2022 | VOL. 31 | NO. 1



Bright Ideas

A publication of the Intellectual Property Law Section of the New York State Bar Association

GREENWASHING: CONSIDERATIONS FOR BRAND COUNSEL

NON-FUNGIBLE TOKENS AND INTELLECTUAL PROPERTY LAW

THE METAVERSE: FROM SCIENCE FICTION TO COMMERCIAL REALITY – PROTECTING INTELLECTUAL PROPERTY IN THE VIRTUAL LANDSCAPE

PUBLICATIONS Virtual Lawyering: A Practical Guide

Editor: Mark A. Berman, Esq.

As a result of the public health crisis created by COVID-19, the legal profession will never be the same: attorneys will be litigating, arguing, closing transactions, and counseling individuals and corporate clients over virtual platforms, from the most commonplace tasks, such as a virtual notarization or executing a will, to holding virtual hearings before a court or closing on multi-million dollar transactions.

Whether you are a litigator, transactional attorney or in-house attorney, *Virtual Lawyering: A Practical Guide* will provide you with practical advice as you navigate through the virtual legal world and confront new issues.

eBook (413720E) NYSBA Members \$45.00 Non-Members \$60.00

ORDER ONLINE: NYSBA.ORG/PUBS | ORDER BY PHONE: 800.582.2452

🟛 Virtual Lawyering:

A Practical Guide

Editor Mark A. Berman, Esq.

W YORK STATE BAR ASSOCIATION



Contents

Features

- 4 'Greenwashing': Considerations for Brand Counsel Kathleen E. McCarthy
- 8 Non-Fungible Tokens and Intellectual Property Law: Key Considerations Daniel J. Barsky and Andrew Cummings
- **13** The Metaverse: From Science Fiction to Commercial Reality—Protecting Intellectual Property in the Virtual Landscape Charles R. Macedo, Douglas A. Miro and Thomas Hart

Bright Ideas 2022 | Vol. 31 | No. 1

Regulars



Message From the Chair Michael Oropallo



Section Committees and Chairs

Bright Ideas

Submission of Articles

Anyone wishing to submit an article, announcement, practice tip, etc., for publication in an upcoming issue of *Bright Ideas* is encouraged to do so. Articles should be works of original authorship on any topic relating to intellectual property. Submissions may be of any length.

Submissions should preferably be sent by e-mail to Editor-in-Chief, Sarah Ryu, at: sarah.ryu@weil.com.

At-Large Members of the Executive CommitteeDavid B. BassettRaymond A. Mantle

Accommodations for Persons with Disabilities:

NYSBA welcomes participation by individuals with disabilities. NYSBA is committed to complying with all applicable laws that prohibit discrimination against individuals on the basis of disability in the full and equal enjoyment of its goods, services, programs, activities, facilities, privileges, advantages, or accommodations. To request auxiliary aids or services or if you have any questions regarding accessibility, please contact the Bar Center at 518-463-3200.

Bright Ideas is a publication of the Intellectual Property Law Section of the New York State Bar Association. Members of the Section receive a subscription to the publication without charge. Each article in this publication represents the author's viewpoint and not that of the editors, Section officers or Section. The accuracy of the sources used and the cases, statutes, rules, legislation and other references cited is the responsibility of the respective authors.

Publication Date: April 2022

Copyright 2022 by the New York State Bar Association. ISSN 1530-3934 (print) ISSN 1933-8392 (online)

Editor-in-Chief

Sarah Ryu Weil, Gotshal & Manges LLP New York, NY sarah.ryu@weil.com

Executive Editor

Rory J. Radding Mauriel Kapouytian Woods LLP New York, NY rradding@mkwllp.com

Section Officers

Chair Michael A. Oropallo Barclay Damon LLP moropallo@barclaydamon.com

Vice-Chair

Brooke Erdos Singer Davis & Gilbert LLP New York, NY bsinger@dglaw.com

Secretary

Nyasha S. Foy nyasha.foyesq@gmail.com

Treasurer

William Robert Samuels Warshaw Burstein LLP wsamuels@wbny.com

NYSBA.ORG/IP

Message From the Chair

Where have the last two years gone? It would have been hard to imagine two years ago that our world would be turned upside down like an episode of *Stranger Things*, but it has. We gave little attention to the one- or two-hour daily commute that many of us have abandoned in favor of our computer monitor, cramped spaces, and remote working. But is there a "silver lining" to the pandemic?

Just like 9/11, we will never forget COVID-19, "flatten the curve," "social distancing," and struggling to recognize friends, family and colleagues from behind those N-95's nor the losses and difficult times we collectively experienced and want to put behind us. However, we learned that our profession can survive without being physically present at a deposition table or in a judge's chambers. We also learned that those one- or two-hour commutes could be parlayed into spending a little extra time with our loved ones or getting outside.

So what does the future of our profession hold, and will what we have learned help our never-ending struggle to achieve work-life balance? Personally, I believe things will moderate, that slowly but surely we will return to many of our old habits and return to the bricks and mortar of pre-pandemic days. However, I also believe that platforms like Zoom, Teams, and Google will give us much needed flexibility, and that DocuSign and remote notarization will help us and our clients.

The digitization of our world and profession has created challenges and opportunities for IP lawyers. For example, the topics in this edition of *Bright Ideas* are just a sampling of things to come. Who would ever have thought an NFT—a non-fungible token—would ever be an investment opportunity, let alone spawn the types of new legal issues it has with its blockchain and crypto counterparts?

And what about the "Metaverse"? A few years back the IP Section had a panel on "Second Life." Did any of us foresee what is happening now and the



legal, IP, and enforcement issues that are arising in a "virtual" world with "real" transactions?

Finally, another hot topic—"greenwashing"—has its own set of practical and legal issues that IP counsel should consider as the FTC works on updating its "Green Guides" this year.

One thing is clear—our world is changing. As it does, what we traditionally thought of as the "settled law" of patents, trademarks, and copyrights, is being questioned when it comes to these new platforms, virtual environments, and electronic versions of those things that used to have a red ribbon on them.

IP is innovation, and IP lawyers are innovators. There is no better time than the present to be an IP lawyer. Good luck!

Mike Oropallo

NEW YORK STATE BAR ASSOCIATION



If you have written an article you would like considered for publication, or have an idea for one, please contact the Editor-in-Chief:

> Sarah Ryu Editor-in-Chief Weil, Gotshal & Manges LLP 767 Fifth Avenue New York, NY 10153-0001 sarah.ryu@weil.com

Articles should be submitted in electronic document format (pdfs are NOT acceptable), along with biographical information.

REQUEST FOR ARTICLES



'Greenwashing': Considerations for Brand Counsel

By Kathleen E. McCarthy

The Cambridge Dictionary defines "greenwash" as a verb meaning "to make people believe that your company is doing more to protect the environment than it really is."¹ This general concept of "greenwashing" has been around for decades. For example, Greenpeace published a book nearly 25 years ago entitled *Greenwash: The Reality Behind Corporate Environmentalism.* Wikipedia has an entry on "greenwashing," defined as "a compound word modelled on 'whitewash'" that is "a form of marketing spin in which green PR and green marketing are deceptively used to persuade the public that an organization's products, aims and policies are environmentally friendly" with examples going back to the 1950s.²

With growing concerns about global warming in recent years, the push against "greenwashing" is increasing. An article in the *National Law Review* recently reported that 2022 is "perhaps the first year that Super Bowl ads and greenwashing became a topic of morning water cooler conversation" after critics voiced claims of greenwashing when "almost ten different commercials . . . centered on themes of sustainability, zero waste, carbon offset and climate change."³ Potential public criticism of "greenwashing" is only one of the risks faced by advertisers: there are increasingly significant regulatory and litigation risks as well. And it is not just advertisements that are being scrutinized; slogans and brand names can also be challenged.

This article will review the current regulatory and litigation landscape regarding greenwashing and then outline considerations for trademark counsel to assess when clearing new marks or advertising slogans to assist in minimizing the risks presented by greenwashing challenges.

Regulatory and Legislative Actions

Advertising regulators have addressed concerns about greenwashing in various ways. In 1992, the U.S. Federal Trade Commission (FTC) first published its "Green Guides," which set forth guidance relating to and examples of advertising claims asserting or implying that products are environmentally friendly. The guides are due to be updated again this year, having last been updated in 2012.⁴ In 2012 and prior Green Guides iterations, the FTC did not address key terms frequently seen in advertising these days, such as claims relating to the term "sustainable." At that time, the FTC reported that the Guides did not address use of the term "sustainable" (as well as "natural" and "organic") "either because the FTC lacks a sufficient basis to provide meaningful guidance or wants to avoid

proposing guidance that duplicates or contradicts rules or guidance of other agencies."⁵ It remains to be seen if the revised guides to be issued this year will address "fluffy, forward-looking statements" about "sustainable" goods and practices.⁶

The FTC has the power to seek federal court injunctions against continued misleading advertising as well as substantial fines in the form of consumer reimbursement obligations in some situations.⁷ FTC press releases relating to FTC actions taken to stop greenwashing claims and reimburse consumers, show fines ranging from the millions to \$9.5 billion and addressing issues as widespread as false claims about vehicle emissions to advertising chemically treated rayon fabrics as made of environmentally friendly bamboo.⁸

Federal and state legislators are also getting involved. For example, the New York State Legislature is considering an act "to amend the general business law, in relation to requiring fashion retail sellers and manufacturers to disclose environmental and social due diligence policies."⁹

Anti-greenwashing laws and regulations are not limited to the U.S. In the U.K., the Competition and Markets Authority (CMA) announced in November 2020 its concern "that [a] surge in demand for green products and services could incentivise some businesses to make misleading, vague or false claims about the sustainability or environmental impact of the things they sell."¹⁰ The CMA provided examples of misleading behavior:

- 1. exaggerating the positive environmental impact of a product or service;
- 2. using complex or jargon-heavy language; and
- 3. implying that items are eco-friendly through packaging and *logos* when this is not true (emphasis added).¹¹

Following discussions with relevant stakeholders including companies, public interest groups, and consumers, the CMA published guidance for businesses in 2021 to help them support the transition to a low carbon economy without misleading consumers.¹² The key principles are:

- claims must be truthful and accurate;
- claims must be clear and unambiguous;

- claims must not omit or hide important relevant information;
- comparisons must be fair and meaningful;
- claims must consider the full life cycle of the product or service; and
- claims must be substantiated.¹³

In France, a new climate law was introduced in 2021, addressing, among other things, advertising promoting a product or service as carbon-neutral or as having no negative impact on the climate.¹⁴

Litigation

More and more class action complaints are being filed that allege products were misleadingly advertised as clean and environmentally friendly. For example, the bareMinerals cosmetics brand is facing litigation that its products are "marketed as clean and natural beauty products for normal, everyday use, but [they] contain harmful per- and polyfluoroalkyl substances (PFAS)."15 The complaint even challenges the brand name, which is alleged to "intentionally join[] the words 'bare' and 'minerals' . . . to convince consumers that its products are clean and natural."¹⁶ The shoe brand Allbirds also is facing a class action complaint that its advertising claims relating to the low carbon footprint of its products and its humane sourcing of wool are false and misleading because the methods Allbirds uses to calculate the carbon footprint ignore the environmental impact of wool production and the widespread mistreatment of sheep in the wool industry.¹⁷ Purveyors of seafood products, both at the restaurant level and in grocery stores, are facing challenges that their advertising claims that their fish products are sustainably sourced are misleading.18

Competitor actions are also possible. Vague phrases regarding a company's aspirations might traditionally be considered puffery and thus non-actionable. However, when those phrases relate to environmental impact, and particularly if a competitor is named, lawsuits often follow, and litigation ensues. For example, a yogurt company's advertising campaigns focused on its "natural, non-GMO ingredients" and "environmental sustainability practices" with products containing "no bad stuff"; the campaigns were enjoined and not considered puffery because the claims were tethered to "comparison claim[s] specifically referencing" its competitor's product, such that the claims were not "the sort of commendatory overstatement incapable of deceiving a consumer," and instead included "negative phrasing in connection with other statements and images that paint [the competitor's] products as a safety risk because they contain potassium sorbate."¹⁹ Lanham Act claims also followed advertising that touted the environmental benefits of the advertiser's products, where a produce transport company claimed, for example, that its processes produced less CO₂ than its competitor.²⁰

Considerations for Brand Counsel

When launching a new brand or a new advertising slogan, legal review is likely to include a trademark clearance search. Such a search is often an important step to help guide the business and minimize the risk of a successful trademark infringement challenge to the new brand or slogan. Even a planned short-term product or slogan can lead to a federal trademark infringement action, with the associated potentially negative publicity, legal and marketing expense, and uncertainty.

Particularly in the current legal and regulatory landscape described above, counsel advising a company on a new brand or slogan should not ignore potential greenwashing risks when providing advice to marketing teams about proposed new marks or advertising slogans. By their very terms, for example, the FTC Green Guides apply to brand names:

These guides apply to claims about the environmental attributes of a product, package, or service in connection with the marketing, offering for sale, or sale of such item or service to individuals. These guides also apply to business-to-business transactions. The guides apply to environmental claims in labeling, advertising, promotional materials, and all other forms of marketing in any medium, whether asserted directly or by implication, through words, symbols, logos, depictions, *product brand names*, or any other means.²¹

Thus, when clearing a mark or logo for use and registration, in addition to conflicts presented by prior trademark filings and uses, counsel should also consider whether there are risks associated with any advertising claim issues inherent in the proposed mark (e.g., "eco-," "green," "sustainable," etc.).

In addition, an "eco" mark may be clear for use in some respects but not registrable for various reasons. If the mark cannot be registered, selecting a new mark may be advisable for that reason alone, even where the risks associated with *use* of the mark may be low. This is particularly true if securing a registration is important in the jurisdictions where the mark will be used—for example, where counterfeiting protection is available only for registered marks or in a "first to file" country where registration is paramount. Registration may not be essential for every mark. But if registration is a goal, consider whether an "eco" mark may be unavailable for registration in the U.S. for one or more of the following reasons:

A. The Mark Is Generic or Merely Descriptive

• A term is generic if it refers to the class or category of goods or services on or in connection with which it is used, as determined by the primary significance of the term to the relevant public.²²

- Generic terms are free for use by all and cannot be registered regardless of length of use. The issue of genericness will be determined by the examining attorney at the time of examination.
- A mark is merely descriptive "if it immediately conveys knowledge of a quality, feature, function, or characteristic of the goods or services with which it is used."²³
- While it can be easy to clear a merely descriptive mark for use, merely descriptive marks can only be registered with proof that the mark has acquired distinctiveness, i.e., that the mark has come to be associated exclusively with the applicant. It usually takes some time to develop acquired distinctiveness in the marketplace. For example, the USPTO may accept as prima facie evidence of distinctiveness a claim that the mark has been in substantially exclusive use for five years under 15 U.S.C. § 1052(f) (Section 2(f)).
- An example of an "eco" mark rejected as generic is SUSTAINABLE WATER for "sustainable on-site water recycling and wastewater treatment services." The proposed mark SUSTAINABLE WATER was found to be generic because the relevant public was likely to understand the term to refer to a type of water recycling and wastewater treatment services.²⁴
- An example of an "eco" mark rejected as merely descriptive is GREEN CEMENT for cement products that the applicant stated were "produced using processes that emit low level carbon dioxide by-products as compared to standard processes" and "will be made in a way that reduces their carbon footprint." The Trademark Trial and Appeal Board affirmed the examining attorney's refusal to register the mark on the grounds that it was merely descriptive of cement and cement-related products.²⁵ "Green" adds nothing to distinguish the mark, as it is commonly used to identify environmentally friendly products.

B. The Mark Is Deceptively Misdescriptive or Deceptive

- A mark is deceptively misdescriptive if it (a) misdescribes the goods or services, and (b) consumers are likely to believe the misdescription.²⁶
- A mark is "deceptive" if, in addition to misdescribing the goods or services in a manner that consumers are likely to believe (as with a "deceptively misdescriptive" mark), the misdescription is also likely to be material to the purchasing decision.²⁷
- A deceptive mark cannot be registered, even with proof of acquired distinctiveness.²⁸
- An example of an "eco" mark that failed as both deceptively misdescriptive and deceptive is GREEN

SEAL for "adhesive tape and adhesive packaging tape and tape dispensers for home and office use," where the applicant claimed that its use of "green" referred not to environmentally friendly characteristics of the goods, but to a color-coding system used for its tapes. The Trademark Trial and Appeal Board did not buy this argument and affirmed the rejection on the ground that purchasers and prospective purchasers would likely believe the misrepresentation conveyed by the term: that applicant's goods are environmentally friendly.²⁹

Some of the provisions that prohibit registration of a mark also trigger regulatory or class action concerns. For example, continued use of a mark that the USPTO considers "deceptive" could trigger potential action by the FTC, and may implicate class action risks such as those identified above as well as the following examples:

- The FTC sued a company called Truly Organic, alleging that the company's nationally marketed bath and beauty products are neither "100% organic" nor "certified organic" by the U.S. Department of Agriculture (USDA).³⁰
- The FTC sued a paint company using a "Green Promise" certification mark for its Zero Emission brand of paints, alleging, among other things, that the company did not adequately disclose that the certification was self-awarded by the company and that the paints may emit chemicals for the first four hours after the latest application.³¹
- The FTC sued a retailer selling Little Bamboo baby blankets that were made of rayon.³²
- A class action suit was brought against a beauty and skincare company, asserting that use of the registered trademark ACTIVE NATURALS and other marketing materials were false, deceptive, and misleading to consumers since the products contain unnatural, synthetic ingredients and are not natural.³³

Counsel can better assist and guide clients through new product and slogan launches by taking a holistic approach to clearance and considering more than just trademark infringement risks. The meaning and import of the proposed mark in the context of the overall marketing plan and the nature of the proposed products should be evaluated against a more complete trademark and regulatory landscape.

Kathleen E. McCarthy is a partner in the intellectual property group at King & Spalding LLP, located in the firm's New York office, with a practice focused on trademark, copyright, advertising and internet matters. She is a former president of the NYIPLA, former editor-inchief of INTA's scholarly journal *The Trademark Reporter*, and author of the current edition of PLI's one-volume treatise *Kane on Trademark Law*.

Endnotes

- See Greenwash, Cambridge Dictionary, https://dictionary. cambridge.org/us/dictionary/english/greenwash (last accessed Feb. 26, 2022).
- 2. *See* Greenwashing, Wikipedia, https://en.wikipedia.org/ wiki/Greenwashing#History (last accessed Feb. 26, 2022).
- 3. See John Gardella, Super Bowl Ads and Greenwashing: Critics Quick to Attack, The Nat'l Law Rev. (Feb. 24, 2022), https:// www.natlawreview.com/article/super-bowl-ads-andgreenwashing-critics-quick-to-attack (last accessed Feb. 26, 2022).
- 4. *See* FTC, Part 260: Guides for the Use of Environmental Marketing Claims, https://www.ftc.gov/sites/default/ files/attachments/press-releases/ftc-issues-revised-greenguides/greenguides.pdf (2012 guides, last accessed Feb. 26, 2022).
- See Press Release, FTC, FTC Issues Revised "Green Guides" (Oct. 1, 2012), https://www.ftc.gov/newsevents/press-releases/2012/10/ftc-issues-revised-greenguides (last accessed Feb. 27, 2022).
- See, e.g., TFL, The Federal Trade Commission Says it Will Review its 'Green Guides' in 2022, The Fashion Law (July 7, 2021), https://www.thefashionlaw.com/the-federal-tradecommission-says-it-will-review-its-green-guides-in-2022/ (last accessed Feb. 27, 2022).
- 7. AMG Capital Management, LLC v. FTC, 141 S. Ct. 1341 (2021) (Section 13(b) of the Federal Trade Commission Act authorizes federal courts to issue "permanent injunction[s]" in FTC enforcement actions, but does not include the power to award equitable monetary relief such as restitution; monetary relief on behalf of consumers may be sought by the FTC under § § 5 and 19 of the Act, when the FTC has engaged in administrative proceedings and issued cease and desist orders).
- 8. *See generally* https://www.ftc.gov/news-events/press-releases?items_per_page=20 (last accessed Feb. 26, 2022).
- 9. See S. 7428, 2021-2022 Gen. Assemb., Reg. Sess. (N.Y. 2021), https://legislation.nysenate.gov/pdf/bills/2021/S7428 (last accessed Feb. 26, 2022).
- 10. *See* CMA, CMA to examine if "eco-friendly" claims are misleading (Nov. 2, 2020), https://www.gov.uk/ government/news/cma-to-examine-if-eco-friendly-claimsare-misleading (last accessed Mar. 1, 2022).
- 11. Id.
- 12. See CMA, Making environmental claims on goods and services (Sept. 20, 2021), https://www.gov.uk/ government/publications/green-claims-code-makingenvironmental-claims/environmental-claims-on-goodsand-services (last accessed Feb. 26, 2022).
- 13. Id.
- 14. See Law No. 2021-1104 on the fight against climate change and the reinforcement of resilience in the face of its effects, https://climate-laws.org/geographies/france/laws/lawno-2021-1104-on-the-fight-against-climate-change-and-thereinforcement-of-resilience-in-the-face-of-its-effects (last accessed Feb. 26, 2022).
- 15. *Complaint, Onaka et al v. Shiseido Americas Corp.,* Civ. Action No. 1:21-cv-10665-PAC (S.D.N.Y. Dec. 14, 2021).

- 16. Id.
- 17. See generally Complaint, Dwyer v. Allbirds, Inc., Civ. Action No. 7:21-cv-05238 (S.D.N.Y. June 13, 2021).
- See, e.g., GMO Free USA v. Aldi Inc., Case No. 2021 CA 001694 B (D.C. Superior Court) (defense motion to dismiss denied Feb. 16, 2022); Marshall v. Red Lobster Management LLC, Civ. Action No. 2:21-cv-04786-JAK-MAR (C.D. Cal.) (defense motion to dismiss pending).
- 19. *General Mills, Inc. v. Chobani, LLC*, 158 F. Supp. 3d 106, 118 (N.D.N.Y. 2016).
- 20. See TransFresh Corp. v. Ganzerla & Assoc., Inc., 862 F. Supp. 2d 1009 (N.D. Cal 2012).
- 21. 16 C.F.R. Chapter 1, Subchapter B § 260.1(c) (emphasis added).
- 22. In re Dial-A-Mattress Operating Corp., 240 F.3d 1341, 1344 (Fed. Cir. 2001).
- 23. *In re Chamber of Commerce of the U.S.*, 675 F.3d 1297, 1300 (Fed. Cir. 2012).
- 24. *In re Aquei Technologies LLC*, Serial No. 86034765 (June 17, 2015) [not precedential].
- 25. *In re Calera Corporation*, Serial No. 77409087 (March 24, 2010) [not precedential].
- 26. See In re Christopher C. Hinton, 116 USPQ2d 1051 (TTAB 2015) [precedential] (refusal to register THCTea for "teabased beverages" that did not contain THC, the chief intoxicant in marijuana, as deceptively misdescriptive of the goods, despite applicant's claim that THC in the mark stood for Tea Honey Care).
- 27. See In re Gulf Coast Pharmacy, Inc., Serial No. 86506207 (August 3, 2016) [not precedential] (refusal to register the mark i for "dietary and nutritional supplements" as deceptive because consumers would understand the mark to indicate the goods included Vitamin E (when they did not) and this misdescription would be likely to affect the purchasing decision of a significant portion of relevant consumers).
- 28. USPTO, Trademark Manual of Examining Procedure, § 1203.02 (July 2021).
- 29. *See In re Kitaru Innovations Inc.,* Serial No. 85211019 (March 26, 2013) [not precedential].
- See Press Release, FTC, Truly Organic? The FTC Says No, Alleges Retailer Misled Consumers about Its Products (Sept. 19, 2019), https://www.ftc.gov/news-events/pressreleases/2019/09/truly-organic-ftc-says-no-alleges-retailermisled-consumers-about (last accessed Feb. 27, 2022).
- 31. See Agreement Containing Consent Order & Decision and Order, In re Benjamin Moore & Co., Inc., File No. 1623079, https://www.ftc.gov/system/files/documents/cases/ benjamin_moore_agreement_and_decision_and_order.pdf (last accessed Feb. 27, 2022).
- See Lesley Fair, Clothes By Any Other Name: FTC Challenges Retailers' "Bamboo" Claims, FTC Business Blog (Dec. 9, 2015, 11:16 a.m.), https://www.ftc.gov/news-events/ blogs/business-blog/2015/12/clothes-any-other-name-ftcchallenges-retailers-bamboo (last accessed Feb. 27, 2022).
- See Complaint, Goldemberg v. Johnson & Johnson Consumer Companies, Inc., No. 13 Civ. 3073 (NSR) (S.D.N.Y. May 7, 2013).

Non-Fungible Tokens and Intellectual Property Law: Key Considerations

By Daniel J. Barsky and Andrew Cummings

Non-fungible tokens—NFTs—have recently taken the world by storm. NFTs have rapidly transformed from little-known online games and virtual trinkets to a multibillion-dollar enterprise replete with novel legal issues running the gambit from intellectual property to securities law considerations. Recent months have seen soaring NFT prices, high-tech heists of NFTs, and the emergence of novel uses for NFTs. This article provides an overview of NFT technology and discusses some of the emerging legal issues that NFTs have raised or are likely to raise.

Overview of NFT Technology

NFTs have existed since at least 2017¹ but exploded in popularity in 2021. An NFT is a unique crypto token that is managed on a blockchain (a type of decentralized ledger that, like a bank ledger, records transactions between the various users of the blockchain). While traditional cryptocurrency is fungible (e.g., one bitcoin is fundamentally the same as any other bitcoin), NFTs are non-fungible, meaning that each and every NFT is, in some way, different from each and every other NFT. This is a critical difference between NFTs and the other types of tokens, such as cryptocurrency, that exist on blockchains and is one of the reasons there is so much excitement surrounding NFTs.

NFTs can exist on any blockchain that has a defined NFT standard, such as Ethereum,² Flowchain,³ and Wax,⁴ among many others. At present, the Ethereum chain, and its ERC-721⁵ standard, is the most common and popular.

NFTs contain at least: (1) a unique identifier; (2) metadata; and (3) code (also known as a smart contract) that handles properties such as transferability and ownership of the NFT. Beyond these fundamentals, an NFT can be programmed in an almost limitless variety of ways, so long as it complies with the standard under which it is created. For instance, an NFT might link to a piece of art and incorporate contractual rights that provide the original artist a commission on all future sales of that piece of art. An NFT may grant ownership of a unique item, merely a license to view or use the unique item, or nothing more than a virtual "certificate of authenticity."

NFTs are created in a process known as "minting" where the unique token is formed in compliance with the standards set on the blockchain used. There are various publicly available programs that allow a user to mint an NFT. Most major NFT marketplaces also support minting, sometimes for a fee.

Almost as important as understanding what NFTs are is understanding the three key things that NFTs are *not*. First, an NFT is not the underlying asset itself. Instead of the actual item, it is helpful to think of an NFT more like a record of a deed for real property: it shows the world who owns the real property (ownership), and the chain of title for the real property (transfer history), and can include additional language such as restrictions, easements, and future conveyances (akin to smart contract language). But the recorded deed is not the real property itself—just like an NFT is not the underlying asset itself.

Second, NFTs are not limited in number. While NFTs are non-fungible, they are not limited in number like some cryptocurrencies, such as bitcoin. The only limits on NFT creation are the creativity of individuals, the practical effects of the cost of minting the NFTs, and the computational limitations of a chosen blockchain.

Third, NFTs are not representative of a unique asset. Each NFT itself may be unique but the underlying asset an NFT represents may not be unique. For instance, outside the technical limitations of a chosen blockchain, there

Daniel Barsky is an intellectual property attorney in Holland & Knight's Miami office. Mr. Barsky regularly represents clients in intellectual property (IP), information technology (IT) and data-related licensing and transactional matters, including mergers and acquisitions (M&A), private equity transactions, joint ventures, and multilateral and multinational licensing agreements. Additionally, he is an adjunct professor at the University of Miami School of Law. His full bio can be found at: https://www.hklaw.com/en/ professionals/b/barsky-daniel-j.

Andrew Cummings, an associate with Holland & Knight LLP's Orange County, California office, is an experienced litigator handling all types of commercial and business litigation in California, Nevada and federal courts across the nation. Mr. Cummings has represented companies from small start-up tech companies to publically traded companies in a wide range of disputes, including trade secret claims and breach of fiduciary duty claims. His full bio can be found at: https://www.hklaw.com/en/ professionals/c/cummings-andrew. is nothing to prevent an artist from creating one million NFTs representing one million copies of the same piece of art. While each NFT is unique from every other NFT, the difference may be as minor as a small piece of metadata indicating whether a particular NFT is the first, second, or third NFT minted in a series of NFTs. In other words, the only unique piece of data in an NFT may be akin to an artist numbering a series of 100 prints of an original work as "1 of 100" instead of "2 of 100"—the artwork is otherwise identical except for the numbering on the piece.

Virtually anything can be minted into an NFT. When creating ERC-721 in 2018, the standard's creators stated that NFTs are "also known as deeds," that their rationale for creating the standard was "tracking distinguishable assets," and that future uses "include tracking real-world assets, like real-estate."⁶ While real estate transactions have not yet been turned into NFTs, a wide variety of items have been minted into NFTs, such as music, sneakers and shoes, digital art, physical art, videogame assets (such as unique swords and player skins), and virtual real estate. There is almost no limit as to what can be minted into an NFT. If the minimum technical requirements of the NFT standard being used are satisfied, an NFT can be minted.

More on Minting and Gas Fees

There are a variety of issues that need to be considered when counseling clients on minting NFTs. Importantly, minting is not free. Due to the nature of current blockchains, fees are charged (known as "gas" fees) for minting an NFT to pay for the computing power, energy, and other resources required to run the blockchain.⁷ Gas fees can vary widely and become extremely expensive. For instance, the gas cost to mint an NFT on Ethereum started at only a dollar or two but has since increased and can exceed hundreds of dollars per NFT. Gas prices on Ethereum are like gas prices for cars-they are dynamic; the busier a blockchain is the higher the gas fees. In other words, a user must pay more to ensure their transaction gets processed by the blockchain. Additionally, gas is paid in the subject blockchain's cryptocurrency, which is subject to exchange rate fluctuations against traditional currencies (such as the dollar). When advising clients, you must determine how much those fees are and who will be responsible for paying them.

Also important to bear in mind is that larger NFTs, such as those that incorporate digital artwork with large file sizes, will cost more in gas fees to mint than smaller NFTs. To reduce NFT size (and minting costs), many users mint NFTs that do not themselves contain the asset being transferred. Instead, the NFT may contain only a link or other access right to the asset which is stored elsewhere. When storing the work represented by an NFT outside of the subject blockchain, a number of issues are raised, including where is the work stored, how is the work stored, how is access granted to the work, and how is security maintained. There are two general ways to avoid paying gas fees up-front: using a sidechain⁸ and lazy minting.⁹ A sidechain is a different but compatible blockchain that operates alongside of, but distinct from, the main blockchain. NFTs can be transferred from the sidechain to the main chain such that a marketplace is not forced to operate on a single chain. There are a variety of benefits and drawbacks to using a sidechain for minting. The benefits include less traffic than the main blockchain, potentially resulting in lower creation and transfer costs together with faster transaction processing. Potential drawbacks to using a sidechain to mint include the creation of additional steps that can result in friction and added complexity, a fragmented experience for users who utilize multiple marketplaces, and possible messaging and public relations issues.

"Lazy" minting refers to the practice of not minting an NFT until there is a recorded sale, at which point the NFT is both minted and transferred. While the minting may appear to be "free," the cost of minting may actually be included in the transaction fee charged by the marketplace. The primary benefit of lazy minting is that no costs are incurred until an NFT sale is made reducing barriers to entry for consumers. However, as discussed in more detail below, lazy minting has been shown to lead to a dramatic increase in the offering for sale of counterfeit, fraudulent, and fake NFTs.

NFTs and Copyrights

Contrary to much of the hype in the NFT space, NFTs do not somehow fundamentally alter copyright law. The fundamentals of copyright transfer and ownership will still apply to NFTs. For example, things that are classically not subject to copyright protection—such as cocktail recipes¹⁰—are not subject to copyright protection simply because they are minted into an NFT.

The existence of an NFT will not convert a non-protectable item into a protectable work. While not formally decided by a court at this time, it is unlikely that NFTs are, themselves, subject to copyright protection. U.S. law requires works of authorship to be "fixed in any tangible medium of expression" to be eligible for copyright protection.¹¹ NFTs themselves are intangible and are therefore likely outside the scope of current U.S. copyright law. While NFTs do not fundamentally alter copyright law, they do, in many instances, offer new and unique commercial opportunities. For example, while a particular cocktail recipe itself may not gain copyright protection from being minted into an NFT, NFTs can be created around that cocktail recipe that are protectable (such as unique artwork) or derive independent economic value (such as membership in a club or admission to a speakeasy). Additionally, while NFTs may not directly alter established copyright law, existing agreements dividing intellectual property rights between two or more parties may be unclear on which party owns the rights to create NFTs using the subject IP.

"It is more accurate to think of the current situation as akin to Napster and the music industry; NFT evangelists who believe that copyright law is inapplicable or minimally applicable to NFTs are likely to meet the same fate Napster met at the hands of Metallica (and its lawyers)."

Therefore, it is more accurate to think of NFTs as a new technology that will be subject to the application of existing copyright law as opposed to a technology that will fundamentally alter copyright law or cause Congress to take steps to pass new legislation to fundamentally alter copyright law to address NFTs. It is more accurate to think of the current situation as akin to Napster and the music industry; NFT evangelists who believe that copyright law is inapplicable or minimally applicable to NFTs are likely to meet the same fate Napster met at the hands of Metallica (and its lawyers).¹²

Given the broad applicability of copyright law, it is critical for sellers and end users to understand what rights the purchaser is acquiring when purchasing an NFT. For copyrightable works, except in the case of a work made for hire, the author of a work owns the copyright.¹³ The sale of a copyrighted work does not, on its own, transfer ownership of the copyright from the owner to a subsequent purchaser absent an assignment or exclusive license.¹⁴ NFTs can convey a wide variety of rights, from very limited rights in the underlying work to essentially all rights in the underlying work. For example, the NBA Top Shot NFTs convey to the owner no more than a license to view video clips of player highlights on the NBA Top Shot platform¹⁵ whereas the Bored Ape Yacht Club NFTs convey all copyrights in the NFT to the owner so that the owner can use their Bored Ape NFT however they want, including creating derivative works.¹⁶

Copyright Ownership Considerations and Royalties

It is therefore critical to analyze who owns the intellectual property rights for assets that are minted into NFTs. Attorneys should counsel their clients (whether sellers, buyers, or marketplaces) so they understand what rights the buyer is acquiring when purchasing an NFT. From the perspective of a buyer, you should review at least which copyrights, if any, are implicated by the NFT, whether the party selling the NFT owns the copyrights associated with the NFT, if any, and whether the seller wishes to transfer copyright ownership with the NFT.

From the seller's perspective, you need to consider whether they might wish to divide the various rights associated with a copyright and parcel them out to different holders through multiple NFTs. For example, a seller could decide to take a single work and create five different NFTs, one each for the rights of reproduction, distribution, adaptation, performance, and display.

A significant difference from "traditional" works is that continuing royalties for creators can be written into the NFT so that the payment of royalties automatically occurs when a downstream sale of the NFT is made. Proponents of NFTs regularly point to continuing royalties for creators of works as a substantial benefit of NFTs. Attorneys advising clients will need to determine whether continuing royalty payments exist and, if so, who pays the royalties and whether a given marketplace will also take a commission on royalty payments.

For example, with respect to music minted into an NFT, the associated smart contract can be drafted with provisions that provide performance rights only to the purchaser of the NFT while retaining all other rights for the artist, who could then sell one of those other rights (such as the synch rights) to a different purchaser of a separate NFT, while the artist retains a right to receive 10% of all future sales of both NFTs. The open nature of the blockchain means it is relatively easy to track these various rights as they pass from party to party and makes tracking any associated royalty streams relatively easy compared to current standards.

There are two sources that must be reviewed to determine what rights are associated with any particular NFT. First, the smart contract that forms an integral part of the NFT must be reviewed for any contract terms associated with the NFT. Second, the terms and conditions of the NFT marketplace on which the NFT is offered for sale must be reviewed to determine whether there are any terms and conditions associated with the NFT in addition to those contained within the NFT's smart contract.

NFT Marketplaces and How They Function

While it is technically possible to manually review a blockchain, it is not practical to do so and, in the case of NFTs, not useful. Because it would be extremely inefficient and practically impossible to do so, NFT marketplaces have been created to facilitate trading in NFTs.

The general nature of blockchains makes manually reviewing the chain, locating an NFT to transact, and entering into a transaction with the owner of the NFT practically impossible. Users of the Ethereum blockchain have both "blockchain accounts" and "blockchain wallets." A blockchain account is an address on the blockchain; it allows the blockchain ledger to associate a specific token—such as cryptocurrency or an NFT—with a specific user. The user, however, is anonymous. For instance, an Ethereum account number starts with the prefix "0x" followed by a 40-digit alphanumeric code; there is no personally identifying information. Users can, however, choose to publicly associate themselves with their blockchain accounts, thereby removing anonymity. Unless an individual has elected to publicly associate their contact information with their blockchain account it is impossible to associate an individual with an account. A market-maker (such as a marketplace) is required to facilitate NFT transactions while allowing users to maintain their anonymity.

Popular blockchains are processing an ever-increasing number of transactions; Ethereum is currently processing over one million transactions per day.¹⁷ Because it is not practical for users to review over one million ledger entries on a daily basis, a technical solution-the blockchain wallet-has been created to allow users to easily view what assets the blockchain associates with an individual user's account. Blockchain wallets are computer code and programs that read a blockchain and display for the user the assets listed as owned by the user's blockchain account. The wallet also allows the user to conduct transactions. Blockchain wallets do not hold any crypto tokens. Rather, if a blockchain account is like a bank account (a number on a ledger), a blockchain wallet is like a bank's application on a smartphone (giving the user access to see what is in the account).

NFT marketplaces have become the overwhelming choice for users transacting NFTs. Marketplaces may or may not require users to create accounts to utilize the marketplace. They will, however, require a user to link his or her "blockchain wallet," which has the effect of linking the user's "blockchain account" to the marketplace.

Key Issues in NFT Marketplace Licenses and User Agreements

When counseling clients who wish to create or use an NFT marketplace, there are a number of key issues that must be considered and addressed.

First, when creating an NFT marketplace, or entering into a development contract with a contractor to create a series of NFTs, the relevant blockchain and NFT standard should be identified. NFT marketplaces exist on different blockchains which, in turn, have different NFT standards that are not interchangeable. While it is possible to move an NFT from one blockchain to another, it may not be easy. Moreover, the different blockchains, and different NFT standards existing on those chains, may have substantial impacts on what can be minted into an NFT, the costs of doing so, and how those NFTs may be utilized. It is important to understand the different blockchains, the different NFT protocols on those chains, and how those variables impact the economics, and terms and conditions of use of an NFT marketplace.

Second, some NFT marketplaces charge fees to their users. Fees can be charged to the seller, the buyer, or both. Fees can be charged up-front (such as a listing fee) or taken from the proceeds of the transaction. Some marketplaces charge a setup fee or otherwise restrict who can join the marketplace to applicants only (such as NiftyGateway¹⁸ and SuperRare,¹⁹ which require creators to apply to create NFTs on their marketplaces). These marketplaces are often trying to curate the NFTs offered for sale to increase quality and reduce potential scams. Other marketplaces (such as NBA TopShot) place restrictions on the ability of users to withdraw the proceeds of sales of NFTs. For instance, they might charge withdrawal fees and/or restrict the timing and amounts of withdrawals. Some of these marketplaces have been accused of not being upfront about these restrictions, which has led to complaints, bad press, and even legal action.²⁰

Third, questions of intellectual property infringement and counterfeiting must be considered. Marketplaces may be liable for indirect infringement of copyrights and trademarks. If your client is considering operating a marketplace, you will need to put in place policies and procedures for handling Digital Millennium Copyright Act (DMCA) takedown notices and other infringement allegations. These should address, among other things, whether and how user accounts and/or allegedly infringing NFTs will be restricted (such as prohibitions on displaying an infringing NFT). OpenSea has recently restricted use of its free, "lazy" minting tool after stating that up to 80% of NFTs offered for sale on the marketplace using the free tool were fake, fraudulent, or counterfeit.²¹

Fourth, there has been an explosion in NFT-related trademark applications; 2021 saw a 400-times increase in NFT-related marks.²² Therefore, when launching an NFT marketplace, brand clearance should be undertaken to minimize the chances of infringing the intellectual property rights of a third party.

Emerging Legal Issues for NFT Marketplaces

As might be expected, there are a number of emerging legal issues surrounding the NFT space, mostly involving NFT marketplaces. One emerging issue is how will marketplaces be treated in anti-counterfeiting actions and law-suits. It seems likely that NFT marketplaces will be treated like virtual flea markets and we can expect that the flea market line of cases pertaining to counterfeit products will be applied to marketplaces.²³

Another emerging legal issue is how marketplaces should handle allegations that NFTs listed through their services are stolen. Recently, the owner of an art gallery alleged a number of NFTs he owned were taken from his wallet when he clicked on a phishing link.²⁴ Those NFTs were subsequently offered for sale, presumably by the alleged thieves. Sales of the allegedly stolen NFTs were blocked after the owner requested that OpenSea halt all transactions involving the subject NFTs. While halting trading may seem like the clearly prudent course of action, OpenSea faced criticism from members of the blockchain community who believed such actions violated the spirit of NFTs and blockchains.²⁵

The liability of marketplaces in the case of hacks or other data breaches is another emerging issue. OpenSea suffered a well-publicized hacking incident that resulted in some level of data exposure. One OpenSea user has alleged that, as a result of the incident, NFTs he owned were taken from his wallet, which was linked to OpenSea, and subsequently sold for a fraction of their actual worth.²⁶ This lawsuit was only recently filed as of the date of this writing and it remains to be seen how the courts will handle such claims going forward.

Finally, certain NFTs may be considered securities by virtue of being an investment contract. The Howey Test²⁷ will apply to NFTs and will examine whether an NFT required an investment of money in a common enterprise with the expectation of profits derived from the entrepreneurial or managerial efforts of others. The company that created the blockchain used for NBA Top Shots was recently sued for selling NFTs without registering the NFTs as securities.²⁸ The lawsuit was only recently filed as of the date of this writing, and there have been no substantive legal decisions at this juncture.

Conclusion

NFTs are a relatively new technology that recently exploded in popularity and present new and unique challenges to existing intellectual property law. Lawyers and the courts will be tasked with applying our existing laws to this new technology in a way that allows NFTs to flourish and achieve their maximum utility and economic potential while preserving the intellectual property rights of artists, creators, and inventors. We stand at the beginning of a new chapter in intellectual property law with many blank pages before us.

Endnotes

- See Alex White-Gomez, The Definitive Timeline of Early NFTs on Ethereum (Dec. 30, 2021), https://www.one37pm. com/nft/tech/the-definitive-timeline-of-early-nfts-onethereum#:~:text=This%20NFT%20project%20was%20 minted,they%20weren%27t%20fully%20compliant.
- 2. https://ethereum.org/en/.
- 3. https://flowchain.co/.
- 4. https://on.wax.io/wax-io/.
- 5. https://ethereum.org/en/developers/docs/standards/ tokens/erc-721/.
- 6. https://eips.ethereum.org/EIPS/eip-721.
- 7. https://ethereum.org/en/developers/docs/gas/.

- https://ethereum.org/en/developers/docs/scaling/ sidechains/.
- 9. See Alex Atallah, Create NFTs for Free on OpenSea, OpenSea Blog (Dec. 29, 2020), https://opensea.io/blog/ announcements/introducing-the-collection-manager/.
- 10. U.S. Copyright Office, *Circular 33 Works Not Protected by Copyright*, https://www.copyright.gov/circs/circ33.pdf.
- 11. See 17 U.S.C. § 102(a).
- Metallica v. Napster, Inc., No. C 00-3997 MHP, 2001 WL 777005, at *1 (N.D. Cal. Mar. 5, 2001), aff'd sub nom., A&M Recs., Inc. v. Napster, Inc., 284 F.3d 1091 (9th Cir. 2002).
- 13. See 17 U.S.C. § 201.
- 14. Id.
- 15. https://nbatopshot.com/terms.
- 16. https://boredapeyachtclub.com/#/terms.
- 17. *Ethereum Transactions Per Day*, YCharts, https://ycharts. com/indicators/ethereum_transactions_per_day.
- 18. https://niftygateway.com/.
- 19. https://superrare.com/.
- 20. See Complaint, Friel v. Dapper Labs, Inc., No. 1:21-cv-05837 (S.D.N.Y. July 7, 2021).
- 21. Jordan Pearson, More Than 80% of NFTs Created for Free on OpenSea Are Fraud or Spam, Company Says, Vice (Jan. 28, 2022), https://www.vice.com/en/article/wxdzb5/morethan-80-of-nfts-created-for-free-on-opensea-are-fraud-orspam-company-says.
- 22. Justinas Baltrusaitis, U.S. NFT trademarks applications skyrocketed 400x in 2021 with 15 registrations daily in 2022, Finbold (Feb. 16, 2022), https://finbold.com/u-s-nfttrademarks-applications-skyrocketed-400x-in-2021-with-15-registrations-daily-in-2022/.
- See, e.g., Coach, Inc. v. Sapatis, 994 F. Supp. 2d 192 (D.N.H. 2014); Coach, Inc. v. Goodfellow, 717 F.3d 498 (6th Cir. 2013); Luxottica Group, S.p.A. v. Greenbriar Marketplace II, LLC, 212 F. Supp. 3d 1375 (N.D. Ga. 2016).
- 24. Shanti Escalante-De Mattei, Thieves Steal Gallery Owner's Multimillion-Dollar NFT Collection: "All My Apes Gone," ARTnews (Jan. 4, 2022), https://www.artnews.com/ art-news/news/todd-kramer-nft-theft-1234614874/; see also Lois Beckett, "Huge mess of theft and fraud:" artists sound alarm as NFT crime proliferates, The Guardian (Jan. 29, 2022), https://www.theguardian.com/global/2022/ jan/29/huge-mess-of-theft-artists-sound-alarm-theft-nftsproliferates.
- 25. Aaron Limbu, OpenSea Freezes Stolen Bored Apes, Sees Backlash for Lack of Decentralization (Dec. 31, 2021), https:// blockchain.news/news/opensea-freezes-stolen-boredapessees-backlash-for-lack-of-decentralization.
- 26. Complaint, *Mckimmy v. Opensea*, No. 4:22-cv-545 (S.D. Tex. Feb. 18, 2022).
- 27. *S.E.C. v. W.J. Howey Co.*, 328 U.S. 293, 294 (1946) (the test for determining what constitutes an "investment contract" requires (1) an investment of money; (2) in a common enterprise; (3) with the expectation of profits; (4) derived from the entrepreneurial or managerial efforts of others).
- 28. See supra n. 23.

The Metaverse: From Science Fiction to Commercial Reality—Protecting Intellectual Property in the Virtual Landscape

By Charles R. Macedo, Douglas A. Miro and Thomas Hart

Introduction

The Metaverse, as technology often does, has deep roots in science fiction.

The term "Metaverse" itself comes from author Neal Stephenson's 1992 novel Snow Crash, which describes it as an immersive world. When logged into the Metaverse, the character Hiro is "not actually here at all. He's in a computer-generated universe that his computer is drawing onto his goggles and pumping into his earphones. In the lingo, this imaginary place is known as the Metaverse. Hiro spends a lot of time in the Metaverse."1 As described by Stephenson, the Metaverse is a computer-generated world, accessed with goggles and earphones and enabled by accurate-to-life graphical and audio user interfaces.² The Metaverse has much to offer to users, who are able to design, build, and own virtual real estate, and also engage in creative collaboration with other users. Of course, the Metaverse is also an ideal advertising space for corporations, with virtual billboards being seen by millions.³

Echoes of Stephenson's conception of the Metaverse can still be seen today in how the metaverse is (or metaverses are) conceptualized.⁴ There is a critical difference, however: the advance of technology. Since Stephenson's writing of *Snow Crash*, what was once only science fiction is now becoming increasingly technologically feasible and scientific fact. This change brings with it both new opportunities and new challenges for intellectual property. This article discusses the foundation of the metaverse, different visions of the (or a) metaverse, key components that define metaverses, IP rights, virtual objects which might be protected, and ways to protect virtual objects.

The Foundations of the Metaverse

In the decades after *Snow Crash*, various developments have continued to build a technological framework on which the metaverse is being built.

The metaverse first took a step towards reality with the launch of *Second Life*. Wasting no time, the team behind *Second Life* started working on their vision of a virtual world shortly after *Snow Crash*. Powered by the internet, *Second Life* was first launched in 2003 by Linden Lab. As the 2003 trailer defined it, *Second Life* was "a new society, a new world, created by you."⁵ The 2003 trailer advertised that users would be able to "EXPLORE a world of surprise and adventure," "CREATE anything you can imagine," "COMPETE for fame, fortune or victory," and "CONNECT with new and exciting people."⁶ *Second Life* provides an early example of a proprietary, centralized metaverse accessed through a computer display via the internet and designed to facilitate social interaction.

Soon thereafter, on the gaming side, Activision, Inc. (which would later merge with Blizzard Entertainment, Inc.—the company responsible for *World of Warcraft* before being acquired by Microsoft Co.) launched *Call of Duty: United Offensive*—an early first-person shooter multiplayer expansion to the original *Call of Duty* game. While the original game had a multiplayer option, allowing players to participate in a virtual world shoot-out, the 2004 game introduced more and larger multiplayer maps, in-game vehicles, a variety of game modes, and an online ranking system.⁷ This expansion of the Call of Duty[®] franchise, by expanding the scope of multiplayer shooters, opened a new step in metaverse game play.

Coupled with these early examples of virtual worlds were developments in user controls. In 2006, Nintendo Co., Ltd. introduced its Wii[®] console, which utilized a handheld remote controller and nunchuk in conjunction with a sensor bar. This arrangement allowed its users to interact with the virtual game play on the screen far more than they were able to with existing keyboards, mice, and remote controls.⁸ Three-dimensional accelerometers in the controller and nunchuk, combined with controller tracking via the sensor bar, allowed the Wii console to track a user's position and movement. This advance was an early step towards allowing users to become immersed in a virtual world involving game play, e.g., a tennis match or a dance off. Wii consoles also allowed users to individualize their Mii[®] avatars (virtual images of the player).

Thereafter, in 2010, Microsoft released the Kinect[®] for Xbox.[®] The device was a major step toward bringing a *Star Trek* style holodeck to life—with users not needing any controller other than their own bodies. Relying primarily on cameras and infrared sensors, a game player's position and movement could be traced and used as interactive input to the Xbox platform.⁹

Meanwhile, also in 2010, Hollywood introduced *Caprica*, a limited run prequel to Michael Moore's version of *Battlestar Galactica*. *Caprica* introduced a sophisticated version

Charles R. Macedo and **Douglas A. Miro** are partners and **Thomas Hart** is a law clerk at Amster, Rothstein & Ebenstein LLP.



of the metaverse, called "Virtual World" or V-World.¹⁰ As one of the fandom pages for *Caprica* explains, the V-World is a virtual reality space created by the character Daniel Graystone.¹¹ His invention, the holoband (an advanced version of VR goggles), is used to access the V-World.¹² In the V-World, participants interact with the world and others via their avatars.¹³

Caprica's vision of a holoband started to come to life, when Oculus VR, Inc., a virtual reality start-up that was acquired by Facebook Technologies, LLC in 2014, introduced its first virtual reality headset—the Oculus Rift[®]— in 2016.¹⁴ The headset offered a new, immersive portal to virtual worlds and metaverses as compared to the computer display originally used in Second Life back in 2003.

In the same year that the Oculus Rift was released, Niantic, Inc., the publisher of the popular Pokémon[®] game series, published *Pokémon Go*, an augmented reality mobile game.¹⁵ The game proved to be widely popular and sparked the imagination of how augmented reality could be used to supplement the real-world environment with virtual objects. Each user in *Pokémon Go* had its own avatar (or virtual representation), which was placed in a virtual map corresponding to a real-world geographic location.¹⁶ As users walked around, so did their avatars.¹⁷ The mobile game also offered an augmented reality (AR) mode,¹⁸ which displayed different Pokémon appearing in the realworld environment by superimposing them on the view taken in with the camera on a user's device.¹⁹

The difference between the technologies involved in *Pokémon Go* and the Oculus Rift showcases the difference between what is known as augmented reality (AR) and virtual reality (VR). AR places virtual objects in actual space—such as virtual Pokémon in the real world. Advanced versions of AR would come close to the holodeck in *Star Trek*. In contrast, VR places the user in an immersive experience of a virtual world to potentially interact with others. This is what Second Life offered back in 2003 (albeit in primitive form), and as will be discussed later in this article, what the metaverse is trying to offer today and promises to offer in the future.

In July 2017, Epic Games, Inc. released *Fortnite*, one of the most popular online video games today, and far more advanced than the original *Call of Duty* release or Second Life release from the early 2000s. As originally envisioned, *Fortnite* was a game where players would build forts and defend them against attacks of zombie armies or travel to distant virtual worlds.²⁰ Players could be joined by other players or develop their own automated players.²¹ Epic also developed a popular player-against-player mode.²²

In February 2019, *Fortnite* began to evolve from its game playing roots into a more immersive shared experience, with its first ever live concert by the band Marshmello,[®] attended by over 10 million players.²³ *Fortnite's* virtual world (or metaverse) showcases that the opportunity for virtual shared experiences in the metaverse is constantly evolving. Like *Second Life, Fortnite* is a proprietary centralized metaverse, owned and controlled by Epic.

Around this time, in 2018, the movie *Ready Player One* was released, providing an even more compelling virtual world, as envisioned by director Steven Spielberg and author Ernest Cline. Set in the year 2045, the movie featured people seeking to escape from reality through a virtual reality entertainment universe called OASIS.²⁴ Users entered this interactive world using goggles like the Oculus Rift.²⁵ Users could also buy body armor which provides them with haptic feedback, so that when a user is hit in OASIS, they feel it in the real world.²⁶

This movie illustrated a dystopian view of a metaverse, but with immersive technology that, with the developments discussed, looked more like science fact than science fiction. Interestingly, work on this project began in 2010 around the same time that *Caprica* originally aired.²⁷

Today, Second Life continues to exist, albeit in a new and much more robust format. As revamped, Second Life is much closer to the *Ready Player One* version of a metaverse than its rudimentary roots. Other tools that provide new interfaces into a virtual world continue to be created and refined. In 2020, with the pandemic, existing collaborative tools such as Zoom[®] and Microsoft Teams[®] became essential and a key part of daily human activity, including work, school, and social interactions. Using these collaborative video conferences, users can speak and work with friends and colleagues from remote locations in real time, share documents, send text messages and more. As a social and business tool, video conference technology is an early step in the direction of a collaborative work metaverse (as opposed to merely social or game play one), as will be discussed later in the article.

And earlier this year, technology titans continued to invest in even more corporate acquisitions to help capture key opportunities in the metaverse. For example, Microsoft announced that it is acquiring Activision Blizzard, Inc. (the owner of the Call of Duty franchise and other metaverse games) for \$69 billion.²⁸ No doubt more is to come.

This history illustrates the many roads that have led to what this article considers to be the metaverse—a virtual reality of creation, gaming, and collaboration; the product of technological progress, innovative systems, and the ongoing discourse between fiction and reality.

Different Visions of "the" or "a" Metaverse

With this background, it is important to keep in mind some of the competing visions of what should be "the" metaverse, versus what constitutes "a" metaverse. As is apparent, there is currently no single metaverse, and there are several players in the field. Meta Platforms, Inc. ("Meta") and Microsoft are both pursuing corporate (and proprietary) metaverses, whereas The Sandbox and Decentraland are creating decentralized metaverses that are developed and governed by the users.

Proprietary Metaverses: Meta's Vision and Microsoft's Mesh

In October 2021, Mark Zuckerberg made a very public announcement that Facebook would be rebranding as Meta, representing a commitment to its own metaverse.²⁹ At the same time, in his October 2021 keynote speech at Connect 2021, Zuckerberg shared his vision of what the metaverse is, what it should be, and how Meta wants to implement it.³⁰ In the hour-long video, his vision comes straight out of a science fiction book or video like *Ready Player One* or *Caprica*, combined with the key investments Meta has been making over the past decade.

Meta introduced its vision of the basic concepts of the metaverse as including several different elements. Meta wants users to have a feeling of presence, allowing users to feel like they are physically present in the metaverse by enabling interaction with the environment as well as other users. To enable this, Meta's vision includes giving users a selection of avatars (virtual representations for each individual), as well as a home space (and presumably other public spaces) to give users the ability to relax as well as entertain.³¹ In Meta's world, users would not interact with the links between spaces, instead relying on "teleporting," a quick means of traveling, to get between spaces.³²

One of the important goals of metaverses generally, including Meta's, is virtual goods and services (such as concert tickets, outfits, and the like) available for purchase by consumers. This would also encompass virtual goods which correspond to real-life goods. A Meta user could, for example, teleport to a virtual store, similar in design to a real store, browse and purchase items, and have reallife versions sent to the user's home. Meta's vision also includes interoperability, or compatibility between different metaverses. This would allow items, avatars, and other goods purchased on Meta's metaverse (or another metaverse) to be transferred between metaverses. This is not currently the case, and it will be interesting to see who ultimately decides the standards for interoperability: Meta or the marketplace in general. Beyond implementing interoperability, Meta also hopes to innovate by making user interfaces more "natural" by reducing reliance on conventional technology such as display screens, keyboards, mice, and even virtual goggles like the Oculus Rift.³³ Instead, Meta hopes to incorporate AR and other technologies to increase user presence.³⁴ Finally, Meta noted that it considered privacy and safety as one of the key elements of its metaverse.35

Meta also discussed what it believed to be key goals and use cases for its metaverse.

First, Meta's vision of the metaverse is the next step in social media and the internet, as a means for establishing and maintaining social connections. A key component is that the metaverse is "immersive"—users will feel as if they are together with others in the metaverse.³⁶ Second, like *Fortnite* (and the social clubs in *Caprica*), Meta envisions the metaverse as including both entertainment and gaming.³⁷ Third, reminiscent of the early Wii consoles with Wii remotes and nunchuks as interfaces, Meta's vision of the metaverse also allows users to exercise and play games, like table tennis, with other users—many steps beyond what even Peloton[®] offers today. Last, Meta also seeks to enhance the work experience beyond Zoom and Microsoft Teams to allow immersive workspaces and classrooms.³⁸

Of course, commerce is likely to be a primary focus of Meta's metaverse. Commerce includes both real-world devices, like the hardware interfaces that allow users access to the virtual world (including Oculus goggles and computers systems that provide access points to the metaverse), as well as virtual objects within the metaverse. Virtual objects are discussed below in greater depth with relation to the decentralized vision offered with blockchain technology later on.

While Meta discussed collaborative building of the metaverse, some might suspect that Meta is more concerned with control over the metaverse, including the access points, virtual currency, and stores, than a decentralized collaborative vision shared by others. In this regard, Meta notes that interoperability is a key component to develop the metaverse.³⁹ Interoperability was the same challenge computer manufacturers faced when building computers and the internet.

Meta is not the only corporation with a vision of a metaverse. Microsoft is also developing its own version of a metaverse, called Mesh, building on its enterprise roots like Microsoft Teams and Office 365[®].⁴⁰ Unlike Meta, Mesh is principally focused on providing a virtual space for workplace and educational collaboration.⁴¹ At the same time, with its Xbox platform and recent acquisition of the Activision Blizzard game franchises, it seems obvious that Microsoft also seeks to participate in the metaverse from its game playing entry points. Microsoft has not held the same sort of keynote speech as Meta regarding its vision of the metaverse, and while Microsoft has released some information, it is less clear exactly what it sees the metaverse as.

Crypto (Decentralized) Metaverses: Sandbox and Decentraland

In contrast to a private or centralized version of a metaverse, a crypto metaverse is decentralized and based on blockchain technologies. No one person or entity owns or controls a decentralized metaverse, as compared with proprietary metaverses.⁴² Governance tokens⁴³ and block-chain technology enable staking and a determination on how the metaverse will run. While this ideal may not always be realized in so-called decentralized metaverses, it nevertheless presents a significant distinction.

The Winklevoss brothers and their Gemini entities have helped to explain what crypto metaverses are. As their *Cryptopedia* (an online encyclopedia "designed to facilitate" public understanding of "the mechanisms and utility" of cryptocurrency by "providing free, high-quality crypto education to the world"⁴⁴) explains:

A metaverse is a shared, immersive virtual world in which players, usually represented by avatars, can interact with each other, construct experiences, and create in-world objects and landscapes. Metaverses typically have their own intrinsic economies and currencies, with which users can buy, sell, and trade digital real estate, items, avatar accessories, and more. You can experience the metaverse via a computer, virtual reality (VR) headset, or smartphone.⁴⁵

Key features of a crypto metaverse, as further explained by Gemini's *Cryptopedia*, include decentralization, user governance, provable provenance (through non-fungible tokens, or NFTs), and real-world economic value.⁴⁶

The Sandbox is an existing crypto metaverse that users can participate in today. As its co-founder Sébastien Borget explains in a *Cryptopedia* article:

The Sandbox is a decentralized, community-driven virtual world where creators can design, share, and sell in-world assets. The Sandbox metaverse is one of several blockchain-based virtual worlds attempting to change the dynamics of the gaming market and reward creators for the value they produce through user-generated content.⁴⁷

Another existing crypto metaverse is Decentraland. *Cryptopedia* explains that:

Decentraland is a user-owned, Ethereumbased virtual world where you can play, explore, and interact with games and activities. You can also purchase parcels of land on which to build your own environments, marketplaces, and applications. Decentraland's three native tokens—MANA, LAND, and Estate—all play a unique role in furnishing the Decentraland economy. The platform is governed by its users through the Decentraland DAO, a decentralized autonomous organization.⁴⁸

In particular, Decentraland is a virtual world that is integrated with Ethereum. On the Decentraland platform, users can explore a multifaceted, user-generated landscape that incorporates real estate, gaming, and social media elements. MANA, an ERC-20 token, is the digital asset token used to pay for goods and services in Decentraland. Users can own virtual real-estate as well: LAND is a nonfungible ERC-721 token that represents the ownership of virtual land.

Key Components of the Metaverse

While the exact style of a metaverse may change between the different metaverse creators, the above discussion demonstrates that current conceptualizations share four key components.

First, a metaverse enables social connectivity. Users can interact with each other in an augmented reality and/or virtual reality, using their own avatars to represent themselves.

Second, metaverses provide virtual space. They are places where users can work, play, and interact. This can occur in different contexts, such as professional, educational and/or entertainment (e.g., virtual concerts, plays and/or games). In some metaverses, such as The Sandbox, digital space may be a limited resource, with only a certain number of private areas available for the entire world. Depending upon how users travel between spaces, relative locations between spaces can also become an important and valuable resource.

Third, metaverses can contain digital marketplaces. These digital marketplaces often allow entrepreneurs to bring creativity in exchange for a profit. Users can buy the latest avatars, clothing, and gadgets, often as NFTs, as discussed below.

Last, as even Mark Zuckerberg recognized, like the internet itself, interoperability is a key. In the crypto metaverse, NFTs are one vehicle that may be used to achieve this interoperability. Note, however, that interoperability is currently not implemented.

The Types of Law Applicable to the Metaverse

Like other forms of online and digital spaces, traditional forms of IP continue to apply in the new and evolving metaverse.

Copyrights. Original expressions of virtual objects can potentially be protected by copyright law, like any other digital objects. For example, NFTs used in the metaverse such as accessories for digital avatars—may be eligible for copyright protection as pictorial or graphical works.⁴⁹ Copyright owners can make use of existing law, such as the DMCA, which can be used to remove infringing material from metaverse platforms.⁵⁰ Metaverses themselves have been sympathetic to rights owners—several different metaverses recognize that the copyright of an NFT resides in the creator of the token and will enforce copyright.⁵¹ The Sandbox, for example, notes that "it would be a violation of international copyright and trademark laws" to "make an ASSET of a [copyrighted] character."⁵²

Additionally, users who upload their content to a metaverse platform may be inhibited in their capacity to control its use once uploaded due to clauses in the platform's terms of service, which can grant broad licensing rights to the platform.⁵³

Trademarks. Goods and services which are made available in a metaverse can be protected with source identifiers like names, images, and sounds, using trademark law.

The U.S. Patent and Trademark Office has provided sample descriptions which cover goods and services related to the metaverse. For example, ostensibly to cover avatar accessories, the USPTO offers as a description of a class 9 good: "Downloadable virtual goods, namely, computer programs featuring {specify nature, type, e.g., articles of clothing} for use in online virtual worlds."⁵⁴ To cover the marketplace for these goods, the USPTO gives as an example in class 35: "Retail store services featuring virtual goods, namely, {specify type, e.g., clothing} for use in online virtual worlds."⁵⁵ These descriptions provide a good starting point for those seeking metaverse registration. Various companies have begun to register their trademarks for metaverse protection, although they deviate from the USPTO's description. For example, Nike has sought trademark protection for its NIKE mark in connection with "providing on-line, non-downloadable virtual footwear . . . for use in virtual environments."⁵⁶ Meanwhile, Epic has sought protection for the mark FORTNITE PARTY ROYALE⁵⁷ in conjunction with providing virtual concerts, and successfully registered FORTNITE ⁵⁸ in connection with providing digital goods in exchange for cryptocurrency.⁵⁹

That said, there may be complications. The Ninth Circuit has held that the First Amendment may offer protection for potential trademark infringers in the virtual context.⁶⁰ Finding that the use of a real-life strip club's trademark and trade dress in *Grand Theft Auto* was subject to a First Amendment defense, the Ninth Circuit reasoned that the use of a trademark "in the body of the work" would not violate the Lanham Act unless it had "no artistic relevance to the underlying work whatsoever" or it was "explicitly mislead[ing] as to the source or the content of the work."⁶¹ The Ninth Circuit considered the threshold for First Amendment protection to be a low one,⁶² and, given historic and continuing roots of metaverses in video games, this precedent may pose a challenge to those wishing to control use of their brand in the metaverse.

Patents. Innovative technology used to access and implement metaverses can potentially be protected by patent law.

Other. Other legal mechanisms like business torts, trade secret law, right of publicity, and contract law are also available to protect and enforce IP rights in the real world against violations with respect to virtual spaces.

For example, consider the right of publicity, which (where it exists) protects a person's identity against commercial exploitation.⁶³ Metaverse terms of service may reinforce this right. However, given the dual creative-commercial character of the metaverse, it may be difficult to define the exact contours of what constitutes "commercial exploitation." Relatedly, privacy rights, while important, may also be difficult to enforce. Terms of service frequently limit the rights which users of a site may have. The nature of NFTs and the blockchain as establishing a chain of title may likewise inhibit user privacy. At the same time, users are able to engage in self-help by anonymizing their online behavior by creating usernames or avatars which are dissimilar from their real-world identity. Finally, while some protections exist, users may also have difficulty in controlling the access and use of data by platforms.⁶⁴ While users retain control over their own content in most cases, they also, in nearly every case, agree to licensing as a condition for use of a metaverse platform.⁶⁵

In addition to traditional IP tools, smart contract in blockchain implementations, user rules, private dispute

mechanisms, and technological solutions also will offer new and different tools in future metaverses.

There is one significant advantage that users in the metaverse have for enforcing their rights: the ability to use smart contracts. In a traditional sales model, such as for a painting, there are transaction risks. For example, both the painting itself and the payment for the painting may be fraudulent. To reduce risks, parties often employ what can be costly measures, such as experts to verify authenticity and escrow accounts to hold money. What's more, an artist who sells their work may have limited means to further monetize it. Even if an artist seeks to include a clause in the sale stating he or she will receive a portion of the money of any future sale, the artist is forced to go to court to enforce it.

NFTs built on smart contracts provide another option. In future sales following the first sale of the NFT, the smart contract is capable of automatically sending some portion of the sale to the artist. The artist, thus, is able to profit off of his or her work's popularity. And, as opposed to traditional sales, due to the security of the blockchain, there is little to no risk of fraud or non-payment.

Virtual Objects in Virtual Worlds

This section considers various virtual objects which can exist in a metaverse and how intellectual property law rights and violations might arise.

Virtual Land. Just like in the real world, virtual worlds will have virtual spaces where avatars can live, work, play and/or be entertained. Such spaces may be public (like a public square in a city) or private (like a theatre, casino, store, or home.) In many metaverses these spaces can be bought and sold. For example, crypto metaverses like The Sandbox and Decentraland use NFTs as deeds to show ownership and maintain control over such spaces. Property ownership of such spaces is controlled using technology-e.g., NFTs and blockchain protection. But IP can also come into play, just like it does in the real world. For example, just like a store front in the real world may have signage (like Macy's® at Herald Square in New York City), a virtual plot can also have virtual signage like the Atari® plot in The Sandbox.⁶⁶ Thus, traditional notions of trademarks (and service marks) can also be applicable to virtual land and the use of marks with respect to goods and services offered in such space.

Avatars. Every user/participant in virtual worlds will have their own virtual representation (or avatar). A user may present themselves as video images, like in Zoom and Microsoft Teams, or as avatars, such as in relation to the Nintendo Wii. Avatars can be made to look like the user, as with bitmojis, or to bear no resemblance at all to the user, making it difficult to know the user's identity at first glance. Often times, avatars are or will be customizable, and accessories (perhaps as NFTs) like digital clothing or digital apparel may be purchased to customize them further. In some cases, avatars themselves might be NFTs (like a Snoop Dogg avatar). Copyright can protect those who create avatars and/or avatar accessories from third parties making unauthorized copies or use of those "works." Similarly, the right of publicity may allow some to prevent their image from being used as an avatar without their authorization.⁶⁷ As with virtual land, traditional notions of IP can be applicable in the metaverse.

Virtual Services. Participants in virtual worlds will frequently offer virtual services, such as concerts, entertainment, and even game play. Just like how consumers will often purchase tickets to attend an in-person concert, users can purchase virtual objects to experience virtual services. For example, users on The Sandbox can purchase a pass (as an NFT) to access the Snoopverse, a part of The Sandbox where Snoop Dogg will perform a virtual concert.⁶⁸ As part of this, users can also purchase access to a private party with Snoop Dogg.⁶⁹ Like tickets in real life, the pass can be resold on the open market. As an advantage of the NFT, however, ownership can be traced back to the original seller, allowing for buyers and metaverse providers to be assured of the authenticity of any ticket.

Marketplaces. There are venues where virtual objects can be bought and sold as an NFT or other digital objects. These marketplaces can include LAND, avatars and accessories, and other virtual objects and/or virtual services (like tickets to the concerts discussed above). Selling virtual goods on these marketplaces is a major early opportunity that many real-world companies are seeking to participate in.⁷⁰

No one is a stranger to online shopping, but marketplaces for the metaverse are distinct from the average online site in one distinct way: choice of currency. Marketplace offerings for the metaverse rely upon cryptocurrencies and crypto tokens, instead of standard currency. SAND (used for The Sandbox) and Mana (used for Decentraland) are key tokens on the Ethereum blockchain that allow users to participate in their respective metaverses by purchasing NFTs. Ether, an underlying blockchain which supports smart contracts and other tokens, is the major rail underlying these, and other, cryptocurrencies.

Additionally, various utility tokens are being created to support the operations of the metaverse. Filecoin (FIL), an early cryptocurrency, was set up to tokenize decentralized disk storage. Render (RNDR) is a utility token that provides decentralized GPU usage for rendering graphics in the metaverse. A wide array of NFTs is also available to allow for the purchase and transfer of goods and services in the metaverse. These new virtual marketplaces represent an expansion of the standard idea of currency as well as the goods that one can purchase.

Conclusion: The Future of the Metaverse

The present is merely the beginning of the next generation of the Metaverse, and the IP implications are only beginning to be understood. It remains to be seen how these new virtual worlds will result in new opportunities and, unfortunately, pitfalls, for their participants.

Endnotes

- 1. Neal Stephenson, Snow Crash 24 (Random House Publ'g Grp. 2003) (1992).
- 2. *Id.* at 24-26.
- 3. *Id.* at 26.
- 4. Note on style: this article refers to "the *M*etaverse" to refer to the conception in *Snow Crash,* and "the *m*etaverse" to refer to all other conceptions.
- georgeorwell1984, Second Life Trailer 2003, Youtube (Aug. 23, 2007), https://www.youtube.com/ watch?v=KHH2CAE9Y60.
- 6. Id.
- See Call of Duty: United Offensive, Metacritic, https://www. metacritic.com/game/pc/call-of-duty-united-offensive (last visited Feb. 4, 2022).
- See Daniel Turner, Hack: The Nintendo Wii, MIT Technology Review (July 1, 2007), https://www.technologyreview. com/2007/07/01/271887/hack-the-nintendo-wii/.
- 9. Ron Forbes & Arjun Dayal, *How You Become the Controller*, XBOX (Dec. 29, 2010), archived at: https:// web.archive.org/web/20110111115024/https://www. xbox.com/en-US/Live/EngineeringBlog/122910-HowYouBecometheController.
- 10. *Virtual World*, Caprica Fandom, https://caprica.fandom. com/wiki/Virtual_World (last visited Feb. 4, 2022).
- 11. Id.
- 12. Id.
- 13. Id.
- 14. *First Look at the Rift, Shipping Q1 2016,* Oculus Blog (May 6, 2015), https://www.oculus.com/blog/first-look-at-the-rift-shipping-q1-2016/.
- Pokémon Go launched in July of 2016. See Andrew Webster, Pokémon Go's Wild First Year: A Timeline, The Verge (July 6, 2017, 9:02 AM), https://www.theverge. com/2017/7/6/15888210.
- See Megan Willet-Wei, Players Can Now Change Their Avatar Whenever They Want in 'Pokémon Go' (Aug. 1, 2016, 8:53 AM), https://www.businessinsider.com/how-to-changepokemon-go-avatar-2016-7.
- 17. Nick Wingfield and Mike Isaac, *Pokémon Go Brings Augmented Reality to a Mass Audience*, NY Times (July 11, 2016), https://www.nytimes.com/2016/07/12/ technology/pokemon-go-brings-augmented-reality-to-amass-audience.html. Users were able to catch Pokémon anywhere, but could go to virtual 'gyms' to train their characters. *Id.* Businesses such as Starbucks entered into agreements to have their real-world locations marked as gyms on Go's virtual map, *see* Andrew Webster, *supra* n.15, a foreshadowing of businesses seeking ways to enter and monetize the metaverse.

- 18. Id.
- 19. Id.
- 20. *See Fortnite Wiki Home*, Fandom, https://fortnite-archive. fandom.com/wiki/Fortnite_Wiki (Last visited Feb. 4, 2022).
- 21. Id.
- 22. Id.
- Andrew Webster, Fortnite's Marshmello Concert Was The Game's Biggest Event Ever, The Verge (Feb. 21, 2019, 2:30 PM), https://www.theverge.com/2019/2/21/18234980/ fortnite-marshmello-concert-viewer-numbers.
- 24. Ready Player One (Warner Bros. Pictures 2018).
- 25. Id.
- 26. Id.
- See Mike Fleming Jr., Warner Bros Wins 'Ready Player One' Book Auction For Farah & De Line To Produce, Deadline (June 18, 2010, 7:17 pm), https://deadline.com/2010/06/ warner-bros-and-de-line-pictures-win-book-auction-forready-player-one-48086/.
- 28. Subrat Patnaik and Supantha Mukherjee, *Microsoft to Gobble Up Activision in \$69 Billion Metaverse Bet*, Reuters (Jan. 19, 2022, 12:12 AM), https://www.reuters.com/ technology/microsoft-buy-activision-blizzard-deal-687billion-2022-01-18/.
- 29. *Introducing Meta: A Social Technology Company,* Meta (Oct. 28, 2021), https://about.fb.com/news/2021/10/facebook-company-is-now-meta/.
- 30. Meta, *The Metaverse and How We'll Build It Together— Connect 2021*, Youtube (Oct. 28. 2021), https://www. youtube.com/watch?v=Uvufun6xer8.
- 31. Id.
- 32. Id.
- 33. Id.
- 34. Id.
- 35. Id.
- 36. Id.
- 37. Id.
- 38. Id.
- 39. Id.
- 40. *See generally Home Page*, Mesh, https://www.microsoft. com/en-us/mesh (last accessed Feb. 4, 2022).
- 41. Mesh was originally targeted toward "people who work with 3D physical models," and was designed to give designers and engineers a space to collaborate. John Roach, *Mesh for Microsoft Teams Aims to Make Collaboration in the* '*Metaverse' Personal and Fun* (Nov. 2, 2021), https://news. microsoft.com/innovation-stories/mesh-for-microsoftteams/. While Mesh also hopes to provide a space for all sorts of work and education, for now, its goals seem limited to facilitating professional collaboration. See id; see also Anastasiya Tarnouskaya, Qian Wen & Jim Walker, *What Is Microsoft Mesh?*, Microsoft Mesh (Preview) FAQ (Jan. 16, 2022) (https://docs.microsoft.com/en-us/mesh/ faq).

- 42. Cryptopedia Staff, *What is a Crypto Metaverse?*, Cryptopedia (Dec. 23, 2021), https://www.gemini.com/cryptopedia/what-is-metaverse-crypto-nft-game-blockchain.
- 43. Holders of governance tokens are "are typically able to propose changes to the protocol as well as use their tokens to vote on those changes." *Glossary: Governance Token*, Cryptopedia, https://www.gemini.com/cryptopedia/glossary#governance-token (last visited Feb. 24, 2022). In the ideal decentralized metaverse, these governance tokens thus ensure that changes to the metaverse occur more or less democratically.
- 44. *Our Mission*, Cryptopedia, https://www.gemini.com/ cryptopedia (last accessed Feb. 24, 2022).
- 45. Cryptopedia Staff, supra n.43.
- 46. Id.
- 47. Sébastien Borget, *The Sandbox (SAND): Tokenized Assets for Gaming Ecosystems?*, Cryptopedia (Dec. 23, 2021), https://www.gemini.com/cryptopedia/the-sandbox-sand-crypto-nft-virtual-world.
- 48. Cryptopedia Staff, *Decentraland: A Virtual World Built on Ethereum*, Cryptopedia (Dec. 23, 2021), https://www.gemini.com/cryptopedia/decentraland-defi-ethereumbased.
- 49. 17 U.S.C. § 102(a).
- 50. *See* 17 U.S.C. § 512(c) (providing a safe harbor for service providers who act upon a takedown request by a copyright owner).
- 51. See, e.g., Second Life Terms and Conditions, LindenLab, https://www.lindenlab.com/legal/second-life-termsand-conditions (last accessed Feb. 4, 2022); *Rights Ownership and Copyrights of Assets*, The Sandbox, https:// sandboxgame.gitbook.io/the-sandbox/assets/what-areassets/rights-ownership-and-copyright-of-assets (last accessed Feb. 4, 2022).
- 52. *Rights Ownership and Copyrights of Assets, supra* n.51 ("Can I make an ASSET of a Marvel / Disney / Pixar / Pokemon / Family Guy / Futurama / Other character which I do not own the rights to? No. This would be a violation of international copyright and trademark laws. Your ASSETs must be unique and must not depict characters that you do not own the intellectual property rights for.").
- 53. For example, *see id.* When users "upload content to The Sandbox," they grant it "a worldwide, non-exclusive, royalty-free, perpetual, irrevocable, sub-licensable (through multiple tiers), transferable right and license" to use and distribute the content, albeit for a limited purpose. *Id.*
- 54. *Trademark ID Manual*, USPTO, https://idm-tmng.uspto. gov/id-master-list-public.html (last accessed Feb. 18, 2022) (search for "virtual world").
- 55. Id.
- 56. Trademark Serial No. 97/096,366.
- 57. Trademark Serial No. 88/907,828.
- 58. Trademark Serial No. 88/709,517.

- 59. SLART, registered by Richard Minsky, is an example of a trademark that was registered in connection with a virtual art gallery. Despite being enforced in court, *see Minsky v. Linden Research*, 1:08-CV-819, 2008 U.S. Dist. LEXIS 143547 (N.D.N.Y. Sept. 4, 2008), the mark was later cancelled after being voluntarily surrendered, *see* Paper Correspondence Outgoing, Reg. 77137283 (Apr. 7, 2009) (surrender of trademark).
- 60. *See E.S.S. Entm't* 2000, *Inc. v. Rock Star Videos, Inc.*, 547 F.3d 1095 (9th Cir. 2008).
- 61. Id. at 1098.
- 62. Id. at 1100.
- 63. See Restatement (Third) of Unfair Competition: Appropriation of Trade Values §§ 46-49 (1995).
- 64. See Internet Privacy Laws Revealed How Your Personal Information is Protected Online, Thomson Reuters, https:// legal.thomsonreuters.com/en/insights/articles/howyour-personal-information-is-protected-online (last visited Feb. 17, 2022) (providing a brief overview of (the relatively sparse) internet privacy laws in the U.S.).
- 65. See Rights Ownership and Copyrights of Assets, supra n. 51.
- 66. *Map*, The Sandbox, https://www.sandboxgame.com/en/ map (last visited Feb. 4, 2022). The Sandbox allows users to create "ESTATEs," which are combinations of smaller sized LANDs. On the map of The Sandbox, these ESTATEs can appear as logos. *What are ESTATEs?*, The Sandbox, https:// sandboxgame.gitbook.io/the-sandbox/land/what-island/what-are-estates (last visited Feb. 4, 2022).
- 67. See the discussion in Section: IP Rights and Protection in Virtual Worlds.
- 68. *Market Listing for the Snoop Dogg NFT Collection*, https://www.sandbox.game/en/shop/?collections=26 (last visited Feb. 4, 2022).
- 69. Id.
- 70. For examples, see Bernard Marr, *How Luxury Brands Are Making Money in The Metaverse*, Forbes (Jan 19, 2022, 1:56 AM), https://www.forbes.com/sites/ bernardmarr/2022/01/19/how-luxury-brands-aremaking-money-in-the-metaverse/.

Section Committees and Chairs

The Intellectual Property Law Section encourages members to participate in its programs and to contact the Section Officers or Committee Chairs for information.

Advertising Law

Brooke Erdos Singer Davis & Gilbert LLP New York, NY bsinger@dglaw.com

Copyright Law Paul Matthew Fakler Mayer Brown LLP New York, NY pfakler@optonline.net

Cyber Security and Data Privacy Daniel Francis Forester Orrick, Herrington & Sutcliffe New York, NY daniel.forester@orrick.com

Diversity

Joyce L. Creidy CompuMark/Clarivate Analytics joyce.creidy@clarivate.com

Deborah Robinson New York, NY darobinsonesq@aol.com

Ethics

Rory J. Radding Mauriel Kapouytian Woods LLP New York, NY rradding@mkwllp.com

Philip Furgang Furgang & Adwar, LLP New York, NY philip@furgang.com **In-House Initiative** VACANT

Internet & Technology Law Richard L. Ravin Hartman & Winnicki, PC Ridgewood, NJ rick@ravin.com

Legislative & Amicus VACANT

Litigation Marc A. Lieberstein Kilpatrick Townsend & Stockton LLP New York, NY mlieberstein@kilpatricktownsend.com

Membership William Robert Samuels Warshaw Burstein LLP wsamuels@wbny.com

Patent Law Michael A. Oropallo Barclay Damon LLP Syracuse, NY moropallo@barclaydamon.com

Douglas A. Miro Amster, Rothstein & Ebenstein LLP New York, NY dmiro@arelaw.com **Trademark Law** William Robert Samuels Warshaw Burstein LLP New York, NY wsamuels@wbny.com

A. Ashford Tucker Fross Zelnick Lehrman & Zissu New York, NY atucker@fzlz.com

Trade Secrets

Andre G. Castaybert Castaybert PLLC New York, NY acastaybert@ac-counsel.com

Transactional Law Robin E. Silverman Golenbock Eiseman Assor Bell & Peskoe LLP New York, NY rsilverman@golenbock.com

Danielle Ella Maggiacomo Jayaram Law New York, NY dmaggiacomo@jayaramlaw.com

Y**oung Lawyers** Nyasha S. Foy nyasha.foyesq@gmail.com

Contribute to the NYSBA *Journal* and reach the entire membership of the state bar association

The editors would like to see well-written and researched articles from practicing attorneys and legal scholars. They should focus on timely topics or provide historical context for New York State law and demonstrate a strong voice and a command of the subject. Please keep all submissions under 4,000 words.

All articles are also posted individually on the website for easy linking and sharing.

Please review our submission guidelines at www.nysba.org/JournalSubmission.



NEW YORK STATE BAR ASSOCIATION INTELLECTUAL PROPERTY LAW SECTION One Elk Street, Albany, New York 12207-1002

CLE Program

 $\Pi \Pi$



Review our upcoming LIVE WEBINAR schedule

We're offering dozens of brand new webinars every month on a variety of topics, including COVID-19 related programs, so be sure to register today!

Visit us online at NYSBA.ORG/CLE