponding original physical work;

the one not chosen will be destroyed (i.e., either the NFT or the physical work will be burned). As explained on the website of the project, “The collector has to decide between the digital NFT or the physical artwork, but cannot keep both. This exchange is a one-way process, so choose carefully.”

See <https://currency.nft.heni.com/info>.

1295. IT TAKES A VILLAGE



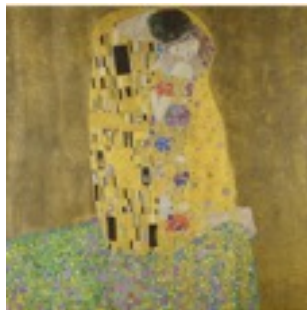
“The Currency” collection [LINK](#)

C. Artistic Works

Artists can digitize their physical artwork by scanning or photographing it and by turning the result of the digitalization into a token on the blockchain.

There are several perceived advantages. Artists can show and sell their art without having to resort to a gallery. Artists can have complete control over the sale of their artistic works without having to pay a gallery commission. Artists also have the potential to benefit from future sales due to resale royalty implementation. In fact, NFTs can be programmed to give a percentage of future sales to their creators, giving the artist an opportunity to be compensated for secondary sales of their works.

As an example, the Boston Museum of Fine Arts (MFA) offered a collection of NFTs of 24 of the museum’s French pastels. Drawn from the MFA’s collection of Impressionist artworks, the capsule exhibition features artworks by Edgar Degas, Claude Monet, and others. Proceeds from each sale support the study, treatment, and conservation of two paintings of Edward Degas.



The Vienna Belvedere Museum created a collection of 10,000 NFTs and each one is a unique part of the high-resolution image of The Kiss by Gustav Klimt.

Other kinds of so-called “generative art,” or blockchain native art provide artists with the potential to create art via algorithm, with the art initially only existing in its NFT form. For example, the popular Art Blocks series allows artists to curate an algorithm by which minters of the art randomize the art and fix it permanently as an NFT in the process of it being purchased. See, e.g., <https://www.artblocks.io/learn>. Some versions of this generative artistic process allow the entirety of the generative art project to be stored “on chain.” See, e.g., <https://www.larvalabs.com/autoglyphs>.

D. Collections

Bored Ape Yacht Club Collection

Background: As described on the Bored Ape [website](#), “[Bored Ape Yacht Club] is a limited NFT collection where the token itself doubles as the purchaser’s membership to a swamp club for apes.” Examples of the individual NFTs offered under the collection are show below:



Bored Apes (Source: www.boredapeyachtclub.com)

Bored Ape Yacht Club (colloquially, “Bored Ape” or “BAYC”) is a collection of digital artworks that provide owners an avatar-based Non Fungible Token (“NFT”) featuring a unique cartoon ape and, more recently, a variety of virtual and real world perquisites for Bored Ape NFT holders. Thus, as the “yacht club” portion of the collection’s name suggests, BAYC was born out of the co-founder’s vision for not only providing digital art, but creating an exclusive community made up of Bored Ape NFT owners as well. BAYC hired professional illustrators to provide the underlying project graphics, which were then fed into an algorithmic program that randomly generates thousands of images with unique combinations of facial features, furs, glasses, and other props or distinct visual characteristics. Certain traits—gold fur, laser eyes, biker vests—show up more rarely, making apes with those traits perceived as more valuable.

Each Bored Ape, which is generated by an algorithm that randomly mixes the various traits, remains hidden until the initial collector pays for it, so buying an ape avatar was a bit like playing a slot machine. In other words, if someone was randomly assigned an ape with the right alignment of traits, a collector could profit wildly by subsequently flipping it to the next

purchaser for a higher price. As a result, some Bored Ape NFTs have led to rampant price speculation and market participants seeking extraordinary profits.

Commercial Value: The project's name is a reference to the crypto slang of "aping in" to a big investment in hopes of an uncertain but large profit. BAYC has since come to represent one of the more prestigious NFT collections on the market. After launching in April 2021, Bored Ape has surpassed \$2 billion in total sales, amassing 11,831 buyers and over 32,000 total transactions. To date, the most valuable single Bored Ape (Ape No. 8,817) sold at a Sotheby's auction for \$3.4 million. As another example, a bundle of 101 Bored Ape NFTs resold for \$24.4 million in an auction also hosted by the fine-art house Sotheby's. Some notable celebrities who have purchased BAYC NFTs include Tom Brady, Snoop Dogg, Jimmy Fallon, Post Malone, Paris Hilton, Madonna, Kevin Hart, Neymar Jr., and others.

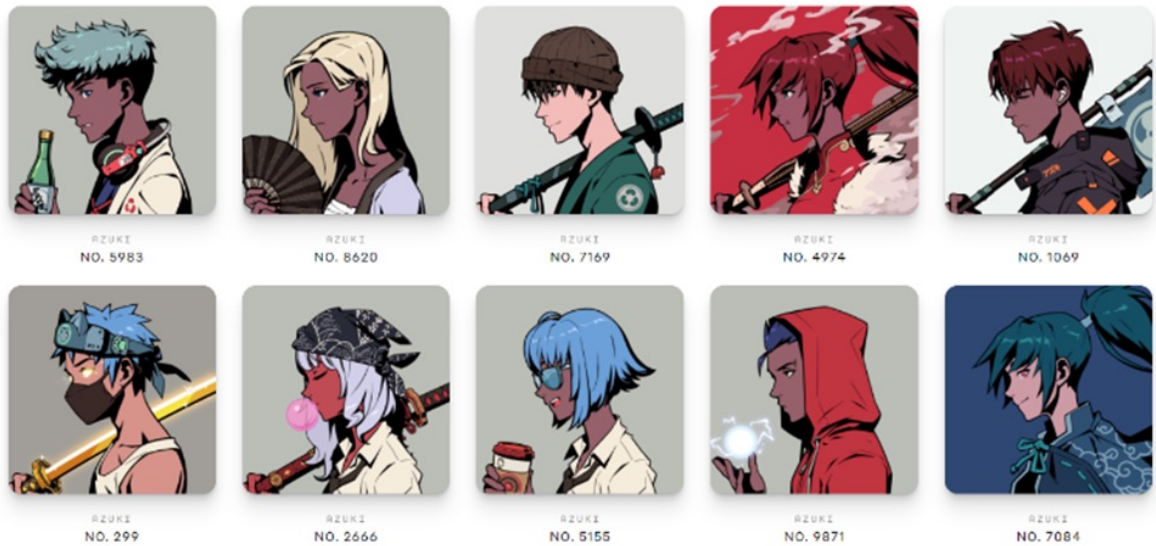
Value to NFT Holder: In response to the popularity surrounding Bored Ape, Wylie Aronow (the BAYC co-founder) stated that BAYC aims to be a "Web3 lifestyle company." Beyond the already-popular use of character-based NFTs as a status symbol for owners, BAYC NFT holders enjoy additional perks as the tokens serve as a digital identity and access pass that unlocks membership to an exclusive online community space called "the swamp club," as well as invitations to exclusive in-person events (Ape Fest), and even IP rights over the image and artwork for personal or commercial uses. In other words, prior to Bored Ape, NFTs mainly served as mere avatars whose value derived from the rarity of the digital asset. BAYC on the other hand released secondary assets like "Bored Ape Kennel Club," "Mutant Serum," and "Mutant Ape Yacht Club," all of which have increased BAYC's perceived value, brought more users into the ecosystem, and rewarded previous holders by giving away a select number of these secondary collections to existing BAYC NFT holders.

NFT as IP Wave: To date, BAYC remains one of the most prominent NFT collections that provides not only ownership of the token, but also provides the holder commercial rights to the underlying art. Thus, many have credited Bored Ape as popularizing a new frontier in the "NFT as IP" wave, i.e., NFT collections that provide commercial usage rights that allow the holders to create and sell derivative works based on the underlying art. The BAYC Terms and Conditions explain: "When you purchase an NFT, you own the underlying Bored Ape, the Art, completely." Regarding personal use, the Terms explain that NFT holders are granted "a worldwide, royalty-free license to use, copy, and display the purchased Art, along with any extensions that you choose to create or use."

In addition, NFT holders are also granted "an unlimited, worldwide license to use, copy, and display the purchased Art for the purpose of creating derivative works based upon the Art ("Commercial Use"). Examples of such Commercial Use would, e.g., be the use of the Art to produce and sell merchandise products (T-Shirts, etc.) displaying copies of the Art." While many collectors may purchase a BAYC NFT with the hope of a lucrative future resale, others have explained that owning the underlying commercial rights to a Bored Ape NFT allows them to use their Ape as the basis for new derivative works, or even as a source identifier for their own goods or services. For example, two BAYC owners have told *The Verge* that they are in talks to launch their own products that feature their Ape. One BAYC member explained to *The Verge* that, as a member who works in the cannabis industry, licensing was part of the appeal from the beginning. He purchased his Ape for ETH 15.00, or around US \$45,000, in August 2021, and thought of it as an investment in branding and marketing opportunities. Even celebrities and other media companies have purchased Bored Apes to capitalize on the trend.

Azuki

Background: Azuki is a collection of 8,700 anime-themed NFT avatars that were released in January 2022. The Azuki collection was created by Chiru Labs, a group of four Los Angeles-based artists and developers who describe themselves as “the skaters of the internet.” In terms of the NFTs, each Azuki is essentially a profile picture project with randomized traits and visual characteristics with distinct anime-inspired visuals. Like BAYC, Azuki NFTs are generated through a randomized selection of visual characteristics, which were originally developed by the project’s lead artist (known as Steamboy) based on “skateboarder” style anime portraits. Examples of the individual NFTs offered under the collection are show below:



Azuki gallery (source: www.Azuki.com)

In addition, like BAYC’s swamp club, Azuki NFT holders are also provided membership access to “the Garden,” which provides exclusive real-world offerings such as streetwear and figurine collectibles, as well as virtual events and additional NFT offerings. As described on the official [website](#), the Garden “is a corner of the internet where art, community, and culture fuse to create magic ... [blurring] the lines between the physical and digital worlds.”

Commercial Value: The Azuki NFTs, which were released for sale on January 12, 2022, through the OpenSea marketplace, were originally priced at \$3,400 each. Within minutes, the entire initial release of the 8,700 NFTs sold out, with total sales at this point reaching over \$29 million. Like other successful NFT collections, the subsequent trading of Azuki NFTs following the initial sales further solidified Azuki’s commercial value, as Azuki amassed US \$300 million in total transaction volume across several major NFT marketplaces including OpenSea, Nifty, and Rarible.

Azuki is built on Ethereum, which is a blockchain-based platform best known for its cryptocurrency, “ETH.” To date, the most expensive Azuki sold was Azuki #9605 (shown below), which sold for ETH 420.69 (roughly US \$1.42 million):



Azuki #9605 (Source: www.OpenSea.io)

Following initial sales and subsequent trading, Azuki was one of the few NFT collections to initially reach a floor price of over 20 ETH (\$62,069), which helped to ensure the stability of the overall market for Azuki NFTs. As of April 2022, Azuki’s overall sales volume sits at slightly over 200,000 ETH, currently worth roughly \$786 million, amassing 14,391 buyers and 31,837 total transactions.

Value to NFT Holder: Owning an Azuki NFT grants the user access to exclusive NFT drops, streetwear collaborations, live events, and more, as they become members of The Garden. The creators describe The Garden as a “corner of the internet where artists, builders, and web3 enthusiasts meet to create a decentralized future.”

As previously mentioned, those who have access to The Garden, i.e., those who own Azuki NFTs, are offered exclusive virtual and in-person perquisites. For example, on March 30, 2022, Azuki hosted its first in-person garden party in Los Angeles, which was limited to Azuki holders and a guest of their choice.

Secondary Collections: During the March 30 event mentioned above, Azuki owners were surprised with the release of Azuki’s new collection, “Something Official.” All Azuki holders were airdropped two unrevealed NFTs per Azuki collectible that was already in their wallet. Initially, the NFTs started as a digital crate, which was later updated on April 1 to reflect a crate containing a pile of dirt. The third iteration saw not only the dirt being replaced with a red bean pod, but also a change to the collection’s name. Renamed from “Something Official” to “BEANZ,” the collection consisted of 20,000 BEANZ NFTs. Holders of this collection receive access to a holders-only Discord channel, which is an online discussion forum where Azuki owners can discuss a variety of topics ranging from the Azuki NFTs specifically to anime and manga more broadly.

Azuki has also recently sought to create a brand extension of new NFTs based on one of the more famous original Azuki NFTs (Azuki #40, shown below). Azuki launched a collection of “Bobu Tokens,” which fractionalized the original Azuki #40 NFT into what is

known as a “fractional.art vault.” The vault is a decentralized smart contract that locks the NFT so it cannot be sold by a single person or owners of the fractional tokens. Instead, owning a Bobu Token allows owners to “participate in collective governance over Bobu’s character in the Azuki universe” and “to join an experiment in decentralized character IP governance.” Simply put, Bobu Tokens are not ownership in the underlying NFT, but each token represents a vote used for governance over the use and commercialization of that NFT.



Azuki #40, “Bobu” (source: <https://www.azuki.com/bobu-101>)

For example, the first governance proposal where Bobu Token holders could vote was “should we send Bobu to space?” Azuki partnered with STELLAR, a student research organization that builds and sends research projects to the International Space Station (ISS), to lead a vote to decide whether to send 2,000 Bobu Tokens (roughly \$1 million) to space “inside a ledger nano, aboard a SpaceX rocket in a NASA mission to the ISS.” Bobu Token holders not only could vote on whether to do so, but also how much the community would donate to STELLAR to continue their research in the future. Details concerning this proposal can be found at <https://bobu.azuki.com/proposals/should-we-send-bobu-to-space>.

Examples of NFT Commercialization by Brands

ASICS

In July 2021, the shoe brand ASICS announced its first-of-its-kind footwear release in the form of NFTs that would be available via digital auction. The ASICS SUNRISE RED™ NFT COLLECTION is described as “a celebration of sport and a first step in building a future where digital goods inspire physical activity.” The collection consists of 189 NFTs comprising nine different ASICS digital footwear products. The shoes were featured in a limited-edition release made up of 20 NFTs per shoe, and a gold edition release featuring each shoe in a metallic gold colorway with just one NFT per shoe. An example of an NFT collection is shown below:



ASICS SUNRISE RED, METARACER (Source: <https://nft.asics.com/>)

All ASICS SUNRISE RED owners received digital 3D models and textures of their NFT shoes to use in animation projects and other applications, including the metaverse. To date, ASICS has not applied for any marks related to NFTs or the metaverse, although its website's use of the "™" symbol in connection with the collection name may suggest that such an application is foreseeable. As of this writing, total sales of the SUNRISE RED collection through the OpenSea marketplace have reached ETH 24.1 (roughly US \$45,895) and an associated floor, or lowest price at ETH 4.9 (roughly US \$9,331). While 155 of 189 total NFTs have been collected to date, all of the Gold Edition NFTs (the 1-of-1 NFT of a particular model) within the collection have been purchased, with prices ranging from ETH 0.5 to 1.6 ETH (roughly US \$900 to US \$3,000).

ASICS also announced that all proceeds from the project would be invested in a digital artist residency program, called the ASICS Digital Goods Artist-in-Residence program. The program is designed to reinvest in the next generation of digital shoe artists, aimed at both established and emerging digital artists from around the world who connect with the ASICS mission to inspire physical activity through digital goods. Each partnership is valued at up to US \$250,000 to each individual artist selected for the program.

Joe Pace, Head of Business Development, ASICS Running Apps, commented: "At ASICS we strive to be at the forefront of innovation in the sporting goods sector. So, while we are excited to drop the world's first digital shoe release from a major sporting goods company, this is only the beginning. In coming together with some of the most creative and forward-thinking digital artists in the world through our new Artist-in-Residence program, our long-term vision is to push the boundaries of digital goods to inspire physical activity."

Additionally, ASICS recently partnered with StepN, a "move-to-earn" Web3 running app, to release a limited-edition StepN-ASICS Sneaker NFT mystery box collection through the Binance NFT marketplace. To participate, users must download the StepN app, purchase an NFT, and run or walk in the real world to earn tokens. Users can spend their earnings in the StepN ecosystem or swap them to an external account and cash out for profit. An example of the NFTs created through this collaboration is shown below:



StepN x ASICS NFT Sneaker #395802589 (Source: <https://www.binance.com/en/nft/product/83357652>)

Compared to the SUNRISE RED collection, the ASICS collaboration with StepN has seen more significant commercial success. As of this writing, Binance reports the total sales volume of NFTs traded in the marketplace for the StepN x ASICS NFT Sneakers collection at roughly US \$21 million.

McDonalds

NFT Offerings: In November 2021, McDonalds created a limited number of NFTs in celebration of the McRib’s 40th anniversary. The NFT was a digital version of the sandwich. Consumers had to enter a contest for a chance to win an NFT, rather than purchasing one directly. To enter, customers had to follow McDonald’s Twitter account and retweet the Sweepstakes Invitation tweet anytime between November 1 and 7, with the ten winners selected by November 12. Those winners had the McRib NFT (shown below) added to their digital wallet which allowed them to “enjoy [the McRib] year-round ... digitally.”



McRib NFT (Source: <https://corporate.mcdonalds.com/corpmcd/en-us/our-stories/article/OurStories.40-anniversary-mcrib.html>)

McDonald’s China also released a set of 188 NFTs on October 8, 2021, to celebrate their 31st anniversary in the Chinese market, which was branded as the “Big Mac Rubik’s Cube” collection. The NFTs were distributed among employees and consumers as part of a similar giveaway. The NFTs themselves were built on the Conflux public blockchain and created in partnership with a digital asset creation agency, Cocafe. The Big Mac Rubik’s Cube NFT (shown below) were designed based on the three-dimensional structure of McDonald’s China’s new office headquarters in Shanghai.



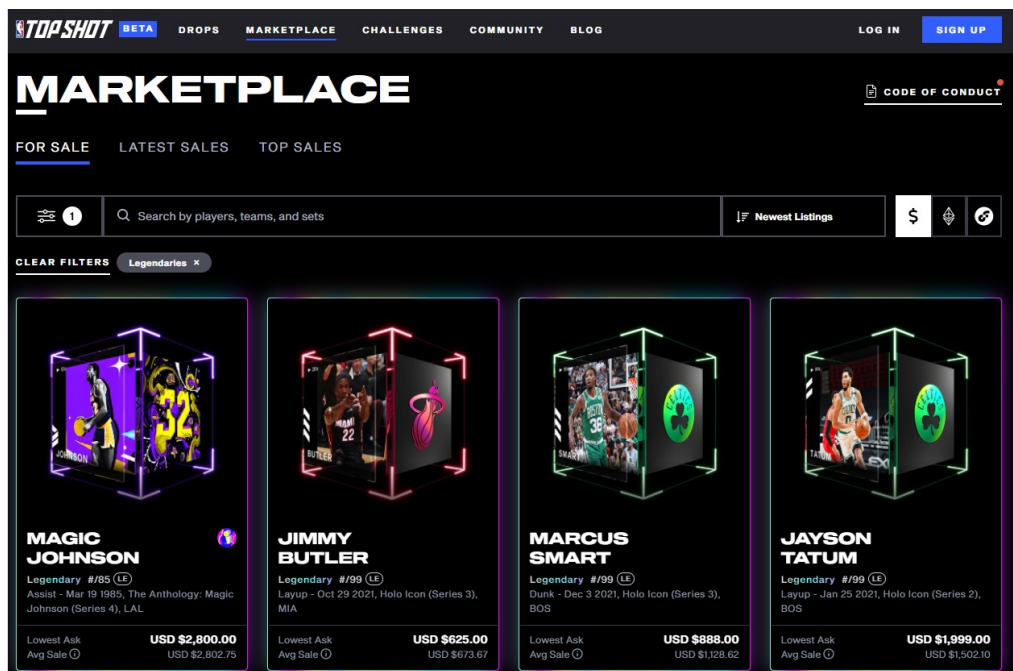
Big Mac Rubik’s Cube (Source: www.cryptotimes.io)

Both collections reflect a broader trend of brands using NFTs primarily for marketing and PR-related purposes, as opposed to artistic or expressive purposes. Notably, McDonald’s is not the only fast-food chain company to release its own branded NFTs. For example, Taco Bell has released a collection of taco-themed GIFs and images on the NFT marketplace Rarible. Other brands like Pepsi, Burger King, and Starbucks have also sought to expand their brand’s presence in the NFT space by releasing limited edition NFT collectibles. Indeed, Starbucks recently announced a blockchain-based loyalty program called “Starbucks Odyssey” which “will offer members the ability to earn and buy digital collectible stamps (NFTs) that will unlock access to new, immersive coffee experiences.” See <https://stories.starbucks.com/press/2022/starbucks-brewing-revolutionary-web3-experience-for-its-starbucks-rewards-members/>.

Related NFT Trademark Applications: More recently, McDonald’s has applied for a trademark in the U.S. to “operate a virtual restaurant”. (App. No. 97,253,179). Filed on February 4, 2022, the application was for the MCDONALD’S mark in connection with services under International Class 43; namely, for “operating a virtual restaurant featuring actual and virtual goods, operating a virtual restaurant online featuring home delivery.” The application was accepted by the Office as meeting the minimum filing requirements but, as of this writing, has not yet been assigned to an examiner. While the application was filed on an intent-to-use basis, McDonalds has not yet offered or advertised any of the services listed in the application.

NBA Top Shot Moments

Background: NBA Top Shot was created as a partnership between the National Basketball Association (NBA), the National Basketball Players Association, and Dapper Labs. NBA Top Shot is a blockchain-based platform that allows sports fans to buy, sell, and trade NFTs of NBA video highlights (akin to a digital version of a basketball card). The project originated in 2019, spent most of 2020 in development, and rose to popularity with upwards of a million registered users in 2021. An example of the NBA Top Shot marketplace and collectible “Moments” is shown below:



NBA Top Shot Marketplace (Source: <https://nbatopshot.com/marketplace>)

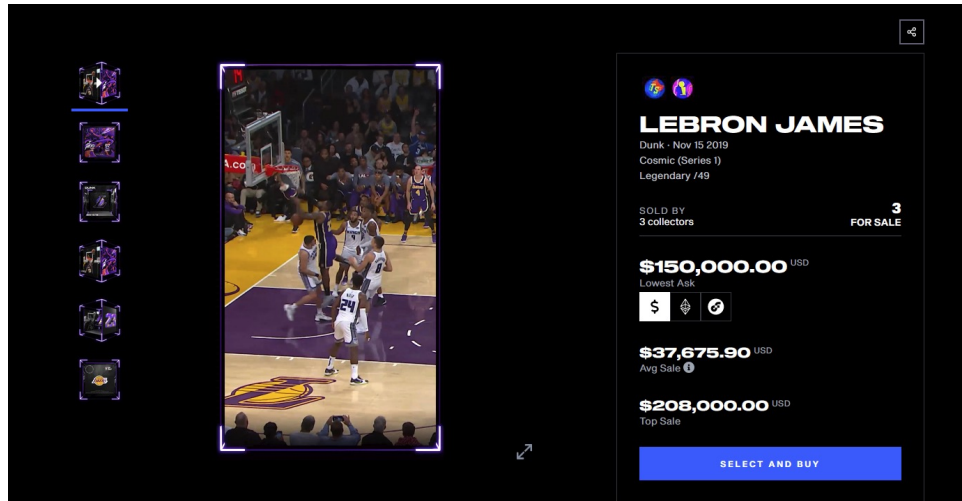
At its core, NBA Top Shot offers fans the chance to collect “Moments,” which are tradable NFTs that contain dynamic media content, including a video clip of a specific game highlight as well as other relevant information, such as statistics about the specific game and the player featured in the clip. Moments vary in terms of scarcity and value. For example, there are different tiers of Top Shot Moments, each available at different price points:

1. **Genesis Ultimate (1 copy):** Available only through special events
2. **Platinum Ultimate (3 copies):** Available only through special events
3. **Legendary (25–99 copies):** Found in Legendary packs—starting at US \$230; typically containing six Common Moments, three Rare Moments, and one Legendary Moment
4. **Rare (150–999 copies):** Found in rare- and higher-level packs, starting at US \$22—each rare pack is guaranteed to contain at least one Rare Moment
5. **Common (1,000+ copies):** Found in common packs, starting at US \$9 for nine Common Moments

In terms of how consumers can collect these NFTs, most Moments are first released as part of a digital “pack,” which users can purchase directly from NBA Top Shot. Like traditional trading cards, collectors will not know prior to purchasing the pack what is contained within the pack, and the pack, once opened, will reveal each of the Moments contained therein. NBA Top Shot also provides “Challenges” for users to accumulate a specific set of Moments in order to earn a bonus Moment. The Moments won in Challenges often cannot be found anywhere else. Thus, Challenges encourage users to trade among themselves, thereby ensuring an engaged and active market. Moreover, NBA Top Shot Moments can also be collected through peer-to-peer trading (again, very similar to traditional trading card practices). However, unlike physical cards, each Moment’s authenticity and scarcity is readily verifiable (via the Flow blockchain), and the full transaction history and past sale prices of each Moment are available for everyone to see. Further, while Moments can only be sold and traded on NBA Top Shot’s official platform, the user community determines the fair market value of every Moment after the initial sale. As of this writing, peer-to-peer trading accounts for more than 95 percent of total sales.

Trademark Registrations: As of this writing, the NBA has acquired trademark registrations for the word marks **NBA TOP SHOT** (U.S. Registration Nos. 6,629,616 (Class 9), 6,569,842 (Class 41), and 6,435,118 (Classes 35 and 42)). These registrations include use of the mark in connection with downloadable virtual goods and digital media, providing non-downloadable digital collectibles for use in digital environments for entertainment purposes, and providing digital collectible services, respectively. While each application was initially refused on the basis that an existing registration was likely to cause consumer confusion, the NBA was able to establish that the cited registration (**NBA DEVELOPMENT LEAGUE**, Registration No. 3186084) was owned by an entity that operates under the NBA. In addition, while all applications were initially filed based on an intent-to-use, the Trademark Office has since accepted the NBA’s specimens of use. Notably, however, the NBA has yet to file an application for the **MOMENTS** mark, which is still used alongside the ™ symbol on the NBA Top Shot Marketplace.

Commercial Success: As of May 2022, more than 800,000 accounts were registered on NBA Top Shot, and users have collectively generated over US \$1 billion in sales. NBA Top Shot's success can be attributed to the scarcity of packs, which typically sell out within seconds of their release. To date, the most valuable NBA Top Shot Moment (LeBron James dunking on Sacramento Kings' Nemanja Bjelica) sold for roughly US \$200,000 in February 2021. An example of the current listing, which shows the current asking price of US \$150,000, for the LeBron Top Shot Moment is shown below:



LeBron James Moment (Source: <https://nbatopshot.com/listings/p2p/c561f66b-5bd8-451c-8686-156073c3fb69+de32d3fb-0e6a-447e-b42a-08bbf1607b7d>)

In addition, several NBA players have also seen the value in NBA Top Shots and are contributing to the project in their own ways, further demonstrating the overall success of the collection. For example, New Orleans Pelicans' Josh Hart is an NBA Top Shot user himself and occasionally livestreams himself opening new packs. Other players even trade Moments for real-life experiences, such as offering courtside seats or a specific game jersey in exchange for a Moment.

Lastly, NBA Top Shot's commercial success can also be explained by the fact that the NBA Top Shot digital marketplace is designed to be more intuitive and accessible for sports fans already familiar with analog trading cards, regardless of their familiarity with cryptocurrencies or blockchain technology.

IP Rights over Moments: Unlike other NFT collections such as BAYC, the NBA still owns the highlight footage used in every Moment, and the organization's media partners are still allowed to broadcast the video clips that are sold as Moments. In addition, if a user violates the Terms of Service, NBA Top Shot can suspend or delete that user's account and Moments from the platform without advance notice. In other words, while the digital record of each Moment cannot be "deleted" in the traditional sense, the NBA Top Shot team does have the ability to remove any Moments whose owners otherwise violate the Terms of Service, and the ability to exclude users from the NBA Top Shot marketplace. In these respects, buying an NBA Top Shot Moment is significantly different from buying a physical trading card, or even from buying other NFTs, and is more analogous to purchasing a software license that is revocable a user violates the Terms of Service.

F. NFT for Sports/Entertainment Fan Engagement

From collectibles featuring famous athletes or iconic moments in the history of every

sport,^[1] to fan tokens of the most followed clubs,^[2] which give the owners the opportunity to unlock unique rewards, attend live games, or even influence team decisions, the sports industry has new and exciting developments coming in the near future because of NFTs.

As discussed above, NFTs can replace physical trading cards with custom digital assets that can be accessed and traded online, or can even be used to replace physical tickets to enter game venues. The use of NFTs in these scenarios is not a pointless endeavor, but instead solves fairly common problems such as fraudulent tickets creating massive lines at sport events,^[3] or the loss of value caused by the simple deterioration of physical cards. Beyond digital collectibles and tickets, NFTs can be integrated into live sports games as virtual access tokens.

They also offer new ways for fans to support their favorite teams and interact with them. Traditional player trading cards are transformed through blockchain technology into different forms of NFTs that sports enthusiasts can collect—memorabilia, gifs, video highlights, game badges, and more. In addition, they are tradable on NFT marketplaces.

Some sports NFTs can also serve as a form of fan club membership, giving holders exclusive perks, such as access to meet-and-greet events with athletes. Sports NFTs can offer new ways for fans to support teams and athletes and interact with them.

The gaming side of the sports industry, traditionally dominated by games such as FIFA or the average fantasy football league, has been shaken by a project called Sorare.^[4] Sorare allows gamers to own NFT versions of the athletes (game assets that can be owned and traded using blockchain technology) and create their own fantasy football teams to compete with other players. By doing so, the player is now back in the driving seat and has full control of his roster, making it a perfect proof of concept of a decentralized game on the blockchain that can revolutionize the industry.

Individual athletes can also issue their own NFT collections to engage their fan base. Similar to trading cards, athlete NFTs establish a connection between the athletes and their supporters. Additionally, athletes can maintain their IP rights by issuing NFTs themselves. As NFT creators, they can receive royalty fees from the resales of their NFTs.

We are currently at the first stage of NFTs and the blockchain in the sports industry. As this technology matures and becomes more prevalent, the need for clear rules, accountability, and regulation will become increasingly important, especially when it comes to underlying IP rights and ownership rules. And as NFTs mature, there will be even more practical applications for sports NFTs, all set to transform the industry in exciting ways. Loyal fans can demonstrate their passion by holding sports NFTs, while sports clubs and their athletes can offer fans long-term value through NFT's growing functions and uses.

Future investigation should include the Sorare project dealing with soccer, baseball, and basketball.

[1] <https://autograph.io/>

[2] <https://fantoken.com/inter/it/> - <https://www.socios.com/>

[3] <https://www.mirror.co.uk/sport/football/news/french-officials-show-fake-champions-27102736>

[4] <https://sorare.com/>

E. Web3 Domain Names

Web3 is a term used to describe new NFT applications that are classified as Utility NFT's. Web3 domain names serve a similar function as normal Web2 domains, in that they map user-friendly identifiers to digital addresses, but in the case of Web3 domain names, the digital addresses are blockchain-based digital addresses.

The primary uses for Web3 domains are for:

- Digital wallets
- Usernames
- Digital identities

The most popular Web3 domain extensions are: .eth, .crypto and .nft. Some blockchain projects are also issuing top-level domains for individual and corporate use.

The most popular Web3 domain projects are:

- Ethereum's .eth top-level domain
- Unstoppable Domain's .crypto, .nft and .wallet top-level domains
- Handshake's top-level domains, such as .c, .p and .tx

Recent domain name registration totals as of February 13, 2023 (Source: <https://altroots.com/stats>)

- .eth: 2,459,708
- .crypto: 982,697
- .nft: 647,212
- .wallet: 477,364
- Handshake top-level domains: 10,159,296

For more information, see Chapter 8 entitled "Web3 Domain Names."

4. Trademark Filings and Best Practices

Participants

Michael Geller
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Introduction

NFTs raise complex questions with regard to the proper protocol and classification when filing a trademark application. While the tokens are themselves digital, they could be classified several different ways—as digital goods, as the actual goods depicted on the NFT, as a service for providing the token, as an entertainment service, and more.

This chapter includes a brief review of current guidelines on classification and filings for NFT-related trademarks.

Classification—Class 9

To date, most countries' trademark offices require NFTs to be classified in Class 9 as downloadable files. The 12th Edition of the Nice Classification will include “downloadable digital files authenticated by non-fungible tokens” in Class 9.

More precisely this new Edition will enter into force on January 1st .2023 and will include: Class 9:

- Addition of the items “downloadable digital files authenticated by non-fungible tokens [NFTs],” “computer network routers,” “portable document scanners,” “cases for smartphones incorporating a keyboard.”
- Amendment of the item “downloadable computer software for managing cryptocurrency transactions using blockchain technology” to “downloadable computer software for managing crypto asset transactions using blockchain technology.”

See also : https://euipo.europa.eu/ohimportal/en/news-newsflash/-/asset_publisher/JLOyNNwVxGDF/content/pt-virtual-goods-non-fungible-tokens-and-the-metaverse.

The term “authenticated” is key here. This suggests that an NFT is merely a digital certificate that authenticates a digital item. Thus, “the type of digital item authenticated by the NFT must be specified.”

See: https://euipo.europa.eu/ohimportal/en/news-newsflash/-/asset_publisher/JLOyNNwVxGDF/content/pt-virtual-goods-non-fungible-tokens-and-the-metaverse.

A few offices, like the EUIPO, have released formal guidance to trademark applicants adopting this wording. Specifically, the EUIPO (following on the Nice Classification plans) stated “[v]irtual goods are proper to Class 9 because they are treated as digital content or images.”¹

See: https://euipo.europa.eu/ohimportal/en/news-newsflash/-/asset_publisher/JLOyNNwVxGDF/content/pt-virtual-goods-non-fungible-tokens-and-the-metaverse.

However, the term “virtual goods” on its own lacks clarity and precision, so it must be further specified by stating the content to which the virtual goods relate (e.g., downloadable virtual goods, namely, virtual clothing).”

[1] The below terms in EUIPO trademarks, have either been published or registered. Thus, it can be inferred that the EUIPO is accepting the mentioned terms for the classes indicated:

Class 9:

- downloadable multimedia files containing graphic material, text, audio and video files and non-fungible tokens.
- non-fungible tokens (NFTs) and digital art;
- non-fungible tokens (NFTs) and other application tokens;
- non-fungible tokens (NFTs) used with blockchain technology;
- non-fungible tokens (NFTs) used with blockchain technology to represent a collectible item;
- non-fungible tokens (NFTs) featuring collectible images and videos;
- non-fungible tokens (NFTs) featuring digital art;
- non-fungible tokens (NFTs) or other digital tokens based on blockchain technology.

Class 35:

- providing an on-line marketplace for buyers and sellers of digital currency assets, non-fungible tokens (NFTs), physical assets, artwork, music, text and audio and video, and other media;
- provision of an online marketplace for buyers and sellers of downloadable digital video game assets authenticated by non-fungible tokens (NFTs)
- providing virtual goods namely, images, works of art, artworks, dolls, toys, cards and NFT related collections used to represent people's virtual characters, virtual reality characters and images to represent people in online virtual world and social networking for instant message sending;

Class 36:

- electronic transfer of non-fungible tokens;
- electronic transfer of non-fungible tokens, Via blockchain technology.
- exchange, purchase and sale of non-fungible tokens registered on a blockchain network

Class 41:

- entertainment services, namely, providing an online virtual environment for collecting digital assets or digital collectibles authenticated by non-fungible tokens or other digital tokens;
- entertainment services, namely, providing online, non-downloadable digital assets or digital collectibles authenticated by non-fungible tokens or other digital tokens;
- entertainment services in the nature of the development, display, distribution, production, and reproduction of digital content in the nature of audiovisual works, audio-only works, visual graphic works, image files, captured recordings, and still photography, all authenticated by non-fungible tokens or other digital tokens

Class 42:

- providing online non-downloadable software featuring non-fungible tokens (NFTs) or other digital tokens based on blockchain technology.
- non-Fungible Tokens used with blockchain technology;
- non-fungible tokens used with blockchain technology to represent a collectible item;
- software platforms for providing access to crypto-collectibles, non-fungible tokens, and other application tokens;
- providing temporary use of online non-downloadable software for use in electronically trading, storing, sending, receiving, accepting and transmitting digital currency, crypto-collectibles, non-fungible tokens and other application tokens, and managing digital transactions;
- providing non-downloadable computer software in the nature of crypto-collectibles and non-fungible tokens (NFTs).

The USPTO follows a similar course and requires that the products be identified as “downloadable files” with wording that states that the files are authenticated by NFTs. For instance, two acceptable forms of wording in the USPTO are as follows: “downloadable music files authenticated by non-fungible tokens (NFTs)” and “downloadable multimedia files containing artwork relating to sports authenticated by non-fungible tokens (NFTs).”²

[2] The USPTO ID Manual contains the following NFT-related entries:

Class 9:

- Downloadable music files authenticated by non-fungible tokens (NFTs)
- Downloadable audio recordings featuring (specify subject matter, e.g., music, poetry, etc.) authenticated by non-fungible tokens (NFTs)
- Downloadable multimedia file containing artwork relating to (indicate field or subject matter of file) authenticated by non-fungible tokens (NFTs)
- Downloadable multimedia file containing text relating to (indicate field or subject matter of File) authenticated by non-fungible tokens (NFTs)
- Downloadable multimedia file containing audio relating to (indicate field or subject matter of file) authenticated by non-fungible tokens (NFTs)
- Downloadable multimedia file containing video relating to (indicate field or subject matter of file) authenticated by non-fungible tokens (NFTs)
- Downloadable video recordings featuring (specify subject matter, e.g., sports highlights, movie clips, memes, etc.) authenticated by non-fungible tokens (NFTs)
- Downloadable audio and video recordings featuring (specify subject matter, e.g., sports highlights, movie clips, memes, etc.) authenticated by non-fungible tokens (NFTs)
- Downloadable image files containing (indicate subject matter or field, e.g., trading cards, artwork, memes, sneakers, etc.) authenticated by non-fungible tokens (NFTs)
- Downloadable multimedia file containing artwork, text, audio, and video relating to (indicate field or subject matter of file) authenticated by non-fungible tokens (NFTs)
- Downloadable virtual goods, namely, computer programs featuring (specify nature, type, e.g., articles of clothing) for use in online virtual worlds.

Class 35:

- Provision of an online marketplace for buyers and sellers of downloadable digital art images authenticated by non-fungible tokens (NFTs)
- Provision of an online marketplace for buyers and sellers of downloadable digital (indicate type of downloadable digital goods, e.g., art images, music, video clips, etc.) authenticated by non-fungible tokens (NFTs)
- Retail store services featuring virtual goods, namely, (specify type, e.g., clothing) for use in online virtual worlds.

In addition, the USPTO is accepting multiclass applications covering 9, 35, 41 and 42, listed in the Manual.

Some Office Actions issued in connection with applications covering NFTs (e.g., US App Nos 97212947 and 90767267) contained proposed identification language consistent with the ID Manual entries.

Classes Other Than Class 9

Other classes commonly covered by NFT-related trademark applications include Classes 35, 36, 41, and 42.

- Class 35 is often used to cover elements such as online marketplaces and websites for buying, selling, and trading NFTs. This class is essential for NFT platforms but may be less important for NFT creators and minters.
- Class 36 may be used for electronic transfer of NFTs; electronic transfer of NFTs via blockchain technology and exchange, and financial transactions via blockchain network.³
- Class 41 may be used by individuals providing informational services or training for NFTs. This is perhaps least likely to be relevant.
- Class 42 is a common class for non-downloadable software for accessing, storing, trading, buying, selling, and other activities related to NFTs. This class is where NFTs most often merge with other “metaverse” related areas. This class is often used to capture wording related to non-downloadable software for consumers to make payments related to NFT transactions and other e-commerce purchases, as well as digital wallets, and non-downloadable software for accessing and storing NFTs.

NFTs In Trademark Registries

Countries such as Benelux, Brazil, Costa Rica, India, Italy, Romania, Spain, Taiwan, and Vietnam, are examples of jurisdictions accepting trademark applications in the same manner as the EUIPO, but without an official policy or guidelines.

Other countries are considering different approaches for NFTs applications, such as:

- (i) Canada has not released any official guidelines; they will likely deal with these types of goods/services on a case-by-case basis.
- (ii) The Intellectual Property Office of Singapore (IPOS) has a list of *approved* goods and services that includes goods and services related to blockchain technology. For example:
 - Class 9: Downloadable computer software for managing cryptocurrency transactions using block chain technology
 - Class 36: Electronic funds transfer provided via blockchain technology
 - Class 42: User authentication services using blockchain technology
- (iii) China is reportedly not accepting applications related to NFTs and has no policy or guidelines in this regard.
- (iv) Brazil has no policy guideline regarding NFTs, but INPI accepts applications related to NFTs in Classes such as 9, 35, 41 and 42. Samples include:

CLASS 9: ARCAN LEAGUE OF LEGENDS®; Digital music available to be downloaded through the internet; digital materials, to be known as, non-fungible tokens (NFTs); downloadable software for computer lock screens; downloadable software for computer background images; downloadable electronic publications,

[3] Canada, India, Italy, Romania, Singapore, and Taiwan, and the UKIPO and EUIPO offices.

such as, comic books, graphic novels, stories, magazines, manuals as well as other information material the entertainment and video game scope; downloadable cinematographic movies, television shows and other forms of short entertainment content such as animations, comedy, drama esports, fantasy and science fiction; downloadable video game software; mouse pads; pre-recorded CD's with music; optical and magnetic pre-recorded discs with cinematographic movies and other forms of short entertainment content such as animations, comedy, drama esports, fantasy and science fiction; pre-recorded video discs and DVD's with cinematographic movies, television shows and other forms of short entertainment content such as animations, comedy, drama esports, fantasy and science fiction; protective phone cases; recorded video game software; video game cartridges; video game discs.

CLASS 35: (DESIGN ONLY—IMAGE OF A “GHOST) Online sales and retail services with regards to informatic hardware, peripherals and digital support, such as, pre-recorded videos, photographs, images, audiovisual content, retractable supports for telephones, holders, supports and structures for smartphones and other cellular phones, smartphone cases and covers, computer tablets and cellphones; portable wireless earphones, portable wireless speakers, fridge magnets, decorative magnets, writing instruments, notepads, decals, stickers, greeting cards, postcards, book markers, calendars, bags, purses and other accessories, face covers, dresswear (except in the case of medical use), toys, stuffed toys, beach balls, water toys, playing cards, glasses, mugs, fanny packs, pillows, pins and brooches, works of art, water and other bottles, keychains or holders, ice cube molds, games, dishware, cups and glass containers, sunglasses, event notes, jewelry, bags and other transport sacs, collars, leads, and other animal items, furniture, bedding, plastic or fabric curtains, digital coins, digital tokens, and non-fungible tokens (NFT).

CLASS 41: NIKE: entertainment services, specifically, online supply and non-downloadable footwear, clothing items, hats, glasses, bags, sports bags, backpacks, sporting equipment, art, toys, and other accessories for virtual and online use.

CLASS 42: EFINITY: Provide for temporary use of non-rechargeable computer software that allows users to send, receive and store digital coins; Provide a safe technological services based upon Web technology that allows users to remotely access, send, receive, manage and store digital coins; authentication and certification of date related to crypto coins and non-fungible tokens (NFT) via blockchain; development of computer software for the utilization of blockchain technology; development of computer software for the use of blockchain technology; development of computer software for the use of blockchain technology; development of computer software to facilitate the crypto coins and non-fungible tokens (NFTs) transactions; planning and supplying an online platforms to facilitate the crypto coins and non-fungible tokens (NFTs) transactions; designs and digital arts and images for commercial use

Issues With Proving Use

Once a trademark application is filed, an issue will arise in connection with proving use of

the mark either for registration (most notably in the U.S.), maintenance (in countries like Mexico and Philippines), and cancellation based on non-use. The primary issue of use appears likely to arise around use of the actual NFTs, as opposed to the ancillary classes (such as Classes 35 and 42).

One strategy for attempting to prove use in connection with NFTs is to ensure that the trademark owner’s mark appears on each and every NFT to designate the NFT as originating with the brand owner. Another option, which has been used in the U.S., is to use the brand owner’s trademark on a landing page from which the NFT token can be downloaded. This generally is counted as a “point of sale.” Whether such an example of use would work outside the U.S., however, is less certain, especially in countries with stricter rules around proof of use of a mark.

Classification Issues

Which specific goods are covered has a greater impact than just the mere aspect of classification. In many jurisdictions, the application examination process will carefully compare specific goods claimed in the application against goods in third-party filings. Because NFT goods are generally shoehorned into Class 9, the class will likely quickly become overcrowded, and it may be more difficult to protect NFT-related goods in core classes of importance. Indeed, Class 9 is already often regarded as the most crowded of classes

As brand owners—from restaurateurs to sports teams—seek to protect their marks for NFT-related goods and services, Class 9 is likely to become more crowded.

Example NFT Classification Chart

~~Future work should include a NFT classification chart by jurisdiction in the form below.~~

Chart for classification NFT products	How is the trademark office (TO) considering applications for NFT’s. Do they have a specific policy or guidelines?		Is TO accepting a specific wording and in which classes?		Has TO indicated that a new class would be required for NFT’s?	
Country/Register	TM OFFICE PRACTICE COMMITTEE	HARMONIZATION COMMITTEE	TM OFFICE PRACTICE COMMITTEE	HARMONIZATION COMMITTEE	TOPC	HC

Recommendations For Trademark Applications and Best Practices

Harmonization among trademark offices globally would greatly benefit trademark applicants and trademark offices in enabling applicants to both protect their trademarks for NFTs and to maintain the resulting registrations (e.g., proving use and defending against non-use cancellations). In order to do so, best practices include:

- Filing in Class 9 for the NFT digital token and ensuring that the trademark appears on the face of the digital token and/or the access, download, or purchase screen associated with it. The majority of jurisdictions consider the digital token itself to be classified in Class 9, and as such, obtaining a registration in Class 9 is likely the best approach for obtaining protection.
- Filing in Class 35 is also recommended for individuals providing platforms and outlets to sell NFTs. Doing so can help protect the trademark for retail sales associated with NFTs.
- We recommend that all jurisdictions consider a harmonized approach for classifying NFTs, potentially through providing new language through

the Nice Classification system.

5. Channels of Distribution

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Introduction

As explained above, NFTs are “virtual badges” incorporating a digital work. NFTs most commonly come in the form of “a metadata file containing information encoded with a digital version of the work that is being tokenized.” Alternatively, an entire work can be uploaded into the blockchain.[1] In the same fashion as physical commodities, NFTs can be sold online via different channels i.e., auction sites, marketplaces, standalone web shops, social media, etc. The explosion in popularity of NFTs parallels the appearance of many marketplaces allowing users to sell or auction the digital tokens.

Where are NFTs bought and sold?

NFTs are sold on various NFT marketplaces, some of which have a specific theme or focus. Some marketplaces restrict membership and others are open to different buyers and sellers. Open marketplaces include OpenSea, Rarible, or Mintable, where it is possible to buy and sell many different types of NFTs. OpenSea (<https://opensea.io/>) is arguably the most popular NFT marketplace and started its operations in 2017. Examples of closed marketplaces include Valuables By CENT, where it is possible to buy and sell tweets; the NBA Top Shot Marketplace, a marketplace created by the National Basketball Association, where it is possible to buy NFTs of basketball video clips and game highlights; and the Axie Marketplace, a marketplace where it is possible to buy and sell NFTs related to the video game Axie Infinity.

Additional marketplaces include:

- Larva Labs/CryptoPunks, which hosts its own marketplace for CryptoPunks and related NFTs;
- Rarible, on which Taco Bell has listed art; cloud software giant Adobe recently partnered with Rarible to help secure NFT artists’ and creators’ work;
- SuperRare, which includes art, videos, and 3D images;
- Foundation, which focuses on curated art collections;
- Nifty Gateway, which is an art curation platform powered by the crypto exchange Gemini (controlled by the Winklevoss twins);
- Mintable, which is backed by billionaire Mark Cuban and aims to be an open marketplace similar to OpenSea of all types of creators (from photographers to musicians) who want to sell their work as a digital asset;

- Theta Drop, which is a platform built for the decentralized distribution of video and TV on the internet [2];
- Sandbox, which is at the same time a metaverse and a marketplace for trading NFTs [3];
- LooksRare, which purports to be a more community-based decentralized marketplace and provides user rewards for trading activity;
- X2Y2, which again purports to be a community-based decentralized marketplace and provides user rebates for trading activity.

Many other marketplaces are created on a regular basis.[4] There are also NFT marketplace aggregators, such as Gem or Genie, which show listings from other major NFT marketplaces aggregated in one location.

Consumers interested in NFTs can purchase access, and therefore ownership, to the file stored in a distributed digital ledger (i.e., the blockchain) by performing a transaction with its creator or the current holder, or directly with the smart contract (i.e., by minting an NFT). [5] NFT marketplaces allow the sale of NFTs stored on various platforms, including Ethereum, Polygon, Klatyn, and Solana.[6]

A potentially important evolution occurred in October 2022 when Apple decided to allow the use, exhibition, viewing, sharing, and sales of NFTs on its App store. This creates accessibility to the NFTs through a very powerful channel of distribution; however, since the user will have to pay the 30% commission to Apple as for any other sales made on this platform it remains to be seen whether usage may be limited.

Relevant Currencies Used

Typically, consumers buy tokens by paying in cryptocurrency (e.g., Ether, Solana, USDC, or Dai), but generally not currencies issued by governments.[7] Consumers not holding cryptocurrency who are still interested in purchasing NFTs can also use certain services allowing the transfer of NFTs against certain government issued currencies.[8] Several services, including centralized cryptocurrency exchanges, allow users to purchase NFTs using credit cards.

Ways to Acquire an NFT

Those interested in owning an NFT can acquire one through several different methods. First, one can create or “mint” an NFT. Second, one can buy an NFT already created by a third party on one of the marketplaces described above. In that case, the transaction can involve multiple parties such as the seller receiving the price for its token and the blockchain receiving a transaction fee (a gas fee). If an intermediary like a marketplace is involved, the transaction can involve the marketplace receiving a fee, the seller receiving the price for its token, the original creator, if different from the seller, receiving a resale royalty, and finally the blockchain receiving a transaction fee. Please note that the above and following is true for the sale of ERC-721 based NFTs.

The most expensive NFT sold to date is actually a series of NFTs called The Merge created by the digital artist Pak (an anonymous digital artist and programmer). It was purchased by 28,983 people who purchased at the time of sale) a total of 312,000 NFTs, generating nearly \$92 million dollars in initial sales proceeds. The Merge has made Pak one of the

most valuable living artists in history.

Minting

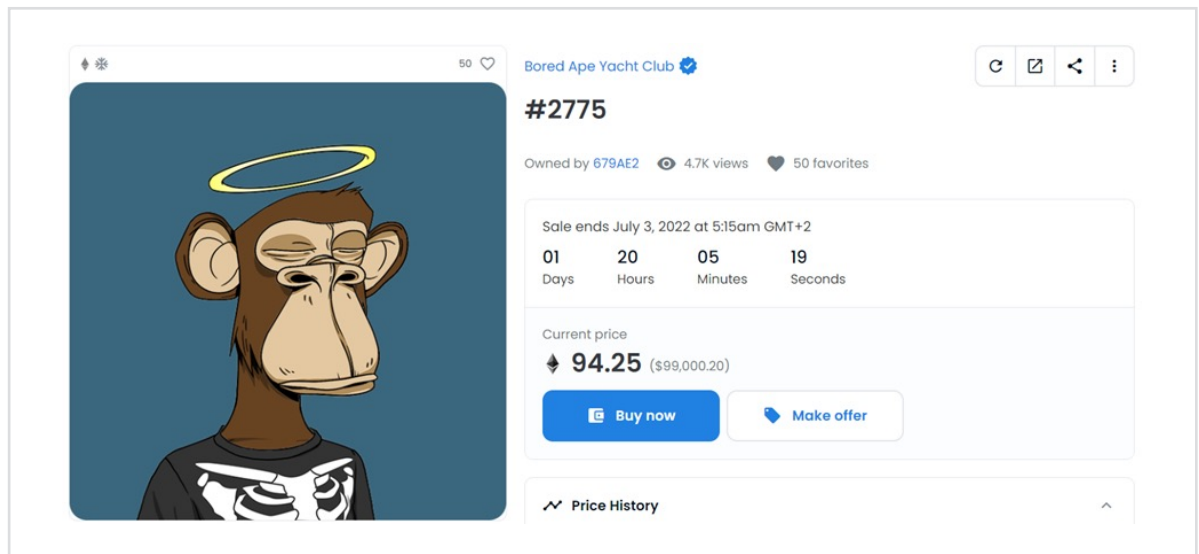
An NFT can be created (“minted”) by the creator deploying on the blockchain a smart contract designed to generate NFTs, then connecting its wallet to the contract.[9] The smart contract may then allow for the possibility of minting an NFT by paying a GAS fee to the blockchain.[10] An NFT creator/owner now has the option to keep the NFT or resell it through a third-party marketplace.

An NFT creator may choose the option of listing the NFT for sale. Depending on the sales terms, the artist may have the ability to determine the details of the transaction (price, royalties, auction time limit, and what cryptocurrencies buyers can use to pay).

Buying an NFT on a Marketplace: the Example of OpenSea

As previously mentioned, typically an NFT consists of a metadata file, commonly in the form of an ERC-721 token.[11] An ERC-721 standard NFT token has some mandatory elements; some others optional. The first core element of an NFT is a number known as the token ID, which is generated upon the creation of the token; the second is the contract address.[12]

By way of example, a listing on Open Sea shows on the left the visual digital work incorporated in the NFT, on the top right the owner, and on the bottom right the price:



[13]

Furthermore the Details panel shows additional information including the Contract Address and Token ID:

Blockchain	Ethereum
Metadata	Frozen
Creator Fees	2.5%

The token ID identifies the NFT whilst the Contract Address points to the Smart Contract “responsible to keep track of the created tokens on Ethereum.”[14] The contract address can also be used to verify that the NFT belongs to the authentic collection and therefore has a function of “proof of authenticity.”[15]

Each marketplace has its own steps, each generally requiring the purchaser to connect a wallet to the marketplace that contains the correct cryptocurrency required by the marketplace in question. Even where an NFT is being offered for free, the marketplace may include a transfer fee paid to the marketplace for conducting the transaction or it may require the payment of a gas fee to the blockchain being used.

Owners may also choose to resell their NFTs (regardless of whether they created them) on third-party marketplaces in the same manner as described above. The owner can decide to use the same platform or transfer it to another marketplace, which would incur additional gas fees and marketplace listing fees thus reducing the final fee the owner will receive. In addition, the original creator can set royalties on future sales that are deducted from the reselling price and are automatically transferred to the creator’s wallet.[16]

Storing NFTs

NFTs have four main parts:

1. ID (identifier, such as CryptoPunk #2517);
2. Token URI (unique resource identifier);
3. Metadata (information such as address, files, etc., which are referenced by the URI token);
4. Rich data (such as a real image archive).

NFTs’ metadata are almost always stored in the blockchain, while the media files associated with it (metadata, Rich data, etc.) can be stored either on the blockchain, or in external centralized or decentralized storage. As for location and access, “when you buy a NFT you own the metadata on the blockchain where you can access it through your wallet. This metadata has a link directed to an image (or whatever media file it is) to the storage location.

Metadata is stored in the blockchain, but few projects store media files on the blockchain due to the generally large fees required. However, the so-called “rich data” of most projects are stored in at least decentralized storage where multiple copies of the data exists. (e.g., IPFS (see below)). Decentralized storage offers longevity and security due to the decentralized state.

Recently, hackers stole thousands of dollars’ worth of NFT assets from accounts on the

marketplace Nifty Gateway. This platform blamed the hack on consumers' lack of two-factor authentication, thus making it easier for hackers to identify user credentials and steal the NFT assets. Some new types of crypto wallets have been created explicitly for storing NFT data. It is harder for a cybercriminal to invade a decentralized NFT storage, making this type of storage the trend in the crypto community. Some popular options for decentralized storage include "IPFS" or the InterPlanetary File System, and similar services like "Pinata" that provide easy access for creators.

NFTs are not stored in a user's wallet itself. The wallet, instead, gives the owner access to the blockchain through the owners' "private keys". Hardware wallets (such as Trezor and Ledger) have emerged as solutions to keep private keys off internet-connected devices.

Using NFTs as Collateral—NFT Lending and Other Financing Options

One can use an NFT that one owns as collateral for a loan. Certain platforms, such as NFTfi or BendDAO, provide community lending of cryptocurrency based on the perceived value of an NFT, using the NFT as collateral against the cryptocurrency loan. The decentralized lending process mimics traditional lending, including by aggregating loans and allowing individuals to "buy into" a loan aggregation platform. The individuals buying the loans earn yields on the interest and have an opportunity to obtain NFTs in the event of a defaulted loan. The borrower then gets access to cryptocurrency, needing to pay back the loan at an agreed-to interest rate.

In August, 2022, BendDAO ran into a liquidity problem wherein it allowed borrowers to receive up to 40% of the NFT asset's "floor price" as a loan. However, there were not sufficient funds in the BendDAO platform to support the amount of borrowing taking place. Thus, the community faced a liquidity crisis as lenders could not get their money out. As such marketplaces are unregulated, further liquidity issues could arise as borrowers and lenders are left at risk without government backing.

There are additional unregulated markets, such as NFT renting (with or without collateral) or derivatives. As noted above, the processes mimic the physical world processes, such as renting a car or apartment or purchasing derivatives on the established financial markets. Without regulation, each is subject to abuses or platform errors that cannot be compensated.

Giving NFTs

It is more and more common to give NFTs as gifts or as promotions. These NFTs, like any others, can be stored and resold. One can see the potential for regulatory violations and other official objections in jurisdictions where promotions are regulated by law. For instance, a jurisdiction's competition authorities or other agencies in charge of regulating promotional offers may argue that an NFT—which has no declared value itself—has value if it is resold for a profit.

Marketing of NFTs

It is apparent that NFTs are disrupting the marketing landscape. Many companies throughout the world are using NFTs to incentivize their customers by building a buzz around the new cutting-edge technology being associated with their brand. The way in which customers are incentivized through the promotion of NFTs is by offering them exclusive content and prizes or the chance to own their own NFT. By using an NFT as a way

to market its brand, a brand owner can then also easily trace and track consumer behavior associated with that NFT.

Popular examples of how NFTs may be used by a company to successfully market a brand include:

- competitions to win NFTs that are related to the goods and services being sold by the relevant company;
- auctions to purchase NFTs specially created for the company; and
- the purchase of goods/services that enables a consumer to earn an NFT, which in turn will allow a consumer to earn the right to exclusive deals, exclusive content, or giveaways.

The other advantage of using an NFT to promote a brand is that it is building awareness for future generations and audiences. Many luxury brands are doing just that by investing millions of dollars in promoting their goods by way of NFTs. For example, the brand Gucci has recently created Gucci Town on Roblox. Users can connect, play games, view art and purchase digital Gucci items which they can use for their Roblox Avatars.

NFT Distribution and Crime

If we assume that a NFT can be a protected work or can function as a trademark that can be infringed, or can infringe a trademark, its improper use in commerce may lead to criminal lawsuits in jurisdictions where infringement can be criminally prosecuted.

In the event of potential criminal liability, jurisdictions will face issues related to which country has jurisdiction over the action—where the criminal actor resides, where the NFT is stored, where the NFT was sold, where the rightful owner resides, etc. Additional questions may include how someone can be convicted on the basis of the applicable national rules, and related questions of enforceability across the digital and/or physical world.

Recommendations for Channels of Distribution

Policy points or recommended actions with respect to channels of distribution:

- Monitoring and/or advocating for consistent takedown policies across the various NFT marketplaces: This doesn't have to be governmental action but could be something akin to a UDRP process. This may go against the basics of an open blockchain marketplace, but some way to follow serial infringers and monitor or manage their actions could be helpful, if it's achievable
- Monitoring and/or advocating for regulation of the use of NFTs as collateral for loans
- Monitoring how jurisdictions handle the marketing of NFTs in the case of giveaways

[1] <https://www.weforum.org/agenda/2022/02/non-fungible-tokens-NFTs-and-copyright/>

[2] <https://www.fool.com/the-ascent/cryptocurrency/nft-marketplaces/>

[3] <https://www.wedemain.fr/decouvrir/the-sandbox-ce-metaverse-ultra-populaire-dorigine-francaise/>

[4] <https://www.forbes.com/advisor/investing/cryptocurrency/best-nft-marketplaces/>

[5] <https://www.coinbase.com/learn/crypto-basics/how-to-buy-nft> and <https://metaversist.com/how-to-buy-NFTs-from-the-contract/>

[6] Obviously, the list of platforms mentioned does not pretend to be exhaustive since the market is changing rapidly.

[7] <https://support.opensea.io/hc/en-us/articles/1500003082521-What-currencies-can-I-use-on-OpenSea-#:~:text=The%20core%20currencies%20on%20OpenSea,like%20USD%20and%20the%20Euro.>

[8] <https://support.moonpay.com/hc/en-gb/articles/360012284338-What-is-MoonPay->

[9] For a definition of “wallet” see the previous chapter.

[10] <https://metaversist.com/how-to-buy-NFTs-from-the-contract/>

[11] <https://ethereum.org/en/developers/docs/standards/tokens/erc-721/>

[12] https://www.wipo.int/wipo_magazine/en/2021/04/article_0007.html

[13] <https://opensea.io/assets/ethereum/0xbc4ca0eda7647a8ab7c2061c2e118a18a936f13d/2775>

[14] <https://ethereum.org/en/developers/docs/standards/tokens/erc-721/>

[15] <https://help.coinbase.com/en/coinbase/getting-started/crypto-education/glossary/contract-address>

[16] <https://www.fool.com/investing/stock-market/market-sectors/financials/non-fungible-tokens/how-to-sell-NFTs/>

6. Design and Trade Dress Rights in NFTs

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Introduction

Interest in NFTs is trending not just in technology-driven industries but also among the public. Many people around the world now have broadband access to the Internet. Anyone with such access can create and sell NFTs to generate profits by eliminating intermediaries. For example, some musicians and artists in the visual arts have shifted their e-commerce platforms to an NFT format. The overall increase of interest in NFTs, together with the potentially significant value of NFTs traded on the market, brings lawyers into play as advisors and counselors to NFT owners, and to represent NFT owners, other interested parties, or other rights holders, as NFT-related disputes inevitably arise.

As of the date of this writing, most jurisdictions have not yet drafted, let alone implemented, specific regulations governing commercial NFT transactions. A few jurisdictions, such as South Korea, Switzerland, and the United States, have adopted some limited rules applicable to virtual assets as investments. Other jurisdictions, such as Poland, have yet to establish any laws relating to NFTs at all. Still others are at different stages of regulatory development. Uruguay for example, is starting to explore regulating NFTs related to cryptocurrency and finance. In January 2022, the Uruguayan National Central Bank issued a document called “Conceptual framework for regulations of virtual assets in Uruguay.”

Globally, the protection of IP rights in NFTs is still generally governed by existing IP legal frameworks. The protection of NFTs thus depends on the nature of the underlying unique item or work, which may or may not have cognizable IP rights under the relevant national legislation.

Normally, the design elements of NFTs are protectable under the relevant national copyright laws, as the design elements tend to fall under the category of artistic works. For example, Australia’s copyright laws likely have sufficient scope to protect the design elements of NFTs; in addition, the Australian Consumer Law imposes consequences for both unauthorized NFT minters of copyright protected content and blockchain platforms that facilitate such minting. However, as of the date of this writing, NFTs consisting of graphical user interface (GUI) designs are not protected under Australian law.

In general, whether the design elements of NFTs can be protected by design rights or in some cases by trade dress rights is still an open question. This section discusses whether design rights and/or trade dress rights make sense for NFTs, and if so whether specific legislation is needed to protect these rights in NFTs.

A: Design Rights and NFTs

Design Rights Generally

Design rights, and their close cousins design patents and industrial designs, can protect the ornamental (i.e., non-functional) aspects of articles of manufacture, works of applied art, works of creative art, and, in some jurisdictions, digital works such as GUIs. Design rights can cover three-dimensional ornamental features (e.g., shapes) and two-dimensional features (e.g., patterns, lines, or colors).^[1] Thus design rights can potentially overlap and be complementary to any copyright rights that subsist in NFTs.

Design Rights in the United States

“Design patents,” a form of design protection under the U.S. patent law, protect the ornamental design for an article of manufacture. 35 U.S.C. §171. This differs from U.S. utility patents, which protect subject matter that is useful. But both design patent and utility patent subject matter must be (i) novel (new), and (ii) non-obvious over the prior art. 35 U.S.C. §§102, 103. Design patent owners have the right to exclude others from making, using, offering to sell, selling, or importing the patented design. Eligible subject matter for design patents is unlimited, provided that the design meets the statutory requirements. Some examples of eligible subject matter include:^[2]

- Packaging and containers;
- Furniture and household goods;
- Lighting equipment;
- Electronic devices;
- Jewelry;
- Textiles;
- Graphic symbols, logos, graphical user interfaces (GUIs);

Design Rights Outside the United States

In general, outside the United States designs can be protected under a variety of laws, such as design registration systems, industrial design laws, patent laws, and in some cases even without a registration. A majority of jurisdictions require a design to be registered to be enforceable. However, the laws of some important jurisdictions like the EU and the UK provide for protection and enforcement of unregistered designs (with more stringent proof requirements).

Possible Design Rights Protection of NFTs

Are NFTs capable of protection via design rights? Considering that an NFT is a certificate that contains information about an associated asset, rather than the asset itself,^[3] we must consider whether the underlying assets with which the NFT is associated can be protected by design rights. The answer to that question depends, of course, on what the asset is.^[4] Protection may also vary depending on the applicable laws of each relevant jurisdiction.

As noted above, under U.S. design patent law, a design must be embodied in, or applied

to, an article of manufacture.^[5] Additionally, to be patentable, the design must be novel and non-obvious. Accordingly, if the underlying asset meets these criteria, the associated NFT may also be protected under design rights.

To meet the article of manufacture requirement for computer generated designs, such as NFTs with GUIs as their underlying assets, the USPTO currently requires that the patent application drawings include some representation of a computer display or portion thereof, in solid or broken lines. This is because the USPTO does not consider computer generated designs, in and of themselves, to qualify as an article of manufacture. The USPTO is currently considering comments it received from the public on the feasibility of this requirement, with the advent of projected designs (e.g., holographs) which are not dependent on a traditional computer screen to be visible.

This is just one example of how NFTs could be protected by design patents in the United States. This logic is similar to that of many other jurisdictions throughout the world. However, in practice, there are some issues as to how NFTs should be classified, protected, and enforced under the legal frameworks for design protection in each jurisdiction, as further discussed below.

B: Trade Dress Rights and NFTs

Trade Dress Rights Generally

The concept of “trade dress” under U.S. law, and the associated concept of product or packaging “get-up” in British Law jurisdictions, generally refers to the overall appearance of a product or its packaging. In other jurisdictions, such as civil law jurisdictions, protection for the overall appearance of a product or packaging may be found under a jurisdiction’s general unfair competition law.

For trade dress rights to exist, the claimed trade dress must function as a trademark, that is, it must separately and independently indicate to consumers that the underlying product comes from a single source of origin. In addition, the claimed trade dress must not be functional. Examples of protectable trade dress can include (i) a unique stylized typeface or font; (ii) colors; (iii) shapes and designs of logos; (iv) a specific and consistent location or placement of a trademark; and (v) some or all of the foregoing found on product packaging or the delivery of services. Examples are Gucci’s repeating diamond pattern of inverted G’s^[10] and Ferrero Rocher’s distinctive gold foil packaging.^[11] Some jurisdictions allow the registration of trade dress as a trademark, but not all.

In most cases, the trademark significance of trade dress must be demonstrated via proof of secondary meaning, i.e., acquired distinctiveness. Please note that a detailed discussion of the types of evidence usually accepted to prove trade dress rights is beyond the scope of this paper. It should also be noted that current U.S. law recognizes a limited category of “inherently distinctive” trade dress, consisting of (i) product packaging, and (ii) interior designs of stores (whether selling products or services).

Possible Trade Dress Protection for NFTs

Proving and enforcing trade dress (or comparable) rights in the real world can be quite challenging. When applied to virtual worlds, it becomes even more challenging. Due to the increasing number of virtual goods available for commercial transactions, the question arises whether trade dress rights could protect the underlying assets of NFTs. As of

the date of this writing, we do not yet have a definitive answer to this question from any jurisdiction.

In the United States, the pending NFT infringement case of *Hermès v. Mason Rothschild*, Case No. 1:22-cv-00384 (S.D.N.Y. 2022), may provide at least a part of the answer. In the *Hermès* case, Hermès of Paris, Inc. (“Hermès”) sued digital artist Mason Rothschild in a U.S. trial court for creating and selling “MetaBirkins,” a collection of NFTs tied to digital art depicting bags “inspired by” the iconic Birkin bag.^[13] Hermès not only owns registered trademark rights to the terms HERMES and BIRKIN, but also owns registered trademark rights to the trade dress of the Birkin handbag design. Hermès’s complaint includes claims for trademark infringement, trademark dilution by blurring, unfair competition^[14], and associated wrongs^[15].

In the meantime, some NFT platforms have started to offer a takedown procedure for IP owners whose trademarks or trade dress have been infringed, somewhat analogous to the U.S. DMCA’s takedown procedure for online copyright violations.

C: Possible Challenges on Using Design Rights and Trade Dress Rights to Protect NFTs

The increased use of NFTs and the lack of specific regulations governing their use have created issues when it comes to obtaining and enforcing IP rights, including design and trade dress rights. In this section, we address some of these issues.

Issues Regarding Design Rights in the NFTs

This section is based on U.S. law. Future work should expand to other jurisdictions.

Article of Manufacture

Under the U.S. design patent law, a design must be embodied in or applied to an “article of manufacture,” though the article of manufacture does not need to be claimed in the design patent application. An article of manufacture is generally understood to be a human-made tangible object.^[16] It is the underlying asset to which the design is applied. While an NFT itself is not a tangible object, there is a prominent issue as to what should be considered an “article of manufacture” within the scope of creating an NFT.

As described above, current USPTO practice makes it possible for a GUI to satisfy the article of manufacture requirement for a design patent by claiming a computer display (or portion thereof) as the article of manufacture.^[17] South Korea takes a similar approach.

However, we have no guidance yet about virtual designs that do not require a computer (or other) screen to be visualized, such as projected designs, holograms, and virtual/augmented reality designs. The USPTO is currently studying comments from the public on the possibility of extending design patent protection to these other types of designs.

Under current U.S. practice, NFTs may be treated as GUIs to be protected by design patents. However, in other parts of the world, this may not be the case. In countries such as Sweden, design rights in NFTs could include any ornamental design, as either a GUI or an image. In Taiwan, the visual appearance of a virtual object represented by an NFT can be protected as a “computer image design.” Since November 1, 2020, computer image

designs in Taiwan no longer need be shown in the context of how they are applied to devices, such as a screen or a monitor, to be protected by a design patent. They can simply be classified as “a computer software generated image/GUI/icon” to satisfy Taiwan’s product indication requirement. For countries such as Switzerland, NFTs themselves cannot be registered as GUIs under the Federal Act on the Protection of Designs (DesA) because the design must be perceivable visually or by touch. The DesA protects “the design of products or parts of products that are characterized, in particular, by the arrangement of lines, surfaces, contours, or colors, or by the materials used.” The term “product” implies that it is an item of physical goods. Computer programs and musical works are not eligible for design protection for this reason. In the context of an NFT, the token itself would not be protectable under the DesA because it is likely to be considered a computer program. However, the design of the underlying asset represented by the NFT may be protectable by the DesA, depending on the nature of that asset.

Functionality Requirements

In general, design patents are meant only to protect the ornamental aspects of a design. The ornamental aspects must not be dictated purely by function.^[20] However, as discussed earlier, in the U.S. and other jurisdictions, the design must be applied to an article of manufacture. For example, in the U.S. GUIs are treated as surface ornamentation applied to a computer screen. And while the article of manufacture may have a function, the appearance of the GUI must not be dictated purely by its function.

Although not specific to NFTs, the U.S. the case of *Ex parte Strijland*, 26 USPQ2d 1259, 1262 (Bd. Pat. App. & Inter. 1992), suggests that NFTs with designs as the underlying assets that are merely displayed pictures (e.g., artwork) may not qualify as statutory subject matter eligible for design patent protection. “The declarations indicate that the intended design is not merely a displayed picture, but an integral and active component in the operation of a programmed computer displaying the design. Therefore, the subject matter, if properly presented and claimed, would have constituted statutory subject matter.” The case of *P.S. Products Inc. et al. v. Activision Blizzard Inc. et al.*^[21], suggests that a design patent for a physical object may not be read to encompass a virtual representation of the object in a video game as, according to that court, “[n]o reasonable person would purchase defendants’ video game believing that they were purchasing plaintiffs’ stun gun.”^[22]

Considering that many NFTs are merely artworks that do not have an associated function, it is questionable whether NFTs can be protected via design rights (that is, design patents) at all. Under the current Design Protection Act in South Korea (“Design Act”), it is unlikely that NFT-represented designs (“designs in NFTs”) may be protected. Typical types of designs in NFTs are digital arts and video clips. These designs in NFTs may be subject to copyright protection but are quite unlikely to be protectable under the Design Act because they normally lack the legal requirement of functionality (i.e., being used for device operation or displayed as a result of the device carrying out its function). The reasoning is similar in Switzerland, although if the underlying asset of an NFT represents a digital artwork, it might be registered as a “screen graphics/decoration” in Class 14.04. The Designs Act in Australia goes a bit further. It defines “product” as “a thing that is manufactured or hand-made.” This has been interpreted as requiring that products exist in a physical form. For example, in *Microsoft Corporation [2008] ADO 2*, Deputy Registrar Herald found that a ‘font’ was not a product. This is problematic in the context of NFTs.

One possible solution is to tie an NFT to a physical device. However, if this is not possible, then it would be necessary to wait for further regulations or the court decisions to resolve this issue.

Functionality is not a problem in other jurisdictions such as Uruguay, where NFTs continue to be governed by the current laws on trademarks and industrial designs and there are no applicable functionality requirements because neither trademarks nor designs are required to have that feature.

Other Design Rights Issues

One of the most common problems for design applications is that the design must be new. However, if a design is first published as an NFT, will that destroy novelty? Will the NFT become prior art? Taiwan has partially answered this question. A physical design can be cited as prior art against an application for a virtual design in terms of inventiveness but not in terms of novelty. On the other hand, in Sweden this issue is assessed on a case-by-case basis.

In the U.S., any publication of a design prior to the filing date of a design patent application in the U.S. is considered prior art to that application, unless the publication occurs less than one year before the filing date of the U.S. design patent application and the publication was made by the inventor or someone who derived the design from the inventor. 35 U.S.C. §102.

AI-created NFTs pose additional issues for design patent requirements, as current U.S. law requires a human being to be the named inventor of the design. This is a requirement in nearly all other jurisdictions, raising the question whether AI-created NFTs and particularly those created solely by a computer program can be protected under current law. In the U.S., for example, purely AI-generated designs are not considered patent-eligible subject matter.

These issues are just examples of the lack of clarity surrounding design rights for NFTs. It has become increasingly necessary for regulators to consider clarifying what can and should be protected, and for the courts to resolve this uncertainty through future case law.

There could also be problems when it comes to the Locarno Classification System (LOC) as NFTs are not a Locarno class yet and their definition has yet to be established. Virtual objects are currently classified in Locarno Class 14-04 (screen displays and icons). It is likely that an NFT-represented designs will also be placed in this subclass before the LOC is updated.

Jurisdictions around the world are beginning to recognize these issues and are attempting to find solutions. The “ID5,” a working group of the five IP offices around the world that receive the most design applications (China, EU, Japan, Republic of Korea, and the United States), is currently studying best practices for protecting designs produced using new technologies. The Korean Intellectual Property Office (KIPO) recently launched a “metaverse design expert committee” and has started to seek opinions as to whether and how industrial designs in the metaverse should be protected. Uruguay has been one of the 60 nations that signed the recent document, “A Declaration for the Future of the Internet”. In Switzerland, the Adaptation of Federal Law to Developments in Distributed Ledger Technology is in force.

These regulatory changes, however, focus mainly on payment tokens and securities, rather than utility tokens such as NFT domain names. In the U.S., the USPTO and U.S. Copyright Office are launching a joint study on NFTs, “including whether there would be intellectual property challenges with future applications of NFTs, how transferring an NFT impacts the rights associated with that asset, how licensing rights and infringement work, and what intellectual property protections are given to an NFT creator.”[23] In Australia, the government has advised that the issue of the treatment of virtual or non-physical designs is being considered further as part of IP Australia’s program of designs reform.

Issues in Relation to Trade Dress Rights in NFTs

Filing new trademark applications covering NFT assets is an important step in seeking protection of the brand or brands associated therewith. In fact, well-recognized fashion and cosmetic brands are doing exactly that in increasing numbers^[24]. It appears, however, that trade dress rights in NFTs face some significant obstacles. For example, there are likely to be evidentiary difficulties with establishing trade dress rights in an NFT, e.g., showing that an NFT functions as a source identifier rather than being “merely ornamental.”

In the limited number of cases that have addressed trade dress in virtual spaces, accused infringers have frequently claimed First Amendment (“freedom of expression”) rights under the U.S. Constitution as their defense. An example of such a case is the aforementioned *Hermès v. Rothschild*.^[25] Rothschild claimed that his allegedly infringing NFT was “art” and thus an expressive work protected by the First Amendment, under the *Rogers v. Grimaldi* test. Under this test, the use of another’s trademark in an expressive work is not actionable unless use of the mark “has no artistic relevance to the underlying work whatsoever, or if it has some artistic relevance, unless [it] explicitly misleads as to the source or content of the work”.^[26] In this case, the court rejected Rothschild’s motion to dismiss the complaint by reasoning that Hermès had adequately alleged that the MetaBirkin label was explicitly misleading, meaning that the Rogers test might not provide a defense for Rothschild’s conduct.^[27]

A U.S. case from 2008, *E.S.S. Ent. 2000, Inc. v. Rock Star Videos, Inc.*, addresses trade dress infringement of a brand in a video game and uses a similar analysis. The case held that the use of a real-life strip club’s trademark and trade dress in the video game *Grand Theft Auto* was protected under the First Amendment and the *Rogers* test. ^[28] The business represented in the virtual game world was deemed not to cause confusion with the plaintiff’s physical business and was further recognized as protectable artistic expression.^[29]

At present we are not aware of any law specifically governing trade dress rights in virtual spaces, including for NFTs. It is our view that jurisdictions should turn their attention to formulating legislation to address protection of and rights in NFTs, as this relatively new asset class will become more important and prevalent in the near future.

Recommendations for Design and Trade Dress Rights in NFTs

In general, the laws governing design rights and trade dress rights in each jurisdiction do not (yet) explicitly cover or apply to the unique assets identified by NFTs. Therefore, it is premature for INTA to offer specific guidance to NFT owners claiming such rights.

However, we recommend that the INTA Advocacy Council and its constituent committees, along with the INTA Board, support, create, and facilitate dialog opportunities among governments, international organizations, and multinational stakeholders, to discuss these issues and develop/offer possible solutions. The output of the dialog discussions may result in an INTA Board Resolution on each issue.

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7. Ownership of NFTs

Participants

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Introduction

Ownership of an NFT is a composite of the underlying asset and the associated non-fungible digital token. The fact that ownership of an NFT entails ownership of both these distinct components raises important questions about the nature of NFT ownership in relation to the owner of rights in the underlying asset.

Transfer Of An NFT

Copyright law in general renders protection to “original works of authorship fixed in any tangible medium of expression,” which automatically vests in an author as soon as the original, creative expression is fixed by the author in tangible form. While the exact scope of rights that are protected under copyright law varies with each jurisdiction, the following four categories of works are protected in nearly every legal system: (i) literary; (ii) dramatic; (iii) musical; (iv) artistic; (v) sound recording; and (vi) cinematographic/motion film. Accordingly, the underlying asset associated with NFTs is likely protected by copyright under (iv) artistic works.

As mentioned above, an NFT comprises of two distinct components:

- (a) a digital token, usually governed under Ethereum’s ERC-721 standard, that bears a unique cryptographic address and contains certain metadata stored on a blockchain. That metadata is not the image, however; it is data that describes (or “points to”) the location of the image—a location that is typically off-chain, stored in places like Amazon Web Services or within the InterPlanetary File System (IPFS); and
- (b) the underlying asset to which the NFT points (which, as discussed above, would be subject matter of protection under copyright law).

In an NFT purchase, the digital token, which is usually minted by the right holder (or an entity under consent or license from the right holder), is transferred from the wallet of the issuer to the purchaser. There is no actual transfer of the underlying asset which remains stored on an off-chain (such as a cloud server) or on-chain location.

Conditions of Assignment—‘Signed’ and ‘In Writing’

The copyright holders have the prerogative to assign, sell, transfer, or otherwise encumber their copyright in favor of third parties. To effectuate such a sale, transfer, or assignment of the intangible intellectual property rights vesting in the underlying asset, copyright holders are required to comply with certain statutory rules evidencing proper transfer of the copyrighted material. For instance, under 17 U.S.C. § 204(a) of the Copyright Act, a valid transfer of copyright must (a) be in writing and (b) be signed by or on behalf of the transferring party. This requirement is present in the copyright laws of many jurisdictions.

When an NFT is sold and transferred through the trade channels discussed in an earlier part of this whitepaper, conventionally, the parties do not enter any written, signed

agreements. In the absence of compliance with prescribed statutory conditions for the assignment of copyright, it is likely that no sale or assignment of rights can be presumed to take place. Therefore, the intellectual property of an underlying asset or creative work may in principle always belong to the author if the author never explicitly transfers ownership to other people in the manner prescribed under law, despite the ownership of the NFT being traded in digital spaces.

Similar requirements also exist for the licensing of rights in copyrighted works. For instance, in many jurisdictions, after the advent of the Internet and click-wrap End User License Agreements (EULAs), the requirement to have a 'signed' license agreement was removed, thereby allowing parties to express consent by an overt act of clicking a button, scrolling through the text of the agreement, or by conduct (such as the continued use of a website). However, the condition for licensing terms to be recorded in writing remains a requirement in several jurisdictions.

Many NFT platforms such as OpenSea, WazirX, nOFTEN, and others have a dedicated space where the issuer of an NFT can mention specific terms and conditions applicable to the NFT. It may be possible under certain circumstances to construe the existence of a copyright license in writing where such space has been utilized to specify the license terms. Since all subsequent transfers happen on the same listing page, it is possible for every subsequent purchaser of an NFT to be deemed to have knowledge of and consented to such license terms. Complications may arise in cases where the platform permits the NFT to be exported out of its ecosystem, in which case there is no way for the written license terms to be exported along with the NFT.

Recommendations for Ownership of NFTs

Amendments may be required in nearly every jurisdiction's extant IP framework to facilitate the effective and sustainable commercialization of intellectual property rights through NFTs. Such legislative changes must pave the path for the recognition of IP rights, their licensing, transfer, or assignment, and adequate protection against infringement in the NFT ecosystem. We recommend that INTA develop a model legislation that can be adopted by jurisdictions so as to amend or adapt their existing frameworks to permit commercialization of rights through NFTs.

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8. Web3 Domain Names

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In the same way that NFTs create digital scarcity for art, they can represent unique identifiers that function as domain names for the decentralized Internet.

Decentralized domain names are built on blockchains instead of the traditional Domain Name System (DNS). Like domain names in the traditional DNS, decentralized domain names have the ability to convert long alphanumeric addresses into easy-to-remember shortcuts that improve a blockchain's user's experience. For example, instead of having to remember the Ethereum wallet "0xd8dA6BF26964aF9D7eEd9e03E53415D37aA96045" you could just type "vitalik.eth," which resolves to the wallet address associated with Vitalik Buterin, the creator of the Ethereum blockchain.

This is an example of the Ethereum Name Service, which is one of the more popular decentralized domain name systems. Like traditional domain name, ENS domain names provide users with a shortened, easy-to-use alternative to the 42-character long Ethereum (ETH) wallet address. Ethereum addresses are complex machine-readable identifiers that are difficult for humans to read, memorize, and use on a consistent basis. ENS domain names, however, translate a complicated and lengthy ETH address to a simpler, friendlier name that is easily recognizable and ends with .eth (akin to .com or .org). With an ENS domain name, blockchain transactions become easier and more manageable since instead of copying and pasting the entire 42-character long ETH wallet address, the user needs to only remember the simpler ENS domain name they chose and registered to the wallet.

In addition to their use as wallet names, blockchain domain names can also point to websites on certain Internet browsers that operate on the decentralized web (currently such browsers include Brave and Opera, and there are plugins for more commonly used browsers). An ENS domain name can act as a naming service, a web hosting service, a banking service, and allow for user authorization and authentication across other applications. The ENS can combine all of these services into the same ENS address that can be used for various different purposes. ENS domain names are also ownable NFT assets, so they are tradeable among users. Lastly, they are composable, which means they can own or be owned by other NFTs, allowing other applications that can provide utility to people who interact with ENS domain names.

On the surface, the functionality of blockchain domain names may be similar to Web2 domain names, but the decentralized nature of Web3 and blockchain domains may present new challenges to brand owners due to a lack of regulation and legal enforcement mechanisms.

Traditional domain names are directed by browsers to a Domain Name System (DNS) server that connects them to the corresponding website. The DNS is governed and managed by ICANN. Blockchain domains do not use DNS to connect the domain name with a website. Rather, the blockchain domain name links to an NFT existing on a

blockchain. These blockchain domain names are purchased from blockchain domain name services providers, such as ENS or Unstoppable Domains. The naming services do not govern the operation of the underlying website under the blockchain domain, and once the name is registered with the blockchain domain name service, its control over the blockchain domain name is narrow and limited. Indeed, this is consistent with the idea and philosophy of a decentralized web system.

The operation of traditional domains is regulated and governed through ICANN. A distinct feature of blockchain domain names is that they are controlled by the owner of the related domain and are not regulated by a central entity like ICANN or a registrar. While this will likely provide significant flexibility and control to the owner over the domain name and the underlying Web3 website, a collateral impact of this flexibility is that it may invite cybercriminals and intellectual property theft. For example, traditional domain names governed by ICANN are subject to the Uniform Domain Name Dispute Resolution Policy (widely known as the UDRP). The UDRP has been a tool for brand owners to enforce against illegitimate and bad faith users of trademarks as domain names. If the traditional domain name at issue violates ICANN's UDRP policy, it can be assigned to the complainant. Moreover, a complainant can also initiate proceedings in court under the Anti-Cybersquatting Protection Act. These enforcement mechanisms are not available against blockchain domain names because there is no central governing body regulating domain names, and because of jurisdictional issues (jurisdictional concerns are discussed in detail in another section in this paper).

Given the nascent state of blockchain domain name use and scant regulation, there are limited tools for brand owners to protect their marks against infringing and illegitimate use. Blockchain domain names are generally completely controlled by the owner and not by a centralized regulatory authority. This poses a significant issue for trademark owners as a judicial process to reclaim bad faith domain name registrations does not exist. One suggestion is to secure blockchain domain names as early as possible from blockchain domain name service companies like Unstoppable Domains and ENS; another is to submit take-down requests to NFT marketplaces, like OpenSea and Rarible, where the blockchain domain name is offered for sale. While a takedown won't result in an assignment of the domain name, it will reduce the ability of speculators to monetize the domain name. Alternatively, brand owners can acquire domain names in the secondary market or register alternative domain names.

Recommendation For Web3 Domain Names

Trust by consumers is required for Web3 domain names to gain mass adoption by consumers and brand owners. INTA, in collaboration with WIPO, could consider developing a global trademark dispute resolution policy, akin to the UDRP, that can be adopted for the emerging digital ecosystems of NFTs and the Metaverse.

9. Infringement & Enforcement vs. Fair Use

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Introduction

NFTs are having their moment. Though they have only recently become part of the public consciousness, billions of dollars have now been spent in creating, buying, and selling NFTs as many anticipate a new digital land rush. Unsurprisingly, combining such high financial stakes with limited existing regulation has led to significant confusion over the legal rights associated with NFT-related transactions. For instance, exactly who has the right to mint and sell an NFT? How are the intellectual property rights divided between a creator and the owner of any preexisting brand features that are incorporated in the work? It is also yet to be determined how legacy fair use principles will be applied to specific contexts within the metaverse. There have already been several high-profile trademark infringement lawsuits filed against NFT platforms and creators, as IP owners seek to clarify to what extent their brands may be appropriated in these virtual works.

In this section we will outline the emerging legal landscape surrounding the use of trademarks in NFS and provide guidance for brand owners seeking to enforce their rights in this new digital frontier.

Difficulties With Enforcement that Are Unique to NFTs

Identifying Creators and Owners

There are essentially three categories of persons who may have rights in an NFT:

1. The “creator,” by which we mean the person who creates the NFT. Creators, otherwise known as “minters,” come in many different forms because only a relatively modest amount of technological know-how, concerning the underlying blockchain technology, is needed to mint NFTs. Alternatively, there are now various suppliers who will create NFTs from any type of digital content. The end-result is that pretty much anybody can be a minter if they so desire. —from large corporations, to small and medium sized enterprises, all the way to individuals.
2. The underlying “IP rights holder(s),” which, in this paper refers to owners of trademark, design and trade dress rights, but also includes other IP rights that will routinely be relevant to NFT content, in particular copyright.
3. The “NFT owner,” i.e., the end user who purchases the NFT.

The relationship between the creator and the IP rights holder can come in many forms. They can be the same person. Or the creator can have a formal license from the IP rights holder for the trademark and/or any other IP rights. The IP rights in the NFT could also be transferred outright to the creator. It is also possible that there will be multiple IP rights holders, who each own different IP rights that subsist in the NFT.

The problem for NFT owners is that there is no obligation on creators to disclose their licenses with the IP rights holder within the NFT’s metadata and/or the transaction documentation made available to NFT owners. As such, unless the creators voluntarily disclose this information, the NFT owners are left not knowing whether the necessary IP license(s) are in place or not, and whether their NFTs are authorized by the IP rights holders.

Until some sort of regulatory environment (voluntary or otherwise) gains traction over NFTs, whereby creators must have a greater level of transparency regarding the licensing status of the underlying IP rights, NFT owners will be at a significant disadvantage when it comes to verifying the IP rights status of the NFTs purchased.

Even if the underlying work in question is properly licensed, it is also important to note that this license will often be limited in nature. It will almost certainly only amount to a license to use the NFT in certain limited and restricted ways. The creator and/or the IP rights holder are likely to retain ownership of the IP rights, including but not limited to the rights to enforce them.

Do We Need to Specially Protect Trademarks in the Metaverse, or are Existing Trademark Protections Sufficient?

Overview

Why Do Trademark Registrations Need to Cover Virtual Goods?

Products in the metaverse are at most “the virtual appearance of the real product,”

and NFTs can represent these products digitally. For trademark purposes, it is generally considered that NFTs should be classified as computer software and that the goods already registered without having trademark registrations for software are not sufficient for metaverse uses, and that additional trademarks should also be considered for the relevant “virtual goods.” Therefore, many big companies have filed new trademark applications to cover related virtual goods.

The reason is that the real products are manufactured, they are tangible, they are sold to people or companies for their actual use in real life. However, in the metaverse, such products are digitally created, not produced by a machine or by hand, or grown from the soil. They are coded. They are software. The main reason a virtual good cannot be regarded as a real product, for instance a shoe or a hat, is that it cannot be used the same way as the real one, in this case, worn by the purchaser. It is not actually a shoe in a traditional understanding. It is only the appearance, the photo, the video, or the digital representation of the good and neither the creation nor the end use of the real and virtual product are identical.

Goods with different uses, consumers, and distribution channels are classified differently. Since a virtual shoe does not correspond to an actual shoe in any feature other than its visual appearance (even though it is worn by the avatar), it is only logical that it should not be considered as the shoe in Class 25 with the function of covering/protecting feet for walking/running.

In addition, it must be noted that well-known marks are generally protected regardless of the goods and services within the scope of the trademarks. In any case, there is no regulation or even formal guidelines on registration of the trademarks in the metaverse, only suggestions.

As of this writing, it is possible to cover virtual goods in Class 9 as computer software or downloadable items; however, in the future it might be possible (and beneficial in case the metaverse is more developed and frequently used) to introduce either a class including virtual goods (though it will be a very long one) or to include virtual versions of all of the existing goods and services into the current relevant classes in the Nice Classification.

Which Goods and Services/Classes Should a Trademark Cover to Protect Metaverse Uses? Is the Current Nice Classification Sufficient?

It seems that Nice Classes 9, 35 and 41 are generally used to expand the trademark protection to the metaverse. Consequently, although it seems that current trademark laws and the correct classification of goods and services as in being virtual are applicable to metaverse, it may be beneficial to adapt the laws and to also cover the metaverse in the classification system to avoid legal uncertainty. For the sale or marketing of goods on a metaverse platform or via other virtual spaces, the trademark owners should be aware of the wording of Class 35 specifications to be sure that they include the sale of virtual goods. In addition, it seems that Class 42 covering technological services is also sometimes chosen but Classes 9, 35, and 41 are more common because they include virtual goods and virtual spaces.

In the EUIPO Trademark Guidelines virtual/downloadable goods are considered as in Class 9, whereas “providing an online platform” is considered under class 42 because it is deemed as providing computing platforms. For instance, class 35 would include sale and

promotion of virtual goods and Class 41 would cover online, downloadable virtual goods. It can be seen mostly from USPTO applications that the terms “metaverse” or “virtual worlds” are also used in the wording of the goods and services.

Applications have already been made in the following goods and services for metaverse trademarks: downloadable virtual goods, namely computer programs (Class 9), retail store services featuring virtual goods (Class 35), entertainment services (Class 41), on-line non downloadable virtual goods and NFTs (Class 42), and financial services, including digital tokens (Class 36). While exact criteria are often unclear, it is important to attempt to be clear and precise in the wording to avoid rejection. For classification purposes, existing trademark protections can be used and adapted as they are not too limited, but if/when the metaverse expands, the need for more comprehensive and specific coverage of classification for trademarks in the metaverse will arise.

Territoriality: Where to register the trademarks?

Trademark protection is territorial. Trademarks should generally be registered in each jurisdiction in which they will be used. However, since the metaverse is beyond any existing territory, it is not clear where trademark applications for marks that will be used in the metaverse should be made. It may be possible to make a basic analogy with domain names or the use of trademarks on the Internet without borders. Still, for the use of trademarks on the Internet and domain names, some factors are taken into account to determine which jurisdictions (and their consumers) are affected (such as with regard to currency, language, etc.).

The metaverse on the other hand is a whole new virtual world with its own rules and features. Moreover, even within the metaverse there could exist multiple different dimensions, each with their own separate set of rules. For this reason, it should either be considered that any trademark registration in any jurisdiction would suffice to provide protection in the metaverse or perhaps a whole new category of trademark is needed exclusively for metaverse spaces. How an exclusively metaverse trademark would be registered is still an open question as there is no competent authority exclusively for metaverse worlds. Each world may have its own trademark office for instance. The issue of territoriality is, as we have seen, problematic at this point and most of the current trademark laws are not well suited to provide sufficient trademark protection in the metaverse.

The Chinese Perspective

Is There a Need to Specially Protect Trademarks in the Metaverse or is Existing Trademark Protection Sufficient?

As always, with new technology new legal challenges will follow. This is particularly true for the metaverse and NFTs, which are quite new. The current trademark law in China is silent about the protection for NFTs and metaverse-related products and services.

Can brand owners simply rely on their existing trademark rights to enforce in the metaverse without making a separate filing for the virtual goods and services? While there are ongoing cases in the U.S. relying on traditional trademark rights, there is still no clear decision in many jurisdictions, although there is an argument with the blurring of the physical and digital space that one should be able to rely on existing rights. Despite this

uncertainty, there has been an increase in metaverse-related filings with the trademark offices in each jurisdiction.

Since there is no governing authority in the digital world, it is assumed by brand owners that trademark offices in the physical world should, at least for now, be the registering authorities for trademark registration for NFTs.

How is a Trademark “Used” in Association with NFTs?

When a trademark is used on NFT products, the use is arguably both NFT-related and a digital use of products.

A brand owner may want to apply for “software for creating, managing storage, verification, sales and transaction of NFTs; downloadable electronic pocket” in Class 9, or “design and provide an online platform to facilitate the transaction of NFTs” in Class 42, “providing online market for NFTs” in Class 35, “financial information or financial exchange of NFTs” in Class 36, and/or “providing online platform for NFT transaction or forum for NFT” in Class 41, which are related to the creation and sales of digital products in the form of NFTs.

How to Protect NFTs through Registration

Before laws and policies regulating intellectual property rights for the metaverse and NFTs are published, current digital product/service providers will generally rely on trademark law in the physical world for protection of the use in the virtual world. In short, the brand owner may rely on the already established reputation and rights of a particular trademark for uses in NFTs that are distinct but broadly related to the previously protected goods and services.

For products that will be used in virtual worlds, the brand owner should also consider filing for the mark in technology-related classes to protect the digital characteristics and in the products/services classes to protect its commercial interests.

Trademarks Containing “Metaverse” and “NFTs”

A mark containing the word “metaverse” may be challenged for registrability, but the issue is not that serious for marks containing “NFT.”

In February 2022, it was reported that there were 16,000 Chinese applications for trademark containing “METAVERSE” or “元宇宙” (YUAN YU ZHOU/metaverse in Chinese) in all classes.⁴ It is clear that CNIPA has decided to prevent abuse of registration containing these terms, which can be further reflected in the consequent rejection, in May 2022, of applications for trademarks containing the Chinese term “元宇宙” (YUAN YU ZHOU / metaverse in Chinese) filed by the leading technology companies such as Tencent, Alibaba, iQiyi, and NetEase.⁵ the CNIPA is only allowing the “real” trademark with distinctiveness equivalent to that in the virtual world to mature into registrations.

The registrability for marks containing “NFT” may differ depending on the goods/services covered in the applications. If the goods/services are related to “computer software or

[4] http://news.sohu.com/a/524647141_121175002, <https://www.163.com/dy/article/H1A30L0805524FIX.html>trademarkI

[5] <https://baijiahao.baidu.com/s?id=1732493361023895185&wfr=spider&for=pc>

services” or activities related to NFTs, then the applications are likely to be rejected. However, “NFT” as an abbreviation for terms other than “Non-Fungible Token” is registrable on the unrelated goods/services.

Class Coverage for NFT Protection

Minting, storage, sales, and other transactions relating to NFT products are not covered or protected by the traditional products classes, but the interests might be overlapped with those in Class 9, and other classes more focused on NFT goods/services.

Brand owners may want to protect digital products by protecting both the interests for NFTs (the form of the products) in addition to the existing trademark protections covering the interests for any parallel or related physical products. The broadest possible protection would provide more leverage to ensure that the correct class will be covered for sufficient use protection and enforcement purposes.

The standards for examination of applications for trademarks for metaverse- and NFT-related goods should comply with the current classification. But the brand owner must identify the classes that should be covered.

Since the items in the metaverse are digital, most brand owners have taken the approach that products sold and displayed in the metaverse should be protected in technology and online services classes. For example, NIKE applied for its house mark in three classes to protect “sales of NFT clothing, shoes or bags,” namely Class 9 for “downloadable computer software in the form of clothing, shoes or bags,” Class 35 for “online retail store services in relation to these digital products,” and Class 42 for “developing computer program; storage of electronic data” in relation to these digital products. Depending on the level of brand engagement, broader protection may also cover Class 36 for financial services relating to virtual currencies, Class 38 for telecommunication services in relation to virtual communities, and Class 42 for non-downloadable computer software for virtual goods creation and trade in NFTs.

In addition to the above coverage, NIKE has also chosen to file in Class 25 for clothing and shoes. For those brand owners who intend to offer virtual fashion shows or virtual concerts, protection in Class 41 may be relevant. Restaurants such as McDonalds have chosen to protect their brands for services like operating a virtual restaurant featuring actual and virtual goods and operating a virtual restaurant online featuring home delivery in Class 43.

For Chinese brand owners, it is noted that, Bing Dwen Dwen and Shuey Rhon Rhon, the popular Olympic Game mascots for 2022, also plans to enter the virtual world by way of NFT products. The Beijing Organizing Committee for the 2022 Olympic and Paralympic Winter Games has successfully registered the Chinese word mark characters as 3D trademarks in Classes 9 and 42 covering the scope for digital products, in addition to the toy products Class 28 and retail service Class 35.

With the rise in metaverse-related filings, local trademark registries, including the China Trademark Office, are also reviewing and updating the new classification of goods and services to cope with commercial needs. At this stage, when no new standard items related to NFT can be found in the Classification Book for Goods and Service Specifications, it is not acceptable to claim specifications with limitations to NFT or digital

products in China, though they might be acceptable in the U.S. or the EU. Brand owners can choose to designate non-standard items initially but should be prepared to deal with office actions later, which may end up being replaced by standard items in these classes. It is important for brand owners to monitor future developments to ensure their trademark interests in the metaverse are fully protected.

Indian Perspective

Classification and Trading of NFTs

As of this writing, NFTs have not been classified as goods, securities, commodities, etc., in India. However, considering the existing legislative framework in India, NFTs could potentially be classified as the following:

1. Securities:

Under Section 2(h)(i) of the Securities Contract Regulation Act, 1956 (SCRA), securities are defined as- “shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities of a like nature in or of any incorporated company or other body corporate.”

Under Indian law, NFTs cannot fall within the meaning of shares, scrips, stocks, bonds, etc. as these are in one way or the other associated with an incorporated company or other body corporate. In fact, the price of NFTs depends upon market forces and not the performance of any corporate entity. Accordingly, NFTs cannot currently be classified as securities. However, this could change if the definition of ‘securities’ is amended in the future.

2. Commodities:

Under [Section 2\(bc\)](#) of the SCRA, “commodity derivative” means a contract “(i) for the delivery of such goods, as may be notified by the Central Government in the Official Gazette, and which is not a ready delivery contract; or (ii) for differences, which derives its value from prices or indices of prices of such underlying goods or activities, services, rights, interests and events, as may be notified by the Central Government, in consultation with the Board....”

Accordingly, only goods or contracts that are notified by the government can be traded as commodities. Therefore, NFTs cannot currently be classified as commodities as the [list notified](#) by the government does not include NFTs. However, this could change if the definition of ‘commodity derivative’ is amended in the future.

3. Goods:

In India, the sale and purchase of goods is governed by the Sale of Goods Act, 1930 (SOGA). According to the act, goods [mean](#) “every kind of moveable property other than actionable claims and money; and includes stock and shares...”.

According to this definition, a good must be moveable. The inclusion of “stocks

and shares” in the definition, makes clear that goods can include both tangible and intangible properties.

Since NFTs can be transferred from one person to another, they can be considered ‘moveable.’ Further, since the definition of goods under SOGA includes intangible materials as well, NFTs can qualify as goods.

4. Contracts:

Under [Section 10](#) of the Indian Contract Act, 1872 (ICA), “[a]ll agreements are contracts if they are made by the free consent of parties competent to contract, for a lawful consideration and with a lawful object, and are not hereby expressly declared to be void.” Further, nothing in the Indian Contract Act prohibits electronic agreements, as long as they possess all the essentials of a valid contract. Therefore, a NFT transfer could be by way of a contract as well.

Challenges From an Enforcement Perspective Depending Upon Classification

Once goods are sold, the buyer has complete ownership of the concerned goods, and the seller no longer has a claim on the goods. Extending the same logic to NFTs, once an NFT is sold, the seller would no longer have any proprietary rights/claims over it and would not be able to enforce a trademark, copyright, or patent covering that NFT. However, it is yet to be seen whether the courts in India and/or the legislature classify NFTs as securities, commodities, goods, etc.

Under the Indian Copyright law, a written contract is mandatory for assignment of a copyright. Further, the right to reproduce and distribute copies of a work vest with the copyright owner. Applying the copyright law here, the person who purchases an NFT pertaining to an artwork by way of a written contract does not get the copyright over the underlying artwork unless the owner specifically assigns all rights in writing, including the right to make copies.

Another challenge would be to establish the jurisdiction of the court wherein a lawsuit pertaining to an NFT would be instituted. While the courts in IP infringement cases determine jurisdiction on the basis of the plaintiff and/or defendant’s place(s) of business or where the cause of action arises, it would be interesting to see the applicability of these same standards in a case involving NFTs, due to the very nature of the transaction.

Protection of NFTs in India

NFTs can be classified under various intellectual property schemes. For example, the method of minting or creating a particular NFT, if technical enough, may be protected under the Indian Patents Act. Further, since an NFT can include logos, books, paintings, other forms of art, images, etc., it can also incorporate trademarks and/or copyrights. That said, the scope of classification of NFTs, under the relevant IP statutes in India, will become clearer once cases pertaining to NFTs are adjudicated by the courts in India and/or once the government introduces rules, regulations, statutes, etc., that govern NFTs .

Canadian Perspective

How a trademark is “used” in association with NFTs, and their associated assets has not been determined under Canadian trademark law. What constitutes trademark “use” is a specifically defined term under Canada’s Trademarks Act. Section 4(1) of the Act deems a trademark to be used “in association with goods if, at the time of the transfer of the property in or possession of the goods, in the normal course of trade, it is marked on the goods themselves or on the packages in which they are distributed or it is in any other manner so associated with the goods that notice of the association is then given to the person to whom the property or possession is transferred.” Use is also deemed to occur with goods if the trademark is marked in Canada on goods or on the packages in which they are contained when those goods are exported from Canada [see section 4(3)]. Section 4(2) deems use with “services” in Canada when the mark is “used or displayed in the advertising of those services.”

The Act provides no guidance on how to determine what a “good” is versus a “service.” In view of the definition of “use,” it is logical to presume that a “good” is something in which property in or possession of can be transferred, versus a “service” which is something that is performed. This conceptual dichotomy should theoretically apply to NFTs, the transfer of property in which is reflected on the blockchain. However, the current approach under Canadian intellectual property law suggests that only tangible or fixed (e.g., downloaded) products will be considered to be goods, with intangible (e.g., streamed/cloud-based) products considered to be services. In the context of NFTs, which often represent only an intangible asset—i.e., there is no physical item tied to what is transferred—such dichotomy makes it more likely for (at least) trademark enforcement to develop around a conception of NFTs as linked to services rather than goods.

It is an open question to what extent courts would consider NFTs to be a “good” within the meaning of the Trademarks Act. As of June 9, 2022, the Trademarks Office has listed “nonfungible tokens (NFTs) for use in authenticating ownership of digital files” as a pre-approved term for a Class 9 “good.” A recent provincial court decision indicated that, at least for cryptocurrencies, there was no functional difference between enforcing against the new digital and the traditional tangible good. “Digital funds are not immune from execution and seizure to satisfy a debt any more than a bank account provided the individual or institution which can access the funds are within the reach of a court order.”⁶

However, outside the above-noted reference, all other references to NFTs and “digital tokens” within the list of the Office’s pre-approved terms relate to the software used to facilitate access or to “downloadable ... assets, namely downloadable digital files” (i.e., a durable copy). The current Canadian Trademarks Examination Manual indicates that “intangibles” should not be listed in a trademark application’s statement of goods, since they are considered to be services.⁷ This is reflected in the Office’s treatment of software—“downloadable” products are classified as goods, while “non-downloadable” products are services. A similar distinction between downloadable/durable and non-downloadable/impermanent goods has been consistently drawn by the Supreme Court of Canada in the context of copyright law; the Court considers different copyrights to be engaged when a user has access to experience a work (considered a “performance”) versus the creation of a fixed copy (considered a “reproduction”).⁸

[6] See *Li et al. v. Barber et. al.*, 2022 ONSC 1176 at para 23

[7] See Canadian Trademarks Examination Manual, section 2.4.5.13

[8] See *Society of Composers, Authors, and Music Publishers of Canada v. Entertainment Software Association*, 2022 SCC 30

Even if NFTs themselves are considered “goods” by the Trademarks Office, it is an open question as to how one can support “use” of a trademark with such goods within the meaning of section 4(1) or 4(3) of the Act. As an intangible product that exists as code and contracts, there is no “good itself” for the mark to appear on, nor would there be any packaging—an image of a pipe is not itself a pipe.

The more likely route to prove “use” of a mark with an NFT as a good would be to convince a court that at the time of transfer, the mark “is in other manner so associated with the goods that notice of the association is then given to the person to whom the property or possession is transferred.” One possible path is through case law involving computer software, which has found “use” under this part of section 4(1) in circumstances where the trademark has appeared on a license agreement the purchaser must read prior to loading the software, or on the user’s computer screen prior to the program loading.⁹ However, these cases turned on evidence that showed how the mark was displayed, and such display tended to occur before the purchaser was able to use the purchased software. If the mark is simply expressed as part of the code line that is otherwise invisible to the user, such display is unlikely to fall within this part of this definition of “use” with goods.¹⁰

Of note, some NFTs may be created to have the asset travel on the blockchain itself (on-chain asset), rather than directing the purchaser to an external URL that permits access and/or download of the material associated with the NFT (off-chain asset). Even with off-chain assets, it may be possible to characterize the NFT as “featuring” an asset, such as digital clothing, and that the good transferred is the NFT itself, rather than the associated off-chain asset. Such facts open a potential argument that words or images that travel with the associated smart contract or code can be characterized as “marked” on the NFT itself. However, current technologies render smart contracts and code as working in the backend when an NFT is transferred. Purchasers can view them but are not required to do so at the time of transfer.

Less fraught is an approach that looks to the services surrounding NFTs—e.g., sale of NFTs, platforms facilitating access to the visual work associated with the NFTs, and provision of services as a benefit of owning an NFT. Canadian courts liberally interpret the concept of “services” for the purposes of “use” under the Trademarks Act; if some members of the public, consumers, or purchasers in Canada receive a material benefit from the activity in question, it will amount to the performance of that service in Canada.¹¹ Retail sale of non-downloadable products, like computer applications, computer programs, and software is recognized as a type of “service” by the Canadian Trademarks Office. It is not a stretch then, that creators and/or providers of NFTs would, at least, be considered as providing a service in connection with the trademark associated with that digital asset—even where the law would not treat the mark as able to be “used” in association with the NFT itself.

Approaching an NFT from the perspective of the services associated with it, rather than as a good in and of itself, could also assist with potential enforcement action. For example, infringement under Section 19 of the Act requires the defendant’s use to be of the identical trademark with the same good or service as is covered by the plaintiff’s

[9] See e.g., *BMB Compuscience Canada Ltd v Bramalea Ltd* (1988), 22 CPR (3d) 561 (FC); *Clark Wilson LLP v Genesisystems, Inc.*, 2014 TRADEMARKOB 64; *Fasken Martineau DuMoulin LLP v Open Solutions DTS Inc.*, 2013 TRADEMARKOB 68; and *Legault Joly Thiffault LLP v Information Builders, Inc* (2017), 154 CPR (4th) 312 (TRADEMARKOB)

[10] See e.g., *Ridout & Maybee LLP v Apple Inc.*, 2019 TRADEMARKOB 110

[11] See *Miller Thomson LLP v. Hilton Worldwide Holding LLP*, 2020 FCA 134 (at paras 30, 115)

trademark registration. By contrast, Section 20 deems infringement to occur where the trademark's use is likely to cause consumer confusion (such that the marks at issue do not need to be identical; neither do the goods and services). If, for example, the defendant is selling digital shoes featuring the plaintiff's mark for use on metaverse avatars, but the plaintiff's registration only covers the goods "shoes" themselves, there is an argument to be made that a claim under Section 19 would fail. By contrast, a claim under Section 20 might succeed if the court accepts the argument that the sale amounts to providing retail services that are provided in association with that trademark, such that this trademark "use" is nevertheless likely to cause consumer confusion.

Both types of infringement require that, as a pre-condition, the defendant actually "used" the plaintiff's mark within the meaning of Section 4 of the Trademarks Act. As discussed above, it may be difficult to establish "use" within the meaning of section 4(1) in respect of an NFT as a good, but far simpler to establish "use" with a service under section 4(2).

A services-based approach to use with NFTs also has potential benefits in respect of asserting jurisdiction over the use in Canada. The current jurisprudence lends good support for the proposition that if the NFT is purchased and/or accessed by a person situated in Canada—even if the purchaser is using a VPN (virtual private network) or some other service to have the asset transferred without the code or other information passing through or being recorded in Canada—a trademark used or displayed in conducting that activity is "used" in Canada in conjunction with a service. By contrast, for the purposes of establishing "use" with a good in Canada, some transfer in possession or property of the good must occur in Canada within "the normal course of trade."¹² This could be trickier to prove and may well depend on where Canadian law considers NFTs ultimately to be situated.

Infringement and Artistic Expression

Status of Current Pending U.S. NFT Cases, Application of Fair Use Principles

Application of the trademark fair use doctrine in the NFT space is still evolving. Descriptive fair use concepts continue to apply in this space. For instance, it is uncontroversial that use of images or written references to apples in connection with NFTs are permissible so long as the usage clearly relates to the generic dictionary meaning of the term as opposed to any implied affiliation with the well-known technology brand.

In contrast, the application of nominative fair use principles to NFTs is less clear and will play a key role in NFT-related court cases over the coming years. It is currently the subject of the pending Nike vs. StockX¹³ litigation. Nike's complaint accuses StockX of trademark infringement relating to the unauthorized sale of Nike-branded NFTs. StockX purportedly owns physical Nike products that it stores in a vault; it then sells the NFTs as proof of ownership to consumers who can then redeem the NFT for access to the physical NIKE products held by StockX and gain other benefits such as access to StockX promotions and events. Nike argues that such digital assets are likely to cause customer confusion as to source and/or affiliation, especially as Nike recently began offering its own NFTs.

To establish nominative fair use under existing U.S. case law, three requirements must be met: (1) the product or service in question must not be "readily identifiable" without use of the trademark; (2) only so much of the mark or marks may be used as is reasonably

[12] *Manhattan Industries Inc. v. Princeton Manufacturing Ltd.* (1971), 4 C.P.R. (2d) 6 (F.C.T.D.)

[13] *Nike Inc v. StockX LLC*, U.S. District Court for the Southern District of New York, No. 1:22-cv-00983

necessary to identify the product or service; (3) the user must do nothing that would, in conjunction with the mark, suggest sponsorship or endorsement by the trademark holder.¹⁴ Additionally, under the Rogers test described above¹⁵, the use of a trademark in an artistic work is actionable only if the mark (1) has no “artistic relevance” to the underlying work or (2) explicitly misleads as to the source or content of the work. Assuming StockX’s claims about its offerings are true, its use of the NIKE mark to refer to actual Nike products may meet the first two elements of the nominative fair use test; however, it is debatable whether StockX’s use of the NIKE brand in this way could suggest sponsorship or endorsement by NIKE of StockX’s offerings—especially any offerings beyond the actual physical NIKE products held by StockX. Moreover, StockX does not likely have the defense of parody, criticism, or news commentary that other more “artistic” NFT creators may seek to rely upon in defending against claims of trademark infringement. While this case is still in its early stages, it will certainly be interesting to see how the court applies existing standards of fair use from the physical world onto digital tokens.

Another ongoing case that is exploring the application of fair use to NFTs is *Hermès v. Rothschild* (*Hermes International v. Rothschild*, U.S. District Court for the Southern District of New York, No. 1:22-cv-00384), in which Hermès, owner of the trademark BIRKIN for handbags, is suing the creator of a collection of NFTs depicting digital renderings of handbags under the name METABIRKINS. The defendant has claimed that this is a fair use because his digital artworks are unique and fanciful interpretations of BIRKIN bags, depicting them as “fur covered” to comment on the animal cruelty inherent in Hermès’ manufacture of its expensive leather handbags. The defendant further asserts that the works are not actual handbags which compete with the plaintiff’s products, but rather are artistic works protected by the right of free speech. In taking this position, the defendant seeks to tie this NFT-related format to more traditional artistic concepts, arguing that the uniqueness of the new technology should not cause it to lose the First Amendment protection granted to tangible forms of expression.

On May 5, 2022, the judge denied the defendant’s motion to dismiss, indicating that the court believes that Hermès’ claims of trademark infringement do not fail as a matter of law. However, the court declined to determine at this early stage whether these NFTs meet the low threshold for artistic relevance under Rogers, stating only that the incorporation of the brand into the work did not disqualify it from artistic consideration. The court also has yet to determine whether the NFTs are likely to mislead consumers as to an implied affiliation with Hermès.

In addition to fair use defenses, these cases also hinge in part on whether the plaintiffs’ existing trademark rights to certain physical goods (e.g., NIKE for shoes, BIRKIN for handbags) protect against unauthorized third-party use of virtual goods that are arguably just digital representations of the physical goods. In other words, do the trademark owners need separate trademark registrations covering NFT-related offerings to be able to successfully assert trademark infringement claims?

Ultimately, we will have to wait until further guidance is handed down by these courts, but for the time being it appears that both traditional trademark infringement and fair use principles do carry over into the NFT realm. Accordingly, while each outcome will continue to be very fact-dependent, an overarching theme will be whether the work at issue is artistic and whether consumers are confused as to the source of the NFT or its affiliation with the real-world trademark owner.

[14] *New Kids on the Block v. News America Publishing, Inc.*, 971 F.2d 302 (9th Cir. 1992)

[15] *Rogers v. Grimaldi*, 875 F.2d 994 (2d Cir. 1989)

Are Consumers Likely to be Confused?

Within the United States, the Lanham Act generally provides that any mark owner may seek relief against any other confusingly similar marks being used. In the context of NFTs, brand owners will need to show that the trademark used for an asset authorized by an NFT, or the asset itself, is likely to confuse, deceive, or mislead consumers as to source or sponsorship.

As evidenced by some of the courts' more recent orders in pending NFT infringement litigation, it appears that the likelihood of confusion analysis will generally follow the traditional standards. While varying slightly amongst various jurisdictions, American courts generally look to the following factors:

1. Strength of the senior user's mark;
2. Similarity of both marks;
3. Similarity of the goods or services being offered by both;
4. Likelihood of the senior user to enter the junior user's market;
5. Evidence of actual confusion;
6. Junior user's intent in using the mark;
7. Quality of the junior user's products or services; and
8. The sophistication of the relevant consumers.¹⁶

Whether consumers are likely to be confused regarding the source or affiliations of NFTs will remain a heavily fact-intensive inquiry. Common threshold considerations that may dictate the outcome of any claim may depend on how the NFT itself is being used (collection vs. individual piece, digital content vs. receipt for tangible goods), how the NFT uses or incorporates the mark at issue (is the mark used in the title of the NFT vs. incorporated in the digital asset itself), the strength of the mark being infringed, and the type of confusion alleged (source vs. affiliation vs. dilution).

Similarity of Goods

In the context of NFTs linked to digital assets, a court is far more likely to find similarity of goods where the mark owner has registered their mark in the international classes that have come to be associated with NFT goods and services. Namely, Class 9 for "downloadable virtual goods;" Class 35 for "retail store services featuring virtual goods;" and Class 41 for "entertainment services, namely, providing on-line, non-downloadable virtual footwear, clothing, headwear, eyewear, bags, sports bags, backpacks, sports equipment, art, toys and accessories for use in virtual environments" as the primary classes of goods/services.

Use of Disclaimers

In the context of NFTs linked to physical goods in particular, the use of prominent disclaimers will likely be the center of any likelihood of confusion analysis. There seems to be an arguable basis for dispelling confusion through disclaimers in the context of NFTs linked to physical goods given that the NFT is merely allowing owners to track ownership without having to possess the physical goods, such that the owner can make a future trade without incurring transaction costs, delay, or risk of damage or loss associated

[16] *Polaroid Corp. v. Polarad Elecs. Corp.*, 287 F.2d 492, 495 (2d Cir.1961) (internal citations omitted)

with shipping physical goods. As more and more consumers become familiar with this particular NFT use case, it may support a common-sense position that the NFT is conceptually distinct from any claims concerning the source or affiliation of the goods themselves.

Remedies

Identifying Infringers and the Potential for Recovery of Damages

A rather obvious starting point is that an IP rights holder cannot recover damages from an infringer if the identity of the infringer is unknown. In the sphere of NFTs, IP rights holders are likely to face an extremely difficult uphill challenge in identifying infringers, unless those infringers take active steps to share their identities.

Many NFT users are attracted to the inherent anonymity of the NFT ecosystem, in circumstances where such anonymity is largely by design: cryptocurrency enables transactions with respect to NFTs to be carried out anonymously and blockchain enables these transactions to be recorded in a unique fashion without compromising this anonymity.

Furthermore, there is—as yet—no regulatory requirement requiring NFT creators to identify themselves within an NFT. If today you looked within the contents of an NFT, you would be unlikely to find any personal identity details for either the creator or any other intellectual property owners, for the reasons set out below.

NFTs are essentially pieces of computer code that are written into the blockchain. This code contains various bits of information. The code will vary depending on which blockchain is used. Ethereum, a decentralized open-source blockchain, is the most ubiquitous blockchain technology in use. Standards have been created for use in relation to Ethereum. These standards are constantly being updated. For example, the “EIP-721: Non-Fungible Token Standard” provides a standard interface to allow wallet/broker/auction applications to work with any NFT on Ethereum. Such standards can specify the elements that must be present, and some that are optional.

Irrespective of which blockchain is used, any NFT will have a number associated with it, this number is known as the tokenID, which is generated upon the creation of the token. A second element of all NFTs is a blockchain address that can be viewed everywhere in the world using a blockchain scanner. The combination of elements contained in the token make it unique; only one token in the world exists with that combination of tokenID and blockchain address. At its essence, the NFT is simply these two numbers.

However, there are other elements that can be present within the NFT. One is the wallet address of the creator. (An NFT wallet is a cryptocurrency wallet that supports the blockchain protocol that NFTs are built on. It also needs to support the currency with which NFTs are purchased.) Some NFTs will also include a link to cross-reference the original work.

But just because you have identified the NFT wallet of a creator, does not necessarily mean that you will be any closer to establishing the *identity* of the creator. This is because the NFT wallets will not usually, on the face of them, identify a specific individual user. While transactions leading to NFT wallets can occasionally be tracked back to their source,

this is a very technical undertaking, often requiring expert input and technology, and does not guarantee identification.

The long and the short of the situation is that there is no mandatory requirement for NFT creators to disclose their identity, whether within the NFT itself or within their wallet. If NFT creators chooses to disclose their identity, then that is one thing (and there might be pressure on some such creators to do so in order to prove their bona fides). However, if NFT creators choose not to reveal their identity, then the reality is that the IP rights holder is likely to be thwarted in attempts to uncover it. Given that infringers are likely to err on the side of anonymity, this presents a problem for IP rights holders.

For the reasons set out above, in circumstances where an infringer cannot be identified, there will also be a barrier to the enforcement of any injunction made against such infringers. See, e.g., *Lavinia Deborah Osbourne v (1) Persons Unknown (2) Ozone*¹⁷ – a case in the High Court of England and Wales, where the Court granted a freezing injunction in relation to stolen NFTs but left open questions of service and jurisdiction.

Secondary Liability for Platforms: a US perspective

While most of the ongoing NFT-related litigation is primarily centered between famous brands and NFT creators, there will likely be more cases in the future that address the degree to which marketplace platforms may be held vicariously or secondarily liable for NFT sales that infringe on the IP of others. While marketplaces generally operate to allow others to buy and sell NFT collections, popular platforms such as OpenSea, Rarible, and SuperRare also allow anyone to create (mint) and list their own NFTs for sale. OpenSea even took to Twitter in January 2022 to highlight the exponential increase in the misuse of its free minting tool, with the result that “[o]ver 80% of the items created with this tool were plagiarized works, fake collections, and spam.”

Background Issues

Given the difficulty in ascertaining the physical identity (as opposed to their otherwise anonymous digital wallet) of the owner or initial creator of an NFT, marketplaces serve as a more direct, ascertainable target for claims of secondary liability. However, marketplaces vary in terms of their overall platform policies, their level of control over the minting and sales process, and individual sale terms, all of which only further complicate the issue of a marketplace’s role and awareness of the creation, listing, and sale of potentially infringing NFTs. In addition, marketplaces have relied almost exclusively on mark owners to enforce their own IP through retroactive measures, as opposed to employing meaningful screens for potential infringements. While seemingly better than nothing, this issue is compounded by the fact that even where infringing goods are removed, new and identical ones to those removed almost invariably pop up in their place. This is further compounded by the lack of a DMCA-type statutory framework for trademark infringement claims.

Thus, given the increasing number of NFT marketplace platforms, the ease with which anyone can create and sell an NFT on these platforms, and the difficulty of ascertaining the physical identity of NFT creators/owners, it is no surprise that associated liability for these platforms remains a point of increased focus for brands seeking to enforce their marks against infringement in the NFT space.

[17] [2022] EWHC 1021 (Comm)

Contributory Liability

In some cases, brands may have a claim against these marketplace operators under a theory of contributory liability. Within the U.S., a mark owner can assert this claim if it can show that the marketplace was aware of the infringing activity and refused to act in response to claims of such infringement. Importantly, claims of contributory infringement also require the plaintiff to establish direct trademark infringement, that the marketplace had direct control, and monitoring of the instrumentality used by the direct infringer.

While a marketplace's control is more easily established in the context of marketplaces that offer tools to mint NFTs, the difficulty will likely lie in establishing their specific knowledge of infringing activity or that the marketplace had sufficient control over the service to effectively remove infringing content and/or discontinue its services to someone who the marketplace knew was involved in continuous infringing activities. Regarding sufficient knowledge, courts generally require specific knowledge of the particular infringement, as opposed to the generalized statements like those made by OpenSea regarding the scope of overall infringement for which the platform is being used. In certain cases, however, such knowledge may more easily be established where the marketplace was previously informed about the infringing materials but failed to act.

Vicarious Liability

Separate from contributory liability, marketplaces may also (depending on the circumstances of a given dispute) be faced with claims of vicarious secondary liability. Under this theory of secondary liability, an online marketplace can be held vicariously liable for trademark infringement where the defendant-marketplace and the infringer have an actual or apparent partnership, have authority to bind one another in transactions, or exercise joint ownership or control over the infringing product.

In the context of NFT marketplaces, the difficulty in establishing vicarious liability will likely center around the extent to which marketplaces partner with NFT creators to offer exclusive NFT offerings on their platform, and whether any NFTs created through this partnership involve the unauthorized use of a trademark owner's mark.

Duty of Care as Sellers

Beyond secondary liability claims, at least one recent lawsuit against one of the more popular NFT marketplace platforms, OpenSea, has taken a different approach.¹⁸ In this case, the plaintiff is suing the marketplace after he used the platform to purchase a Bored Ape Yacht Club NFT, which was subsequently stolen and resold on the same platform after someone hacked the OpenSea database. The plaintiff is alleging that OpenSea owed a duty of reasonable care over the sale of the NFTs that was breached after the plaintiff informed OpenSea that someone had stolen his NFT through hacking OpenSea's platform before the NFT was resold. For their part, OpenSea argues that, as a matter of law, no such duty is owed given that no special relationship ever existed between OpenSea and the plaintiff.

[18] *McKimmy v. OpenSea*, 4:22-cv-00545 (S.D. Tex.)

Chinese Perspective

Legal Nature of NFT Platforms

Under Chinese law, platforms operating on the Internet can be divided into Internet Content Providers (ICPs) and Internet Service Provider (ISPs). According to the Regulation on the Protection of the Right to Disseminate Information on Information Networks (the “Regulation”) and relevant judicial interpretations, ISPs generally provide network services including automatic access, automatic transmission, information storage space, search, link, and file sharing technology.

In China’s first case of NFT Digital Collections (“NFT Case”), the court held that the NFT platform can be categorized as an ISP, based on the fact that the NFT digital collections are provided by users, not the platform. However, through consideration of the features of the NFT works, transaction mode, technical characteristics, controllability of the platform and profit model, the Chinese court affirmed the NFT platform as a new type of ISP that is not stipulated in Article 4 of the Provisions of the Supreme People’s Court on Several Issues Concerning the Application of Law in hearing of Civil Dispute Cases Involving Infringement of the Right to Disseminate Information on Information Networks.

“Exhaustion of Rights” Does Not Apply to Transactions Involving NFT Works

In the field of Chinese copyright law, the exhaustion of rights mainly applies to restrictions on distribution rights, which is also known as “the principle of one-time exhaustion of distribution rights” or “the principle of initial sale.” When a work or its copy is sold for the first time, the copyright holder loses control over subsequent circulation of the work or its copy, and the buyer can resell the work or its copy on the basis of property rights. This principle is mainly set up to prevent others from selling illegal copies of works, rather than to restrict the use of works that are legally sold.

In the NFT Case, the court held that the principle of exhaustion is based on the inseparability between a work and its tangible carrier, and only the right of use of the tangible carrier of works can be controllable. Under the NFT transaction model, unspecified members of the public can obtain NFT works at their designated time and place, which is a typical act of information network dissemination. Such dissemination of works through information networks is a type of flow of information, which does not lead to the transfer of ownership or possession of the tangible carrier of the works. Therefore, it is not controlled by the distribution rights in the physical world and lacks the premise and basis of the “exhaustion of rights.”

It is noteworthy that some Chinese scholars hold that the blockchain is similar to the role of the real estate transaction registration administration, and since NFT works are not encumbered by the reproduction right, the exhaustion of rights rule is not likely to be currently applicable to the digital realm.

Degree of Care of NFT Platforms

Pursuant to Article 11 of Provisions of the Supreme People’s Court of China on Several Issues Concerning the Application of Law in hearing of Civil Dispute Cases Involving Infringement of the Right to Disseminate Information on Information Networks, where a network service provider directly obtains economic benefits from the works,

performance, and/or audio-visual products provided by network users, the courts shall determine that such network service provider bears a relatively higher duty of care regarding the network users' infringement of the information network transmission right.

Since most of the NFT platforms can obtain economic benefits directly from the NFT works, they bear a relatively higher duty of care regarding transactions on their platforms. In the NFT Case, the judge held that considering the platforms' transaction model, technical features, platform control ability, profit model and other factors, the accused platform not only must assume the responsibilities of a general network service provider, but also must establish an effective intellectual property examination mechanism to preliminarily examine the copyrights of the NFT works traded on the platforms, such as whether the users who have applied for NFT minting have provided preliminary evidence, including original copies, legal publications, copyright registration certificates, and certificates issued by authentication institutions, to prove that they are the copyright owners or relevant rights holders.

Determination NFT Platform Damages

Article 54 of Copyright Law stipulates that the infringer shall make compensation based on the actual losses suffered by the rights holder or the illegal profits of the infringer. Where it is difficult to compute the actual losses of the rights holder or the illegal income of the infringer, compensation may be made with reference to the royalties for such rights. Where it is difficult to compute damages by these three methods, a court shall rule on compensation ranging from RMB 500 to 5 million based on the extent of the infringement. The compensation amount shall also include reasonable expenses incurred by the rights holder to curb the infringing act.

In the Chinese NFT Case, the plaintiff claimed damages of RMB 100,000. The court first explained that transactions of NFT works are recorded on the blockchain in a tamper-resistant manner, and therefore, the infringement income from NFT transactions can usually be identified. In this case, the court found that the sales price of the disputed NFT work was RMB 899, and only one sale was made. However, as the parties failed to provide evidence of the profit amount of the transaction, the court adopted a statutory compensation method, taking into account the transaction amount, reasonable expenses and other expenses, and finally determined the damage amount to be RMB 4,000.

It is worth noting that NFT transactions cannot be tampered with, as they are completed on the blockchain, and as such a Chinese court may directly adopt the transaction information on the blockchain as evidence for calculating the amount of damages, which is different from the proof in general intellectual property infringement cases.

EU Perspective

The proliferation of NFTs has undoubtedly raised significant concerns about both primary and secondary liability for trademark infringements occurring in NFT marketplaces. Given that in most cases it is impossible to identify the seller who has listed an NFT on a platform, trademark owners may choose instead to seek indemnification from the NFT marketplace. The latter, acting as an intermediary in an NFT transaction, risks facing liability similar to internet service providers ("ISPs"). While the issue has emerged only recently, without the Court of Justice of the European Union ("CJEU" or the "Court") yet having been given the opportunity to articulate itself ad hoc, the existing EU legal

framework and jurisprudence of the CJEU establish the regime under which such online intermediary platforms may incur secondary liability for trademark infringements.

Before analyzing the liability regime at the EU level, a preliminary remark needs to be made: liability presupposes the establishment of a trademark infringement, which, in the realm of NFTs, remains itself a contested issue. A trademark is infringed in case an unauthorized third party uses an identical or similar sign for similar or identical goods or services. Since NFTs have recently started to gain traction, many trademark owners have not yet proceeded with the registration of their trademarks for downloadable digital files authenticated by non-fungible tokens, according to the classification proposed by the EUIPO, or other similar categories pertaining to NFTs, including goods or services associated with the metaverse, digital art, or collectibles. Hence, any potential guidance on the above matter will significantly impact the extent of liability that NFT marketplaces may incur. Nevertheless, this mainly concerns less established brands, as, in contrast, well-known ones are more likely to make use of their already established reputation and, thus, claim cross-class protection.

Tort and unfair competition law have not been in principle harmonized in the EU—despite the harmonization of registered trademark law—and, therefore, EU Member States have adopted rather diverging approaches regarding secondary liability. Nevertheless, the extent of liability of online intermediaries is effectively regulated by the E-Commerce Directive (Directive 2000/31/EC). This instrument sets out the conditions under which ISPs are exempted from liability under any law, thereby overriding the conceptual differences regarding secondary liability standards for trademark infringement among EU Member States. The E-Commerce Directive sets forth a safe harbor that applies horizontally to all claims under any legal basis and for all types of activities initiated by third parties, including trademark infringements. The safe harbor principles provided for by the Directive apply to three types of online service providers: mere conduits, caching and hosting providers, and online intermediaries. The latter are immune from liability unless they are aware of the illegality and are not acting expeditiously to cease the infringing activity.

Notably, with regard to hosting providers, under which category NFT marketplaces may fall, according to Article 14 of the E-Commerce Directive a “(hosting) service provider is not liable for the information stored at the request of a recipient of the service, on condition that: (a) the provider does not have actual knowledge of illegal activity or information and, as regards claims for damages, is not aware of facts or circumstances from which the illegal activity or information is apparent; or (b) the provider, upon obtaining such knowledge or awareness, acts expeditiously to remove or to disable access to the information.” The Directive precludes the imposition of a general obligation to monitor the activity of third parties during the provision of services pursuant to Article 14.

According to the case law of the CJEU¹⁹, providing useful guidance on the conditions for immunity, immunity is not granted where the online marketplace plays an “active role” in the promotion or sale of the trademarked goods or services, thus not providing the respective service neutrally, and which is of such a kind as to give it knowledge of, or control over, the data relating to those offers for sale. The online marketplace plays such an “active role” where it provides assistance, e.g., in optimizing the presentation of the offers for sale in question or promoting those offers. Furthermore, an online marketplace may lose immunity under Article 14 of the Directive if it is aware of facts or circumstances on the basis of which a diligent economic operator should have realized that the offers

[19] See e.g., *L'Oréal v eBay*, C-324/09

for sale in question were unlawful and, in that event, failed to act expeditiously. The above criterion covers every situation in which the provider concerned becomes aware, in one way or another, of such facts or circumstances, for instance the identification of an illegal activity as the result of an investigation undertaken on its own initiative, as well as a situation in which the operator is notified of the existence of such an activity or information.

A comparative examination between the U.S. contributory liability and the EU secondary liability regime for trademark infringement by online platforms shows that they present certain diversities. Under the common law rules, according to the *Tiffany* case²⁰, applying the contributory trademark liability doctrine (*Inwood* test²¹), “for contributory trademark infringement liability to lie, a service provider must have more than a general knowledge or reason to know that its service is being used to sell counterfeit goods. Some contemporary knowledge of which particular listings are infringing or will infringe in the future is necessary.” It was held that general knowledge was not sufficient to trigger contributory liability and the ISP was under no affirmative duty to monitor its website and identify potential infringements. Hence, liability can be triggered only if the ISP acquires specific knowledge by receiving notice that a specific item on its website infringes a trademark, and it does not act promptly to remove the infringing listing. Conversely, under the EU jurisprudence mentioned above, the level of “awareness” seems to be generally less specific than “actual knowledge.”

In view of the above, if NFT platforms qualify as hosting service providers under the EU secondary liability regime for ISPs, they could benefit from the safe harbor stipulated in the E-Commerce Directive, and therefore be immune to liability for trademark infringements, if the conditions discussed above are fulfilled. Nonetheless, certain characteristics that NFT platforms present, namely the minting of NFTs through the use of their platform and the fact that the listings contain a direct link to the underlying work infringing a trademark, could potentially require a more active role on behalf of these platforms, as well as more control over the content they host, thereby reinforcing the degree of their duty of care.

The exemption from liability under the EU regime established in the E-Commerce Directive does not entail an outright immunity from remedies against online platforms. According to Article 11 of the Enforcement Directive (Directive 2004/48/EC), Member States shall ensure that right holders are able to apply for an injunction against intermediaries whose services are used by a third party to infringe an intellectual property right. Therefore, injunctive relief may be provided even when the online intermediary falls within the safe harbor of the E-Commerce Directive.

For a more comprehensive understanding of the EU legal framework on secondary liability, reference should be made to the copyright liability regime of online platforms (Directive on Copyright in the Digital Single Market (Directive 2019/790), “DSMD”) as well as to the legislative proposal regarding the modernization of the E-Commerce Directive (Digital Services Act, “DSA”). Article 17 of the DSMD provides that online content-sharing service provider performs do not benefit from the limitation of liability established in Article 14 of the E-Commerce Directive described above and can be held liable if the content is copyright infringing. To escape liability, the DSMD requires the platforms to make “best efforts” either to obtain a license for the material or to block unauthorized content, thereby increasing the liability that such platforms may incur.

[20] *Tiffany (NJ) Inc. v. eBay Inc.* 600 F.3d 93 (2nd Cir. 2010)

[21] *Inwood Laboratories Inc. v. Ives Laboratories, Inc.*, 456 U.S. 844 (1982)

Regarding the proposed regime under the DSA, it brings about a number of important amendments to the E-Commerce Directive by clarifying some uncertainties surrounding the application of the Directive in force, as well as by reinforcing the obligations of ISPs. Firstly, it clarifies that the hosting safe harbor does not apply to online platforms that present the illegal content in such a way that an average and reasonably well-informed consumer is led to believe that it is provided by the online platform itself, rather than by the actual trader. Therefore, online marketplaces will need to clearly distinguish between the services and goods they offer themselves, in contrast to the services and products that are sold by independent third parties using their marketplace. Moreover, ISPs will not be eligible for the exemptions from liability solely because they carry out voluntary own-initiative investigations or other activities to identify and remove or disable access to the illegal content. The DSA further aims at lifting the fragmentation in the implementation of the notice and action mechanism by EU Member States in absence of specific provisions in the E-Commerce Directive. It provides that hosting service providers will need to implement an easy to access, user-friendly mechanism that allows users to submit such notices by electronic means and shall promptly and diligently process the notices.

It is evident that the recent legislative choices at the EU level reveal a tendency to increase the liability of and to impose *ex ante* control in order to prevent rights violations by ISPs and, in particular, by online platforms. However, as the landscape of NFTs remains virtually uncharted in Europe, it is expected that the outcomes in pending cases in the U.S., as well as in other jurisdictions, may significantly impact the stance of the EU on this conundrum.

India Perspective

The liability of online intermediaries in intellectual property infringement is a hotly debated issue. In India, third-party platform providers/service providers are termed as “intermediary” and are governed by the Information Technology Act 2000 (IT Act). The definition of intermediary is inclusive and exemplifies “online-auction sites” and “online-marketplaces.”

Section 79 of the IT Act confers statutory immunity upon intermediaries from liability for any third-party data/information/communication link made available on their platform. The immunity of an intermediary is contingent upon the following:

- (i) An obligation not to (i) initiate the transmission, (ii) select the receiver of the transmission, and (iii) select or modify the information contained in the transmission
- (ii) Abiding by “due diligence” as prescribed by the Central Government (These Guidelines are explicated in the accompanying 2021 IT Rules and include provisions for notification of terms of service, “Dos & Don’ts,” establishment of a grievance mechanism and timelines for content takedown and others);
- (iii) The intermediary must not aid, abet, or conspire in the commission of the unlawful act
- (iv) Upon receiving “actual knowledge,” the intermediary must “remove or disable access to the unlawful material”

The term “actual knowledge” is not defined under the IT Act and there was uncertainty as to its scope and interpretation. In the landmark judgment of *Shreya Singhal v. Union of India*²², the Supreme Court interpreted “actual knowledge” provided under Section 79(3)(b) of the IT Act and accompanying Rules to mean a direction in the form of a court order or

[22] AIR 2015 SC 1523

a notification by the government. The Court noted that intermediaries are inundated with millions of requests, and it is not possible (or desirable) that they become private arbiters and determine the legitimacy of complaints/content.

The IT Rules 2021 now provide statutory recognition to the above principle by way of Rule 3(1)(d), which states that an intermediary ought to take down content only upon receipt of a court order or order from a government agency.

Specificity of Knowledge by Way of URLs

Additionally, courts have consistently held that a vague knowledge of the possibility of infringing content on a platform is insufficient to impute knowledge or awareness upon an intermediary. The Division Bench of the Delhi High Court in *Myspace, Inc. v. Super Cassettes Industries*, 2017 (69) PTC 1 (Del) (DB) held that any notice to an intermediary (in this case, with regard to copyright infringement) ought to include URLs. In the absence of URLs, platforms may be incentivized to take down all potentially affected websites or content, which would have a chilling effect on free speech.

Similarly, in *Kent Systems Ltd. and Ors. vs. Amit Kotak and Ors.* 2017 (69) PTC 551, the plaintiffs sought a direction against eBay to delist all products infringing the registered designs of the plaintiffs as well as that eBay proactively monitor future listings. Relying on *Myspace*, the contention was rejected by the Court holding that an intermediary is only liable to remove specific URLs as notified by rights owners, and there is no legislative requirement to monitor listings for future infringements. The Court also held that merely averring that the intermediary is aiding or abetting the infringement does not establish/prove any involvement, and such allegations must be proven to the legal standard.

However, merely taking a plea of being an intermediary does not ipso facto confer immunity. For instance, in *Christian Louboutin SAS v Nakul Bajaj and Ors*²³, the court classified the defendant, an e-commerce trading platform, as an “active participant” based on the role it assumed in conducting the business. Pertinently, an “active participant” does not enjoy the exemption under Section 79. The court examined the entity’s role in the e-marketplace with respect to the goods, including providing value-added services, and held that if on examination of the various factors, it can be concluded that the e-commerce website is involved in or conducts business in such a manner, it crosses the line from being an intermediary to an active participant, and the e-commerce platform would be liable for infringement.

In *Fermat Education v Sorting Hat Technologies P. Ltd*²⁴, the plaintiff sought an injunction restraining the uploading of videos containing the plaintiff’s copyrighted educational materials on the first defendant’s website (www.unacademy.com) by third-party tutors. Although Sorting Hat sought to claim immunity under Section 79, the Court rejected the contention on the ground that Sorting Hat retained editorial control over the uploaded content, paid consideration to third-party uploaders, and the terms of service had an “exclusivity” clause that barred uploaders from uploading the content elsewhere.

Obligations of Intermediaries in Copyright Infringement Cases

The IT Act carves out a limited exception insofar as exercise copyrights and patent rights is concerned. Section 81 of the IT Act states that while the provisions of the Act override the

[23] CS (COMM) 344/2018, I.As. 19124/2014, 20912/2014, 23749/2014 & 9106/2015

[24] CS(OS) 330 of 2018

provisions of other laws, nothing prevents copyright owners from exercising their copyright. In *Myspace, Inc. v. Super Cassettes Industries*²⁵, the court reconciled the immunity granted to intermediaries under Section 79 with Section 81 of the IT Act. The court held that Section 51 of the Copyright Act, which deals with infringement of copyright, and Section 79 are supplementary provisions taking into account the rights of the copyright owner while also taking into consideration newer technologies and the digital economy. The court also took note that the proviso to Section 81 does not preclude the affirmative defense of safe harbor for an intermediary, in case of copyright actions. Failure to interpret the sections harmoniously would lead to a situation where intermediaries would be held liable irrespective of their due diligence. Further, the court held that in the context of copyright infringement, the intermediary may act upon receipt of a private notice by the copyright holder specifying the URLs whereupon the infringing content is available.

Section 52(1)(c) of the Copyright Act also provides for a notice and take down mechanism whereby a service provider is obligated to remove infringing content within 36 hours upon being notified by copyright owners. Rule 75 of the Copyright Rules, 2013 provides the detailed procedure for providing notice for the take-down of infringing content.

Applicability to NFT Platforms

Although NFT-related cases are yet to surface in India, insofar as platform liability is concerned, a perusal of the above provisions indicates that trading of NFTs does not create a special liability regime for platforms/intermediaries. In the context of trademark/copyright infringement arising out of third-party NFTs, platforms may be able to claim immunity subject to them fulfilling the requirements of Section 79, as mentioned above. However, further clarity may result from cases when they are eventually determined in India.

Practical Enforcement Guidance & Defense Strategies for Brand Owners

Defensive Strategies

Extending Trademark Protection—Classes and Jurisdictions

Although registered trademarks for “real world” products and services may assist with infringement cases relating to NFTs (particularly for well-known trademarks), solely relying on pre-existing trademark rights may be insufficient. In several of the recent cases on NFTs, such as the *MetaBirkins* case, the plaintiff had not registered a trademark for NFTs prior to commencing proceedings, which, given the timing, was understandable.

Brands should therefore be looking to expand their trademark protection to cover such virtual goods. Brand owners will then be better positioned to control, monitor, and monetize their trademarks. It also safeguards brands from imitation and potential exploitation in the virtual world. The main classes of importance for NFT related trademarks are Classes 9 and 35. Other classes such as Classes 41 and 42 may also be relevant, depending on the NFT.

IP Offices are starting to give classification guidance with respect to NFTs. The EUIPO recently stated that virtual goods are proper to Class 9 because they are treated as digital content or images. The EUIPO has advised that the term “virtual goods” on its own lacks

[25] (2011) 47 PTC 49 (Del.)

clarity and must be further specified by stating the content to which the virtual goods relate (e.g., downloadable virtual goods, namely, virtual clothing).

The EUIPO also stated that the term “non-fungible tokens” on its own is not acceptable and the type of digital good authenticated by the NFT must be specified. The EUIPO’s approach will be set out in the 2023 draft Guidelines on which a range of stakeholders had until October 3, 2022 to comment.

The USPTO has also introduced NFT-specific classification language for Classes 9, 35, and 42, such as “downloadable music files authenticated by non-fungible tokens (NFTs)” in Class 9 and “Provision of an online marketplace for buyers and sellers of downloadable digital {indicate type of downloadable digital goods, e.g., art images, music, video clips, etc.} authenticated by non-fungible tokens (NFTs)” in Class 35.

Registering NFT-related trademarks in an expanded number of jurisdictions should also be considered. Brands should also remain cognizant of the jurisdiction in which these marks are registered, as NFTs reside in a virtual world that bypasses geographical borders.

Trademarking NFTs is gaining traction among brands who are keen to protect their identities. This is exemplified in the recent findings that the USPTO saw an [exponential increase](#) in the number of businesses applying to trademark their NFTs, with over 1400 applications in 2021 as opposed to merely 20 applications in 2020.

Licensing Strategies—Review of Existing Licenses and New Licensing to Protect Branding in NFT Marketplaces

Brand owners could employ licensing as a defensive strategy to combat infringement. Putting in place licensing agreements with prospective NFT creators who mint NFTs would allow brand owners to retain ultimate control over the intellectual property in the virtual property while receiving additional revenue through creating NFT packages for sale to consumers.

Licensing agreements should specifically outline the parameters of the relationship and they usually prohibit the assignment of copyright and trademarks. This allows brands to mitigate some of the risk and uncertainty associated with entering the NFT market.

Monitoring NFT Marketplaces

Monitoring NFT marketplaces is an important defensive strategy with respect to brand protection and enforcement. To the extent possible, brands should proactively search for IP infringement on marketplaces such as OpenSea to ensure that they are preserving their reputation and protecting their commercial potential. However, the decentralized nature of NFT marketplaces and communities makes it challenging for brands to actively monitor and protect their IP rights.

Monitoring each NFT marketplace involves additional costs for brand owners and is likely to be overly cumbersome. Some brand monitoring platforms, such as Marqvision, have started to include monitoring and removal services for NFT fakes on NFT marketplaces, which will assist with watching and takedowns in a more cost-effective manner for brand owners.

Enforcement and Takedown Mechanisms in NFT Marketplaces

One obvious enforcement mechanism is to report any suspected IP infringement to the relevant NFT marketplace. Once a brand has identified itself as the authorized IP owner, it can then submit a complaint report outlining its grievance. However, the enforcement and takedown mechanisms vary considerably between NFT marketplaces.

In the U.S., copyright owners may file a Digital Millennium Copyright Act (“DMCA”) takedown notice against a website owner or online service provider if a copyrighted work in question is copied or distributed online without the rights owner’s consent. Similarly, there are existing legal mechanisms under EU law that offer some protection for trademark and copyright holders. Article 14 of the E-commerce Directive provides that, for online platforms to avoid liability for infringing content, they must act expeditiously to remove allegedly infringing material upon receipt of a takedown notice.

As an example, for OpenSea, the takedown procedure is relatively straightforward and involves the completion of the OpenSea takedown form, which includes details such as name, email, links to the content that is being reported, why it is being reported, and an electronic signature.

OpenSea has improved its takedown and infringement support. In June 2022, it stated that its average time to first response in May 2022 was less than 24 hours. Some of the other main NFT marketplaces, such as Decentraland, Mintable, Rarible, and Crypto.com all have takedown mechanisms. Until there is an NFT standard, however, it will be challenging to police these marketplaces.

Injunctions

Traditional injunctions represent another potential defensive strategy for brand owners as a means of preventing further infringement.

A recent example of an injunction being granted in relation to NFTs can be seen in [the May 2022 Singapore High Court Decision](#). In this case, the court issued an injunction prohibiting the sale of a Bored Ape Yacht Club NFT on the Ethereum blockchain, due to an ownership dispute. The Court recognized NFTs as a form of property. The Singapore court also allowed for the injunction to be issued via social media platforms. These included Twitter and instant messaging social platform Discord.

With the case being one of its kind, it may influence other jurisdictions to take a similar approach, thus emphasizing the importance of obtaining IP protection for NFTs as a means of enhancing protection for existing and/or new brands.

While injunctive relief in this space is still developing, it is nonetheless a welcome development for companies who are keen to safeguard their brand image. However, as the threshold for injunctive relief varies by jurisdiction it may not present itself as the most viable defensive mechanism in some jurisdictions.

The High Court of Singapore issued an interesting decision on the merits on October 21, 2022 in *Jamesh s/o Rajkumar v. Unknown Person (Chefpierre)*²⁶ also concerning Bored Ape NFTs that shows that while the world of Web3 and blockchain is a decentralized one, it is not necessarily a lawless one. Where disputes may arise over digital assets sited in the

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borderless, decentralized blockchain, the Singapore Courts can take jurisdiction over such disputes. The Court held that “[w]hile the decentralized nature of blockchains may pose difficulties when it comes to establishing jurisdiction, to my mind, there had to be a court which had the jurisdiction to hear the dispute.” With the connecting factors to Singapore in this case, the Court held that “[i]f the Singapore courts did not hear the case, there was no other appropriate forum. This was because the Bored Ape NFT existed as code stored on the Ethereum blockchain, which is essentially a decentralized network of ledgers maintained in computers around the world.”

The judgment stated that freezing orders and legal papers can be served on a metaverse personality (who happens also to be a famous Twitter influencer), even if the party’s actual identity is unknown.

To be able to rule on this subject, the Singapore High Court also specified that NFTs are not merely information or code on the blockchain, but also have the attributes of property. In particular, the Court considered that:

- (a) An NFT with its unique metadata is definable.
- (b) An NFT with its private keys would be an asset with an owner being capable of being recognized as such by third parties.
- (c) An NFT comes with a right that is capable of assumption by third parties, which in turn involves two aspects, that third parties must respect the rights of the owner in that asset, and that the asset must be potentially desirable. The Court held that the “nature of the blockchain technology gives the owner the exclusive ability to transfer the NFT to another party, which underscores the ‘right’ of the owner. Secondly, such NFTs are clearly the subject of active trading in the markets.”
- (d) An NFT has a relative degree of permanence and stability.

Copyright Infringement (and Registration in Relevant Jurisdictions)

The majority of NFTs may be categorized as digital receipts, rather than “works” that typically would fall within the parameters of copyright law. Therefore, the actual minting of an NFT is only likely to cause concern for brands if it involves the unauthorized reproduction of an underlying work or if it amounts to trademark infringement.

As noted above, copyright holders may submit a takedown notice to NFT marketplaces, where there has been unauthorized mining or reproduction of proprietary content. Some Berne Convention members have established voluntary national registration systems for copyright.

For instance, in China, copyright registration is not a mandatory requirement to obtain legal ownership, but registration is encouraged and recommended. For instance, registration provides greater weight of prima facie proof of legal ownership than witness evidence and testimony.

Proof of copyright registration, in relevant jurisdictions, reduces some of the procedural and administrative burdens that brands can face during litigation. Therefore, copyright

registration may prove to be an additional defensive mechanism, with respect to NFTs, in jurisdictions where this is possible.

Legal Issues, Problems and Regulations Needed

Novel Legal Issues Raised by NFTs

Fraud

How Do Purchasers Confirm They Are Obtaining Genuine Goods?

There are times when it is very difficult to link physical creative works and their digital forms in a database or blockchain. This creates a gap that counterfeiters may take advantage of. There are several ways to verify the authenticity of digital products:

1. Through Verifying Metadata

Since every token has verifiable metadata and a log that can assist in proving the record of ownership, it is possible to verify the authenticity of a digital asset. The blockchain offers security for these tokens, maintaining data safely and it is almost impossible to duplicate it.

The metadata in an NFT is the elucidation of the contract and describes the content in the contract stored on the blockchain. In an NFT, the metadata is pointed to by a cryptographically uniform resource identifier (URI) documented in the token. The URI could point towards a website maintained or developed by the NFT creator or a third party, an IPFS address, or another data location that the NFT can resolve.

If one wants to verify the authenticity of a NFT, one could use a blockchain explorer to review the metadata. To do so, one would either need to find the asset on the blockchain or obtain the wallet address of the person transmitting the NFT to make sure it exists and is in their ownership.

2. Through Google Reverse Image Search

In reverse image search, Google finds websites, images and information that relate to the image rather than written keywords. An artwork's original upload date can be found using Google's reverse-check tool and it can also be used to search who creators are. Using Google's reverse-check tool you can also find out how many different variants exist, how long the image has been online, and when the image was first uploaded.

3. Through the Creator's Social Media Accounts

The problem with digital assets is that they are very easy to duplicate. Customers are getting ripped off as they are sold copied collections. People get confused into buying the wrong asset. Sellers are creating fake accounts to scam and sell counterfeit NFTs to buyers. One of the best ways to verify authenticity is to ask the seller/owner for its credibility. One can trace NFTs

back to the original creator and since nowadays artist's create social media accounts to promote their art, one can easily figure out their reputation by looking at their profile. Most artists will share information about their work on their profiles. You can gauge authenticity by their engagement. Examine if the price of the NFT seems legitimate and if the contract address matches the one on the NFT creator's website or other social media.

4. Through Multiple Marketplaces

A search through various NFT marketplaces can confirm that the NFT for sale is not listed on multiple platforms. A seller with original art would sell it on only one platform. A fraudulent seller avoids getting tagged by placing its sales on multiple platforms.

5. Through NFT Storage Servers

It is common for counterfeit NFTs to be stored in centralized storage locations like Google Drive or on personal servers. If an NFT is stored in decentralized servers, then the probability of it being authentic is higher.

6. Through Private Key Cryptography

Any NFT's ownership is connected to its wallet's public key. It's essential to get a digital wallet if you want to own or use a cryptocurrency. A cryptocurrency wallet locates and secures assets that are kept on the blockchain using a dual system of public and private keys. When a buyer pays for an NFT, the buyer gets the right to transfer the token to their digital wallet. The token proves that the copy of a digital file is the original. Proof of ownership of the original is the purchaser's private cryptographic key. The digital artefact is authenticated by the public cryptographic key of the content producer. The value of any NFT token is essentially determined by this pair of the creator's public key and the owner's private key.

Practical Enforcement

The lack of awareness of IP issues among sellers and buyers, along with unregulated marketplaces, has led to an increase in fraudulent/misleading transactions. Therefore, it is advisable to exercise extreme caution, and to treat NFTs with the same level of pre-purchase diligence as one would with any conventional IP. Some fundamental best practices are:

1. Pre-listing due diligence of the target marketplace must be conducted to prevent consumer fraud.
2. Contractual due diligence must be undertaken by buyers, including seller identity verification, scope of assignment of rights on purchase, ownership and duration of underlying IP, smart contracts etc., to be forewarned and aware of the rights and limitations of the NFTs being traded.
3. NFTs must be listed with prominently displayed documentation, written license agreements, and announcements/caution that clearly elucidate the scope and limitations of their purchase.

4. IP right holders \ must conduct cyber-checks of NFTs and the metaverse to detect and take down fake NFTs in their name and/or comprising their IP.

India Perspective

India does not have any legislation or regulation that per se governs/regulates cryptocurrency or NFTs or their categorization. In 2019, a bill to ban trading/mining in cryptocurrency was introduced in the Parliament. However, pursuant to discussions between stakeholders, reports indicated that the Cabinet decided to regulate rather than ban crypto-assets.

On April 6, 2018, the Reserve Bank of India (RBI), India's central bank and authority regulating Indian currency, issued a circular directing all regulated entities to refrain from dealing in cryptocurrencies. The circular was challenged before the Supreme Court in the case of *Internet and Mobile Association of India vs Reserve Bank of India*²⁷, wherein the Court set aside restrictions imposed by the RBI on trading in these currencies, on the ground that the restrictions hindered the fundamental right of carrying out any trade.

Subsequently, the RBI has clarified that “[b]anks, as well as other entities, may, however, continue to carry out customer due diligence processes in line with regulations governing standards for Know Your Customer (KYC), Anti-Money Laundering (AML), Combating of Financing of Terrorism (CFT) and obligations of regulated entities under Prevention of Money Laundering Act, (PMLA), 2002 in addition to ensuring compliance with relevant provisions under Foreign Exchange Management Act (FEMA) for overseas remittances.”

Certain banks in India have prohibited payments using the United Payment Interface (UPI) real time payment system on crypto-trading platforms. This has also been [challenged before the Delhi High Court by WazirX](#), a popular crypto-trading platform on the ground that such a mandate is contrary to the Supreme Court order. Further, it seeks directions to RBI to put in place guidelines for regulation of cryptocurrency and other crypto assets. The case is still pending and could shed further light on how cryptocurrency/NFTs are to be considered under the law.

Treatment and Categorization of NFTs as “Assets”

The Finance Act 2022 inserted clause 47A to Section 2 of the Income Tax Act prescribing the definition of a “Virtual Digital Asset,” (VDA), which is now taxed at a flat rate of 30 percent. VDAs have been included in the definition of “property” and would result in 30 percent taxation even in case of gifts or transfer by other means.

Further, a tax of one percent is also directed to be deducted at “source,” i.e., at the point of sale. However, on June 30, 2022, the Central Board of Direct Taxes (CBDT) issued Guidelines on the deduction of tax at source for VDAs. Pertinently, the notification explains that “non-fungible tokens whose transfer results in transfer of ownership of underlying tangible asset and the transfer of ownership of such underlying tangible asset is legally enforceable” are excluded from the TDS (Tax Deducted at Source) requirement.

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Recommendations for Infringement & Enforcement Vs. Fair Use

Conclusion

By and large, the legal structures currently in place are being used to govern NFTs. In certain contexts, this is a viable option to help brand owners enforce their rights during the growth of NFTs and NFT platforms. But further cross-jurisdictional collaboration and communication are needed—including governments, international organizations, and multi-national policy makers—to harmonize and perhaps even centralize protection, monitoring, and enforcement of infringements of intellectual property rights within the NFT ecosystem.

As the technology develops, so too does the need for reliable tools for enforcement, the means to determine the identities of NFT creators and infringers, and the development of a consensus on trademark filing requirements.

Please see the accompanying Appendix on the recommended statement of IP principles regarding intellectual property rights in emerging digital ecosystems.

Reference Guide

Recommendation that INTA issue a quick reference guide on the INTA website for members with some basic definitions and recommendations relating to NFTs, including:

Prosecution guidance that brands should expand trademark protection over their top brands to cover virtual goods and services in Nice Classes 9, 35, or 41 to be better positioned to control and monetize their trademarks, as well as to prevent potential exploitation in the metaverse.

An INTA resource for members that provides information and links to NFT platform takedown processes.

An INTA database of relevant NFT-related case law summaries and periodic updates.

Policy Advocacy

Advocate that NFT platforms all maintain trademark, counterfeit, and copyright notice and takedown processes, and be required to respond promptly to any legitimate complaints as defined under the law.

Consider a policy position that both traditional trademark infringement and fair use principles carry over into the NFT realm.

In the context of NFTs linked to physical goods, consider a policy position that confusion can be potentially dispelled through the use of prominent disclaimers given that this kind of NFT is merely allowing owners to track ownership without having to possess the physical goods.

Outreach

Liaise with EU lawmakers to determine how the implementation of the DSA will affect platform requirements and liability with regard to NFTs.

Make a recommendation to WIPO to introduce either a class including virtual goods or to include virtual versions of all the existing goods and services into the current relevant classes in the Nice Classification.

Reach out to key trademark offices to collaborate on their handling of applications for virtual goods, and their recommendations for how brand owners should be filing for such goods.

Appendix

Recommended Statement of Principles

Intellectual Property Rights in Emerging Digital Environments

Due to the rapidly evolving nature of NFTs, it is difficult to gain clarity on the rules and policies for which INTA and the IP community should advocate with regard to NFT regulations to protect IP rights.

The Blockchain Subcommittee will continue to explore the appropriate areas for INTA-driven advocacy in 2023 and onward. In the meantime, the Subcommittee would like to propose IP principles that should be noncontroversial and can form the basis for future advocacy efforts.

Background for Emerging Digital Ecosystems

- The International Trademark Association (INTA) is a global association of brand owners and professionals dedicated to supporting trademarks and complementary intellectual property (IP) to foster consumer trust, economic growth, and innovation;
- INTA has established permanent standing committees to consider complementary intellectual property, including Copyrights, Designs, Geographical Indications, Indigenous Rights, Internet (domain names), and Rights of Publicity;
- Once the Internet became a marketing and distribution channel, experience demonstrated the efficacy of recognizing and enforcing IP rights online and in “cyberspace,” such as through the UDRP, URS, and DMCA Takedown Procedure;
- Recent technological developments have resulted in emerging digital ecosystems including blockchain technology, non-fungible tokens (NFTs), virtual and augmented reality, Web 3.0 Domain Names, and the metaverse;
- These emerging digital ecosystems have once again raised questions about the applicability, recognition, and enforcement of IP rights in such ecosystems;

IP Principles for Blockchain Digital Ecosystems

- Intellectual property (IP) is capable of existing and are capable of being exercised in emerging digital ecosystems. Therefore, IP rights should be respected in such ecosystems.
- National and international laws and treaties for the recognition and enforcement of IP rights should apply in emerging digital ecosystems.
- To the extent that IP may be protected by more than one type of IP right, enforcement of some or all applicable IP rights should be permissible in emerging digital ecosystems, at the discretion of the IP rights owner. (See, e.g., INTA Board Resolution of September 12, 2017 on Copyright Protection for Trademarked Material.)
- To the extent practicable, a harmonized cross-jurisdictional approach should be developed for the recognition and enforcement of each type of IP right in emerging digital ecosystems.



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