NFTs, Cryptocurrency & the Metaverse

A new dimension for IP

Protect your brand on the blockchain

The new digital world and the IP risks involved

Could NFTs transform IP into liquid assets?

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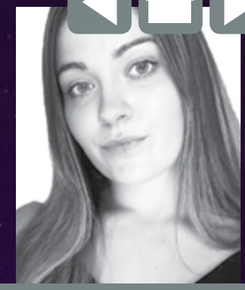
Into web3



Just as Alice stumbled into Wonderland, we find ourselves plummeting toward the yet-to-be-defined world of Web3. Just as Web1 and Web2 came before, it seems that Web3 is set to become the future, but this time in a way that will see the blurring of the real world with virtual wonderlands.

So, what is Web3 and how is it different?

Unlike its predecessors, Web3 uses blockchain, cryptocurrencies, and non-fungible tokens (NFTs) on a decentralized platform.

Cryptocurrency is a digital currency with no centralized authority, instead, transactions are recorded and verified on a decentralized system using cryptography.

Similarly, NFTs are cryptographic assets existing as unique digital identifier codes and metadata. They cannot be copied or subdivided, and all transactions are recorded on the blockchain to authenticate ownership. The code of the NFT is the unique identifier, but the NFT itself can be made up from any digital element – including 'tokenizing' real-world, or tangible, items such as artwork, clothing items, or even real estate.

The system of blockchain records transactions made on Web3 in a peer-to-peer network. This secure and decentralized system removes the possibility of domination by top-tier corporations and instead puts the ownership back into the hands of the users.

Through the combination of these decentralized, permissionless technologies, Web3 is offering a secure, personalized, and user-centric platform that goes far beyond what we have seen before now.

Alice had not a moment to think about stopping herself before she found herself falling down a very deep well. […] First, she tried to look down and make out what she was coming to, but it was too dark to see anything.[1]

The Metaverse

As the developments of Web3 grow *curiouser and curiouser*, so do the prospects of the metaverse. The term 'metaverse' does not refer to one specific type of technology, but rather the way the user interacts with it. The vision presented by Mark Zuckerberg is an upgraded, personalized version of reality, presently accessible through VR headsets with a vision for this to develop into holograms. The boundaries of the metaverse would be limitless, creating an expanse of possibility for connecting, working, and, ultimately, living.

Stepping into Web3

The combinations of the technologies making up Web3 will change the way we use technology and with that, it will change our relationship with many factors of life. The way we interact with money, tangible and non-tangible assets will likely become more fluid, will change consumerism. This is already encouraging the development of consumables for Web3 and with this comes many further changes including the protection of technology, the development of brands, and the protection of both tangible and non-tangible assets. Thus, Web3 is going to challenge intellectual property as we currently know it.

Web3 and IP

To address the questions that Web3 poses to IP, we invited global experts to analyze and give opinions on how they believe NFTs, cryptocurrencies, and the Metaverse will shape the future of IP. In this special edition, brought to you by CTC Legal Media, you can find articles that evaluate the protection of trademarks in the metaverse, the risks that NFTs pose to brands, IP enforcement in the metaverse, Web3 domains and, amongst further analysis, how NFTs are affected by copyright.

Though many questions are yet to be answered, this edition offers guidance for protecting IP as we all prepare to step into the world of Web3.

Faye Waterford, Editor

[1] Carroll, Lewis. Alice in Wonderland. Hertfordshire, Wordsworth Editions Limited, 1992.

Contents

7 **Enforcement in the Metaverse**
Michelle Ciotola and David Kincaid of Cantor Colburn evaluate the hurdles created by the metaverse when it comes to enforcing IP rights, including jurisdictional and issuance questions.

12 **Trademark issues in the Metaverse: a view from the US**
Charles R. Macedo, Max Vern, and David P. Goldberg of Amster, Rothstein & Ebenstein LLP examine recent cases of conflict between platform owners over trademark infringement and conflicts involving NFTs to provide a US perspective on handling trademarks in the metaverse.

17 **IP Risks in the new Digital World**
Ling Jin of Lusheng Law Firm and Holly White of Rouse outline the key considerations for IP owners to reduce risk when exploiting new digital technologies based on recent trends.

21 **A virtual certainty: the metaverse will give rise to plenty of trademark disputes**
Jennifer Mauri, Senior Associate at Michelman & Robinson, advises on the differences between trademark protection of real-world goods and solely virtual goods in the metaverse.

24 **Calling for answers: brand protection in the metaverse**
Juan Berton Moreno and Mariam Omran of Berton Moreno IP Law assess the need, for regulations regarding the protection of trademarks in the metaverse by raising unanswered questions.

28 **Will NFTs permanently change the landscape for trademark protection?**
Rachel Platts, Senior Trademark Attorney at HGF, evaluates the impact NFTs may have on the protection of products as they become virtual goods, questioning how that may also work in reverse, with some considerations for filing.

32 **NFTs and copyrights – a brief overview under Swiss law**
Jürg Simon and Vera Vallone of Lenz & Staehelin review copyright law surrounding NFTs, calling into question the intellectual property brought and sold alongside digital assets with useful considerations for both buyers and sellers of NFTs.

37 **Could NFTs transform IP into liquid assets?**
Jean-Christophe Hamann, Managing Partner and CEO at IPSIDE, discusses the attachment of IP assets to Fractional Non-Fungible Tokens as a potential way of dividing assets without granting licensee rights to produce liquid assets.

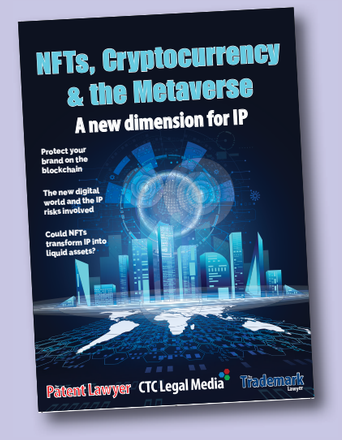
40 **The Wild West of Web 3.0: are NFTs and the Metaverse the next big brand protection risk?**
Fiona Gao, Director of Brand Protection Strategy at LexisNexis Intellectual Property Solutions, assesses the landscape of Web 3.0 for infringement risks from entry to transaction with tips for fighting back.

44 **Metaverse and the reconstruction of the current legal paradigms**
Paola Morales and Daniel Legaspi of Santamarina + Steta examine the potential risks to personal data protection in the metaverse and how the agreement of consent can be accommodated in the changing landscape.

48 **What is the IP reality of the virtual world?**
Ajay Yadav, Senior Consultant at UnitedLex, reviews the current developments of the Metaverse in relation to IP, evaluating the current leaders of metaverse advancement assets and how proceeding companies can prepare to integrate with the Metaverse.

54 **Web3 domain names: protecting your brand on the blockchain. An interview with industry expert Thomas Barrett**
CTC Legal Media sits down with Thomas Barrett, Founder of EnCirca, following the launch of the industry's first Web3 solution for protecting brands on the blockchain, to discuss the importance of registering in this space and how best to protect your brand.

59 **Arming the troops with AI: a mission to protect every trademark in Web3**
Hao (Henry) Du, Ph.D., CEO of Huski.ai, examines the difficulties trademark owners are facing in protecting their rights in the NFT space and explains how Huski.ai's detection image model is combating these issues.



NFTS, CRYPTOCURRENCY AND THE METAVERSE

Editor
Faye Waterford
faye@ctclegalmedia.com

Publishing Director
Chris Dooley
chris@ctclegalmedia.com

Advertising Enquiries
Katie Kerr (Publishing Executive)
katie@ctclegalmedia.com

Subscription Enquiries
subscriptions@ctclegalmedia.com

Accounts Enquiries
accounts@ctclegalmedia.com

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Tel: +44 (0)20 7112 8862
Fax: +44 (0)20 7084 0365

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Enforcement in the Metaverse

Michelle Ciotola and David Kincaid of Cantor Colburn evaluate the hurdles created by the metaverse when it comes to enforcing IP rights, including jurisdictional and issuance questions.

The metaverse, broadly speaking, is a virtual environment or "world" in which users can digitally interact using different types of technology. Technology can range from traditional computing platforms like PCs or smartphones to higher-tech devices such as virtual reality headsets, like the Oculus headset. And while electronic games, such as *Fortnight* and *Second Life*, have long used metaverse-like environments, we are now beginning to see metaverse technology applied to other non-gaming uses. For example, Meta Platforms (formerly Facebook) offers a social metaverse experience known as *Horizon Worlds*, which allows users to navigate the world using the Oculus virtual reality headset and hand-held motion controllers. Consumer and luxury brands, like Nike, Louis Vuitton, and Gucci, are adopting the metaverse as another channel to reach their customers. Within the metaverse, users can interact, conduct business, transfer digital assets, buy virtual property, and more. Many of these interactions are analogous to their real-world counterparts. Just like the real-world, many of these interactions may raise legal issues relating to intellectual property (IP) infringement and enforcement.

Securing IP rights, such as patents, trademarks, or copyrights, related to the metaverse is often very similar (if not the same as) securing non-metaverse IP rights. Patents dealing with the metaverse generally fall into one of two categories: hardware for interacting with the metaverse, such as a heads-up display for viewing virtual reality, or software that provides the virtual world in which users immerse themselves.

Michelle Ciotola

David Kincaid

Obtaining metaverse-related patents requires clearing the same hurdles as non-metaverse patents, namely satisfying the patent eligible subject matter, sufficiency of disclosure, novelty, and non-obviousness requirements of Title 35 of the U.S. Code. Although obtaining software-related patents can be more challenging than obtaining hardware-related patents, especially regarding subject matter eligibility, these challenges are not particular to the metaverse. A patent applicant can be successful in obtaining metaverse-related software patents using conventional approaches, such as showing how an invention improves computer functionality or another technology.

Copyright protects original works of authorship fixed in a tangible medium of expression. Many non-fungible tokens (NFTs) meet the threshold requirements for copyright protection and are often associated with or used in the metaverse. When considering NFTs, copyrights, and the metaverse, it is important to remember that copyright grants the author or owner of the copyright a bundle of rights, including the rights to reproduce the copyrighted work, to prepare derivative works, to distribute the work, and others. A party acquiring an NFT that is the subject of a copyrighted work should consider the rights obtained and the limitation of those rights. The possession of an NFT does not mean that the recipient has the rights to make copies of the underlying work.

Trademark rights for use in the metaverse are obtained through the United States Patent and Trademark Office (USPTO) or other trademark offices worldwide. Having a trademark registration in hand will likely be vital to a brand owners' ability to enforce its trademark rights in the metaverse. But as we are seeing with pending applications, there are certain challenges to obtaining registration. Metaverse-related trademark filings are covering virtual goods, retail store services featuring virtual goods, and entertainment featuring online non-downloadable virtual goods. While handling an identification issue with a pending application can be fairly straightforward in response to an office action, brand owners seeking trademark registration for trademarks in the metaverse are beginning to face issues with proving use or what has been deemed "premature use" by one USPTO examiner. Finally, the USPTO has already issued refusals for metaverse/virtual goods trademarks based on a likelihood of confusion with marks for physical goods, which is encouraging to brand owners. But the importance of obtaining a trademark registration for metaverse trademarks should not be minimized. It is expected that holding a metaverse- applicable trademark registration will become crucial to enforcing rights in the metaverse.

Once a rights holder obtains IP, the rights holder may wish (or be required) to enforce their rights. The key question is how do conventional judicial rights hold up when the underlying IP is related to the Metaverse? For patent enforcement, traditional judicial approaches may hold up well, but copyright and trademark enforcement may face challenges unique to the metaverse.

When a rights holder files suit, several threshold issues must be addressed, such as personal jurisdiction, venue, and service of process, among others. Some of these issues may require special consideration when the rights that sought to be enforced relate to the metaverse.

Personal jurisdiction gives a court authority over the parties in suit and the ability to enforce a judgment against the parties. In the United States, following *International Shoe*, a defendant must have sufficient "minimum contacts" within a jurisdiction to establish personal jurisdiction over that defendant. To the extent infringement of metaverse-related patents occurs, conventional approaches to determining minimum contacts may largely be sufficient. For example, because most metaverse-related patents are to the underlying technology enabling the metaverse, it will likely be easy to identify infringers and evaluate their contacts within a jurisdiction (e.g., does the infringer host servers within the jurisdiction, does the infringer sell products such as VR heads up displays within the jurisdiction, etc.). Establishing personal jurisdiction over copyright or trademark infringers may not be as straight forward. For example, often the infringers may be individuals instead of organizations. Infringers may also hide behind the relative anonymity that the metaverse platforms may provide. It may be unclear where these parties are located and what contacts, if any, an infringer has in certain jurisdictions.

Venue is the location in which a lawsuit can be heard as set forth in 28 U.S.C. § 1391. Venue is often tied closely to personal jurisdiction and accordingly may face some of the similar issues for enforcing metaverse-related IP.

Service of process, or simply "service", is the procedure used to give notice of a legal action to the opposing party (e.g., defendant). Conventional approaches to service include service by mail, personal service, waiver of service. However, these approaches may not be suitable for metaverse-related infringement. For example, an accused infringer may not be contactable outside the metaverse because the correlation between a virtual party/participant in the metaverse and a real-world party/individual may be unclear. At least one court has considered this issue of service regarding counterfeiting of a trademark used in the alleged unauthorized sale of NFTs. In *Playboy Enterprises Int'l, Inc. v. www.playboyrabbitars.app*, the court found that "alternative service" was appropriate. "Given the online nature of Defendants' conduct, email service is most likely to give Defendants' notice of the filings pertaining to this lawsuit." (*Playboy Enters.*, 21 Civ. 08932 (VM) at 5 (S.D.N.Y. Nov. 13, 2021)). Conceivably, email service or another electronic service method may be the only

> **"Brand owners seeking trademark registration for trademarks in the metaverse are beginning to face issues with proving use."**

Résumés

Michelle Ciotola, Partner & Chair, Trademarks & Copyright Practice, Cantor Colburn

Michelle Ciotola counsels clients on protecting and enforcing their trademark, trade dress, copyright, and related IP rights, including unfair competition, Internet, advertising, and promotions law. She counsels clients in developing and exploiting their trademark and copyright portfolios, including clearance; prosecution; and identifying important overseas jurisdiction and filing or coordinating with local counsel overseas. Michelle develops strategies for the enforcement of her clients' IP rights. She also develops strategies for enforcement of her clients' intellectual property rights online, including handling Uniform Domain Name Dispute Resolution Policy proceedings. Michelle attends and speaks at International Trademark Association (INTA), MARQUES, European Communities Trade Mark Association (ECTA) and the Asociancion InterAmericana de la Propriedad Intelectual (ASIPI). She is an Adjunct Professor reaching copyright Law at Western New England University School of Law.
Michelle's Email: mciotola@cantorcolburn.com

David Kincaid, Partner & Co-Chair, Artificial Intelligence Practice, Cantor Colburn

David Kincaid concentrates on assisting clients in solving IP problems and protecting their investments in product development and has significant experience protecting inventions related to or incorporating artificial intelligence (AI), augmented reality (AR), virtual reality (VR), cloud computing, and other emerging technologies. David has prepared and prosecuted patent applications about: artificial neural network architectures and algorithms for image processing, natural language processing, and the like across various industries; reinforcement learning for autonomous driving; AR for 3D data visualization; VR user feedback systems; and cloud architecture and infrastructure management systems. David is a thought leader in the AI technology space being active in the Intellectual Property Owners Association committees on Software Related Inventions and AI & New *Emerging Technologies.*
David's Email: dkincaid@cantorcolburn.com

An accused infringer may not be contactable outside the metaverse because the correlation between a virtual party/ participant in the metaverse and a real-world party/ individual may be unclear.

practical means for serving an opposing party when enforcing metaverse-related IP rights.

When a rights holder is investing in enforcing their metaverse-related IP rights, the rights-holder should be aware of and consider these issues early in the process of preparing and filing a lawsuit because these issues may be ripe for challenge by a defendant. Similarly, accused infringers should be ready to challenge these issues where appropriate.

In some cases, conventional judicial approaches to enforcing metaverse-related IP rights may not be practical. A seemingly viable alternative for infringement occuring in the metaverse is utilizing the hosting platform's takedown procedures where available and feasible.

For instances of copyright infringement in the metaverse, the Digital Millennium Copyright Act (DMCA) offers a cost-effective and expeditious first step to removal of the materials. The DMCA provides a safe harbor for online platforms to remove infringing content. Where a copyright owner believes their copyright has been infringed, they can submit an online form and the material is generally taken down quickly (sometimes automated takedown software performs takedowns proactively).

The DMCA does not apply to trademark infringement, resulting in often less robust procedures that vary from platform to platform. While there may be a similar process for submitting a complaint form with the platform, the result and timing can vary. Policies for takedowns are constantly evolving and vary greatly by platform – making the decision whether to pursue an often more cost-effective takedown request versus seeking a more formal judicial remedy dependent on the platform and policies in place at the time of the request.

For example, in the virtual world *The Sandbox* ("TSB"), a decentralized gaming platform allows users to build, own, and monetize assets and gaming experiences using the Ethereum blockchain. According to the Terms of Use, "TSB does not permit the infringement of intellectual property rights on the Services, and will remove Assets and/or Games from the Services if property notified that such Assets and/or Games infringe on another's intellectual property rights." The actual takedown procedure however provides the following:

Our advice is to issue a DMCA notice to the individual politely requesting the removal of the alleged infringing content.

Another platform, *Decentraland*, a 3D world virtual browser-based platform, provides a "Notice and Procedure for Making Claims of Copyright Infringement" similar to the DMCA. It requires the following information be provided:

- an electronic or physical signature of the person authorized to act on behalf of the owner of the Intellectual Property Right;
- A description of the Intellectual Property Right that you claim has been infringed;
- A description of where the material that you claim is infringing is located on the Tools;
- Your address, telephone number, and email address;
- A statement by you that you have a good faith belief that the disputed use is not authorized by the owner of the Intellectual Property Right, its agent, or the law;
- A statement by you, made under penalty of perjury, that the above information in your Notice is accurate and that you are Intellectual Property owner or authorized to act on the owner's behalf.

But includes the caveat "to the extent possible, the [Decentraland] Foundation may try to reach the would-be infringing party to forward your concerns. The Foundation is not in a position to assess the legal merits of the claims."

The metaverse continues to develop and expand, we will face new challenges in protecting and enforcing intellectual property. As the legal ramifications and challenges of enforcement in the virtual world are still developing, best practices will continue to evolve.

Contact

Cantor Colburn LLP
20 Church Street, 22nd Floor, Hartford, CT 06103-3207 US
Tel: +1 860-286-2929
www.cantorcolburn.com

Kylie Palmer contributed to the research for this article

Trademark issues in the Metaverse: a view from the US

Charles R. Macedo, Max Vern, and David P. Goldberg of Amster, Rothstein & Ebenstein LLP examine recent cases of conflict between platform owners over trademark infringement and conflicts involving NFTs to provide a US perspective on handling trademarks in the metaverse.

I. Introduction

In the 1990s, personal computers became more affordable and powerful, and with the ascent of the internet, computer games migrated online. 10 years later, online games inspired the creation of online multimedia platforms that did not involve knights battling dragons, but ordinary people living their lives, such as Sims or Second Life. This was the dawn of the metaverses.

There are competing visions of how they will develop, with Meta and Microsoft creating proprietary platforms while Sandbox and Decentraland develop open-ended user-governed platforms. But all these metaverses amount to programming code sitting on a server, governed by contracts in the form of Terms of Use and by intellectual property ("IP") law.

These metaverses have bright futures, and this article provides a brief but instructive overview of representative trademark cases tackling issues that US-based IP owners and users have faced in navigating these metaverses. The questions raised and solutions suggested should be broadly applicable.

Charles R. Macedo

Max Vern

David P. Goldberg

II. Trademark conflicts between platform owners and users – *Minsky v. Linden Research*

Second Life ("SL") is an online platform, launched in 2003 and owned by Linden Research, Inc. ("Linden"), that allows users to create avatars and interact with each other in a virtual world. Among other things, SL users can create and sell virtual property and services.

Of course, everything on such multimedia platforms exists only virtually, as lines of programming code. When such platforms are structured like computer games, with user actions limited by game rules, then IP rights are limited to the owner. However, on platforms like SL, where users can create or import objects into the platform, questions about the ownership of virtual IP arise. Platform owners address these issues in their Terms of Use, but not all disputes can be anticipated.

The SL platform gave us a taste of the disputes that may arise in such metaverses in *Minsky v. Linden Research, Inc.*, No. 08-cv-0819 (N.D.N.Y. Aug. 14, 2008).

In his Complaint, Richard Minsky asserted that SL developed its community by enticing users to join SL and start businesses to make money. Once someone downloads the software and opens an account, they become a "resident" of SL. Residents can buy and sell Linden Dollars and exchange them for real-world currencies. Linden operates a currency exchange for this purpose and the SL website purportedly encourages such activity.

This aspect of SL appealed to Minsky, who developed his business by opening an art gallery in SL and developing the brand SLART for his SL and real-world activities. Although SLART clearly means "Second Life Art," Minsky claimed that he arbitrarily coined the mark. Minsky's ventures under the mark included running the SLART Gallery, registering the domain slartmagazine.com, and publishing reviews using the SLART mark. Minsky even registered his mark with the US Patent & Trademark Office ("USPTO").

Minsky's dispute with Linden arose when another SL resident started using SLART. Although the resident eventually removed the offending work, this incident opened Pandora's box. In communications with Minsky, Linden asserted that he did not have the right to register marks containing SL as an acronym for SECOND LIFE. In response, Minsky sued Linden for infringement, dilution, and contributory infringement of the SLART mark, and asked the court for a Temporary Restraining Order, which was granted. After additional motion practice, the case settled.

Although it would have been instructive to have received a definitive judgment on the issues raised, since *Minsky*, platform owners have tightened their Terms of Use to prevent users from acquiring rights in trademarks including their platform's name.

Among the other lessons learned from *Minsky* were that traditional IP notions cannot be simply applied, but need to be adapted when considering metaverses like SL.

Today, issues like what constitutes "use in commerce" for trademark purposes within the metaverse and do the Communications Decency Act ("CDA") and Digital Millennium Copyright Act ("DMCA") apply to metaverses, are even more complex, since users may operate in more than one clearly delimited platform operated by a single governing entity like Linden.

In this environment, the Terms of Use are crucial and platform owners must carefully specify rules to govern and avoid legal disputes with users.

III. Trademark conflicts involving NFTs and digital images – *Yuga Labs, Inc. v. Ripps*

Recently, US courts' attention has turned towards Non-Fungible Tokens ("NFTs"), the building blocks of the next generation of metaverses. Basically, an NFT includes an entry on a blockchain representing the ownership of rights in an associated physical or digital item, like a digital art file. One example is the Bored Ape Yacht Club NFTs, which provide unique digital images of comically bored apes that have become a status symbol and been purchased by celebrities, including Eminem and Madonna. Because NFTs link digital files to secure records of authenticity and ownership, they have become essential commercial tools to sell digital files in our developing multiverses.

Unsurprisingly, the emergence of NFTs has prompted trademark infringement lawsuits. One recent suit involving digital images was filed by Yuga Labs, Inc. ("Yuga"), the developer of the Bored Ape Yacht Club NFTs. *Yuga Labs, Inc. v. Ripps*, No. 22-04355 (C.D. Cal. June 24, 2022).

Yuga has pending US Trademark Applications for BORED APE YACHT CLUB and BAYC covering goods and services related to its NFTs and has common law rights in those marks.

According to Yuga, defendant Ryder Ripps created and sold images that are the same as those associated with the Bored Ape Yacht Club NFTs, with the exception that each image was entitled RR/BAYC instead of "BAYC" or "Bored Ape Yacht Club." These actions, they allege, amount to classic trademark infringement, since Ripps sold the same or related products, in the same place, under the same marks.

> **On platforms like SL, where users can create or import objects into the platform, questions about the ownership of virtual IP arise.**

This case is still in its early stages. Because an Answer has not yet been filed, we do not know what defenses Ripps will raise. However, if Yuga's allegations are true, it seems that Yuga has a strong case of trademark infringement based on a relatively straightforward application of traditional trademark law principles.

Not all recent cases in the pipeline are so clear-cut.

IV. Trademark conflicts involving NFTs and physical goods – *Hermès International v. Rothschild*

Another instructive lawsuit, which involves NFTs and physical goods, is *Hermès International v. Rothschild*, No. 22-CV-00384 (SDNY Mar. 2, 2022). The suit alleges trademark infringement, dilution, and cybersquatting by an artist self-named Mason Rothschild, who makes and sells Metabirkins NFTs.

Graphic 1

Graphic 1 (above) left shows an example of a real world Hermès BIRKIN handbag from a US Trade Dress Registration protecting its unique appearance. Graphic 1 right shows an example of a NFT minted by Rothschild, called the Baby Birkin NFT. The Baby Birkin was a single NFT featuring the image of a 40-week-old fetus inside a transparent BIRKIN bag. The one-off

Résumés

Charles R. Macedo and **Max Vern** are partners, and **David P. Goldberg** is an associate, at Amster, Rothstein & Ebenstein LLP. Their practices focus on intellectual property law, and they are excited to help clients obtain, defend, and enforce trademark and other rights for NFT and Metaverse-related projects.

Baby Birkin NFT was auctioned on May 2021 for $23,500. It was then resold for $47,000.

Other examples of the Metabirkins NFTs feature Hermès' BIRKIN handbag covered in fur, as seen in Graphic 2 (below):

Graphic 2

Rothschild moved to dismiss Hermès' Complaint under the theory that his NFTs are "artwork" protected by the First Amendment to the US Constitution under *Rogers v. Grimaldi*. *Rogers* holds that, when allegedly infringing trademarks are used in an artistic context, courts should balance the "public interest in avoiding consumer confusion" against the "public interest in free expression" to avoid intruding on First Amendment values. Explaining further, Rothschild argued that Hermès wanted to stop him from creating fanciful pictures that comment on its handbags, calling those artworks "MetaBirkins," and promoting those artworks, but that trademark law should not give Hermès control over Rothschild's art in the face of First Amendment guarantees regarding the right to respond to corporate messaging in the marketplace of ideas.

Whether Rothschild would have prevailed is unclear. The court denied Rothschild's Motion to Dismiss, since the Amended Complaint included "sufficient allegations of explicit misleadingness … as a function of likelihood of confusion," but also ruled that the *Rogers* test would apply. The parties then settled this matter, so the court never ruled on the substantive issues raised.

Hermès' hurdles in protecting its real-world product in the metaverse shows that obtaining trademark protection for virtual goods and services beforehand will be important not just to protect those virtual goods and services, but also to enforce corresponding rights in real-world goods and services.

The case also raises the question of whether virtual platforms and marketplaces that sell Metabirkins, such as the NFT market OpenSea, will develop private trademark dispute resolution mechanisms, like those devised for Amazon retailer disputes.

V. Trademark-Related contract disputes involving NFTs – *Miramax v. Tarantino*

Another recent litigation involving NFTs involves the type of trademark-related contract disputes we are likely to see in the metaverses. In *Miramax LLC v. Tarantino*, No. 21-08979 (C.D. Cal. Nov. 16, 2021), the dispute centered on whether Miramax or director Quentin Tarantino had the right to mint NFTs for "Pulp Fiction."

Miramax's Complaint quoted Tarantino's website, explaining: "The collection holds secrets from Pulp Fiction …. Each NFT contains one or more previously unknown secrets of a specific iconic scene from Pulp Fiction. The privileged person who will purchase one of these few and rare NFTs will get a hold of those secrets and a glimpse into the mind and the creative process of Quentin Tarantino." Miramax claimed that Tarantino's NFTs sought to capitalize on Miramax's rights in Pulp Fiction, caused confusion, mistake, and deception as to the source of the NFTs, and deceived the public into believing that the NFTs originated from or were authorized by Miramax.

Miramax, LLC v. Quentin Tarantino, Civ. A. No. 2:21-cv-08979-FMO-JC, ECF 1, Complaint, page 11 (C.D. Calif. Nov. 16, 2021)

Graphic 3

Miramax, LLC v. Quentin Tarantino, Civ. A. No. 2:21-cv-08979-FMO-JC, ECF 1, Complaint, page 12 (C.D. Calif. Nov. 16, 2021)

Graphic 4

Although framed in the context of IP rights, this dispute was really a contract dispute as to whether the right to mint NFTs fell under the "Original Rights Agreement" granted to Miramax or remained under the "Reserved Rights" retained by Tarantino. Tarantino alleged that he provided Miramax only with limited rights, reserved all publishing rights in his screenplay, published the screenplay for years without complaint, and had the right to publish digital copies of his screenplay through the sale of NFTs.

Tarantino submitted a Motion for Judgment on the Pleadings. However, the case settled before the Motion was decided.

While a court decision on the substantive issues would have been enlightening, one lesson to be learned is to be careful how contract law is used as a gap filler or loophole to IP rights granted in contracts. As metaverses develop and artists exploit their prior creations in these virtual worlds, careful review of contract rights will be necessary, and new negotiations may be required, to clearly define who owns IP rights in the metaverses.

VI. Conclusions

Although metaverses are arguably 20 years old, legally speaking, we are still at the dawn of metaverse trademark law. While some cases seem to involve a straightforward application of traditional trademark law principles, such as *Yuga Labs*, others raise novel issues that courts have not yet addressed, such as *Hermès*, largely because those cases were quickly settled by the parties.

There are signs in the US that the legislature may step in. In June 2022, the US Congress asked the USPTO to launch a joint study with the US Copyright Office into IP issues raised by NFTs and the metaverse, including acceptable classification and use requirements for NFT and metaverse trademarks, whether the DMCA shields platform providers from liability with respect to uncurated metaverse content, etc.

That said, we expect the bulk of these issues will eventually be resolved in the courts, where actual trademark controversies will be fought out, and that it will still take some time before we have relative clarity on the challenge of how to apply traditional trademark law principles to these new metaverses.

Contact

Amster, Rothstein & Ebenstein LLP
90 Park Avenue, New York,
New York 10016 US
Tel: +1 212 336 8000
Charles R. Macedo, Esq.:
cmacedo@arelaw.com
Max Vern, Esq.:
mvern@arelaw.com
David P. Goldberg, Esq.:
dgoldberg@arelaw.com
https://www.arelaw.com/

IP Risks in the new Digital World

Ling Jin of Lusheng Law Firm and Holly White of Rouse outline the key considerations for IP owners to reduce risk when exploiting new digital technologies based on recent trends.

During the pandemic, investments in digital assets and experiences to build brands, expand customer bases, and facilitate new ways of working have skyrocketed, with digital assets such as non-fungible tokens (NFTs), virtual idols, avatars and virtual goods gaining significant popularity. The luxury, gaming, and sports sectors, in particular, have been making substantial developments in this space, and they are also starting to catch other sectors' attention. So far, we've seen pop-up stores being launched in the metaverse and unique NFTs being created for gaming experiences, such as The Sandbox, Roblox and CryptoKitties.

However, with brands racing to get involved with these technologies, it can be easy to forget the potential risks attached to these investments, especially around IP. To mitigate the risks, IP professionals and legal counsels play an important role in helping to protect brands' reputations whilst enabling the successful use of these brands and technologies. IP professionals should be engaged early in the process to effectively inform the strategy, and help brands adapt their products to work in different countries and regulatory environments - some of which require strict compliance.

How digital assets are influencing market trends

Over the past couple of decades, brands have been focused on boosting their social media presence and e-commerce options. Now, with blockchain technology providing new opportunities for businesses to engage with customers, there is huge new potential to reap new revenue. Brands need to focus on integrating digital and physical marketing to build their customer base.

For many brands, NFTs have become the answer. NFTs are digital representations of assets and

Ling Jin

Holly White

However, with brands racing to get involved with these technologies, it can be easy to forget the potential risks attached to these investments, especially around IP.

Résumés

Ling Jin is Head of Digital and Commercial at Lusheng Law Firm, and **Holly White** is Head of Service Development at Rouse, navigating legal complexities in the digital world.

include online-only assets like digital artwork as well as digitized versions of physical assets such as real estate. They also extend to in-game features like avatars, digital and non-digital collectables, and domain names. The gaming sector has been the first to fully embrace NFT technology; a recent study by Stratis found that 72% of game developers are exploring NFTs and blockchain in new games.

The music industry is now also starting to invest more in NFTs, using them for large-scale events such as Coachella, one of the world's most popular and profitable music festivals. The organizers launched three NFT collections at the last festival in 2021, including a range of digital photos, soundscapes, and posters that could be redeemed for real-world experiences. The band Muse recently reached number one in the UK charts with an album that was sold as an NFT, in addition to traditional formats. The NFT album gave owners access to a downloadable version, alternative artwork and signatures of the band members.

Outside of this, many companies are now looking into how digital experiences can enhance other aspects of our lives. Microsoft recently launched Microsoft Mesh, which allows employees in different physical locations to collaborate and carry out projects with mixed-reality and holographic features. Alongside this, a recent McKinsey report found that individuals are also looking to transition some everyday activities like shopping to the metaverse.

Technologies such as NFTs and the metaverse are here to stay and likely to evolve, so it is critical for businesses to understand and address the IP risks at stake and put in place measures to test appropriate IP strategies, learn from them and adapt.

Key IP considerations to remember

Ownership and the extent of IP protection

The IP rights and protection available to brands are dictated by the digital assets in which they have invested. With a wide variety of digital assets to choose from in this current climate, this ultimately means that legal professionals must be ready to adapt their approach depending on each asset.

Let's consider NFTs – they can exist in many forms, as we discussed above, from digital artwork to cryptocurrency, and the underlying asset influences how they interact with IP.

NFTs in the music and entertainment industry can provide a good level of protection for artists and record labels because the music is stored and hosted on databases, making it easier for ownership to be established and verified. However, digital work does not offer the same protection because these types of creations can be easily replicated. Yet this is not factored into the terms and conditions of smart contracts or the platforms facilitating the sale of NFTs.

Similar protection limitations arise regarding digital avatars. Music artists naturally want to control the commercialization of their identity, a concept known as personality rights. But entertainment companies use digital characters to offer their consumers virtual versions of their favorite artists when delivering virtual concerts, meet and greets and other events – and this can pose a problem for the artists if they no longer have control. Typically, when an artist enters a contract with an entertainment company, and digital avatars are at play, personality rights and copyright are balanced to adequately benefit both parties. But when the contract is terminated or ended early, the question of ownership arises – to mitigate tensions between personality rights and copyright, this must be considered and accounted for when contracts are developed at the beginning of a project.

Similar considerations and questions are needed when it comes to investing in the metaverse. Like blockchains, many virtual worlds are decentralized and owned by decentralized autonomous organisations (DAO). As a result, smart contracts are available for anyone to view, so there's less protection here for transaction-related trade secrets.

In light of this, when choosing to create a virtual world and determining the digital assets that will be included in it, it is important for legal professionals to support digital and marketing teams in prioritizing the digital assets that provide the most protection.

The rise in counterfeits

As investments in virtual advertising and experiences continue to increase, counterfeits of branded products are also expected to rise. In April 2022, a leading NFT marketplace, OpenSea, confirmed that at least 80% of NFTs it hosts were plagiarized, fake collections or spam. Since then, the company has adopted a 'blue tick' system (similar to that on Twitter) to verify legitimate NFTs.

We're already seeing notable brands such as Hermes and Nike take action to bring down counterfeiting efforts. And, in view of the potential scale of counterfeits, it is critical for brands to quickly and effectively locate the sources of fraudulent items.

However, despite the urgency around this matter, in certain regions, monitoring and regulation around counterfeits remain quite limited. In particular, in Southeast Asia, identity verification is not required on social e-commerce platforms, which enables counterfeiters to easily hide behind fake or anonymous accounts. Given this, brands looking to launch digital marketing campaigns in this region will be hoping for a higher level of obligations and consequences for NFT trading platforms to ensure the validity of digital assets on their platforms. There seem to be some positive developments happening in the region, with the first publicized NFT infringement case in China recently issued, in which the Hangzhou Internet Court held a Chinese NFT-trading platform responsible for copyright infringement. While the case is still in the second instance, we do not expect the decision to be overturned.

Navigating complex regulatory environments

In today's climate, more and more governments are taking strong action against non-compliance. Brands must be ready to understand the unique implementations required to launch digital campaigns and experiences across complex regulatory environments, such as China.

In 2021, the Chinese government enacted the Personal Information Protection Law (China's equivalent of GDPR) to enable greater scrutiny of consumer data collection and use. The consequences of data misuse under this law include high fines and loss of business licenses.

The companies most affected by this are those B2C businesses that rely on e-commerce and data analytics, as well as tech giants, who offer services to Chinese consumers through partners. However, other businesses investing in the metaverse will also have to consider their data habits in this region. Huge volumes of data are connected to various NFT forms, including digital fashion and art items, as well as the underlying smart contracts which enable trading. The blockchain technology behind NFTs is immutable, which means a significant challenge for brands is in managing, storing and hosting data. The servers that this data is hosted on falls under cross border data transfers which opens up further regulatory complexity.

Alongside this, any brand looking to operate in this region will need to be aware of the specific rules on NFTs. NFTs are currently allowed in China, but this only extends to digital collectables, digital artwork or virtual digital goods, not payment transactions. There are also policies on secondary trading and strict T&Cs with certain tech platforms, which considerably influence NFT activity and investment. NFTs can also only be bought in Renminbi, for instance, and cryptocurrency payment is not allowed in China.

To navigate such complex regulatory environments, brands must be prepared to understand what adjustments are needed to successfully launch digital campaigns.

Taking control

The use of digital assets and experiences will only continue to evolve, complicating IP protection and rights as we know them. Given the complexities at hand, the wish of some brands to wait to see how digital develops and whether IP enforcement in the digital world will replicate real-world enforcement is understandable. But businesses must remember that early movers can attract attention from consumers and build brand value using digital assets.

Testing out different strategies for key regions is critical to see what works and to build knowledge and learnings. Additionally, it is important for brands to strengthen their rights by filing additional IP registrations to add a layer of protection for virtual assets. Not doing so potentially exposes brands to other parties capitalising on their IP to create digital goods. However, above all else, legal professionals and those leading the innovation must work more closely together to understand and mitigate the risks at stake.

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Contact

Lusheng Law Firm
Room 2706, Park Place
1601 Nanjing Road (West)
Shanghai. China, 200040
Tel: +86 21 2356 4950
LSShanghai@lushenglawyers.com
www.lushenglawyers.com

Rouse
4th Floor City Tower
40 Basinghall Street
London, EC2V 5DE, UK
Tel: +44 20 7536 4100
london@rouse.com
www.rouse.com

A virtual certainty: the metaverse will give rise to plenty of trademark disputes

Jennifer Mauri, Senior Associate at Michelman & Robinson, advises on the differences between trademark protection of real-world goods and solely virtual goods in the metaverse.

The metaverse has made its way into the vernacular. These days, the evolution of the internet to Web 3.0 is the subject of frequent commentary, advertisement and, for many businesses and brands, strategic planning. But what exactly is the metaverse and how will it impact commerce? The answers to these questions beg yet another query of particular importance: how will trademarks be protected in this parallel world?

The metaverse in a nutshell

Broadly speaking, the metaverse is a digital space that people can access to engage in virtual activities like shopping, playing games, attending classes, and doing any number of simulated versions of real-world activities.

Consider this: nearly every major retailer currently has an online presence to sell goods. These are shown via flat 2D photos with accompanying descriptions that consumers scroll through, much like print catalogs of the pre-internet age. The metaverse future will offer a different shopping experience altogether. There, these same retailers may have virtual storefronts where customers can interact with

Résumé

Jennifer A. Mauri is an intellectual property litigator and senior associate at Michelman & Robinson, LLP, a national law firm with offices in Los Angeles, Orange County (California), San Francisco, Dallas, Houston Chicago, and New York City. She can be contacted at jmauri@mrllp.com or by phone at +1 (714) 557-7990.

Jennifer Mauri

products; for instance, in virtual dressing rooms where clothing can be tried on or studios where make-up can be applied using a customer's avatar. In the market for home furnishings? In the metaverse, a new piece of furniture may be visualized in a virtual version of a consumer's own living room. Beyond retail, many businesses engaged in providing services currently offer online "chat" features on their websites to facilitate communications with customers. In the metaverse, these chats will be next-level. By way of illustration, an insurance agent may have a virtual desk that customers' avatars can visit to ask questions, get quotes, and even purchase coverage.

To be clear, the metaverse will not simply be a 3D version of the current internet. Web 3.0 will also feature a wholly virtual world where goods and services never even exist in the real world. Metaverse avatars may have their own wardrobes, their own cars, and their own virtual homes—each existing solely in the ether.

Without question, all of these applications will create countless possibilities and opportunities. At the same time, they are sure to raise serious questions about trademark protection.

Why trademarks matter in the metaverse

While entirely virtual, the metaverse will still be a space where consumers are exposed to goods and services offered in connection with brand names – real-world goods and services subject to trademarks.

As a matter of law, a trademark owner has the right to prevent others from using a confusingly similar trademark (1) in connection with the sale, offering for sale, distribution, or advertising of goods or services and (2) in a way that will likely cause confusion, mistake, or will deceive. By way of background, a trademark can be any word, phrase, symbol, design, or a combination of these things that identifies the source of goods or services. In essence, a trademark is how customers recognize a brand in the marketplace and distinguish that brand's goods or services from its competitors.

Trademark protection is critical because consumers often purchase goods and services

> **The metaverse will not simply be a 3D version of the current internet. Web 3.0 will also feature a wholly virtual world where goods and services never even exist in the real world.**

based on their source (read: the brand). Those who buy Nike shoes have an expectation as to the quality of the footwear because they came from Nike. And if those consumers have good experiences with Nike, they are likely to come back to the brand again in the future. But when consumers walk into stores and unknowingly buy knock-off Nikes, which may well lead to negative ownership experiences, these buyers could turn their backs on the brand, deciding that Nike products are low quality. To make matters worse, these unhappy shoppers may relay poor reviews to others, serving to further tarnish Nike's reputation. All because the brand's trademark was infringed upon.

Moving consumer interactions into a virtual space like the metaverse does not change the equation when it comes to the significance of trademark protection. Indeed, there are a number of ways through which consumers may be exposed to trademarks (and the brands associated with them) in the metaverse. These include:

- Virtual representations of physical retail goods
- Virtual storefronts for retail goods
- Virtual spaces for service providers (like the aforementioned insurance agent)
- Virtual classrooms or conference spaces
- Virtual gyms
- Virtual event spaces for games, concerts, and festivals
- Virtual advertising
- Wholly virtual goods being displayed by other avatars

Bottom line: just as trademarks are used in the real world, a virtual use likely exists, which is why trademark protection in the metaverse is crucial.

The threshold legal question

A basic tenant of trademark law is that a trademark's protection extends not only to the specific types of goods and services that the mark is associated with in the minds of consumers, but also to goods and services within their zone of expansion. For example, consumers associate the Apple trademark with computers, not hair salons. Accordingly, Apple's trademark rights cover computers as well as items that are natural extensions, such as related devices, computer accessories and the like. That being said, Apple's trademark would not extend to prohibit an Apple Hair Studio.

Turning to the metaverse, the key question this limitation raises is if goods and services in the virtual world are within the scope of the goods and services – or the natural zone of expansion – for which any given trademark is registered. The answer depends on whether a trademark is being used to sell, offer to sell, distribute or advertise real-world or purely virtual goods or services.

Real-world goods and services

To be clear, the scope of a trademark's protection is not limited by whether its use is in the real or online world. In fact, courts have long enforced trademark rights against online sellers of unauthorized products. By extension, a trademark – say, one registered to Starbucks – gives that company the right to prevent others from opening Starbucks stores that sells packaged coffee, be it in brick-and-mortar stores or online webpages. A shift to the metaverse is unlikely to change this legal reality. The takeaway: trademark owners can expect to have their current trademark protection extend into Web 3.0, so long as the use there is in connection with real-world goods or services associated with the trademark.

Purely virtual goods

By contrast, trademark law as it relates to purely virtual goods and services is unsettled. Questions abound: does a trademark for "apparel" include a virtual t-shirt that an avatar can purchase in the metaverse? What about a virtual purse?

In January 2021, the latter query found its way into the courtroom thanks to a lawsuit filed by Hermes against Mason Rothschild, an artist who created virtual art versions of Hermes' famous Birkin bag and then sold those images online under the name "MetaBirkin" for a sum of over $1 million. Hermes filed suit against Rothschild for trademark infringement, misappropriation of its BIRKIN trademark, cybersquatting, false designation of origin and description, and injury to business reputation.

Rothschild sought to dismiss the lawsuit based on an argument that the "MetaBirkins" were an artistic expression and that the use of the Birkin name and likeness did not indicate a source – as required for trademarks – but instead was used as an artistic title. His efforts were unsuccessful as the motion to dismiss was denied, meaning the case will proceed and only time will tell how the law in this area shake out. Of note, when deciding not to dismiss the litigation, the court acknowledged that there may be a difference between a static image (such as the "MetaBirkin" artwork) and a virtual purse that an avatar might wear in the metaverse.

> **Trademark owners can expect to have their current trademark protection extend into Web 3.0, so long as the use there is in connection with real-world goods or services associated with the trademark.**

An interim step

Because the scope of trademark protection in the metaverse remains unresolved, the best practice for brands would be to file trademark applications for virtual goods and services likely to be used in the virtual world. This is the case even if that use has yet to start—trademark applications can be filed on an "intent-to-use" basis. This allows applicants to get approval of their proposed trademarks, but then delay their actual use for up to 36 months. Dozens of brands across categories have already done so, including American Express, Anthropologie, the Brooklyn Nets, Colgate, DKNY, Encyclopaedia Britannica, Hasbro, IMAX Corporation, Kanye West, Live Nation, Nike, Pottery Barn, SELF Magazine, The Museum of the City of New York, the Utah Jazz, Warner Bros Entertainment and Zyrtec, the allergy-relief medication. These and so many others are seeking trademark protection in relation to downloadable virtual goods; retail stores featuring virtual goods; online entertainment services; online, non-downloadable virtual goods; and NFTs.

Conclusion

For some, the metaverse seems like science fiction – at least at the moment – but the same was true of the internet 30 years ago. In years to come, the metaverse may well surpass the internet as the principal way in which we interact online? As the future of Web 3.0 pans out, businesses and brands would be wise to prepare for a virtual world where trademark considerations must extend beyond the physical one.

Contact

Michelman & Robinson
Tel: +1 310-299-5500
info@mrllp.com
https://www.mrllp.com/

Calling for answers: brand protection in the metaverse

Juan Berton Moreno and Mariam Omran of Berton Moreno IP Law assess the need, for regulations regarding the protection of trademarks in the metaverse by raising unanswered questions.

The fast paced technological development that has taken place during the last few decades brought as many solutions and advantages as questions in the social, commercial, and economic realms. The legal field was not an exception, particularly regarding intellectual property.

This article will focus on brand protection in the metaverse.

Our aim is to assess the need, if any, for regulations regarding the protection of trademarks in the metaverse or of modifications to the current regulations. We will also identify certain classes that would fit goods and/or services in the metaverse, though subject to approval of the relevant trademark offices. In this regard, it will also be necessary to analyze possible modifications to the Nice Classification System.

On the other hand, even if registration issues could be solved, trademark protection would not be easy to carry out in the virtual realm. A special section of this article will be devoted to addressing these problems, as well as assessing possible solutions.

Notwithstanding the challenges that the metaverse poses to intellectual property law and practice, we believe it is worth thinking about solutions to overcome them, for the sake of enriching our professional exercise and assisting our clients' needs.

What is the Metaverse?

Before expanding on the abovementioned topics, it will be necessary to understand what the metaverse is.

The term "metaverse" was first coined in 1992 by the American writer Neal Stephenson in his science fiction novel "Snow Crash", to refer to a virtual world where the main character lived as a samurai. The term "avatar" also appeared in Stephenson's novel.

Today, thirty years after the appearance of the name "metaverse", a stipulated or widely accepted definition for such a term still does not exist. However, it could be correctly defined as "the three-dimensional version of the internet"[1]. Specifically, one of the definitions Collins Dictionary provides for "metaverse" is *"a proposed version of the internet that incorporates three-dimensional virtual environments"*[2]. It is a whole virtual world where people can interact with each other through avatars. Those may be interactions of any kind, such as economic, social, or for entertainment and business purposes. Video-games may constitute a clear example of interaction in the metaverse. However, the latest technological developments, which include blockchain and artificial intelligence, have made the metaverse a much more complex world.

In this context, the importance of trademark management and protection becomes clear.

Use of trademarks in the metaverse and the challenge of protection

In order to address the challenges that trademark holders may face to protect their rights in the metaverse, it will be useful to distinguish between centralized and decentralized metaverses and their implications for brand protection.

A centralized metaverse is one controlled by a single authority, which may be a corporation. The clearest example would be the metaverse controlled by "Meta", formerly called "Facebook". Brand protection in this scenario is quite simple, as there is a policy that stipulates the procedure in case of a trademark infringement in the relevant metaverse. Such policy is, of course, set by the corporation regulating the centralized metaverse.

Juan Berton Moreno

Mariam Omran

Résumés

Juan Berton Moreno is an IP lawyer who graduated from Universidad Católica Argentina (UCA), Master's degree in Modern Business Contracts, partner at Berton Moreno IP Law.

Mariam Omran is an IP lawyer who graduated from Universidad Torcuato Di Tella, Master's degree in Intellectual Property Law, an associate at Berton Moreno IP Law.

1 Chiever Brand Protection, "Metaverse. What should do trademark holders do?", available on https://chiever.nl/en/blog-en/metaverse-what-should-trademark-holders-do?utm_source=NEWSFLASH%2FMAGAZINE+EN&utm_campaign=adc29571d4-NF-EN-MAR22-Metaverse-LouisVuitton-Eppla&utm_medium=email&utm_term=0_5e9e2e5cf9-adc29571d4-1238723555, consulted on September 16, 2022.

2 Collins Dictionary, available on https://www.collinsdictionary.com/dictionary/english/metaverse, consulted on September 16, 2022.

On the other hand, a decentralized metaverse is controlled and governed exclusively by its users, instead of being regulated by a single, centralized authority. In a decentralized system, decisions rely entirely upon users. In this scenario, trademark protection and the possibility of taking action against infringement certainly pose a challenge for trademark owners.

One of the main obstacles that arise when analyzing the existence of trademark infringement is the restriction of the territoriality principle, according to which trademarks are granted protection only within the territory where they have been registered. Therefore, in theory, a trademark owner would not be able to object the use of its mark other than in its country of origin. Of course, the notion of territoriality fades when the use of a trademark is carried out in the metaverse, at least in countries where the law states that ownership of a trademark is acquired through registration, such as Argentina. Consequently, the courts will need to take this into account when deciding on trademark infringement in the metaverse.

Notwithstanding the above, the damaged party will probably need to prove that the trademark infringement has consequences in the country (or countries) where the mark has been registered in order to initiate a legitimate claim. This means, the right holder must prove a legitimate interest to act against a potential infringement. The burden of proof will certainly be more flexible for well-known marks, as they will face a risk of dilution regardless of the territory where they are being illegitimately used.

> **Nike filed a lawsuit against the e-commerce platform Stockx before a United States District Court of New York, alleging trademark infringement and reputational damage.**

The specialty principle may represent another difficulty when trying to defend a trademark against infringement in the metaverse, as we will be confronting virtual goods or services against real-life goods and services, which, technically, are not the same. As a quick response to a trademark infringement claim in the metaverse, it could be argued that the attacked goods or services are different from the ones covered by the registration on which the claim was grounded, thus, the claim should be dismissed.

However, such defense could be overcome by arguing that the conflicting marks are identical (if that was the case) and, particularly, that the goods and/or services involved are closely related. Therefore, the specialty principle should yield.

One of the most iconic and best-known conflicts involving trademarks in the metaverse is *Nike vs. StockX LLC*. In February 2022, Nike filed a lawsuit against the e-commerce platform Stockx before a United States District Court of New York, alleging trademark infringement and reputational damage. Specifically, Nike alleged that Stockx was minting and selling non-fungible tokens (NFTs) of its sneakers by using its trademark without authorization. Nike also alleged that the defendant was "misleading consumers as to heavily inflated prices of unsuspecting consumers"[3]. On the other hand, Stockx argued that its Vault NFTs were not virtual products and were not valuable for themselves, but images tied to the original product, which had been duly authenticated. Therefore, according to Stockx's defense, the "first sale doctrine" (the equivalent of the exhaustion doctrine under UK law) should be applied[4]. Furthermore, Nike has recently added a claim for counterfeiting, after it allegedly purchased counterfeited versions of some of its sneakers from Stockx's NFT collection, which were verified as original products. Stockx responded by denying Nike's accusation, stating that it had issued a groundless claim.

The court still has not issued a decision in this case, but when it does, we will be able to analyze the limits set for use of trademarks in the virtual world.

There are currently several other court actions that remain unsolved, to which we should be attentive. Court decisions will set important guidelines to analyze trademark conflicts in the metaverse and predict possible solutions for future cases. They will also guide trademark owners as to how to protect their trademarks in the virtual realm.

The Nice classification issue

To our point of view, the first thing that has to be borne in mind when thinking about protection of a trademark in the metaverse is that a virtual good or service is not equivalent to the real/ tangible good or service. For instance, clothing and shoes as we ordinarily know them belong to class 25. However, if we plan to use those goods in the metaverse and protect our trademark accordingly, we will need to think about alternative classifications.

In said regard, class 9 comes as the most significant class, as it comprises downloadable software, images, music and virtual wallets, among other related goods. Indeed, the European Union Trademark Office has recently announced that the 12th edition of the Nice classification will add *"downloadable digital files authenticated by non-fungible tokens"* to the list of goods in class 9[5].

Classes 35 and 41 are also relevant for protecting services provided in the virtual realm. Class 35 becomes useful for protecting the trade of goods and services virtually, while class 41 include entertainment services, which may be offered in a virtual environment.

Notwithstanding the aforementioned alternatives for the protection of virtual goods and services, it seems applicants will still face obstacles as to the precision of the description of goods and services under the existing classification. Therefore, the apparent versatility of the current Nice classification may contribute to overcoming some classification obstacles in this context in the short run. Nonetheless, we consider further modifications to the Nice Classification system will certainly be necessary.

> **The first thing that has to be borne in mind when thinking about protection of a trademark in the metaverse is that a virtual good or service is not equivalent to the real/ tangible good or service.**

Conclusion

Although the analysis conducted through this article brought more questions than answers, it has made a point in summarizing the current issues trademark owners face in a fast-developing new world, which will certainly (and already does) bring significant economic and reputational benefits for them.

Based on the current scenario, it is clear that legislation and case law will need to be modified in order to provide answers for trademark owners, as well as for everyone who wishes to trade on the metaverse. Also, such modifications need to be developed as fast as possible in pursuance of providing efficient answers and accompanying the fast-paced commercial and technological development, as well as competitiveness between the market players.

Contact
Berton Moreno IP Law
Av. Del Libertador 5990, City of Buenos Aires, Argentina, CP 1428
ip@bertonmoreno.com.ar
https://bertonmoreno.com.ar/

[3] Rossow Andrew, "The Nike v. Stockx Lawsuit could determine what type of NFTs can be created", available on https://nftnow.com/features/the-nike-v-stockx-lawsuit-could-determine-what-type-of-nfts-can-be-created/, consulted on September 18, 2022.

[4] "Nike vs. Stockx: Trade Marks, NFTs and the Metaverse", available on https://www.wilsongunn.com/resource/news/nike-vs-stockx-trade-marks-nfts-and-the-metaverse?utm_medium=email&utm_campaign=Client%20Newsletter%20-%20June&utm_content=Client%20Newsletter%20-%20June+CID_92dcd00f2b774c25f69e0ef63e544a26&utm_source=Email%20marketing%20software&utm_term=Read%20more, consulted on September 16, 2022.

[5] Documentation downloaded from the EUIPO webinar "Trademarks and designs in the metaverse: legal aspects/ EUIPO practice", https://euipo.europa.eu/knowledge/course/view.php?id=4763, consulted on September 17, 2022.

Will NFTs permanently change the landscape for trademark protection?

Rachel Platts, Senior Trademark Attorney at HGF, evaluates the impact NFTs may have on the protection of products as they become virtual goods, questioning how that may also work in reverse, with some considerations for filing.

What do NFTs mean for trademarks?

Non-Fungible Tokens (NFTs), are they a fad or here to stay? What will be their impact on the protection of trademarks? NFTs such as virtual clothing and products raise important questions over how they are protected and how their rise could potentially impact the enforcement of IP rights and historic settlement agreements. The article will also include more practical considerations for filing trademarks and considerations for brand owners.

What are NFTs?

Non-fungible tokens (NFTs) are a hot topic at the moment and when new technology such as this meets existing laws, things can get interesting.

Non-fungible tokens (NFTs) are digital tokens stored on blockchain and represent real-world items, once an NFT is formed, it is unique and cannot be replicated. They also cannot be deleted but simply 'burned' rendering them non-transferrable. Think of them akin to art works or trading cards in digital form. NFTs find their value in virtual worlds in the metaverse, such as OpenSea, Roblox, Cryptoboxes and Decentraland. At the moment, there are a number of different platforms for these virtual worlds and there is no one central metaverse. Maybe this is something that will come in time.

So what does a NFT have to do with brands?

It is worth noting that NFTs can exist both in the 'real' world as digital artworks which are openly traded on the various peer to peer platforms, but we are also now seeing them within the metaverse. This means that NFTs are crossing the border from the real world to the virtual world. Brands are starting to purchase 'land' in the metaverse to sell virtual goods, which includes those in the form of NFTs.

Rachel Platts

> **Brands are starting to purchase 'land' in the metaverse to sell virtual goods, which includes those in the form of NFTs.**

For example, a user can purchase fashion items as NFTs which only exist within the metaverse. So their virtual avatar has the latest designer outfit, but it is all virtual and importantly, there appears to be a market for it. There have been reports of some NFTs selling for incredible sums of money, the NFT of the first Tweet by Jack Dorsey sold in March 2021 for $2.9million! Such a purchase does seem questionable when the tweet is simply some text and readily readable online but as the saying goes, 'one man's trash is another man's treasure'.

Interaction with trademark law and what brand owners should consider

Brand owners are now starting to file trademark applications for their core brands which have entered into this digital age of NFTs and the metaverse. Given how new and evolving both NFTs and the metaverse are, in terms of their popularity and uses, brand owners are now realizing there are gaps in their trademark protection.

For example, a fashion house would normally have clothing, bags and accessories covered under their trademark registrations but now they are having to think about digital versions of these, which would fall under the computer software heading. Retailers specifically will need to consider whether their trademark registrations cover the retail services of virtual goods. We are even seeing trademark applications covering entertainment services which is a little outside the box for most retailers, but this would then cover their services which fall within the virtual metaverse (think akin to gaming).

There are other considerations to take into account such as enforcement. As a brand owner you would need to have the appropriate rights in place in order to be able to enforce against a third party. So far, we haven't seen much in the way of take down policies on these metaverse platforms, but this is something which will hopefully be introduced soon.

Again, in terms of infringement actions we haven't got much to go on as yet. There is a big case ongoing in the US between Hermès and Mason Rothschild. For background, Rothschild created a series of 100 works titled MetaBirkins. These were created as NFTs which were the same shape and design as a Hermès Birkin bag and sold on platforms such as OpenSea. Hermès are claiming trade mark infringement, Rothschild claiming they are works of art and thus entitled to his freedom of expression and interpretation. He is, however, benefitting finically from the sales of the NFTs and the publicity of the Court action. This is a US case and the outcome awaits to be seen, but it could be a good indication of how such matters would be handled in the UK courts also.

A recent update from the USPTO also provides interesting guidance. Two trademark squatting applications were filed in 2021 for GUCCI and PRADA by third parties, covering 'virtual goods'. Whilst these are not Court decisions, they provide a valuable insight into the Examiner's views as to the similarity of virtual and physical goods. Neither Gucci nor Prada had registrations for virtual goods (used in the metaverse) at the time of these squatting applications being filed, but the Examiner has found the goods as similar regardless.

Practical considerations

From a practical point of view, we are seeing trademark applications being filed in Class 9 for downloadable software, or more specifically 'downloadable virtual goods' which would cover the digital versions of products. Any particular goods can then be included, so it could be 'downloadable virtual clothing, handbags and shoes' or technology such as 'downloadable virtual mobile phones'. The idea being that the virtual goods are covered in the terms. Class 42 goes hand in hand with class 9, and so we are also seeing terms such as 'Providing online non-downloadable digital collectibles' then listing the goods but we are also seeing Class 41 services such as 'entertainment services' which is interesting. This would cover the use or entry into the metaverse by the user almost as a game, thus the 'entertainment'.

It is worth noting that several IP offices such as the European Intellectual Property Office and the United States Patent and Trademark Office have also issued guidance that such terms need to be clarified, so terms such as 'downloadable virtual goods' and 'non-fungible tokens' will need to be further clarified to identify exactly what virtual goods are being covered.

> **A fashion house would normally have clothing, bags and accessories covered under their trademark registrations but now they are having to think about digital versions of these, which would fall under the computer software heading.**

For retailers, it is also worthwhile covering Class 35 for 'retail store services featuring virtual goods namely…', especially if you intend to sell and trade the virtual goods in the metaverse and NFTs on any of the existing platforms in or outside of the metaverse.

When considering trademark protection for the virtual goods and services, don't forget about the non-traditional marks such as colors also. In the metaverse, color marks could play an increasingly important part of brand identity as the use can be much wider than the constraints of the real world. So for example, Tiffany could have a retail space in the metaverse selling NFTs for jewelry but in their 'land' anything can be robin's egg blue, the sky, the trees, the shop assistant avatars! So colors could have an increased impact in a branding and trademark sense. With the real world, we are somewhat limited with the application of colors but the creativity is much wider in the metaverse.

The next consideration is territory. As trademarks and laws generally are territorial, and thus all governed by different laws around the world. Where do you decide to file these applications? This is something which is a bit more unknown at present, as there are currently a couple of cases making their way through the Court systems, but we won't have a solid answer for a while yet. The point being that the metaverse is accessible anywhere in the world, but who polices it and who is responsible for the legal or illegal goings on? The current trend appears to be filing in the US but there doesn't seem to be any hard evidence that this is the appropriate jurisdiction. It may come down to the individual platform in which the metaverse is being hosted and what territory that is based in as to governing territory.

Résumé

Rachel Platts, Senior Trademark Attorney

Rachel is a member of the Chartered Institute of Trade Mark Attorneys and works with companies and individuals ranging from large multinationals to small business start-ups advising on trademark, design and domain matters.

Rachel provides pre-filing advice relating to brand development, protection and enforcement. She also undertakes pre-filing clearance searches and handles the filing and prosecution of new trademark and design applications. Rachel also advises on portfolio management and brand enforcement strategies including e-commerce monitoring on online platforms such as Alibaba and Taobao. Further, Rachel advises on trademark opposition, invalidity and revocation proceedings at the UK Intellectual Property Office.

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When it comes down to a practical strategy, it may be worth looking at gaps in protection and filing applications in core territories for the goods or services which are likely to make their way into the metaverse as NFTs. Even if there are no current plans for expansion into this new digital world, it may be worthwhile taking the pre-emptive defensive step by protecting the virtual goods and services as it could be useful for taking action against third party infringers.

As with any filing strategy, brand owners would need to bear in mind any intention to use or use requirements for filing or maintaining registrations. This opens up more questions, would use of trademarks in the metaverse be considered genuine use of the trademark for different trademark offices? Usually, evidence has to show the geographical location of where a mark has been used to ensure it meets the requirements, for example in the US filing a declaration of use at the five/six year point the evidence has to show use in the US. What would happen if the mark is exclusively used in the metaverse, would that be sufficient? Another wait and see point.

Another consideration is whether any new filings would have an impact on existing agreements or licenses. Does the expansion into the metaverse contravene any existing agreements with third parties? Many readers will be familiar with the Apple Inc and Apple Music case which highlighted the difficulties with future-proofing agreements, whilst it is difficult to predict such advances in technology it is worth keeping in mind.

> **In the metaverse, color marks could play an increasingly important part of brand identity as the use can be much wider than the constraints of the real world.**

Enforcement considerations

With enforcement considerations, again the main issue centers around territory. A brand owner needs to have the appropriate rights in place in order to be able to enforce against a third party.

As noted above, there is an ongoing case between Hermès and Mason Rothschild in the US. There is an argument that Hermès' trademark rights are strictly in relation to actual bags and leather goods, rather than applying to those which exist in the digital world i.e., virtual bags which are effectively software. Under existing trademark law these would be considered as computer software goods rather than bags per se. However, it will be interesting to see how a judge would find them dissimilar. Certainly, if the Court applies the same logic as the USPTO Examiner in the GUCCI/PRADA trademark squatting applications, then such goods would be considered similar.

Ultimately, it is a waiting game to see how the Court will interpret the Hermès trademark registrations and whether they are enforceable against such digital creations. It is worth watching this case closely as it will likely influence brand owners' decisions about seeking further trademark protection for their core brands on virtual goods and services.

Another point to consider is what would happen in the event of a virtual product being released as an NFT into the metaverse and only existing there but then a third party creating a real-world version of that product. On what rights would you base a claim against the infringer in the real world? An example being a fashion brand releasing a 'one of a kind' virtual bag (in NFT format) which is only available in the metaverse. If someone starts manufacturing that bag in the real world, are they infringing? A lot of comment so far has been about infringement matters in the metaverse, but it would be possible for it to happen the other way around too.

Conclusion

To sum up, there are a number of aspects for brand owners to consider as to their IP protection for this new digital age and what approach is taken may depend on factors such as budget, future expansion plans and whether to have a proactive or reactive approach to trademark protection and enforcement. It is an evolving area and hopefully brand owners and practitioners alike will have some guidance as soon as there are court decisions and official guidance from trademark offices.

Contact

HGF
Tel: +1 161 247 4900
Author Email: rplatts@hgf.com
https://www.hgf.com

NFTs and copyrights – a brief overview under Swiss law

Jürg Simon and Vera Vallone of Lenz & Staehelin review copyright law surrounding NFTs, calling into question the intellectual property brought and sold alongside digital assets with useful considerations for both buyers and sellers of NFTs.

Tokens that uniquely represent a physical or digital asset on the blockchain, so-called Non-Fungible-Tokens (NFTs), have suddenly gained value and interest since early 2017, not only in the technology-driven spheres, but also on a mainstream level. The reason for the sudden increase of interest in NFTs is based, *inter alia*, on the development of the technical basis, which allowed a buyer of the NFT to "own" an asset in the digital world. With increasing publicity and interest, NFTs have developed to represent an underlying physical object (with either authentication or investment purpose) or as a basis for artists to distribute and commercialize their purely digital art and to profit from the sale. However, with the increasing number of cases, several legal questions arise, including intellectual property (and above all copyright) considerations. Depending on the point of view (either seller or buyer) the most relevant questions with regard to intellectual property rights are *(i)* what is the seller able to grant/transfer and *(ii)* what intellectual property rights may a buyer expect to get from buying an NFT. The following article will briefly discuss these issues with regard to copyrights after summarizing the technical and legal background from a Swiss law perspective.

Jürg Simon

Vera Vallone

Technical background

The following technical bullet points cover the technical background on a basic level but with no claim to completeness:

- "Why use the Blockchain?": Blockchain is based on the idea of a shared decentralized ledger that records transactions and tracks assets (tokens). As no participant can change information after it has been recorded to the shared ledger, the information can be deemed as true and thus facilitate business transactions involving tangible or intangible assets.

- "What is an NFT?": An NFT is a token that represents a physical or digital asset on the blockchain (thus, the underlying asset is not itself stored "on-chain", but "off-chain" (see also below)); as the NFT is representing an asset, its application possibilities are practically unlimited (from artwork to videos, real estate etc.).

- "How to save an NFT on the Blockchain?": Every token needs to be created or "minted". During this process, so-called smart contracts (computer code called "smart contract", which is used to automatically execute an order) are used on the blockchain and are assigning unique token ID numbers to every NFT (including the metadata, such as where the asset is stored, ownership, information on the asset etc.). There are different standards of smart contracts used. The standard ERC 720 allows for an interchangeable unit such as crypto currencies, whereas the ERC 721 standard provides for a unique unit or "token" with a unique token ID to be saved on the blockchain (i.e., NFTs). With the newer format ERC 1155 (so-called Multi Token Standard) a user is able to program multiple NFT at once and/or fungible or nun-fungible tokens). Although the technical details seam to require complex programming skills, the process can be standardized and thus, anyone can create an NFT on one of the specialized platforms, e.g. on the NFT marketplaces directly and without any prior technical knowledge. However, it needs to be kept in mind that the technical development currently produces new standards (e.g., ERC-1190 or ERC-2891 which should facilitate the implementation of license / royalty clauses; or fractionalized NFTs (F-NFTs) that allow for multiple buyers to acquire only parts of an NFT that would otherwise be too costly).

- "Where is the actual artwork": In most cases in the digital storage system (IPFS – InterPlanetary Filing System): Embedded within the computer code (smart contract) of NFTs, is the metadata of the location of the underlying digital or physical artwork. Thus, although the digital artwork could be stored on the blockchain in theory, the quantity of data (e.g. JPF, MP3 or GIF) would increase storage size and costs in an enormous amount. Therefore, the underlying data is stored on the web (IPFS).

- "What is the advantage?": Previous to the ERC 721 Standard, digital data was reproducible and could thus be copied countless times. With the new standard, NFTs are unique, which means they can declare authenticity, i.e., someone can be identified as the owner of a digital file whereas someone else owning a simple copy of the digital file can be clearly distinguished, and therefore, create scarcity.

To summarize: An NFT represents the digital and/or physical asset. Thus, the NFT is usually not the asset itself. However, the NFT authenticates the owner of a digital file and thus creates the possibility of ownership in the digital world.

Relevance for intellectual property matters

The most relevant question for a seller and buyer of an NFT is what rights are being acquired or sold with the NFT and whether there are intellectual property rights sold/bought or use rights granted with the NFT or the underlying asset. This may be highly relevant for a buyer that acquires e.g., an NFT which represents a digital art work that the acquirer wants to reproduce or make available. Which rights may be transferred/granted depends on the national legal framework.

> **"Embedded within the computer code (smart contract) of NFTs, is the metadata of the location of the underlying digital or physical artwork."**

Relevant intellectual property rights

In connection with NFTs prominent problems occur especially in relation to copyright considerations (although trademarks were subject to discussion as well, it is not the main topic of this article). The relevant provisions are in the Swiss Copyrights Act (CA).

The CA protects the author of the work by allocating the exclusive right to decide whether, when, and how his work is used (article 10 CA). However, where the author has transferred the rights to the work or to a copy of the work or has consented to such a transfer, these rights may subsequently be further transferred or the copy otherwise distributed (so-called "exhaustion", article 12 CA). The exhaustion does not affect the other exploitation rights, such as the reproduction right or moral rights. Thus, in case an artwork is sold to a third party and then reproduced in a digital format and minted, this action will need to be analyzed in detail to elaborate if it concerns copyrights. However, reproduction or other exploitation rights may be transferred or licensed to a third party.

Résumés

Prof. Dr. Jürg Simon is considered a leading expert in intellectual property and related fields in Switzerland (forensic and non-forensic work) with a particular focus on trademark and privacy law. He has a vast experience as counsel in trademark, unfair competition, copyright and patent litigation as well as in all aspects of commercial transactions involving intellectual property rights (such as licensing, selective distribution, sponsoring, IP securitization). Before joining Lenz & Staehelin, he was director at the Swiss Intellectual Property Institute and partner in an IP boutique firm. Jürg Simon teaches intellectual property law, among others, at the University of St.Gallen, the Swiss Intellectual Property Institute and the Università LUISS Guido Carli in Rome. He published on a wide range of intellectual property and competition topics. He is the past and acting President of two Consorzio in the Swiss dairy industry and a member of the board of directors of IP-intensive companies.

Dr. Vera Vallone is an associate in the Zurich office of Lenz & Staehelin. Her practice focuses on intellectual property, unfair competition, technology and life science matters. She represents clients in litigation before Swiss courts, in arbitration proceedings, as well as in administrative matters before governmental authorities. In addition, she advises regularly on a broad range of other issues in the context of intellectual property and unfair competition law. Dr. Vera Vallone is a member of the firm's Intellectual Property, Litigation and Arbitration as well as Technology and Outsourcing practice groups.

Licensing intellectual property rights

The most common usage of granting intellectual property rights in the underlying asset of an NFT is the licensing model.

The license agreement may be included in the terms and conditions of a market place platform. However, most terms and conditions of such platforms either leave the intellectual property rights to a bilateral solution between the buyer and the seller, or provide for a technical possibility to include some license clauses chosen individually which then are included in the smart contract during the minting process (provided that the minting process is executed on the platform). Some sellers do include a link of the terms and conditions containing the grant of a license to the description of the NFT on the market place platform (e.g., the BAYC).

Thus, there are many ways to include license terms from a technical point of view. From a legal side, depending on the interest of the seller, the license terms will need to be drafted carefully and in consideration of the specific and individual needs of a seller regarding the case at hand.

"Stumbling Stones" to be covered from a legal perspective

Depending on the position of interest, there are a few points to consider when acquiring or selling an NFT and/or setting up a whole NFT project.

Seller's perspective

From a seller's perspective, at the first stage, the objective of the sale of the NFT needs to be established, including the rights to be granted to a potential acquirer. Once this decision is made, either nothing has to be done (if the seller has no interest in licensing or transferring any intellectual property rights) or a written transfer agreement and an implementation of a license in some form, respectively, is required. Depending on the decision on the license rights, different ERC standard options can be chosen.

In any case, the seller of an NFT will need to either (i) be the owner of all intellectual property right in the underlying asset, or (ii) be permitted to grant use rights in the underlying asset to the buyer.

If the seller is setting up a whole NFT project (including marketing; forming a community etc.) it will, in most cases, involve a number of independent and specialized project members including designers, programmers, and the like. As an intellectual property holder, the seller will either need to grant license rights to project members (e.g., to use on discord channels for forming the community and marketing purposes) and/or set up transfer agreements to receive all developed intellectual property rights from e.g. designers.

> **Without the prior due diligence process, the buyer could find themselves in the situation that an NFT was acquired for a specific purpose, that, however, infringes copyrights and thus, the NFT turns out not to be useful.**

If the underlying artwork is physical in nature, the artwork will be digitalized for the purposes of minting NFT or NFTs and the seller / minter is not the owner of the copyright (nor have they the license rights to the artwork), this process may be qualified as infringing copyright (reproduction or personality rights) which is allocated with the author. Thus, in those cases, the facts will need to be analyzed in detail and if needed, the respective rights will need to be obtained by the minter / seller.

Acquirer's perspective

An acquirer is interested in knowing which rights are being obtained with the NFT, if any. For that purpose, the following terms need to be reviewed: the market place platforms terms and conditions; the seller's terms and conditions (e.g., on the website), if any; and the description of the NFT on the market place platform. As the licensing system is not yet established, this search will include some "detective search work". If there is no indication of any intellectual property rights being granted, it is realistic that the seller / minter did not provide for those rights to be granted to the buyer. Thus, it is up to the buyer to decide whether or not they want to acquire the NFT without those rights. Without the prior due diligence process, the buyer could find themselves in the situation that an NFT was acquired for a specific purpose, that, however, infringes copyrights and thus, the NFT turns out not to be useful.

Conclusion

As shown above, the technical developments and increasing numbers of economic applications for NFTs are hindering a clear legal assessment. However, a buyer and seller are advised to follow the basic rule of due diligence (search for license terms/implementation of license terms) and have a clear picture of what rights are being sold/bought.

Contact

Lenz & Staehelin
Brandschenkestrasse 24
8027 Zurich
Switzerland
Tel: +41 58 450 80 00
Fax: +41 58 450 80 01
www.lenzstaehelin.com

Could NFTs transform IP into liquid assets?

Jean-Christophe Hamann, Managing Partner and CEO at IPSIDE, discusses the attachment of IP assets to Fractional Non-Fungible Tokens as a potential way of dividing assets without granting licensee rights to produce liquid assets.

NFTs have been a hot topic for about a year now. After raising enthusiasm, the NFTs market seems to have fallen into deep turmoil, with major actors experiencing hard times, and NFT owners starting to question what they really own.

For a majority of their owners, NFTs are seen as digital art and collectibles, held as electronic/virtual assets in a blockchain. The question of the connection between NFTs and IP comes naturally; many NFT owners are disappointed when learning that acquiring an NFT does not provide them any IP right over the artwork the token is connected to.

Yet, NFTs may have many other utilities far beyond this example, and in particular in connection to IP rights, provided that they are backed up by clear and fair smart contracts, and these potential applications go beyond the blockchain and the crypto world.

> **“As a consequence, there is no need for a token to be connected to an asset of any kind.”**

Résumé

Jean-Christophe Hamann, Managing Partner & CEO

J.C. is a French and European Patent Attorney as well as US Patent Agent. After a career in research and in the Industry, J.C. joined IPSIDE Law firm in 2009 as Managing Partner and CEO. He is currently President and CEO of IPSIDE INNOVATION Inc a US subsidiary of Santarelli Group.

J.C.'s majors are physics, material processing and IT, as well as IP rights financial appraisal.

J.C. is a co-founder of Kryptulip https://www.kryptulip.com/ a platform dedicated to NFTs and IP

Email: jc.hamann@ipside.com

Jean-Christophe Hamann

Let' start with the beginning. NFT stands for Non-Fungible Token.

"Token" has several definitions, in a nutshell:

- a piece like a coin issued for a specific use (like a bus token),
- a unit of cryptocurrency,
- something given or shown as a guarantee,
- a distinguishing feature.

Speaking about the "T" of NFT, almost any of these definitions may actually be relevant.

"Fungible" applies to something, such as money or a commodity, the nature of which allows that one part or one quantity may be replaced by another equal part or quantity in paying a debt or settling an account.

Per this definition, a fungible token can be exchanged blindly with another fungible token of the same kind, can be split in multiple parts, each part can be exchanged with an equivalent part of the same nature and multiple parts can be combined to be exchanged with one or more tokens provided the values, are matching.

Consequently, a cryptocurrency unit is a fungible token.

A non-fungible token is a token that does not bear such fungibility characteristics as stated above. Therefore, an NFT is a token that is unique.

How does a token acquire such a uniqueness to become an NFT?

The simple answer is that such a token is recognized as unique by an authority through a transaction, or transactions, recorded in a blockchain.

> **"FNFTs enable a split to the right of claim over any asset."**

The authority may be the issuer of the NFT itself or a third-party authority. The extent of this uniqueness recognition will depend on the extent of recognition of the certifying authority, and the confidence buyers may have in it. It can be limited to a community like a specific video game community or may be wider spread.

As a consequence, there is no need for a token to be connected to an asset of any kind, should it be an artwork or whatever, to become an NFT, it only requires that a credible certifying authority confers its uniqueness to it through transactions recorded in a secured untamperable ledger.

This is both the beauty and the danger of NFTs.

Attaching the NFT and its recognition of uniqueness to an asset, e.g., and artwork, helps bring confidence to this uniqueness recognition process. Moreover, it connects this virtual token to something more tangible which can be apprehended in the real world. The owner of the economic rights over the asset, i.e., an artwork, can reproduce this right in an intangible form, i.e., an NFT, transferring to the buyer of the NFT part of its economic rights. This can be limited to simply owning this intangible reproduction or it can be more sophisticated depending on the agreement, i.e., the smart contract binding the buyer with the issuer.

Actually, the asset to which the NFT is connected can be anything, from something very tangible like real estate to something intangible like a right. For the NFT to be connected to the value of the asset in the real world, the process by which the NFT acquires its uniqueness should follow an adapted due process and the owner of the NFT should be awarded a right of claim over the asset or over the real owner or owners of this asset. This right of claim is advantageously captured in a smart contract, which is itself deployed in a distributed ledger, i.e., in a blockchain.

In the case where an NFT is connected through a right of claim to an asset, the certifying authority may not only certify a single token accordingly, but may certify a batch of tokens following the same rules and each of them providing an equivalent right of claim. These are called fractional NFTs or FNFTs.

Thus, FNFTs enable a split to the right of claim over any asset, the term asset being taken in a very broad sense, in multiple FNFTs. The corresponding right of claim may be split in a fixed number of FNFTs or may be split in an initially undefined number of FNFTs according to successive issuances, provided that the rules for issuance and certification are consistent.

Moreover, a single asset can lead to the issuance of different kinds of FNFTs, like class A and class B rights of claim.

Therefore, NFTs and more particularly FNFTs, are tools to dismember a private property right, to divide and share the prerogatives of a private property right within a community, some would say a common.

Considering the above let's see how it can be beneficial for patents and patent holders. We will focus on utility patents but the reader can understand that similar reasoning may be performed for other IP titles like trademarks or design patents.

Intangible assets are commonly said to comprise 90% of the value of S&P500 companies. In a startup, in many instances, intangible assets account for 100% of the value of the company. Most intangible assets cannot be sold by or purchased independently from the company, but among intangible assets, utility patents are granted according to a process controlled by a government agency and therefore are intangible assets bearing a private property title.

A granted utility patent provides its owner all the prerogatives of a private property right, for a limited period of time, over a technical industrial solution to a technical problem, meaning that the owner of such a title has an exclusive right for implementing, using, selling, importing and exporting the technology delimited by the patent granted claims. A patent can be sold, licensed (i.e., leased), used as security, and enforced against an infringer. Therefore, a patent provides its owner with the same rights over an intangible asset as the private property right over a tangible thing, except that it is limited in time. For this reason, industrial property rights are usually considered the most liquid among intangible assets.

Yet, utility patents are far from being liquid assets.

However, given the above, a patent (or even a patent application), can be connected to a batch of FNFTs without compromising the ownership of the patent holder. Each FNFT is a right of claim over the patent, such right of claim may be as simple as, for instance, a share of the profit generated by the patent. These FNFTs can be sold, possibly through auctions, and do not require the ownership of the underlying intangible asset, to be modified.

Like in the case of an artwork, the patent owner may share a part of their economic rights over the patents without releasing their ownership over the asset.

Such a system allows the holders of such FNFTs, issued by the patent owner, to build a portfolio comprising multiple patents from different patent owners thus minimizing the risk.

> **"Like in the case of an artwork, the patent owner may share a part of their economic rights over the patents without releasing their ownership over the asset."**

On the other hand, it gives the patent holder the ability to propose these FNFTs to multiple (thousands) of investors without losing his sole property over the IP title. FNFT holders may exchange their FNFTs among themselves, giving rise to a marketplace, while the implementation of the rights of claim may be performed automatically through smart contracts.

Pushing forward, the same scheme as above may be implemented for know-how, or more generally for a trade secret, provided it bears the characteristics of a trade secret - meaning that it is identifiable/documented, secret and substantial and that the FNFTs are certified by an authority that also warrants these characteristics.

Once again, such NFTs may be issued without requiring the disclosure of the trade secret, therefore opening the ability to value such a trade secret without risk for the trade secret holder.

By potentially bringing derivatives of IP rights, e.g., patent or neighboring rights like trade secrets, FNFTs connected to smart contracts allow these assets to become more liquid by dismembering the private property right and bringing only part of the "fructus" part of it to the market place without imparting the ownership. This limits the risk to investors and issuers by multiplying the number of FNFTs holders and allowing them to build diversified portfolios without allowing these FNFTs holders to be licensees or licensors of the technology.

Contact

IPSIDE

6 Imp. Michel Labrousse, 31100 Toulouse, France

Tel: +33 5 31 50 00 22

https://www.ipside.com/en/

The Wild West of Web 3.0: are NFTs and the Metaverse the next big brand protection risk?

Fiona Gao, Director of Brand Protection Strategy at LexisNexis Intellectual Property Solutions, assesses the landscape of Web 3.0 for infringement risks from entry to transaction with tips for fighting back.

In 2020 the COVID-19 global pandemic further accelerated the push toward digital journeys. Suddenly, brands had to rethink which channels were paramount in acquiring and retaining customers. Three-five years of digital growth compressed into three months as some brands tried to avert economic disaster.

Fast forward to 2022, and we've witnessed another digital acceleration: Web 3.0 and, more specifically, the hypergrowth of the metaverse. Now consider cryptocurrencies and NFTs (non-fungible tokens), and the landscape brands have to navigate becomes even more complex. For many, it's a scary concept and a frontier they're underprepared for, but it doesn't have to be. There's an upside, and we've seen several brands take off with success[1]; however, the IP industry is now bracing for a new set of standards and brand protection risks.

Fiona Gao

Résumé

Fiona Gao,
Director of Brand Protection Strategy

With over eight years of experience in online brand protection, Fiona Gao, Director of Brand Protection Strategy at LexisNexis Intellectual Property Solutions, has assisted over 300 international companies in protecting their brand, from removing digital infringements to complete factory shutdowns.

Where to enter the metaverse

At its core, the metaverse includes[2] "any digital experience on the internet that is persistent, immersive, three dimensional and virtual, as in, not happening in the physical world."

Many platforms offer brands and consumers access to the metaverse and opportunities to work, play, connect and transact there. The most famous brand-tested platform is likely Roblox. Gamers and anyone who is gamer adjacent will be familiar. Originally an online gaming platform, Roblox is now a virtual world where its users can create entire lives inside, and consumer-facing brands are taking advantage of the audience there. Nike is one of the brands on the forefront of the metaverse that teamed up with Roblox to create "Nikeland"[3]. It's a free virtual playspace where users can play games and sports. There's also a virtual showroom where users can purchase digital Nike products for their avatars.

Transacting in the Metaverse

Purchasing digital items or skins is not new for gamers, but even the layperson can get in on digital transacting with Non-Fungible Tokens or NFTs. NFTs are any unique digital item that cannot be replicated and can have one owner, for example, digital artwork, videos, digital collectibles, digital fashion, music royalties, etc. Similar to the Nike example of digital fashion above, in 2021, Gucci sold a digital handbag on Roblox for $4,000. But there is only one authentic version of that digital handbag and only one valid owner.

These examples offer a glimpse into common potential brand abuses that companies have been fighting against for years: copyright infringement and counterfeiting. The metaverse is not immune to counterfeit goods any more than the real world. And because much of the transacting takes place in cryptocurrency, it's a lot harder to spot and even more challenging to stop. Cryptocurrency can also be exchanged between users in different regions, making prosecuting these crimes complex, with various jurisdictions needing involvement for just one transaction.

Everything old is new again

The similarities between copyright infringement and counterfeiting NFTs in the metaverse and the same scams with physical goods in the real world are eerily similar. They share one specific commonality: scammers are creating fake intellectual property without a brand's consent or knowledge and being sold as if it is real.

Another similarity? The proliferation of marketplaces. Just as there are hundreds of marketplaces for physical goods, there are many for NFTs, and some are better regulated than others.

There are upwards of 100 marketplaces, but five jump out across multiple ranking sites being top of the market:

- OpenSea
- SuperRare
- Crypto.com
- Binance
- Axie Marketplace

In fact, OpenSea recognized[4] how much of a problem counterfeiting and scams were causing on the site and are implementing new policies and tools to try and combat the practices. Though we know where it relates to brand abuse online, catching cybercriminals can be like playing a game of whack-a-mole.

> **"Criminals register or use domain names identical or similar to those trademarked by legitimate brands."**

Another copycat tactic in NFT exchange is domain spoofing or cybersquatting: criminals register or use domain names identical or similar to those trademarked by legitimate brands. This happens frequently in the trade of physical goods. Cybercrime Magazine notes[5] that "More than 200 domains containing the string "nft" could be cybersquatting on some of the largest brands and trademarks". And per their research found potential scam domains tied to some of the most valuable brands "containing the string 'nft' and brand names, such as PayPal, Adidas, JPMorgan, Apple, Coke, McDonald's, Nike, Walmart, Google, and Rolex."

Fighting back

Litigation against copyright infringement is a tool, albeit an expensive one, that brands have to fight brand abuse. The metaverse is still the wild west of digital landscapes for brands, so there isn't a vast amount of litigation or trademark law when it comes to NFTs, though a few cases have made their way through the legal system like *Hermes Vs. Rothschild*. Famous fashion brand, Hermes, litigated against digital creator Mason Rothschild for copyright infringement for his creation of a MetaBirkin: a digital knockoff of the brand's most famous handbag. The court deemed that since the handbag NFTs he designed were not being used as accessories, Hermes did not have a case against him. But if he were to sell those to be worn by avatars in a digital world, that would constitute infringement.

1 https://www.thedrum.com/news/2022/06/01/5-brands-winning-the-metaverse

2 https://hbr.org/2022/01/how-brands-can-enter-the-metaverse

3 https://www.engadget.com/nike-roblox-nikeland-metaverse-192234036.html

4 https://gizmodo.com/nfts-crypto-opensea-crackdown-on-fakes-1848916239

5 https://cybersecurityventures.com/as-nfts-popularity-grows-so-does-cybersquatting/

Jimmy Tudeschi / Shutterstock.com

> **Minting an NFT is similar to minting a coin. It's a way to ensure that the digital file you have created leaves a permanent mark in the metaverse using blockchain, which is a permanent record of the file.**

NFTs cannot be destroyed once minted or uploaded to the blockchain. Minting an NFT is similar to minting a coin. It's a way to ensure that the digital file you have created leaves a permanent mark in the metaverse using blockchain, which is a safeguard, it can also endanger the brand when a counterfeit NFT or copyright infringing file is minted. NFTs can be "burned" or "deleted," but they are never entirely destroyed since the blockchain itself does not change over time. Once an infringing digital asset has been identified, it's unclear how the courts could intervene.

Protecting your brand

While brand abuse tied to NFTs is still a fairly new type of abuse with a nebulous path to fighting it, the basics of copyright infringement and counterfeiting are the same. As such, tactics to protect your brand against it are similar.

Educate and engage customers

If you are jumping into the NFT trade, be proactive in reaching out to customers to give them information on being smart digital consumers, the processes and platforms your brand will use to sell NFTs, and some common pitfalls associated with digital fraud. For example, check URLs to ensure they are official brand URLs, especially when shared over social media. Links often get shared and re-shared, and in that process fraud is possible.

Develop a mitigation strategy within your organization

Work cross-functionally with your company's product, commercial, and marketing organizations to understand your customers' digital journey. Aggressively monitor those digital channels for abuse targeting your customers. Hopefully, your organization is already doing this. Ensure a direct line of communication with your security and litigations teams and create a process for addressing red flags. Given the early stages of this trade, now is the time to add this type of abuse to your fraud prevention and security strategy.

Partner with brand protection technologists

As we mentioned, scammers learn and adapt daily from abuse mitigation tactics. While self-monitoring against brand abuse can slow bad actors, stopping them altogether is a losing game, especially without the right technology and tools. Before the advent of Web 3.0 technologies, brands were already exposed to harm in our hyper-connected, multi-channel digital universe. New technologies and channels will continue to emerge, so brand protection tools need to be able to analyze data across a broad set of digital media to detect bad actors, fraud, and scams.

Brands are now expected to keep up with consumers in a digital landscape experiencing innovation at the speed of light. The only way to keep up is to meet consumers where they are - both in channels and trends. NFTs and the metaverse are just the newest frontiers. The wild west will undoubtedly be reborn in future iterations, a Web 4.0 and beyond with new opportunities and threats.

Contact

LexisNexis
Radarweg 29 1043 NX Amsterdam,
The Netherlands
Tel: +31 020 485 3456
https://www.lexisnexisip.com/

Metaverse and the reconstruction of the current legal paradigms

Paola Morales and Daniel Legaspi of Santamarina + Steta examine the potential risks to personal data protection in the metaverse and how the agreement of consent can be accommodated in the changing landscape.

The Metaverse is the digital revolution that is hastening the development of new technologies and bringing unique challenges to the legal industry, including the reconsideration and reconstruction of the current legal paradigms.

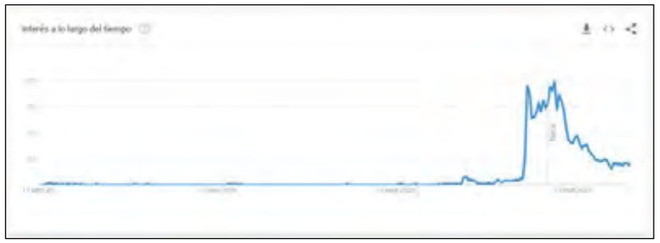
The metaverse has been in our thoughts for a long time; we can even find references to the metaverse back in the 1970s. But during the 1990s and especially in the 2000s, these virtual worlds became part of our lives.

In the early days, the interaction was merely focused on entertainment; hence, the legal aspects were not so relevant. The user only needed to accept the terms and conditions of these virtual worlds and behave accordingly. In the following years and up to 2021, the legal implications of the metaverse focused mainly on data privacy. However, since then, experts have identified other legal areas affected by the interaction between people in a metaverse and how the same can affect our lives within and in the external world.

Before elaborating on the legal paradigms, it's worth noting that according to Google Trends, in 2021, the word metaverse was highly sought. The search to define the metaverse was bound to happen. It is easy to understand why there are many different concepts but, for the moment, achieving "one metaverse" or "the metaverse" is complex. First, it requires a complete consensus of every player, which can be the most critical legal implication. Secondly, it is hard to believe this unanimity will ever happen mainly because businesses' interests and perspectives differ widely. Moreover, each company can have different notions and ideas of the metaverse. Hence, in the following years, we may start interacting with many metaverses depending on our needs and interests.

Paola Morales

Daniel Legaspi



But one thing is certain, the fact that the word 'metaverse' became a trend last year resulted in many positive things. Users interacting in the metaverse seek better products: internet connection, bandwidth, latency, game engines, and hardware – supercomputers or accessories needed to enter the metaverse. Companies will now have to invest in developing more satisfactory products to fulfill users' needs, resulting in products requiring protection from an Intellectual Property standpoint. The benefits of these circumstances will indirectly impact other industries that will ease our lives and improve technological developments.

Data Privacy implications

And what about privacy? The first milestone would be to reshape the legal paradigms surrounding the possible implications of a parallel universe where reality is "different" from what we know today. The first step is to revisit the whys, hows, and whats of regulations and data privacy considerations.

In the next few years, we will probably face two opposite blocks of thinking and action. On the one hand, there is a high probability of losing control of our privacy in the metaverse due to the technological developments that allow our personal data to be used and marketed without us even knowing (that is to say: unconsented). On the other hand, companies, organizations, and even governments are aiming toward protective approaches as they have become aware of the dangers of losing privacy in this new reality.

A critical matter to be studied will be if people in the metaverse are allowed to be value-neutral versus value-laden. The most common thinking is that the key is in the technology's use, that there are no "perverse technologies" until they are used for the wrong purposes. Today, we face a reality where there are more value-laden technologies than neutral ones. Technology with a purpose remains at the core, no doubt. Regardless, as technology, its algorithms, and its uses in the metaverse evolve, technology will be less and less "human-managed". Therefore, the ethical purposes for deciding how to use it could be lost in the technology.

Algorithms, AI, and whatever comes next in shaping the metaverse are the future handlers of our personal data, which will prove to be dangerously challenging. There will be much more drastic trade-offs for us concerning our data. Currently, most regulations mandate consent from individuals to use their personal data. This rule may be the necessary starting point for exercising the right to say, "I do not consent to my image, avatar, or data being used in the metaverse". Also, current regulations follow the information principle where individuals have the right to know how their data will be used and for what purposes, as well as cancellation obligations when the personal data is no longer needed for the purposes it was collected.

These are all obligations that controllers must meet, and if they fail to do so, they will be held accountable for those infractions. Complications will come when issues occurring within the metaverse cannot be traced back to a particular controller to hold responsible for those violations. A possibility may be to consider the platform on which the metaverse takes place to be such controller. But even if so, it would also be a challenge if we realize that most of them specifically state in their terms and conditions that they are not responsible for any content that runs or happens through them.

As can be seen, the implications for data privacy are considerable, as the trade-offs would be high and would depend on others managing our personal data and privacy. For example, think of the avatars used in the metaverse. This version of people is powered by their image, interests, and behaviors. Therefore, the most intimate sphere of us as individuals could become exposed, and, as a result, it can affect us in ways that are not easy to foresee or evaluate.

On the other hand, what about anonymous avatars or the possibility of being somebody else in the metaverse? This scenario is the idea most appealing for people to jump into this new reality. People have an opportunity to reinvent themselves while still using parts of themselves as a foundation. Therefore, it is necessary to analyze and consider options to mitigate the loss or violations of our privacy in this anonymous environment. One solution could be that from the beginning of their product development, metaverse handlers populate the individual's data features using k-anonymity standards and de-identification techniques to "manage" those unwanted traits that may damage the acceptance of these new desired interactions.

> **"In the following years, we will interact with many metaverses depending on our needs and interests."**

Reassessment of informed consent

We also must re-evaluate current notions of informed consent as living-conscious individuals. Currently, we can say yes or no to a company selling our personal data or choose to pay for a more private email. But what about our holograms or avatars in the metaverse, or those of our loved ones once we die? Or when our heirs have also died? Consent would have to remain the cornerstone around the "new privacy". The key question is whether this consent is ever lost, since to what extent does it belong to our heirs?

In addition, the commonly known proper drafted consents and releases of responsibility must be reconsidered and rebuilt to avoid adverse outcomes that we can only imagine because privacy issues as we know them today are on the verge of disappearing.

The stakeholders in the metaverse (individuals, companies creating products, policymakers, authorities) are becoming very relevant to varying stages of these privacy issues, and their interests are certainly very different. For example,

Résumé

Paola Morales, Counsel

With more than 22 years of professional experience, Paola's interest in innovative issues led her to specialize in telecommunications, media, and technology, as well as e-commerce and privacy and data protection. She advises multiple international and national companies and the government in the implementation, from a transactional and regulatory context, of their business in Mexico in these sectors.

Daniel Legaspi, Partner

Daniel has over 15 years of professional experience in intellectual property, franchising, licensing, and technology matters. His practice focuses on assisting clients to maximize the profitability of their intangible assets by developing and carrying out custom-made strategies involving technology (NFTs, Blockchain) on a national and international level. Furthermore, Daniel is currently leading the Technology Taskforce of the firm focused on assisting businesses in the digital environment that have evolved or entered Web 3.0, IoT, IoB, and the Metaverse.

individuals' interests might be limiting their exposure in the face of companies focused on improving products or targeting and benefiting from personal data. And the interest of policymakers and authorities is most likely to balance these interactions appropriately.

This clash is occurring now and will continue to happen in the metaverse. In almost all cases, it will be related to the need for having or not having consent. It is difficult to assess the liabilities or trade-offs, as it is challenging to balance them at this stage in time. The currently known privacy protection techniques, like differential privacy or k-anonymity, will likely become obsolete with the future technologies in the metaverse. The real takeaway is that current notions of privacy are being changed by technology and will continue to transform over the next decade.

Lawyers and policymakers need to be prepared to deal with the issues that may arise and, better yet, attempt to deregulate or regularize – although further analysis is needed on what approach to take – consent issues currently being handled.

It could be that the benefits of the new form of privacy in the metaverse would likely outweigh the harms. However, the damage could also be massive due to the lack of remediation when the notion of "no consent" or "forever" treatment surfaces. Moreover, we cannot forget the ethics involved in this new way of processing personal data with a different notion of consent. What meta-ethical approach should we take to analyze this? At this point, it is not easy to decide.

> **The real takeaway is that current notions of privacy are being changed by technology and will continue to transform over the next decade.**

Contact

Santamarina + Steta
Campos Eliseos 345, Floors 2 and 3
Chapultepec Polanco, Miguel Hidalgo
11560, Mexico City
Tel: +52 55 5279 5400
santamarinasteta.mx

What is the IP reality of the virtual world?

Ajay Yadav, Senior Consultant at UnitedLex, reviews the current developments of the Metaverse in relation to IP, evaluating the current leaders of metaverse advancement assets and how proceeding companies can prepare to integrate with the Metaverse.

Everyone is tapping their feet to join the Metaverse dance by announcing new business visions, acquisitions, rebranding, and much more. However, is their IP strategy on track?

The Internet has grown exponentially since its advent, from Web 1.0, which only gave us information, to Web 2.0 where users contributed the content to Web 3.0+, which offers a more personalized, interactive, and immersive user experience. Now, taking this evolution to the next level and to re-define the experience-quotient of the user, companies are investing and working aggressively toward the next generation of the Internet experience: Metaverse.

Ajay Yadav

What is Metaverse?

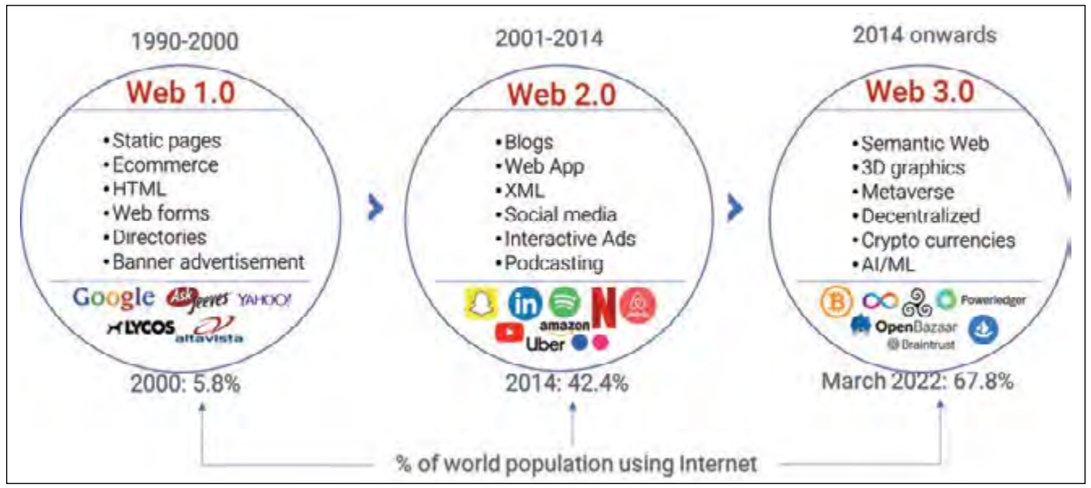
Metaverse is a hyper-realistic, real-time 3D environment where you – via an avatar can interact and experience the virtually immersive environment. Imagine a parallel digital world, where you can enter to meet friends, attend concerts and client meetings, buy/sell things and run a business, much like what you do in the physical world.

To lead the race of Metaverse adaption and make the business future-ready, companies are shelling out big. Based on a recent report published by researchandmarkets[1], the global Metaverse market is expected to reach a whopping US$758.6 Billion by the year 2026 at a 37.1% CAGR. Such growth projection is only possible when there is length of innovation and breadth of commercialization from the companies.

For example, Facebook recently rebranded and renamed itself Meta Platforms, Inc. with its focus and vision on Metaverse. Furthermore, Microsoft, Nvidia, Intel, Alibaba, Walmart are a few of many names that are working aggressively toward Metaverse technologies and applications.

[1] https://www.researchandmarkets.com/reports/5548465/metaverse-global-market-trajectory-and-analytics

Figure 1: Web 1.0 -3.0 development



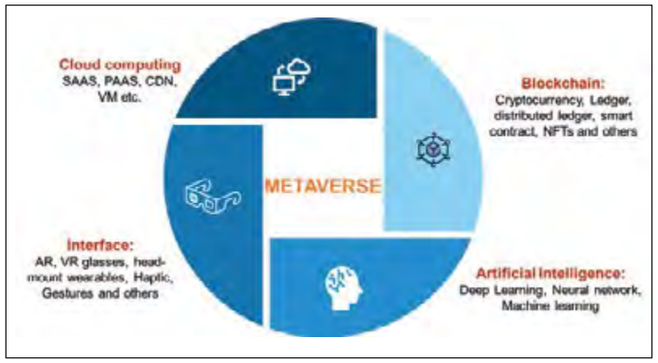


Figure 2. Major technologies in the Metaverse

What technologies will contribute to the Metaverse ecosystem?

To live up to its promise, the Metaverse will require an array of providers and technologies, which is why it will open a wide door of innovation opportunities and possibilities to secure IP. Above are a few major technologies that will lay the foundation of the Metaverse and the different players that will attempt to secure IP for their innovations.

Who is leading the Metaverse IP race?

In the next section, I will try to answer this question by applying a quantitative approach to the individual Metaverse elements:

1. Interface

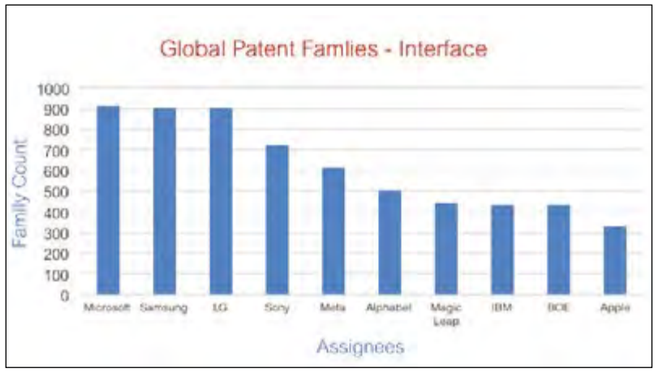
This includes wearables that can generate an interface between the physical and virtual worlds. The wearables can be in any form - 1. Augmented Reality (AR)/Virtual Reality (VR) headsets, for example, Oculus Quest. 2. A glove that reproduces sensations in a virtual world, for example, HaptX Gloves DK2. 3. An entire bodysuit to simulate an experience, and provide haptic feedback, for example Teslasuit.

> **Blockchain is the heart of the Metaverse.**

Figure 3 shows what the current innovation trends look like for the Interface technologies.

The real boom in patent filing activities in these technologies took off around 2014, when companies started to focus on providing more realistic and engaging experiences to customers via mobile, video games, and others. Microsoft, Samsung, and LG together stand strong compared to the rest of the top players in the domain. Furthermore, Magic Leap, Meta, and Apple stood out by filing more than 40% of their patent applications related to Interface technologies in the last four years (2017-2020). Moreover, Samsung, Sony, and Alphabet have been consistent in securing IP for Interface technologies. Interestingly, Goertek (positioned in the top 11-20 innovators) has an arsenal of IP in Interface technologies. Goertek is a China-based public company that offers a growing range of VR products and is also a supplier to the top patent filers in this domain - Apple, Samsung, and Sony.

Figure 3. Major innovators in interface technologies



2. Blockchain

Blockchain is the heart of the Metaverse. Blockchain has been one of the fastest growing technologies in the past few years and has laid down successful initial implementation in different forms. Blockchain-based offerings will play a fundamental role in building the Metaverse, for example, Cryptocurrencies, NFTs, digital ownership, decentralization, and much more. See figure 4.

Résumé

Ajay Yadav is a Senior Consultant in the Intellectual Property team at UnitedLex. He has 14 years of experience in the IP industry with strong expertise in strategizing patent portfolio development and patent monetization for global companies operating in the Hi-tech, Automobile, Telecommunications, Medical, Semiconductor, and Aerospace industries.

He is adept at architecting custom IP solutions for corporates that helps their legal team in designing IP strategy to save cost and capture value from new innovations and existing patent portfolios. He holds a B.Tech degree in Electronics & Communication Engineering and PG Diploma in Embedded System and Design.

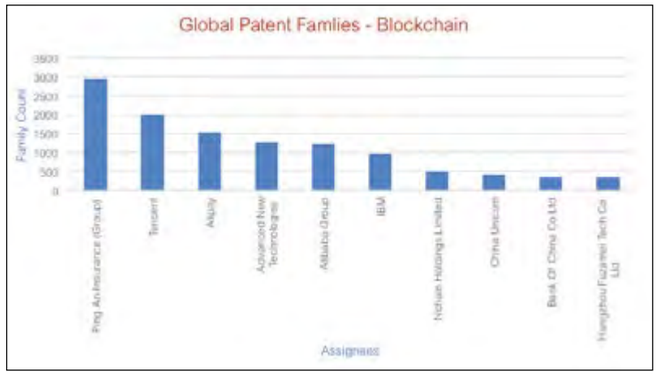


Figure 4. Major innovators in blockchain

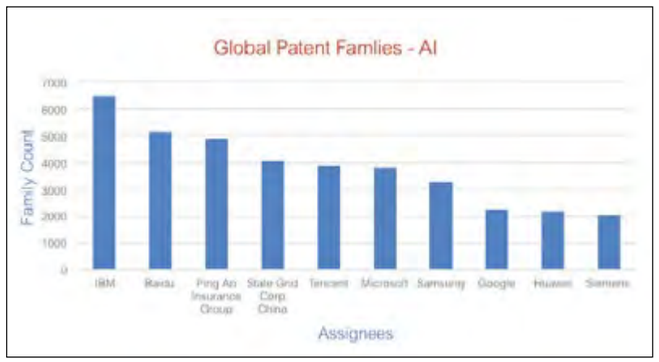


Figure 5. Major innovators in artificial intelligence

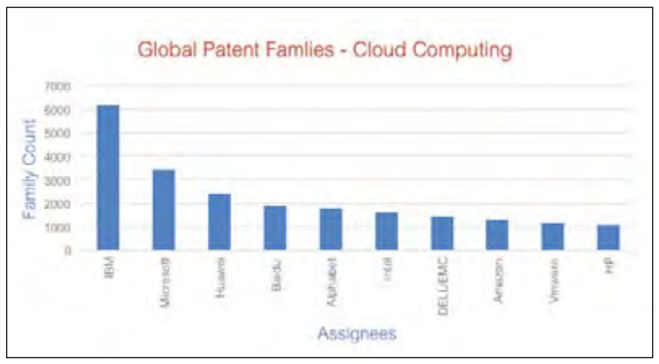


Figure 6. Major innovators in cloud computing

If compared, China is innovating at double the pace of the United States when it comes to securing IP for Blockchain-related technologies. This is evident when nine out of the top 10 global innovators are based in China. Also in the last few years, over 1,000 China-based companies filed 10,000+ Metaverse-related trademarks showing a strong approach toward Metaverse in China. In the United States – leading innovators are IBM, Intel, Mastercard, and Visa.

Patent filing activities rose from 2015 onwards when companies started realizing the versatility of the technology, and of course, the success of Bitcoin. China-based Ping An Insurance group stands top in terms of having the highest number of patent families, with a primary focus on China jurisdiction.

Furthermore, start-ups like Nchain; and private company Hangzhou Fuzmaei Tech. Ltd. increased their filing from 2017 to secure their position in the top 10 innovators in Blockchain technologies. Other companies trailing the top 10 innovators in Blockchain include Intel, Bizmodeline, Microsoft, and Baidu. These initial innovations from start-ups and other small actors will play a key role in the Metaverse as the filed patents cover the basics of Blockchain.

3. Artificial Intelligence

Artificial Intelligence and Machine Learning (AI/MI) are going to play a significant role in building the Metaverse. There will be many metaverses offered by different providers. Eventually, we expect interoperability to enable users to experience always-on Metaverse, where the scale of content, fresh content feeds, personalized content, and other digital experiences would require an enormous effort. To make this more efficient and accurate, AI would play a pivotal role. Companies have been innovating in AI/ML for the past few years and the Metaverse will certainly open new opportunities for more innovation. See figure 5.

IBM is one of the early adopters of AI technology and has retained the top innovator spot with continuous innovation, followed by China's four major players. These companies have innovated and integrated AI into manufacturing, the Internet, finance, commerce, and others. Other key players, which are trailing in AI but focusing more on AI and ML in recent years, are Alibaba, Meta, Amazon, Intel, and Sony.

4. Cloud computing

An always-running Metaverse would require an enormous amount of storage, processing, and performance. To keep everything humming, cloud computing is the only cost-efficient option Metaverse creators have. Knowing the scale of processing required, innovations in cloud computing will be critical for the Metaverse to exist. See figure 6.

IBM has been proactive in securing patents for cloud computing technologies followed by Microsoft, which is actively working toward Metaverse-based applications. Further, Huawei does have a strong IP and commercial offering under cloud computing. Other leaders in cloud computing – Baidu, Alphabet, Intel, Dell, Amazon, VMware, and HP would play an important role in offering an always-on cloud to the Metaverse application enablers.

Assignee	AR/VR	Block Chain	AI	Cloud Computing	Metaverse
IBM	●	●	●	●	◆
Microsoft	●	●	●	●	◆
Tencent	●	●	●	●	◆
Alphabet	●	●	●	●	◆
Alibaba	●	●	●	●	◆
Baidu	●	●	●	●	◆
Huawei	●	●	●	●	◆
Samsung	●	●	●	●	◆
Meta	●	●	●	●	◆
Ping An Insurance	●	●	●	●	◆
LG	●	●	●	●	◆
State Grid Corp China	●	●	●	●	◆
Sony	●	●	●	●	◆

Figure 7. Matrix showing overall leader in the Metaverse based on contributing technologies
● Positioned as top 10 innovators in the category
● Positioned between top 11-20 innovators in the category
● Do not fall in top 20 in the category
◆ Fading blue colour indicates cumulative score of the four technologies expected to contribute in Metaverse

Who will dominate IP in the Metaverse?

Now we have seen which players own the most IP in different Metaverse elements; however, does that indicate anything about who leads the overall race currently?

The Metaverse is still in its infancy but is expected to grow with a series of investments and innovations in different technologies put together. However, to see the bigger picture of Metaverse IP, it would be wise to combine the individual IP story of the four Metaverse elements as follows:

The matrix (figure 7) shows some patent overlap across each technical category. However, looking at the current state – IBM, Microsoft, Tencent, and Alphabet own most IP for

Metaverse's technology element. Furthermore, if we look at the current active and growing ecosystem for Metaverse along with the above IP stats, I think Microsoft and Tencent have an edge over others commercially. Microsoft's already-available infrastructure – Mesh, HoloLens, Azure IoT, Azure Digital Twin, and Azure AI gives them first-mover advantage. Moreover, Microsoft's acquisition of Activision Blizzard affords them another edge to become a leader in Metaverse, as I believe the gaming industry will be the first to offer true Metaverse. Similarly, Tencent, with its gaming dominancy, also has a huge user base through gaming, Wechat, QQ, which gives them a solid base to offer an immersive experience to a large user base and lead China's Metaverse plan.

Other leaders in the above tally have also started exploring the Metaverse plan in their own way. For example, Apple, Alphabet, and Meta are focusing on the technology and affordability of VR/AR headsets for the masses. Baidu launched a Metaverse mobile application "Xirang" to allow users to create avatars and chat with other participants. Samsung launched its flagship mobile phone Galaxy S22 in Samsung's Decentraland Metaverse. LG is partnering with companies to build Metaverse-enabling technologies. And, Sony invested in Epic games to help them build a Metaverse.

All the companies, irrespective of their IP strength, are aggressively looking for avenues to secure their Metaverse plans through partnership, innovation, product launch, investment, filing trademarks, and more. In addition, potential start-ups and small players working on Metaverse technologies will see acquisition attempts by large players.

> **These initial innovations from start-ups and other small actors will play a key role in the Metaverse as the filed patents cover the basics of Blockchain.**

What does the future look like for the Metaverse?

Metaverse is still a concept, and more breakthrough innovations are required that can make Metaverse-enabling products/technology affordable, I believe some serious Metaverse applications/implementations are still six to eight years away, where applications in Gaming, Fashion, and Digital Communication will be the flag-bearer followed by others. There is no doubt that the Metaverse will bring exciting possibilities and opportunities to different industries and businesses. However, in the race to adapt Metaverse, the IP strategy might get ignored.

How should you plan your IP for the Metaverse?

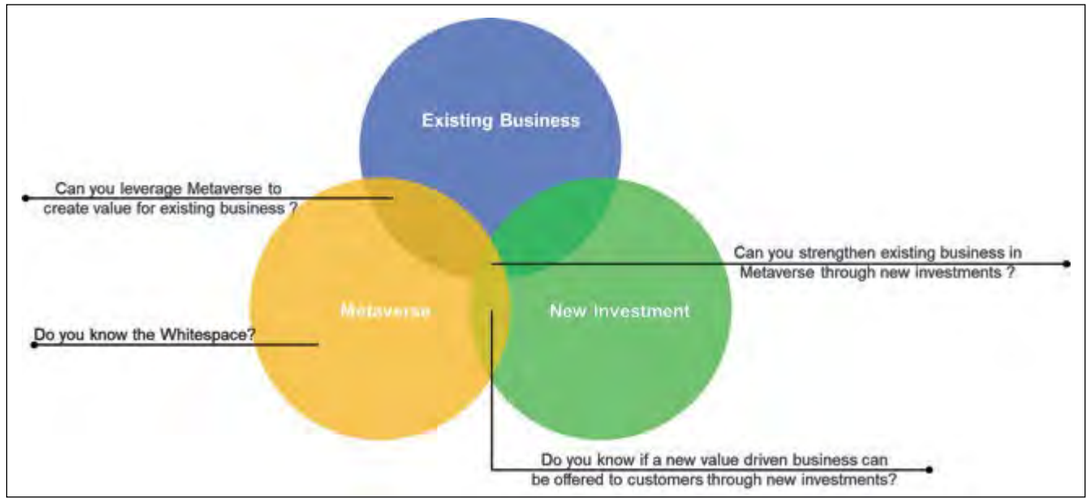
Primarily, one should think about what your company's strengths are to assess if you should move toward integration with the Metaverse and evaluate the potential impact of the Metaverse on your business, product offerings and customers in a virtual environment. Figure 8 poses some relevant questions for such assessments.

Finding answers to the questions in the above diagram is not simple; the questions are complex and subjective. At this initial stage of Metaverse evolution, it's important to get clarity on the following:

I. Value Assessment for business: Understand what value you will create by offering Metaverse-based applications/products.

II. IP strategy: Companies should not run to secure everything they innovate around

Figure 8. Relevant questions for planning Metaverse solution for the business



the Metaverse. Innovators should be conscious while filing patents and should consider the following:

a. Do the due diligence before deciding to file a patent. As the Metaverse evolves, it will offer an ocean of opportunities to secure IP. However, filing patents for every innovation will result in more liability than opportunity.

b. Screen your portfolio to locate potential patents for which a continuation application can be filed to cover relevant Metaverse embodiment. Not all innovations need to come out of Research & Development (R&D).

c. Understand the landscape and identify the whitespace relevant for your business to strategize R&D investment and build the portfolio accordingly.

d. Look for potential partners to accelerate the Metaverse application development

e. Be vigilant while securing IP for your unique business offerings around the Metaverse if you are a startup. It will help you establish your business strongly as a first mover in the space. Further, start-ups and subject matter experts should try experimenting more with their Metaverse business offering to come up with new potential Metaverse implementation/applications, as the Metaverse will take a couple more years to grip a larger consumer.

> **Large, medium, and small businesses, and start-ups alike should sharply define their IP strategy to gain an advantage over the competition.**

Large, medium, and small businesses, and start-ups alike should sharply define their IP strategy to gain an advantage over the competition. Consider your company's strengths to assess if you should move toward the Metaverse and evaluate the potential impact of the Metaverse on your business, product offerings, and customers in a virtual environment. Remember, less can mean more when building your virtual reality patent portfolio. You want the ability to both defend your current portfolio as well as to seize proactive licensing opportunities for monetization.

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Web3 domain names: protecting your brand on the blockchain. An interview with industry expert Thomas Barrett

CTC Legal Media sits down with Thomas Barrett, Founder of EnCirca, following the launch of the industry's first Web3 solution for protecting brands on the blockchain, to discuss the importance of registering in this space and how best to protect your brand.

Can you start by introducing EnCirca, yourself, and your role at the company?

I run an ICANN-accredited domain name service called EnCirca, I do have a second as well, I've been in this space for 20 years. Prior to that, I ran a corporate domain name registrar called NetNames for several years, and before that, I was with Thomson Compumark. I've pretty much had one leg in the trademark space and one leg in the domain name space for 27 years now!

Thomas Barrett

I'm currently the Chair of the Blockchain Subcommittee for INTA. I'm in my third year now, and as I get into helping trademark owners protect their marks on blockchains, I've realized that there are several steps owners need to take. This is a new experience for many of them; brand owners are very accustomed to .com, .bank and .ninja and how ICANN regulates existing domain name space, but ICANN is absent when it comes to blockchain domains. So, it's really a Wild-Wild-West type of phenomenon for a lot of brand owners.

I work on the formation of life cycles of blockchain domain names for trademark owners. This assists the brand in positioning its services for protection. We've been doing registrations for Ethereum and Unstoppable Domains (decentralized, open-source blockchains) for several years now, and what we discovered is that when trademark owners come to us to register their trademark, it's too late; someone's already taken it. They then must go through proceedings to claim it.

To help with this, we are extending our services beyond registration to do trademark investigation. We look to find out if exact matches are available as well as those with close similarities. In a prior life, when I was at Thomson Compumark, I built SAEGIS, which was probably, in its time, the leading trademark research engine with hundreds of different national databases. So, we have built SAEGIS for blockchain domains and so it requires us to not only integrate to blockchains but to run blockchain nodes so that we can conduct data mining through the blockchains to figure out who has registered what domain names. AltRoots is our trademark search engine as a result of that effort.

Résumé

Tom Barrett is Founder and CEO EnCirca, an ICANN-accredited domain name Registrar. EnCirca is a white-labeled registrar for dotBrand TLDs and domain extensions, such as .BANK and .CPA, as well as Blockchain-based DNS and TLDs. EnCirca recently launched AltRoots, an industry-first trademark search engine for the decentralized web (blockchain). Tom serves as Chair of the Blockchain Subcommittee for the International Trademark Association, where he leads policy efforts for leveraging and protecting intellectual property on blockchains. He is also an Internet Governance leader for not-for-profit domain registry organization ICANN, serving as Chair of the NomCom Review Implementation Working Group. Tom has engineering degrees from WPI and MIT.

What are Web3 domains? And how do they differ from Web2 domains?

The use cases are a little different. Web3 domains are mainly user-friendly identifiers to digital identities and digital wallets.

You will be familiar with digital wallets. If you hold any Bitcoin or NFTs, they hold the keys to your digital assets.

An example of a digital identity is Bored Apes, who have avatars to represent them not only on social media but on the various metaverses.

Those are the main uses for Web3 domains. There are decentralized websites and emails, but that's not the primary use case.

Why is it important for brand owners to secure Web3 internet access? What does this allow the brand to do?

It's no different from when social media emerged. If brands wanted to engage with their consumers in that space, they had to follow them onto the platforms, such as Facebook and Twitter. So now, the brands have to follow consumers to the metaverse. That's where consumers are going to be; that's where they're going to be spending money, both real and otherwise. Brands have realized that they need a presence on the meta-verses, which is typically a Web3 domain name.

> **"Brands have to follow consumers to the metaverse. That's where consumers are going to be, that's where they're going to be spending money, both real and otherwise."**

Why should brands opt to acquire top-level domains as opposed to .eth .crypto and .nft type domain extensions?

ICANN, in their last round in 2012, had about 1,800 applications; 600 of those were for .brands. The use case for a .brand is increased security and increased branding because you're no longer branding the extension itself. You can offer a more secure presentation or interaction with your fan base or customer base. Those same benefits apply in Web3 as well.

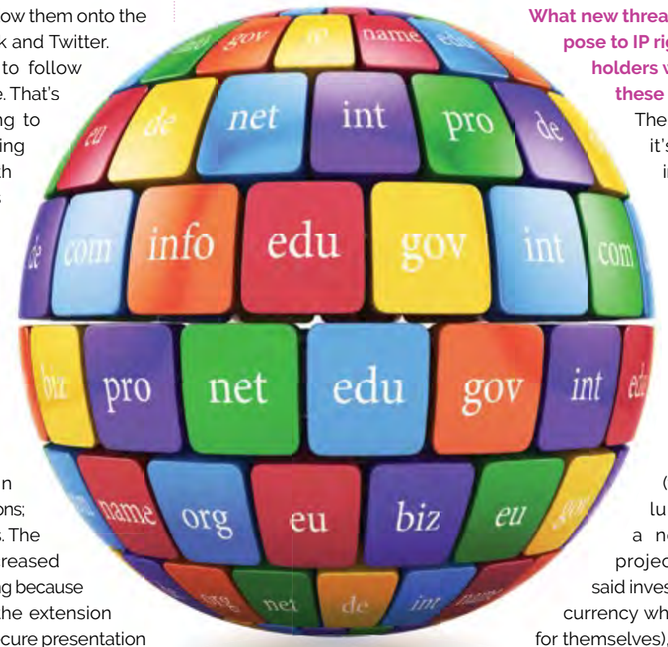
As you mentioned, there is .crypto, .eth; there are actually over 5.5 million extensions on Web3 today. Compare that to ICANN's 1,500, and you get a sense of the magnitude that brands are facing. They cannot simply defensively register in every Web3 extension; there are just too many of them. They can't necessarily police them, either. Web3 domain names don't have zone files like ICANN, UDRP doesn't necessarily apply, and there's no WHOIS. To counter this, brand owners need to establish a brand on Web3 and communicate clearly to their customers about only interacting with that specific Web3 domain if you want to do business with them.

What impact do you think Web3 is having and will have on the IP industry?

As I mentioned, I'm chair of the Blockchain Subcommittee at INTA. The subcommittee and I have been charged with drafting an NFT white paper for the INTA community.

I've got 20 members on my committee, but I've enlisted about 50 other trademark lawyers from 10 other INTA committees. We are working towards a release of the white paper by the INTA leadership meeting, which is mid-November in Miami.

The impact of Web3 is huge. INTA has decided it is their number one concern when it comes to trademark rights for 2022.



What new threats does Web3 pose to IP rights? How can right holders work to overcome these threats?

The biggest threat is that it's anonymous and immutable.

If someone is impersonating your brand or somehow misleading your customers, that can obviously cause tremendous harm to the reputation of the brand. Similar to 'rug pulls' in the crypto space (where a developer lures investors into a new cryptocurrency project, then abandons said investors with a worthless currency while taking the profits for themselves), we'll hear about so-called brands doing rug pulls on

the blockchain. Brands might not even be aware that someone has been impersonating them. So, brands need to monitor the space.

AltRoot's service starts with an assessment step where we will look for the exact names that you can register right away as well as close similarities that might be used to try and impersonate your brand. For brands unsure of what to do, we offer the assessment and watching service to get a sense of the magnitude of the problem. But then, of course, we're here to register the available names, to claim reserve strings - several of the block strings have claimed well-known trademarks - but we're also here to help them investigate some of the names that are taken.

How can EnCirca's search engine assist brands in protecting their IP from infringement?

The first step is to do a situation report or assessment. The first watching report is probably the most valuable because it conducts a search against the entire back file. There are over eight million blockchain domains in our trademark search engine right now - that's across Ethereum, Handshake, and Polygon. As I mentioned, there are over five and a half million top-level domains; the biggest are .eth with Ethereum, .crypto, and a few others, so we look at both the top-level and second-level for exacts and close matches. We offer a monitoring service to brands, but if they want to take it to the next level and start to register what they think should be their presence, or perhaps defensively register a few, we're available to offer that service, too.

What advice would you give to a start-up or SME that is thinking of entering the Web3 space?

Ultimately, the game here is top-level. For the same reason that .brands are migrating from .com into their own TLD, if you have a .eth or .crypto, I think you'll want to migrate to your own top-level domain.

We are a big believer that the leading blockchain offering top-level domains is Handshake. For the cost of a Starbucks coffee, an SME could probably acquire their TLD today. ICANN, in comparison, wants $185,000 and that's five years away, and so it's not scaling for the needs of the blockchain.

What element of Web3 excites you the most and why?

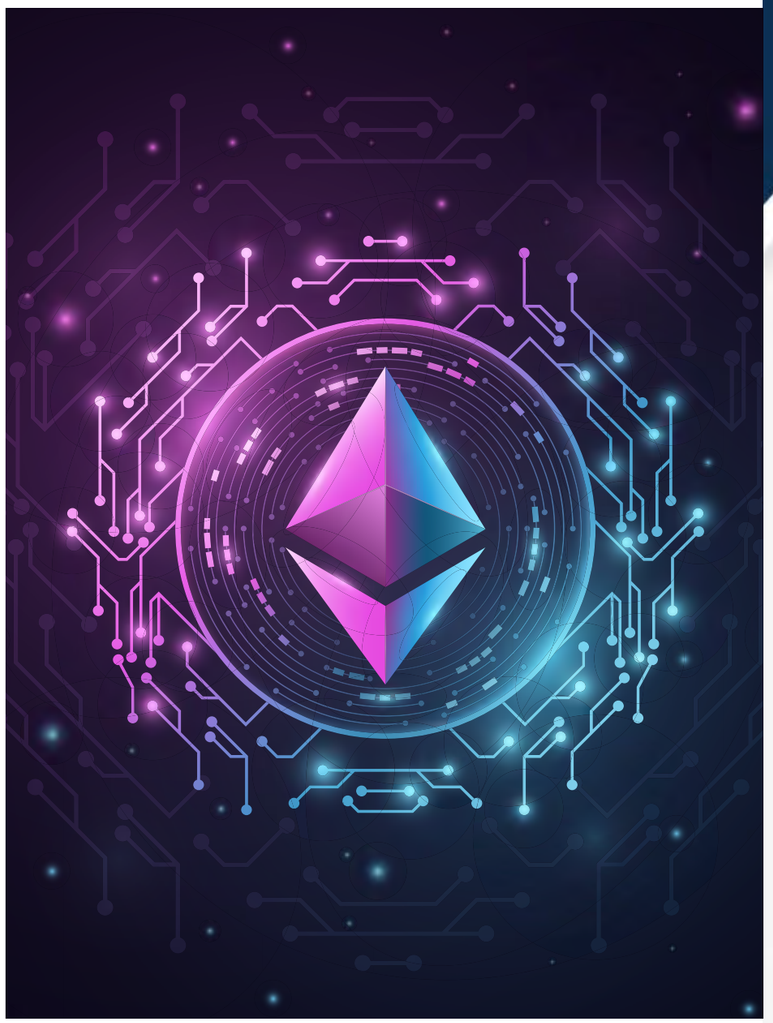
We've seen in Web2 that if you're not paying for the service, you are the service. So, people have lost control of their privacy and personal information. Web3 promises to let people regain their privacy and regain control of who has access to the data. And if you decide to give someone access, then you should be compensated for that, there should be a justification for it.

That's what most excites me about Web3; it's all about personal digital identities. Our kids will have a digital wallet on their phone, they're going to be buying things using crypto, they're going to be managing NFTs - whatever their collectibles are - so it's an exciting next phase of the Internet.

> **For the cost of a Starbucks coffee, an SME could probably acquire their TLD today.**

What is your key focus for Web3 at this stage?

I think the key part is that there is no regulation. ICANN, which fills that role on Web2; is not likely to fill the role for Web3. I think it will be several years before we see some meaningful regulation in this space and so I'm hoping with tools like AltRoots, we can help trademark owners certainly get a handle on what's happening and start to protect their trademarks while they wait for laws and regulations to catch up.



Arming the troops with AI: a mission to protect every trademark in Web3

Hao (Henry) Du, Ph.D., CEO of Huski.ai, examines the difficulties trademark owners are facing in protecting their rights in the NFT space and explains how Huski.ai's detection image model is combating these issues.

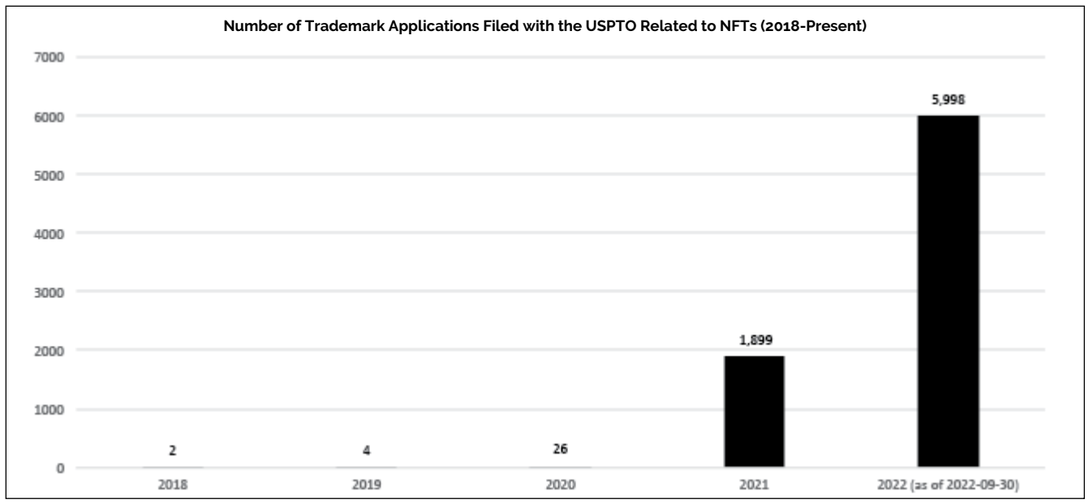
Although the term "NFT" has only recently crept into the public lexicon, the underlying concept is familiar. A non-fungible token (NFT) is an authentication on a blockchain that certifies the ownership of the digital asset to which it is attached. At a high-level, the concept is very similar to a deed of sale. But rather than using a physical document to record a transaction, NFTs take advantage of secure blockchain technology to record transfers of ownership. While NFTs technically refer to blockchain authentications, the term is colloquially used to refer to the digital assets to which they are attached.

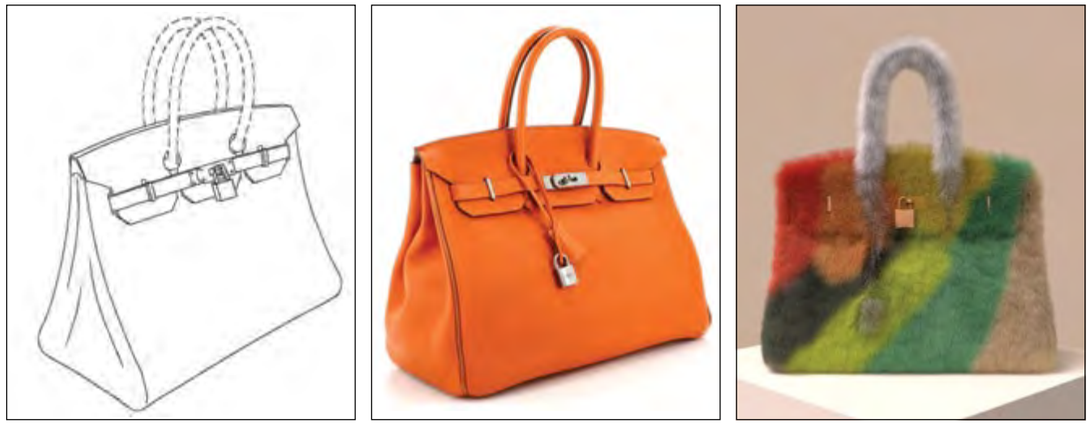
NFTs and related technologies like crypto, blockchain, and virtual reality are said to be some of the technologies that will underpin the projected future of the internet: Web3. "Web3" refers to the evolution of internet usage following

Hao (Henry) Du

Web1 (1994-2004) and Web2 (2004-present). "Web1" refers to the early days of the internet, in which we primarily used the internet to access and read information. "Web2" represented the shift in which we began to post and contribute, such as on social media sites like Facebook. However, Web2 left the profits, ownership, and control in the hands of a few dominating tech companies. As a result, Web3 proponents assert that the next iteration of internet use should prioritize ownership and decentralization. Web3 is, essentially, stakeholder capitalism for the digital age. In short, "read, write, own" describes the transition from Web1 to Web3.

NFTs are therefore a natural extension of this preoccupation with ownership because they authenticate ownership and take advantage of decentralized blockchain technology. While their full potential remains to be seen, NFTs are





Side by side images of USPTO Registration No. 3936105, a real Birkin bag, and a MetaBirkin.

Résumé

Hao (Henry) Du is co-founder and CEO of Huski.ai, a startup that is using AI to transform trademark prosecution and protection for IP professionals and brand owners by offering solutions for the clearance, management, and protection of brands in trademark offices, eCommerce, social media, and Web3. Based in Silicon Valley, Dr. Du is an engineer and serial entrepreneur who has worked in various companies crossing AI chip development and software, autonomous driving, oil & gas, and automobile industries. Dr. Du obtained his Ph.D. degree from the University of Michigan.

primarily used to indicate the ownership of collectibles, digital art, or virtual goods in the metaverse.

While some enthusiasts embrace NFTs, others doubt their staying power. For example, on May 3rd, 2022, The Wall Street Journal claimed that NFT sales were down 92% compared to their record high in September of 2021[1]. "The NFT market is collapsing," the article boldly asserted in its opening line. Despite market volatility, USPTO trademark application data seem to show that NFTs are here to stay.

To date, 7,517 total applications to register have been filed with the USPTO that indicate "non-fungible token" in the goods and services. The first trademark application relating to NFTs was filed in 2018 for OpenSea, the popular NFT marketplace. The number of applications indicating "non-fungible token" in the goods and services first started to increase in 2021, reaching 1,899 applications filed. That number nearly tripled by September 2022, with more and more brand owners looking to get in on the action.

> **In short, "read, write, own" describes the transition from Web1 to Web3.**

Emerging creators and well-known brands alike are now staking their claims in the virtual world, filing applications to register their brand names and imagery for Web3-related goods and services every day. Recently, Hermès International made waves by filing three applications to register in August 2022. As Hermès has always prided itself on its devotion to craftsmanship and refusal to follow trends[2], there is little doubt that this decision was influenced by the luxury fashion powerhouse's ongoing court battle against Mason Rothschild.

Hermès Int'l v. Rothschild is one of the most closely watched cases related to NFTs and trademark infringement. On January 14, 2022, Hermès International filed a lawsuit in the Southern District of New York against Rothschild, an artist who has purportedly made over 1.1 million USD through the sale of his "MetaBirkins" NFT collection.

Hermès is alleging, *inter alia*, trademark infringement, trade dress infringement, and trademark dilution. Hermès owns multiple registered trademarks in relation to its famed Birkin bag, including US Trademark Registration No. 2991927 for the BIRKIN word mark and US Trademark Registration No. 3936105 (https://huski.ai/trademark/-76700120) for the trade dress.

The *Hermès Int'l v. Rothschild* case won't be the only incident of court battle for brand owners. With the flooding of NFTs in the metaverse, brand owners now face the challenge of policing their precious IP against those who seek to profit from it in the virtual world. While the lack of established precedent makes enforcement challenging from a legal perspective, the other challenge is uncovering potential infringements. There is too much data for human monitoring efforts to suffice; scouting these virtual frontiers

1 NFT Sales Are Flatlining. The Wall Street Journal. 03 May 2022. https://www.wsj.com/articles/nft-sales-are-flatlining-11651552616

2 https://martinroll.com/resources/articles/strategy/hermes-the-strategy-behind-the-global-luxury-success/ ; https://www.nytimes.com/2019/02/15/t-magazine/hermes.html ; https://www.fastcompany.com/90605195/hermes-most-innovative-companies-2021

for IP infringement demands powerful tools.

While this new era of a creator economy and metaverse is quickly developing, there are three key challenges to developing the technology needed to catch up and support the hypergrowth:

1. Accessing, gathering, and maintaining Web3 data;
2. Uncovering potential infringements;
3. Affordability.

The first challenge is gathering the data to monitor. Web3 assets reside on different infrastructures than Web2 assets; therefore, a different approach is required to make this data searchable. Developing such an approach is made even more complicated by the unprecedented speed at which new content is generated. Rather than data-gathering and data maintenance being discrete functions, the two must converge to accommodate the ever-changing and ever-growing pool of data.

The next challenge involves making meaning of the data, i.e., detecting which trademarks are present in the images. However, existing artificial intelligence (AI) and machine learning (ML) techniques for image recognition can be costly and resource-intensive, so the final challenge is making it affordable at scale.

Typically, ML requires a significant amount of data for the "machine" to "learn" about a specific

> **Teaching a machine to recognize just one million trademarks from any image would require ten billion labeled images as training data.**

task. For example, to teach a self-driving car to perceive a stop sign, you would provide the computer with approximately 10,000 real-world images in various scenarios with the stop signs labeled. From this input, the computer should learn to detect and recognize stop signs in all possible scenarios.

However, this "traditional" ML paradigm is not scalable for widespread Web2 or Web3 brand protection. The human labor costs would be too high. In contrast to the ~30 types of objects an autonomous vehicle needs to learn, there are millions of trademarks. Teaching a machine to recognize just one million trademarks from any image would require ten billion labeled images as training data, and it would take a team of 1,000 workers over 19 years just to produce that volume of training data – even with the gross assumptions of around-the-clock work at the hyper-efficient production speed of one labeled image per minute.

Because this is a near-impossible task, image models using the traditional ML paradigm are not trained to recognize every trademark; they're trained to detect only the ones they need to know. More directly, only when a service provider acquires a new client will their software be taught to recognize that client's trademarks. While this as-needed approach solves the resources problem – you don't need a team of 1,000 workers creating training data around the clock for 19 years – it does not address the root problem

of traditional ML approaches: the high cost of data-labeling.

As a result, the data-labeling cost is passed on to the user in the form of onboarding or subscription fees, which often gatekeep IP monitoring services from smaller brand owners. Furthermore, the limitations of traditional ML paradigms limit platforms' ability to implement solutions to detect trademark infringement at scale. Without transformation at the technology level, the burden of trademark policing will remain the responsibility of the rights holder, for whom existing tools can often be cost-prohibitive.

Fortunately, breakthroughs in AI promise to make scalable, cost-effective IP protection attainable for all players in the innovation ecosystem.

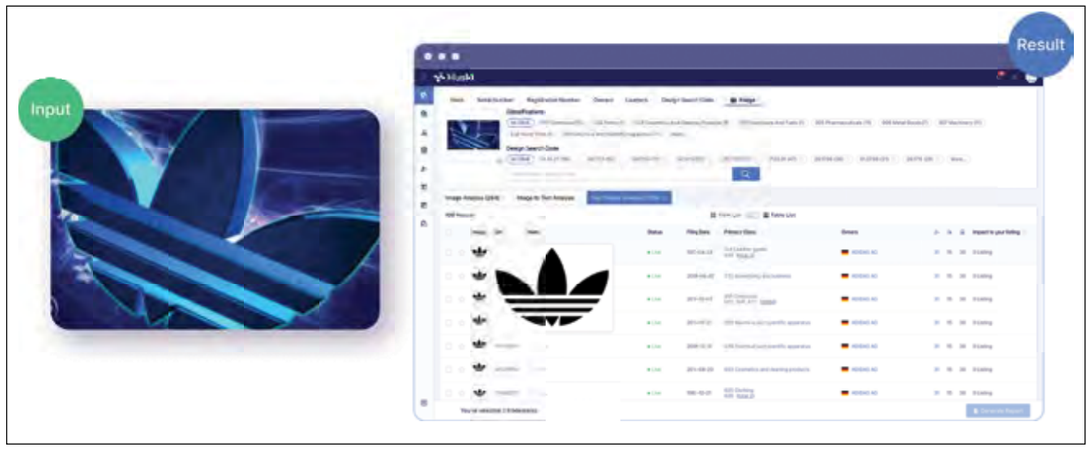
Huski.ai was built to detect and recognize any trademark from any image, in the most challenging conditions, without any data-labeling costs. Huski.ai's proprietary multi-million-class object detection image model does not require any instructions or training data from humans. Instead, the model was trained in a self-taught deep learning paradigm in which separate groups of computers work together to teach each other to recognize millions of trademarks from real-life images.

This "robots teaching robots" deep learning paradigm has produced a model with a deep understanding of visual similarity, performing well even when an image features challenges such as distortion, blurring, and unusual angling, lighting, backgrounds, or textures. Huski.ai can also reliably detect millions of word marks in texts or in images. In this way, it can understand content across different domains, such as content from the real world to the metaverse and back, making it essential for finding potential infringements in the assets authenticated by NFTs.

> **Huski.ai was built to detect and recognize any trademark from any image, in the most challenging conditions, without any data-labeling costs.**

These breakthroughs in AI will have real-world impacts on brand owners and lawyers everywhere, and they will set the groundwork for a just, equitable, and profitable creator economy. The foundation of innovation is the infrastructure established by lawmakers, lawyers, and service providers who maintain a safe and fair playground for innovators to reap the benefits of their creations. A collaborative approach centered around the promotion of strong IP rights, enabled by the latest technology, and in support of innovation, will be our best way forward.

Contact
Hao (Henry) Du
henry.d@huski.ai
+1 (713) 854-2057



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