

**THE VALUE OF ART IN THE SHAPE OF NFTS:
ONE STEP CLOSER TO PERFECT
PROVENANCE, MARKET TRANSPARENCY,
AND ACCESS TO PROFIT**

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ABSTRACT: Nonfungible tokens (NFTs) allow artists and other copyright owners to lawfully mint an image of their underlying copyrighted works as an NFT. Laws around such minting are currently speculative because courts are only just starting to address these rights. These rights should become more certain as International Courts, the U.S. Patent and Trademark Office (USPTO) and the U.S. Copyright Office (USCO), and courts in the United States litigate these issues. In the meantime, courts should analyze NFTs under existing copyright and trademark laws. Despite the speculative nature of NFTs, their true value lies in the potential to expand markets, legitimize ownership, create provenance and establish authenticity, and provide a long-term funding source for artists.

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Christie’s Auction House, Beeple, and nonfungible tokens (NFTs) made headlines¹ and shook the art world in March 2021 when Beeple’s *The First*

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1. See Eileen Kinsella, *An NFT Artwork by Beeple Just Sold for an Unbelievable \$69 Million at Christie’s—Making Him the Third Most Expensive Living Artist at Auction*, ARTNET (Mar. 11, 2021), <https://news.artnet.com/market/christies-nft-beeple-69-million-1951036> [perma.cc/8GEB-B6TR]; Jacob Kastrenakes, *Beeple Sold an NFT for \$69 Million / Through a First-of-Its-Kind Auction at Christie’s*, VERGE (Mar. 11, 2021, 8:09 AM), <https://www.theverge.com/2021/3/11/22325054/beeple-christies-nft-sale-cost-everydays-69-million> [perma.cc/ZL42-N8LC]; Angelica Villa, *Beeple NFT Fetches Unprecedented \$69.3M. at Christie’s*, ARTNEWS (Mar. 11, 2021, 10:08 AM), <https://www.artnews.com/art-news/market/beeple-makes-69-million-1234586424/> [perma.cc/9Z32-YDYQ]; Kelly Crow & Caitlin Ostroff, *Beeple NFT Fetches Record-Breaking \$69 Million in Christie’s Sale*, WALL ST. J. (Mar. 11, 2021, 10:48 AM), <https://www.wsj.com/articles/beeple-nft-fetches-record-breaking-69-million-in-christies-sale-11615477732>; Elena Debré & Aaron Mak, *How in the World Did a “Digital Artwork” Sell for \$69 Million at Christies?*, SLATE (Mar. 11, 2021, 3:05 PM), <https://slate.com/technology/2021/03/beeple-auction-christies-nft-69-million-explained-why-why-why.html> [perma.cc/6EYC-D6MT]; Kevin Stankiewicz, *Here’s What the*

5,000 Days sold for over \$69 million.² According to the artist, the montage is “a picture from start to finish every single day” from May 2007 to January 2021—over thirteen years.³ In other words, Beeple compiled in his NFT an image every day over a period of thirteen years. Beeple started exploring NFTs during Covid when his design business stalled, recognizing the serious money available for digital art minted as an NFT.⁴ Beeple was almost virtually unknown in the art world⁵ before he changed his focus from digital designer to NFT artist.⁶ His transition paid off. The March 2021 bidding went from \$100 to more than \$69 million in a matter of weeks, marking the “third highest price ever paid for the work of a living artist at auction and certainly a watershed moment in the history of digital art.”⁷ The world noticed. Following this sale, NFT art sales went on to generate \$546 million from about 190,000 transactions in the first half of 2021 alone.⁸

Technology has advanced “more rapidly than any innovation in our history” to permeate and transform aspects of society⁹—including how we create, view, and collect art. For example, Alice Left observes that “[t]he future of art collecting is becoming increasingly digitised . . . affording new opportunities for artists, art dealers and collectors alike.”¹⁰ As technology permeates the art world, museums, galleries, and creators should embrace NFT technology to support traditional practices.

Buyer of Beeple’s NFT Digital Art Actually Gets for \$69 Million, CNBC ART & CULTURE, <https://www.cnn.com/2021/03/11/beeple-is-a-rich-man-after-nft-sale-christies-art-specialist-noah-davis.html> [perma.cc/3DVQ-5FEZ] (Mar. 12, 2021 8:45 AM); Hannah Denham et al., *What Is an NFT, and How Did an Artist Called Beeple Sell One for \$69 Million at Christies?*, WASH. POST (Mar. 12, 2021 3:20 PM), <https://www.washingtonpost.com/technology/2021/03/12/nft-beeple-christies-block-chain/> [https://perma.cc/8YWM-FQR4]; Scott Reyburn, *JPG File Sells for \$69 Million, as ‘NFT Mania’ Gathers Pace*, N.Y. TIMES, <https://www.nytimes.com/2021/03/11/arts/design/nft-auction-christies-beeple.html> [perma.cc/H9L7-XC84] (Mar. 25, 2021).

2. *Beeple | The First 5000 Days*, CHRISTIE’S, <https://onlineonly.christies.com/s/beeple-first-5000-days/lots/2020> (last visited Sept. 5, 2023).

3. Mike Winkelmann, *The First 5000 Days*, BEEPLE: EVERYDAYS, <https://www.beeple-crap.com/viewing> [https://perma.cc/FAH9-H2PE].

4. Will Gompertz, *Everydays: The First 5000 Days-Will Gompertz Reviews Beeple’s Digital Work*, BBC (Mar. 13, 2021), <https://www.bbc.com/news/entertainment-arts-56368868> [https://perma.cc/FF8X-RGVB].

5. Sebastian Smee, *Will NFTs Transform the Art World? Are They Even Art?*, WASH. POST (Dec. 18, 2021, 6:00 AM), <https://www.washingtonpost.com/arts-entertainment/2021/12/18/nft-art-faq/> [https://perma.cc/52NE-PC62].

6. Gompertz, *supra* note 4.

7. Christie’s, *Watch Beeple React to the Historic \$69.3m Sale of His Digital Work at Christie’s*, YOUTUBE (Mar. 11, 2021), <https://www.youtube.com/watch?v=S8p1B8NHLFQ>.

8. Smee, *supra* note 5.

9. *Shaping Our Future Together*, UNITED NATIONS, <https://www.un.org/en/un75/impact-digital-technologies> [https://perma.cc/F45E-QZGP] (speaking on digital technology’s impact on the labor force, data, agriculture, the environment, traffic, bill payments, socialization, and global relations).

10. Alice Left, *NFTs and the Art World*, AFFORDABLE ART FAIR (Mar. 18, 2022), <https://affordableartfair.com/inspiration/nfts-and-the-art-world/> [https://web.archive.org/web/20220413153311/https://affordableartfair.com/inspiration/nfts-and-the-art-world/].

NFTs have already successfully made an impact¹¹ and “are poised to transform the art world, changing not only how art is bought and sold, but also what kind of art we value, and which artists.”¹² Digital technology is “re-defining” the art world.¹³ Digital technology like NFTs specifically has the “potential to open up a myriad of possibilities in terms of how we manage, experience and share art collections.”¹⁴ In fact, it seems clear that “NFTs are [already] reshaping the traditional art market” at all levels of the art world.¹⁵ Artists have predicted that “the traditional art world and the NFT world are going to [continue to] move closer to each other.”¹⁶ NFTs might even become the norm for art transactions.¹⁷ As they become the norm, (1) legal rights that come with the transfer of NFTs remain speculative. Still, (2) art museums, galleries, and artists should embrace technology like NFTs as valuable because (a) NFTs can be applied to digital and physical artworks to (b) create a more perfect record of provenance, (c) legitimize ownership of digital mediums, (d) expand audiences, and (e) allow artists to profit long-term from sales, exhibitions, and exchanges of their works. The art world should even consider creating its own NFT technology platform.

I. MINTING ARTWORKS AS NFTS

NFTs are not a new art form. They are simply financial instruments that make it easier to sell digital files by creating scarcity.¹⁸ Generally, NFTs are certificates of ownership “powered by smart contracts and protected by blockchain technology.”¹⁹ In other words, NFTs denote “ownership of a file on the Internet.”²⁰

In art, an NFT is a unique string of code attached to an associated or underlying artwork. As the Singapore High Court clarified, an NFT “is essentially, a string of code which includes the code for the image.”²¹ Generally, NFTs represent “a unique digital record of information²² registered on a blockchain.”²³ A blockchain is a digital database that stores information across a network of com-

11. See Smee, *supra* note 5 (quoting Serpentine Gallery curator Hans Ulrich Obrist as saying that “NFTs have already transformed the art world, regardless of whether the boom continues”).

12. Smee, *supra* note 5.

13. Left, *supra* note 10.

14. *Id.*

15. Sarah D. McDaniel & Denny Galindo, *Democratizing Art: How NFTs Are Reshaping the Art World*, MORGAN STANLEY (June 27, 2022), <https://www.morganstanley.com/articles/nft-art-market-nft-collectibles#:~:text=Nonfungible%20tokens%20are%20disrupting%20the,to%20their%20fans%20and%20buyers.&text=In%20the%20past%20couple%20of,collectors%2C%20spurring%20new%20economic%20activity> [https://perma.cc/E84J-JCYG].

16. Smee, *supra* note 5 (quoting artist Sarah Meyohas).

17. See Left, *supra* note 10.

18. Smee, *supra* note 5.

19. Pinar Çağlayan Aksoy & Zehra Özkan Üner, *NFTs and Copyright: Challenges and Opportunities*, 16 J. INTELL. PROP. L. & PRAC. 1115, 1115 (2021).

20. *NFTs Explained*, NEWS INT’L (Nov. 2021), <https://www.thenews.com.pk/magazine/us/911021-nfts-explained> [https://perma.cc/J3JD-84FJ].

21. Rajkumar v. Chefpierre, [2022] SGHC 264 (Sing.).

22. Left, *supra* note 10; see McDaniel & Galindo, *supra* note 15.

23. Smee, *supra* note 5.

puters.²⁴ Each piece of information added to the blockchain is time-stamped and connected to older pieces of information in a growing chain of verifiable blocks of data.²⁵

Applied to visual art, an NFT is a unique digital representation of an artwork functioning essentially as a certificate of authenticity.²⁶ The NFT creator creates the digital representation by uploading a JPG, PNG, GIF, MP4, or other digital versions of the associated work.²⁷ As explained by IPFS Blog & News, the digital representation “includes a link that points to the metadata [of the associated images that are hosted on external servers and not on the Ethereum blockchain itself], which lives elsewhere online.”²⁸ That digital representation is then “hashed” to create a file that will always produce the same output.²⁹ The hashed file is recorded on a decentralized digital database accessible to the public.³⁰ That file is then transferable as a unique token.³¹ Any changes to that file will result in a different hash value.³² Therefore, NFTs create a unique and one-of-a-kind digital representation of an underlying artwork that no one can duplicate.³³

NFTs can track ownership of digital or physical assets.³⁴ Therefore, the associated or underlying artwork of the NFT can be physical or digital artwork.³⁵ Copyright owners have the choice to mint their physical or digital artwork, or both. On one hand, the copyright owner can choose to sell digital representations of the underlying artwork as copies detached from the underlying artwork.³⁶ This would be like Picasso creating a limited-edition lithograph series of *Guernica* with signatures authenticating those copies. On the other hand, the copyright owner can create a digital representation of the underlying work as an NFT to establish provenance.³⁷ In this case, the NFT would be transferred each time the

24. *Id.*

25. *Id.*

26. McDaniel & Galindo, *supra* note 15.

27. *NFT Smart Contracts | Applications You Must Know*, OODLES BLOCKCHAIN (Nov. 30, 2022), <https://blockchain.oodles.io/blog/nft-smart-contracts-applications/> [<https://perma.cc/VK67-XKNB>].

28. *How to Store and Maintain NFT Metadata*, IPFS BLOG (Oct. 6, 2021), <https://blog.ipfs.tech/how-to-store-and-maintain-nft-metadata/> [<https://perma.cc/54SU-DH22>].

29. *See Introduction to Blockchains*, BITLAW, <https://www.bitlaw.com/blockchain/intro-to-blockchains.html> [<https://perma.cc/QE9P-QGVF>].

30. *See* McDaniel & Galindo, *supra* note 15.

31. *Non-Fungible Tokens (NFTs) Explained*, AWS, <https://aws.amazon.com/blockchain/nfts-explained/> [<https://perma.cc/542L-98BQ>].

32. Andrew Loo, *Hash Function: An Algorithm That Converts a Message into a Hash Value*, CFI, <https://corporatefinanceinstitute.com/resources/cryptocurrency/hash-function/> [<https://perma.cc/XX9A-VKPQ>] (Apr. 5, 2023).

33. *See* Left, *supra* note 10.

34. Louise Carron, *ABCs of NFTs, Art and Law*, 32 ENT. ARTS & SPORTS L.J., no. 2, 2021, at 13, 13, https://nysba.org/app/uploads/2021/08/SECPUBS_EASL-Journal-2021-Vol-32-No-2_8.5X11_WEB.pdf [<https://perma.cc/BKT9-9CXM>].

35. McDaniel & Galindo, *supra* note 15.

36. Jonas Kasper Jensen, *NFT Use Case: Provenance*, TOKENIZER (May 2, 2022), <https://thetokenizer.io/NFT/nft-use-case-provenance/> [<https://perma.cc/Z74A-ZWAP>].

37. *Id.*

underlying artwork is transferred.³⁸ In other words, the NFT could record on the blockchain the transfer of ownership of the physical artwork. Each subsequent transfer of ownership would securely record ownership and prices on the blockchain.³⁹

II. CONTROL OVER MARKET SCARCITY OR SATURATION OF DIGITAL REPRESENTATIONS OF UNDERLYING ARTWORKS

When addressing NFTs, courts and regulators should look to solutions provided by existing copyright and trademark laws.⁴⁰ U.S. courts are just starting to evaluate the exclusive right of an intellectual rights holder in creating NFTs digitally representing an underlying asset. Still, a cause of action for intellectual property right infringement for minting an NFT digitally representing an underlying asset without authorization has survived a motion to dismiss.⁴¹ In *Yuga Labs, Inc. v Ripps*, the plaintiff began lawfully minting NFTs digitally representing underlying works in April 2021.⁴² The plaintiff, creator of a series of NFTs called the Bored Ape Yacht Club, brought a claim for trademark infringement after the defendants created a similarly named collection of NFTs “point[ing] to the same online digital images . . . but us[ing] verifiably unique entries on the [Ethereum] blockchain” without the plaintiff’s authorization.⁴³ Although currently undecided, the case shows there is a potential right of action for the unauthorized creation of NFTs without permission from intellectual property owners.⁴⁴

A. Lawfully Creating a Copy to Mint an Image of a Copyrightable Work as an NFT

Because NFTs containing an image of an underlying copyrightable work should fall under traditional copyright law, only a copyright owner should lawfully mint or authorize someone to mint an NFT containing an image of an underlying artwork. There is limited case law of NFTs in a copyright context because of the newness of the technology.⁴⁵ Still, an NFT of an underlying artwork becomes a digital representation of that artwork.⁴⁶ As digital representa-

38. *Id.*

39. *Id.*

40. See Susan Steams, Director of Trademarks & Brand Enforcement, PayPal, in Public Roundtables for the Study on Non-Fungible Tokens and Related Intellectual Property Law Issues (Trademarks), VBRICK REV, at 1:50:00, (Jan. 24, 2023), <https://rev-vbrick.uspto.gov/#/videos/e4e93c60-06e5-4d51-9f53-b8f85a5d35fa> [hereinafter Public Roundtables].

41. See *Yuga Labs, Inc. v. Ripps*, No. CV 22-4355-JFW (JEMx), 2022 U.S. Dist. 2022 WL 18024480 (C.D. Cal. Dec. 16, 2022).

42. See *id.* at *1.

43. *Id.* (citing defendant motion, 6:20-22).

44. Prac. L. Intell. Prop. & Tech., *NFTs and Intellectual Property*, Aug. 30, 2022, Westlaw, w-036-0145 [hereinafter *NFTs and Intellectual Property*].

45. See *Notorious B.I.G. LLC v. Yes. Snowboards*, No. LACV1901946JAKKSX, 2022 WL 2784808, at *5 (C.D. Cal. June 3, 2022).

46. See *id.* n.3 (finding that NFTs of copyrighted photographs qualified as digital representations of the underlying copyrighted photographs and thus fell under the Copyright Act).

tions, NFTs of underlying copyrighted artwork should fall under the Copyright Act.⁴⁷

To start, an NFT as a digital representation of an underlying artwork should qualify as a copy under the Copyright Act. Under the Copyright Act, copies are “material objects . . . in which a work is fixed . . . and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.”⁴⁸ A material object is “‘fixed’ . . . when its embodiment . . . is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.”⁴⁹ A digital representation is fixed when it is stored on a computer server, hard disk, or other storage device.⁵⁰ Therefore, a digital representation is a copy of the underlying artwork under copyright law.⁵¹ Because an NFT is a digital representation, minting an image of an artwork as an NFT likely creates a copy of that artwork under copyright law.

Because an NFT should qualify as a copy under the Copyright Act, copyright owners should hold the exclusive right to reproduce digital images of their artwork as NFTs.⁵² In *APL Microscopic, LLC v. United States*, uploading a digital representation of an underlying copyrighted work onto a computer server infringed on the copyright owner’s exclusive reproduction right.⁵³ The upload was fixed on the server because it was uploaded to the server.⁵⁴ The upload could be “perceived, reproduced, or otherwise communicated.”⁵⁵ Therefore, the upload created a copy.⁵⁶ The uploader did not own the copyright to the underlying work nor receive authorization from the copyright owner.⁵⁷ Therefore, the uploader infringed on the copyright owner’s exclusive right to reproduce “once the upload was complete.”⁵⁸

A copyright owner should also hold the exclusive right to mint or to authorize the minting of an NFT of their underlying artwork. Minting an underlying artwork as an NFT requires an upload of a digital representation onto a storage device. Considering that NFTs “exist as a permanent record on blockchain,”⁵⁹ NFTs should be sufficiently permanent or stable to permit perception, reproduction, or other communication for a period of more than a transitory duration.

47. *See id.* at *5.

48. 17 U.S.C. § 101.

49. *Id.*

50. *See APL Microscopic, LLC v. United States*, 144 Fed. Cl. 489, 494 (2019) (citing *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1160 (9th Cir. 2007)).

51. *See id.*

52. Under the Copyright Act, a copyright owner has the exclusive right to “reproduce the copyrighted work in copies.” 17 U.S.C. § 106(1).

53. *See APL Microscopic*, 144 Fed. Cl. at 495.

54. *Id.*

55. *Id.*

56. *Id.*

57. *See id.*

58. *Id.*

59. Robert Stevens, *What Are Dynamic NFTs? The ‘Living’ Tokens That Change Over Time*, DECRYPT (July 27, 2022), <https://decrypt.co/resources/what-are-dynamic-nfts-the-living-tokens-that-change-over-time> [<https://perma.cc/6AGE-FJ4Z>].

Based on *APL Microscopic, LLC*, such an upload is an infringement of a copyright owner's exclusive reproduction right. To start, such an NFT requires an upload of a digital representation of the copyrighted work onto the blockchain.⁶⁰ Because such an upload infringed on a copyright owner's exclusive reproduction right in *APL Microscopic*, a digital upload of a digital representation of a copyrighted work to create an NFT should also qualify as an infringement. Moreover, the blockchain is a storage device.⁶¹ Additionally, just as uploading to a server was fixed to be perceived, reproduced, or otherwise communicated in *APL Microscopic*, the blockchain as a storage device fixes an NFT to be perceived, reproduced, or otherwise communicated. Based on these similarities, a minter of an NFT of an underlying artwork creates a copy just like an uploader of a copyrighted image to a server creates a copy. Just as in *APL Microscopic*, unauthorized fixation of such a copy infringes on the copyright owner's exclusive right to reproduce.

In addition, a copyright owner also has the exclusive right "to distribute copies . . . of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending."⁶² Infringement of that right requires actual dissemination of those copies.⁶³ Merely uploading a digital image is not actual dissemination and does not trigger the distribution right. The "act of transmitting [a] webpage—and the Work therein—to a user" is an actual dissemination and does infringe on the distribution right.⁶⁴

In effect, a copyright owner should also have the exclusive right to distribute copies of their underlying artwork as minted NFTs by sale, transfer of ownership, rental, lease, or lending. Actual dissemination of NFTs minted without the authorization of the copyright owner should infringe on that right. Minting an underlying artwork as an NFT surpasses merely uploading a digital image. Instead, minting an underlying artwork as an NFT results in actual dissemination to infringe on the distribution right. Just as transmitting a webpage with a work therein is actual dissemination to infringe on the distribution right, surely the transmitting of a work through the blockchain is actual dissemination to infringe on the distribution right.

60. Jacob Cass, *How to Mint an NFT: 7 Step Guide to Creating Your First NFT*, JUST CREATIVE (May 20, 2022), <https://justcreative.com/how-to-mint-an-nft/> [<https://perma.cc/66HQ-WD4N>].

61. See TechTarget Contributor, *Blockchain Storage*, TECHTARGET, <https://www.techtarget.com/searchstorage/definition/blockchain-storage#:~:text=Blockchain%20storage%20is%20a%20way,found%20in%20a%20centralized%20system> [<https://perma.cc/E99E-YSXG>].

62. 17 U.S.C. § 106(3).

63. *APL Microscopic*, 144 Fed. Cl. at 498; *BMG Rights Mgmt. (US) LLC v. Cox Commc'ns, Inc.*, 149 F. Supp. 3d 634, 670 (E.D. Va. 2015); *Atl. Recording Corp. v. Howell*, 554 F. Supp. 2d 976, 981 (D. Ariz. 2008); *Capitol Records, Inc. v. Thomas*, 579 F. Supp. 2d 1210, 1226 (D. Minn. 2008); *London-Sire Records, Inc. v. Doe*, 542 F. Supp. 2d 153, 166 (D. Mass. 2008); *In re Napster, Inc. Copyright Litig.*, 377 F. Supp. 2d 796, 805 (N.D. Cal. 2005). *Musical Prods., Inc. v. Roma's Record Corp.*, 2007 WL 750319, at *1 (E.D. N.Y. 2007). *But see Hotaling v. Church of Jesus Christ of Latter-Day Saints*, 118 F.3d 199 (4th Cir. 1997) (applying the rule only if the copyright owner could not possibly produce proof of actual distribution).

64. *APL Microscopic*, 144 Fed. Cl. at 498.

Finally, a copyright owner has the exclusive right to “display the copyrighted work publicly.”⁶⁵ A public display occurs when someone “transmit[s] or otherwise communicate[s] a performance or display of the work . . . to the public, by means of any device or process.”⁶⁶ According to *APL*, “‘any other device or process’ clearly brings showing a copy of a work through a computer within the statutory definition of ‘display.’” Thus, each unauthorized showing of a Work through a computer infringes on the owner’s right of public display.⁶⁷ More specifically, each time a member of the public views the unauthorized display of the copy of the copyrighted work, a separate infringement occurs and starts a new statute of limitation.⁶⁸ Copyright owners should have the exclusive right to display an NFT digitally representing their underlying artwork because such an NFT displays the copyrighted work publicly. NFTs transmit an underlying artwork to the public by means of the blockchain. The blockchain is a device that under *APL* “clearly brings showing a copy of a work through a computer within the statutory definition of ‘display.’”⁶⁹ Therefore, each unauthorized showing of an underlying artwork minted as an NFT infringes on the copyright owner’s right of public display. Based on the reasoning in *APL*, such infringement occurs with each unauthorized showing of such an NFT.

Minting an NFT digitally representing an underlying artwork without copyright ownership or authorization from the copyright owner infringes the Copyright Act with potential consequences on the infringer. According to Westlaw’s Practical Law Intellectual Property and Technology resource, “[m]inting unauthorized NFTs could result in the minter facing an infringement claim, rendering the NFTs valueless and exposing the minter to any damages awards, legal fees, or injunctive relief, as well as its own defense costs.”⁷⁰

Because it is likely that only the copyright owner of the underlying artwork can lawfully mint the associated artwork as an NFT, the copyright owner of an artwork has the choice of how many NFTs of the underlying artwork are minted. In the case that the copyright owner chooses to mint only one NFT, the NFT can function as a certificate of authenticity. In the case that the copyright owner chooses to mint only one NFT, the NFT can function as a certificate of authenticity. Alternatively, if the copyright owner chooses to mint a series of NFTs of the underlying artwork, the copyright owner determines the scarcity of the copies.

65. 17 U.S.C. § 106(5).

66. 17 U.S.C. § 101.

67. *APL Microscopic*, 144 Fed. Cl. at 498 (interpreting 17 U.S.C. § 101); see also *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146, 1155–61 (9th Cir. 2007) (holding that unauthorized “communication [over the internet to a user’s browser] of . . . stored thumbnail images directly infringe[] on [a copyright owner’s] display right”); *Playboy Enters., Inc. v. Webworld, Inc.*, 991 F. Supp. 543, 548, 552 (N.D. Tex. 1997) (holding that allowing the public “to view PEI’s copyrighted works . . . while online” without authorization from the copyright owner qualified as an infringing display).

68. See *APL Microscopic*, 144 Fed. Cl. at 498.

69. *Id.*

70. *NFTs and Intellectual Property*, supra note 44.

B. Using NFTs to Increase Trademarking Opportunities for Artists

Under section 43(a) of the Lanham Act, “[a]ny person who, on or in connection with goods or services, or any container for goods, uses in commerce . . . any false designation of origin . . . likely to cause confusion [of association or origin] . . . shall be liable in a civil action by any person who believes that he or she is or is likely to be damaged by such act.”⁷¹ False designation of origin under the Lanham Act exists as a claim to relief distinct from copyright infringement. In *Shepard v. European Pressphoto Agency*, the plaintiff artists owned the copyright to their artworks.⁷² Artists also sold those artworks.⁷³ The Lanham Act thus protected the artists because they produced “tangible goods that [were] offered for sale.”⁷⁴ The defendants purchased tangible goods (artworks) that the plaintiff artists created and sold.⁷⁵ The defendants then placed defendants’ Additionally, just as uploading to a server was fixed to be perceived, reproduced, or otherwise communicated in *APL Microscopic*, the blockchain as a storage device fixes an NFT to be perceived, reproduced, or otherwise communicated. watermark on the tangible goods without the authorization of plaintiff artists.⁷⁶ Defendants published the watermarked tangible goods online, again without the authorization of the plaintiff artists.⁷⁷ The plaintiffs’ complaint alleging false designation of origin survived a motion to dismiss because “it state[d] a claim to relief under the Lanham Act that [was] distinct from, and not foreclosed by, the copyright infringement claim.”⁷⁸ Therefore, a copyright owner can bring both a claim for copyright infringement and trademark infringement.

The Lanham Act applies to both tangible and intangible goods. As the Southern District of New York explained, “[T]he vast majority of courts agree . . . that the Lanham Act extends to trademark claims against intangible, as well as tangible, goods”⁷⁹ The unauthorized use of a trademarked slogan on a website violates the Lanham Act.⁸⁰ Unauthorized publication of copyrighted images on a website can also violate the Lanham Act.⁸¹

The Lanham Act creates a federal remedy against using “a false designation of origin, or any false description or representation” in connection with “any goods or services.”⁸² The Supreme Court has narrowly interpreted origin of goods to mean the “producer of the tangible goods that are offered for sale, and not to the author of any idea, concept, or communication embodied in those

71. 15 U.S.C. § 1125(a)(1).

72. *Shepard v. Eur. Pressphoto Agency*, 291 F. Supp. 3d 465, 469 (S.D.N.Y. 2017).

73. *Id.* at 470.

74. *Id.*

75. *Id.*

76. *Id.* at 468.

77. *Id.*

78. *Id.* at 470.

79. *Hermes Int’l v. Rothschild*, 590 F. Supp. 3d 647, 656 (S.D.N.Y. 2022).

80. *See Kelly-Brown v. Winfrey*, 717 F.3d 295 (2d Cir. 2013).

81. *Id.*

82. Lanham Act, Pub. L. No. 79-489, 60 Stat. 427, 441 (1946) (codified as amended at 15 U.S.C. § 1125(a)(1)).

goods.”⁸³ Therefore, section 43(a) of the Lanham Act does not protect against the “unattributed copying”⁸⁴ of “uncopyrightable materials.”⁸⁵ In other words, someone can copy an artwork in the public domain without accreditation to the original copyright owner. Even for communicative products like Art, “[t]he right to copy, and to copy without attribution, once a copyright has expired . . . ‘passes to the public.’”⁸⁶ Nevertheless, 15 U.S.C. section 1125(a) “would undoubtedly be sustained if [infringer] had bought . . . and merely repackaged [the goods] as its own.”⁸⁷

Artists may register for a trademark under 43(a) of the Lanham Act if “the use of its trademark by another, is likely to confuse consumers as to the source of the product.”⁸⁸ According to the USPTO, “[a]rtists may register in a variety of classes depending on the nature of their works (e.g., marble sculptures in Class 19 or wooden sculptures in Class 020 or custom paintings in Class 016) or services (e.g., custom art drawing for others in Class 041).”⁸⁹ Artists can also register their names or pseudonyms if the artists proves that it appears on at least two different works or if it is affixed to an original work of art.⁹⁰ Therefore, artists can already register their artworks under trademark law.

Nevertheless, the Lanham Act does not protect originality or creativity.⁹¹ The Lanham Act only protects artworks when “a separate and distinct product or service is being sourced and identified in commerce.”⁹² When analyzing trademarks in connection to art, courts look not at the commercial undertaking of the artist but whether “the name or identifier or visual image serves as a source identifier for separate products or services.”⁹³ In fact, according to leading trademark scholar Thomas McCarthy, “[t]he identity of the designer or artist who created the image is irrelevant unless that person is identified as the source of the product or service sold under the trademark image.”⁹⁴ That name or identifier or visual image “must be proven to perform the job of identification” to receive trademark protection.⁹⁵ A plaintiff must show that the defendant’s use

83. *Dastar Corp. v. Twentieth Century Fox Corp.*, 539 U.S. 23, 37 (2003).

84. *Id.* at 37.

85. *Id.* at 35.

86. *Id.* at 33 (quoting *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 230 (1964)).

87. *Id.* at 31.

88. *Home Box Office, Inc. v. Showtime/The Movie Channel, Inc.*, 832 F.2d 1311, 1314 (2d Cir. 1987).

89. *Musicians and Artists Profile*, USPTO, <https://www.uspto.gov/learning-and-resources/ip-policy/musicians-and-artists-profile> (last visited Feb. 25, 2023).

90. *Id.*

91. *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23, 37 (2003).

92. ALEXANDRA DARRABY, I DARRABY ON ART LAW § 8:3, Westlaw (Feb. 2023) [hereinafter DARRABY ON ART LAW].

93. *Id.*

94. I J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 3:4 (4th ed. 1998).

95. *Id.*

of that name or identifier or visual image is likely to cause confusion with the plaintiff's use.⁹⁶

NFTs provide a separate and distinct product or service sourced and identified in commerce to place artworks under the protection of trademark law. In other words, NFTs function as a “digital wrapper . . . for digital goods, for physical goods, or for services—you put a wrapper around anything and allow it to move freely in commerce, you're naturally going to have trademark issues.”⁹⁷ For artworks minted as an NFT, the artist's name, the unique code associated with the NFT, and the visual image encoded in the NFT serve as a source identifier for the NFT. As the only lawful creator of an NFT using a copyrightable image, the artist as copyright owner is identified as the source of the product sold under the trademark image. The name, code, and image associated with the NFT performs the job of identification. A non-copyright owner using the artist's name or visual image to create an NFT would likely cause consumer confusion.

NFTs should give an artist or collectors of that artist's NFTs a commercial interest for trademark protection. Courts have found a sufficient commercial interest in cases including collectors and art dealers.⁹⁸ In *Boulé v. Hutton*, art dealers sued American competitors for false advertising under the Lanham Act.⁹⁹ The Court held that

[i]n the context of the art market, where plaintiffs own a significant percentage of the extant works attributed to one artist, where plaintiffs have taken steps to promote their collection, and where plaintiffs contracted to sell a substantial number of those works, plaintiffs have a sufficient commercial interest at stake to give them standing to sue under section 43(a) of the Lanham Act.¹⁰⁰

Therefore, someone who has taken steps to promote a collection of a significant percentage of works attributed to an artist and seeks to sell a substantial number of those works has a commercial interest to receive trademark protection. Consequently, artists who take steps to promote a significant percentage of their works through NFT minting and seek to sell those NFTs should have a commercial interest to receive trademark protection.

NFTs also allow an artist to develop a secondary meaning that the purchasing public associates goods designated by an image of their artwork with a single source. To bring a successful Lanham Act claim, an artist must show “secondary meaning” with evidence “that the purchasing public associates goods designated” by the image of the artwork with a single source.¹⁰¹ In *Hughes v. Design*

96. See *Leigh v. Warner Bros., a Div. of Time Warner Ent. Co., L.P.*, 10 F. Supp. 2d 1371, 1380 (S.D. Ga. 1998), *aff'd in part, rev'd in part sub nom. Leigh v. Warner Bros.*, 212 F.3d 1210 (11th Cir. 2000).

97. Joe Guagliardo, Partner, Dentons' Venture Tech. & Emerging Growth Cos., in Public Roundtables, *supra* note 40, at 2:57:00.

98. See *Boulé v. Hutton*, 70 F. Supp. 2d 378 (S.D.N.Y. 1999), *aff'd*, 328 F.3d 84 (2d Cir. 2003).

99. See *id.* at 379.

100. *Id.* at 386.

101. See *Hughes v. Design Look Inc.*, 693 F. Supp. 1500, 1507 (S.D.N.Y. 1988) (quoting *Centaur Commc'ns Ltd. v. A/SIM Commc'ns, Inc.*, 830 F.2d 1217, 1221 (2d Cir.1987)).

Look, the plaintiffs never used the images at issue to promote any goods or services.¹⁰² Moreover, the plaintiffs sold the works outright without retaining a copy.¹⁰³ As a result, the Court held that the plaintiffs used the works for artistic purposes and not commercial purposes as required for trademark protection.¹⁰⁴ The plaintiffs also offered no evidence that the defendant promoted its product with the artist's name.¹⁰⁵ The plaintiffs thus failed to show that the images had "come to signify . . . Plaintiffs as the source of the product."¹⁰⁶ Therefore, the defendant could use images from the artist without infringing trademark law.¹⁰⁷ The plaintiffs failed to show a likelihood of consumer confusion.¹⁰⁸

NFTs create a secondary meaning to show a likelihood of consumer confusion. NFTs produce a unique, unalterable record that the purchasing public associates to a good designated by the image with a single source.¹⁰⁹ Unlike the works in *Hughes* that did not promote any goods or services, an NFT can promote the ownership of a work or link services such as exclusive meet and greets with an artist. Minting an artwork as an NFT allows the purchasing public to invest in a single source—the artist.¹¹⁰ It allows the public to speculate, which opens up new ways to fund creative commodities.¹¹¹ Some ownership in NFTs includes licenses to certain IP rights.¹¹² Other ownerships include special offerings such as meet and greets with the artist.¹¹³ Broadly, according to Professor Fairfield of Washington & Lee University, "[a]ll of the interest in NFTs has been around owning—around investing in and growing."¹¹⁴ The NFT market provides new revenues and opportunities for digital collectables.¹¹⁵ These drivers to purchase indicate that consumers value and believe that NFTs designate a single source. Therefore, an infringing NFT minting an unauthorized image, artist's name, or artist signature on an image would likely create consumer confusion about the sought source.

Moreover, unlike the *Hughes* plaintiff's failure to retain a copy when he sold his works outright, NFTs containing an image of the artist's work require

102. *Id.*

103. *Id.*

104. *Id.* at 1506.

105. *Id.*

106. *Id.* at 1507.

107. *Id.* at 1508.

108. *Id.* at 1507.

109. Natalee, *NFT Provenance and How It Will Change Art Forever*, NFT CULTURE (Aug. 22, 2022), <https://www.nftculture.com/guides/nft-provenance-and-how-it-will-change-art-forever/> [<https://perma.cc/U9B8-G2MF>] (on how knowledge of who minted an NFT can change an NFT's value).

110. Brian Frye, Law Professor & NFT Artist, University of Kentucky, *in* Public Roundtables, *supra* note 40, at 1:07:00–1:11:00.

111. *Id.*

112. Kimberly Maynard, Partner, Frankfurt Kurnit Klein & Selz Trademark & Brand Mgmt. & Litig., *in* Public Roundtables, *supra* note 40, at 3:04:00–3:06:00.

113. *Id.*

114. Joshua Fairfield, Law Professor, Washington & Lee Univ., *in* Public Roundtables, *supra* note 40, at 1:26:30–1:28:00.

115. Victoria Sheckler, Deputy Gen. Couns., Recording Indus. Ass'n of America, *in* Public Roundtables, *supra* note 40, at 1:36:55–1:38:00.

artists to create a copy of their work. That copy is then permanently stored through the NFT. The artist then arguably retains access to a copied file accessible to the whole public. Therefore, unlike the Hughes plaintiff, artists who mint their work as NFTs retain a copy to show that they used the work not only for artistic purposes but also for commercial purposes as required for trademark protection.

Then, an unauthorized NFT that uses an artist's image, name, or signature on an image likely signifies the lawful or authorized NFT creator as the source of the product. Unlike the defendant in Hughes who did not promote its product with the artist's name, unauthorized NFT minters promote NFTs with the artist's reputation when they unlawfully mint an NFT with a copyrightable image, the author's name, or the author's signature on a copyrightable image. The unauthorized and unlawful minting of an artist's copyrightable image or name therefore likely misleads consumers to believe the unauthorized minter sourced the product.

NFTs also provide an opportunity for artists to produce or license their visual imagery to receive protection under trademark law. Artists who produce or license nothing using their visual imagery risk forfeiting trademark protection.¹¹⁶ In *Leigh v. Warner Bros.*, the plaintiff photographer brought a claim for trademark infringement when the defendant produced images of the same subject matter.¹¹⁷ The plaintiff failed to establish a likelihood for confusion to establish trademark infringement for several reasons. First, the plaintiff sold original fine art photographs.¹¹⁸ Defendant sold motion pictures and home entertainment.¹¹⁹ Therefore, the parties sold different products not attributed to a single source.¹²⁰ Second, fine art photographs and motion pictures targeted different consumers.¹²¹ Third, the plaintiff advertised in brochures, classes, and lectures, while the defendant advertised on the internet, television, trailers, and movie posters.¹²² Moreover, although both the plaintiff and the defendant advertised on the internet, the Court emphasized that “[g]iven the wide-spread use of the Internet by a multitude of diverse businesses, common use of the Internet alone [was] not enough to find similarity of advertising media.”¹²³ Therefore, the parties adequately used different advertising media.¹²⁴ Finally, the plaintiff produced no evidence that the defendant intended to capitalize on the plaintiff's reputation.¹²⁵ Therefore, the plaintiff failed to establish a likelihood of confusion.¹²⁶

116. See *Leigh v. Warner Bros.*, a Div. of Time Warner Ent. Co., L.P., 10 F. Supp. 2d 1371, 1380–82 (S.D. Ga. 1998), *aff'd in part, rev'd in part sub nom.* *Leigh v. Warner Bros.*, 212 F.3d 1210 (11th Cir. 2000).

117. *Leigh*, 10 F. Supp. 2d at 1374.

118. *Id.* at 1383.

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.*

125. *Id.*

126. *Id.*

Artists should mint their artworks as NFTs to receive trademark protection in that market. Unlike the parties in *Leigh* who sold different products, artists who mint an NFT of an artwork would sell the NFT in the same market as an NFT infringer of that work. Artists who choose not to mint their work as an NFT does not sell the same product as a party selling an NFT, just like the parties in *Leigh*. Therefore, artists who diversify sales into NFTs sells the same product attributed to a single source as an infringing NFT creator. Second, unlike the fine art photographs and motion pictures in *Leigh*, which targeted different consumers, NFTs, whether created lawfully or unlawfully target the same consumers. Third, unlike the parties who advertised through different means in *Leigh*, parties selling NFTs all advertise their NFTs through blockchain. Although blockchains are advertised through the internet, such advertisement is not a “common use of the Internet alone.”¹²⁷ Such advertisement is too novel to be common. Finally, unlike *Leigh* where the plaintiff produced no evidence that the defendant intended to capitalize on the plaintiff’s reputation, NFTs provide unalterable evidence of an infringing party’s use of an artist’s image or name. That use could suggest an infringer’s intent to capitalize on the artist’s reputation. Therefore, artists and copyright owners should mint their works as NFTs to establish a likelihood of confusion.

The public seems to agree that NFT-related goods should qualify for trademark protection. The USPTO has already received more than 10,000 applications for NFT-related goods and services.¹²⁸ The USPTO Roundtables confirmed this public support.¹²⁹

III. LEGITIMIZING OWNERSHIP OVER INCREASINGLY DIGITIZED ARTWORKS THROUGH NFTS

NFTs secure artists’ ability to benefit from new, enlarged audiences provided by digital platforms while maintaining control over the lawful reproduction of their artworks and the resulting economic gain. As technology advances, artists embrace screens as a canvas and gallery. In line with the history of art, artists evolved with the development of technology as

[t]he nineties brought the internet and started the technology revolution. . . . The internet helped numerous artists make their artwork more visible, increasing accessibility to worldwide audiences. Advanced technology also enabled the artist to transform and manipulate their artwork, thus becoming a significant art medium.¹³⁰

Artists today fortunately have access to new mediums and vaster audiences. Unfortunately, those mediums and vaster audiences create new risks for copyright infringement: “It takes just a few buttons to copy an image from social media or

127. *Id.*

128. Kathi Vidal, Dir., USPTO, in Public Roundtables, *supra* note 40, at 0:02:30.

129. See Public Roundtables, *supra* note 40; Roundtable: Patents and Non-Fungible Tokens, USPTO, <https://www.uspto.gov/ip-policy/patent-policy/roundtable-patents-and-non-fungible-tokens> [<https://perma.cc/36A7-XRMY>].

130. *How Technology Is Changing the Art World*, ARTDEX, <https://www.artdex.com/how-technology-is-changing-the-art-world-2/> [<https://perma.cc/LM9R-FEA2>].

a website and use it for commercial purposes. If you are not careful, someone else can copy months of your hard work and use it for their personal profits.”¹³¹ Without NFTs, if an artist creates or reproduces something digitally, that digital creation or reproduction can be “infinitely copied”¹³² at the click of a button. NFTs will not stop that copying per se but they can distinguish copies minted by the artist.¹³³

Moreover, before NFTs, a purely proprietary owner of digital artworks could not lawfully transfer that ownership. The development of minting digitized artworks as NFTs “has allowed ownership over something that would otherwise be impossible to own.”¹³⁴ In *Capitol Records, LLC v. ReDigi Inc.*, the Court held that the first-sale doctrine does not apply to transfer of ownership of a digital file.¹³⁵ To start, the Court found that a transfer of a digital file over the internet created a reproduction because the file had to move from one material object to another—from a user’s computer to another server—creating a reproduction.¹³⁶ The Court found that the unauthorized transfer of a digital file over the internet—where only one file exists before and after the transfer—constituted reproduction within the meaning of the Copyright Act and thus infringed on the copyright owner’s rights.¹³⁷ Moreover, the first-sale doctrine did not apply to these unlawful reproductions of digital files because the first-sale doctrine only applied to the ownership of *that* copy.¹³⁸ It was impossible to sell that copy that the original buyer bought because any transfer of a digital file created a copy of that file.¹³⁹ The first-sale doctrine was limited to material items, and digital file transfers created reproductions of the copyrighted code embedded in new material objects.¹⁴⁰ Thus, proprietary ownership of a digital file did not carry the unauthorized right of alienation because no one could transfer a digital file without creating a copy of that file.

NFTs create a way for digital files to carry a proprietary right of alienation. Just like the digital file copied in *Capitol Records*, “an NFT can be copied and pasted at any moment, if it’s a photo or digital file.”¹⁴¹ In fact, the creation of an NFT copies the embedded image on servers around the world to make the NFT verifiable. Such copying, however, “doesn’t capture the smart contract associ-

131. Ritika Tiwari, *Digital Art Copyright: How to Go About It?*, RED POINTS, <https://www.redpoints.com/blog/digital-art-copyright/> [<https://perma.cc/CF6R-EEN7>].

132. Smee, *supra* note 5 (“[A]ll things digital can be infinitely copied. NFTs don’t stop the copying. But they allow you to distinguish the copies from this one, notional ‘original.’”).

133. *Id.*

134. Lucija Bravic, *A Short History of Digital Art: Between New Technologies & Innovative Artistic Practices*, ARTLAND MAG., <https://magazine.artland.com/digital-art/> [<https://perma.cc/NB3J-GLZM>].

135. See *Capitol Recs., LLC v. ReDigi Inc.*, 934 F. Supp. 2d 640, 648 (S.D.N.Y. 2013), *aff’d*, 910 F.3d 649 (2d Cir. 2018).

136. *Id.*

137. *Id.*

138. *Id.* at 655–56.

139. *Id.*

140. *Id.*

141. *Do Non-Fungible Tokens Get Copied or Replicated?*, NFTS GURU (Feb. 1, 2022), <https://nftsguru.com/collector-tips/nfts-copied-or-replicated/> [<https://perma.cc/H5TY-WY8R>].

ated with the NFT.”¹⁴² While NFTs do not necessarily stop the copying explored in *Capitol Records*, NFTs indicate proprietary ownership without copying the exact NFT file.¹⁴³ The transfer of an NFT does not download a copy of the metadata associated with the NFT.¹⁴⁴ Instead, it transfers the NFT token as exactly the same copy to a different wallet.¹⁴⁵

Proprietary ownership in an NFT is recorded ownership in a unique “crypto asset using a smart contract on the blockchain” that cannot be replicated or copied.¹⁴⁶ No one can exactly replicate that smart contract because “[e]ach digital file becomes unique with a different nonce, address, and contract codes in the metadata, making it easy to identify when it’s not the original token and copied.”¹⁴⁷ While the transfer of ownership attempted in *Capitol Records* transferred the digital file, the transfer of ownership of an NFT does not transfer ownership by requiring a copy of the digital file. Instead, an NFT transfer of ownership records the transfer of ownership on the blockchain without creating a copy. In other words, the transfer of an NFT does not depend on the reproduction of the copyrightable material attached to the NFT. It therefore is possibly transferable without creating a reproduction of the NFT. In fact, because of the way that a digital representation is hashed to create an NFT, the NFT will always remain the same.¹⁴⁸ That hashed file is thus transferable as a unique token.¹⁴⁹ Any changes to or reproductions of that hashed file will create a different file.¹⁵⁰ Because transfer alone does not change the hashed file and merely records ownership on the blockchain, the proprietary owner of an NFT may transfer ownership of that NFT.

This gives digital artists “sovereignty,” “complete ownership,” and “the financial freedom to profit.”¹⁵¹ NFTs give digital artists who create computer-generated imagery for clients “the financial freedom to profit from [their] personal work,”¹⁵² “giving [them] complete ownership of [their] work for the first time.”¹⁵³ NFTs thus provide a vaster market for digital artists.

142. *Id.*

143. Smee, *supra* note 5.

144. See Eliana Torres, Assoc., Nixon Peabody, in *Public Roundtables*, *supra* note 40, at 3:21:00.

145. *Id.*

146. See *Do Non-Fungible Tokens Get Copied or Replicated?*, *supra* note 141.

147. *Id.*

148. See *id.*

149. See *id.*

150. See *id.*

151. See Smee, *supra* note 5 (quoting digital artist Ash Thorp).

152. *Id.*

153. *Id.* (quoting Ash Thorp).

IV. USING NFTS TO AUTHENTICATE UNDERLYING PHYSICAL ARTWORKS

Physical artworks can also be minted as an NFT. In that case, NFTs digitally represent an underlying physical asset.¹⁵⁴ The minting of physical assets as NFTs is a newer use of NFTs.¹⁵⁵

NFTs can authenticate underlying physical assets if created by the intellectual property holder. In *Nike v. StockX, LLC*, *StockX* created NFTs associated with physical shoes.¹⁵⁶ Nike challenged this use of NFTs not because of its connection to physical shoes but because the creation of NFTs infringed on Nike's rights as the trademark holder.¹⁵⁷

V. CONTROLLING THE NARRATIVE OF THE UNDERLYING ARTWORK WITH NFTS

Whether the copyright owner chooses to mint the underlying artwork as one or a series of NFTs, the copyright owner can choose what that digital bundle of secure data about the work will include. As Sebastain Smee observes, minting a physical artwork as an NFT “create[s] a digital bundle of secure data about the work.”¹⁵⁸ As the only lawful creator of the NFT minted to the underlying artwork, the copyright owner controls the digital bundle of secure data included with the NFT.

Therefore, anyone viewing the NFT of the underlying artwork has unaltered access to information that a copyright owner chooses to include in the digital bundle. Artists, as the original copyright owners, can add more detail to artworks by minting them as NFTs on the blockchain. Artists could thus create an NFT of their artwork and include “instructions about its care and display,” the origins of its creation, its symbolic meanings and stories, dimensions, the artist's exclusive copyright and trademark reproduction rights, and any other information the artist desires. Because the NFT of the underlying artwork is stored on the blockchain, “it is there for good. . . . because of the immutable nature of blockchain technology. . . . [m]anipulating the record just isn't possible.”¹⁵⁹ Therefore, even as the NFT passes hands, the copyright owner at the time that the NFT was minted continues to have control indefinitely.

154. *NFTs and Intellectual Property*, *supra* note 44.

155. *See id.*

156. *See* Complaint at 2, *Nike, Inc. v. StockX LLC*, No. 22-cv-983, 2022 WL 340664 (S.D.N.Y. Feb. 3, 2022); *see also* *Hermès Int'l v. Rothschild*, 603 F. Supp. 3d 98, 103 (S.D.N.Y. 2022) (holding that Hermès International and Hermès of Paris, Inc. sufficiently alleged that Mason Rothschild's nonfungible tokens based on the iconic Birkin bag were intentionally misleading to consumers and of limited artistic relevance under the federal Lanham Act, 15 U.S.C.A. § 1051).

157. *See* Complaint at 41, *Nike*, 2022 WL 340664. Nike brought a cause of action for false advertising seeking disgorgement of profits.

158. Smee, *supra* note 5.

159. Jensen, *supra* note 36.

VI. PROVIDING A SOLUTION TO HISTORICALLY IMPERFECT PROVENANCE WITH NFTS

Minters can mint images as NFTs in minutes or even seconds.¹⁶⁰ When created, those NFTs are time stamped.¹⁶¹ Therefore, the public can access the time and origin of that NFT. NFTs more securely and conveniently store the provenance of artworks.¹⁶² It is legally important to securely store provenance.¹⁶³ Courts generally use provenance to indicate a broad range of meanings about artworks including their transferability and origin.¹⁶⁴ Provenance is thus legally important to the transfer and authentication of an underlying artwork.

Provenance usually includes the artist who made the underlying artwork, a list of previous owners, and a record of prices paid for the artwork.¹⁶⁵ Historically, provenance records rely on the skills and methodologies of researchers, the availability and accessibility of authoritative sources and materials, and time and budgets for researchers.¹⁶⁶ Provenance seeks to include the origin of an artwork, historic details of the artwork's creation initially, or the artwork's current location.¹⁶⁷ Researchers traditionally establish provenance by following records of ownership.¹⁶⁸ The entire provenance of an artwork is rarely known.¹⁶⁹

Courts have implied that the art world should develop a means by which artists, sellers, and buyers can better document and verify provenance. A 1980 case addressing the ownership of stolen works by established artist Georgia O'Keeffe lamented the "arcane world of sales of art" in which "paintings worth vast sums of money sometimes are bought without inquiry about their provenance."¹⁷⁰ As a remedy, the Court implied that the art world should establish better methods to verify provenance, stating that

[t]here does not appear to be a reasonably available method for an owner of art to record the ownership or theft of paintings. Similarly, there are no reasonable means readily available to a purchaser to ascertain the provenance of a painting. It may be time for the art world to establish a means by which a good faith purchaser may reasonably obtain the provenance of a painting. An efficient registry of original works of art might better serve the interests of artists, owners of art, and bona fide purchasers¹⁷¹

160. Kary Oberbrunner, *in* Public Roundtables, *supra* note 40, at 00:51:20.

161. *Id.*

162. Jensen, *supra* note 36.

163. Amanda Berman, *Nazi Looters, Royal Personalities, and Provenance*, GETTY, <https://www.getty.edu/news/provenance-explained-why-it-matters-who-owns-art/> (Oct. 6, 2022) [<https://perma.cc/FLZ6-4LC6>] ("A basic reason for provenance's importance is a legal one.")

164. DARRABY ON ART LAW, *supra* note 92.

165. Jensen, *supra* note 36.

166. See *PROVENANCE Definition & Legal Meaning*, Law Dictionary, <https://thelawdictionary.org/provenance/> [<https://perma.cc/SH46-6Q2B>]; *Provenance*, SMITHSONIAN, <https://smithsonianprovenance.si.edu/> [<https://perma.cc/R56J-7W4Q>].

167. *Id.*

168. *Id.*

169. Berman, *supra* note 163.

170. O'Keeffe v. Snyder, 416 A.2d 862, 872 (N.J. 1980).

171. *Id.*

Now, the copyright owner who mints an underlying artwork can include the artist who made the underlying artwork in the digital bundle of secure data attached to the artwork minted as an NFT.¹⁷² Moreover, the blockchain will record each transfer of ownership over the NFT including the owners and prices paid.¹⁷³ Therefore, the digital bundle of secure data attached to an NFT also includes a secure digital record of ownership.¹⁷⁴ Because of that secure digital record of ownership, “[e]very time an NFT . . . is bought or traded for another, the transaction is permanently recorded on the Ethereum network, along with its associated meta data and the details about the person who created it.”¹⁷⁵ Because the NFT of the underlying artwork is stored on the blockchain, “it is there for good. . . . because of the immutable nature of blockchain technology. . . . [m]anipulating the record just isn’t possible.”¹⁷⁶

Provenance is important to the transfer of artworks because it “build[s] trust and confidence in the [underlying artwork].”¹⁷⁷ Provenance also proves “vital in the valuation of an artwork.”¹⁷⁸ In other words, provenance “is not only important for the historical information . . . but it also adds to the value . . . for donation or sale to interested buyers.”¹⁷⁹ With traditional approaches to recording provenance,

[d]etermining provenance can be very challenging. Over time, information about a works’ [sic] ownership is lost. Sales documents and receipts are lost, first-hand knowledge about transactions slowly disappears as individuals involved in a sale pass away and memories fade. It is especially challenging to piece together a provenance when parties conceal this vital information. Thieves (whether they are individuals or groups) attempt to erase the truth about works, or create a false provenance, so that they can lay claim to the property. This is exactly what the Nazi Party did as it stole art and valuables across Europe.¹⁸⁰

On the other hand, once an NFT is added to the blockchain, no one can alter those details.¹⁸¹ Minting an underlying artwork as an NFT therefore creates a very well-documented provenance record because the blockchain records each transfer of ownership without risk of alteration or forgery. Because the NFT is connected to the decentralized and secure blockchain, it “permanently and traceably marks the origin, ownership, and uniqueness of the asset it represents.”¹⁸² Any member of the public interested in collecting an artwork linked to an NFT

172. See Natalee, *supra* note 109.

173. Jensen, *supra* note 36.

174. Smee, *supra* note 5.

175. Natalee, *supra* note 109.

176. Jensen, *supra* note 36.

177. *Id.*

178. *Id.*

179. *Klein v. Unidentified Wrecked and Abandoned Sailing Vessel*, 758 F.2d 1511, 1513 (11th Cir. 1985) (abrogated by *Girard v. M/V ‘Blacksheep’*, 840 F.3d 1351 (11th Cir. 2016)).

180. *The Role of Provenance in Legal Disputes: Provenance Series (Part II)*, AMINEDDOLEH & ASSOCIATES LLC (Mar. 30, 2020), <https://www.artandiplawfirm.com/provenance-series-the-role-of-provenance-in-legal-disputes-part-ii/> [<https://perma.cc/JTJ5-LVE6>].

181. See Left, *supra* note 10.

182. *Id.*

can search publicly accessible NFT records to see the history of transfers recorded on that NFT. The public can see if other NFTs linked to that artwork exist. If others exist, “[you] can get information regarding ownership and creation time if you have stored NFTs on public blockchains.”¹⁸³ A researcher can thus trust the NFT record without allocating significant time or budget. Therefore, an NFT builds trust and confidence in the underlying artwork regardless of researchers’ time or budget.¹⁸⁴

NFTs also make it easier to assume authenticity by creating a provenance that traces back to the creation of the NFT. Provenance relates to authenticating objects.¹⁸⁵ Although provenance does not by itself provide authentication, the law can equate provenance that traces back to the artist to authentication.¹⁸⁶

On a less legal note, according to Art Law expert Darraby, “[c]ertain prior owners or events may effectively enhance value by providing artworks with cachet.”¹⁸⁷ In other words, knowing the artist or the history of ownership of a work can make it more valuable based on reputation. As applied to NFTs, knowing “that an NFT had been minted by [Beeple], well, that would already change the value quite a lot.”¹⁸⁸

Bad actors could seek to exploit the added value created by reputation because of imperfect provenance. Without NFT technology, “[i]t is easy to imagine a scenario where a painting is wrongly dated or said to be made by an artist that it is not.”¹⁸⁹ Without publicly accessible provenance information, “[a]rt forgers can falsify provenance information [T]here are often cases on the secondary art market where a work that has been sold proves to be fake.”¹⁹⁰

Artists who immediately create NFTs for their artwork can escape this risk. Many NFT platforms provide digital provenance in an NFT along with a physical certificate of provenance.¹⁹¹ Moreover, storing artworks as NFTs on the blockchain allows artists to attach a digital signature of authenticity to any NFTs they create.¹⁹² In other words, “[e]ach NFT has a unique, almost forgery-proof signature.”¹⁹³ Finally, an NFT serves as a certificate of authenticity that “cannot be destroyed, lost, or modified.”¹⁹⁴ As Louise Carron states, the “immutable

183. *NFT Smart Contracts*, *supra* note 27.

184. *But see* Dorothy Haraminac, in *Public Roundtables*, *supra* note 40, at 00:53:00 (speaking about the right click save problem and holes in system to verify fraud and forgeries and the need for mechanisms to prevent fraud).

185. DARRABY ON ART LAW, *supra* note 92, § 2:61.

186. *Id.* § 2:62; see also *id.* § 2:62 n.5 (citing *Duchossois Industries, Inc. v Stelloh*, 1988 WL 2794 (N.D. Ill. 1988) (“[A] provenance authenticates a painting only insofar as it traces its ‘historical chain of ownership’ . . .”).

187. *Id.* § 2:61.

188. Natalee, *supra* note 109.

189. Jensen, *supra* note 36.

190. *Id.*

191. *Id.*

192. Natalee, *supra* note 109.

193. *How to Turn Physical Art into NFT Art?*, STAMPSDAQ (Jan 19, 2022), <https://medium.com/@stampsdaq/how-to-turn-physical-art-into-nft-art-4b3a5fc5c428> [https://web.archive.org/web/20220617173152/https://medium.com/@stampsdaq/how-to-turn-physical-art-into-nft-art-4b3a5fc5c428].

194. Carron, *supra* note 34, at 13.

record” created by NFTs “points to the artist as the original author.”¹⁹⁵ Artists who mint their artwork as NFTs can thus rest easier with the comfort that forgers will less easily forge their artworks.

Recording transfers of artworks through NFTs also allows collectors to rest easier with the knowledge that they possess proof of ownership over authentic works. Claims for restitution require proof of ownership.¹⁹⁶ Because claims for restitution require such proof, “provenance is vital in lawsuits involving stolen property.”¹⁹⁷

Lack of provenance has historically prevented proprietary owners of artworks from bringing claims for restitution of stolen art. For example, victims of Nazi looting during WWII have struggled to reclaim stolen possessions because of lack of documentation: “As people fled their homes and countries, they left behind not only their property, but paperwork associated with those items. Without that documentation, it is an incredible burden to make a claim for restitution because it is nearly impossible to prove ownership.”¹⁹⁸

Because an NFT is attached to the blockchain, there is “an immutable record of ownership, or ledger, each time the piece gets transferred. . . .”¹⁹⁹ That “immutable record of ownership” provides proof of ownership for collectors in the case that their work is stolen. Moreover, the “immutable record” recorded on the blockchain by NFT technology is permanently recorded and accessible to the public. Paperwork recording provenance is thus backed up by proof of ownership on the blockchain through NFT technology.

VII. FINANCIALLY BENEFITTING FROM THE RESALE, EXHIBITION, AND EXCHANGE OF UNDERLYING ARTWORKS WITH NFTS

NFT technology provides an opportunity to continuously compensate artists for their creations. NFT platforms can allow copyright owners who create their associated NFT to set up royalties at the minting stage through a smart contract on the blockchain. The platform would then automatically execute the terms of that smart contract including the royalties at the time of every purchase.

Artists should embrace NFT technology to transfer their works, because “NFTs have the potential to recreate equity in the art market by ensuring that artists get a share of each resale of their pieces on the secondary market.”²⁰⁰ The copyright owner can include “stipulations about how much money should go to the artist when it is resold,” exhibited, or exchanged in the digital bundle of secure data attached to the underlying artwork when it is minted as an NFT.²⁰¹ Because an NFT is attached to the blockchain, the copyright owner of the minted NFT can secure a resale right automatically paid to the underlying artwork’s

195. *Id.*

196. *The Role of Provenance*, *supra* note 180.

197. *Id.*

198. *Id.*

199. Carron, *supra* note 34, at 13.

200. *Id.* at 14.

201. Smee, *supra* note 5.

artist every time the NFT changes hands.²⁰² The copyright owner and lawful NFT creator can embed a royalty term into the smart contract that governs the NFT.²⁰³ Artists can be “paid out instantly [with] no customs, no foreign exchange, no international wire transfers.”²⁰⁴ Such instant, simple, and consistent means of compensation for artists “stands in sharp contrast to the [traditional] art world,”²⁰⁵ where artwork buyers can transfer their ownership without any compensation for the artist.

Unfortunately, the enforcement of royalties written into smart contracts associated with NFTs is currently discretionary. Many NFT platforms sidestep any legal obligation to automatically include royalties to the copyright owner at the time of every purchase.²⁰⁶ Further, royalties embedded in an NFT on one platform do not transfer if that NFT is listed on another platform.²⁰⁷ Therefore, if the proprietary owner of an NFT decides to list it for sale on another platform, the NFT creator and copyright owner receive no associated royalties.²⁰⁸ Moreover, platforms limit the amount of royalties a copyright owner can embed in a smart contract.²⁰⁹ Some platforms even implement a “royalty-optional system” where NFT buyers have discretion over whether to follow an artist’s royalty terms.²¹⁰

This discretionary process does not differ significantly from transfers in the traditional art market. In a traditional art market,

Visual artists typically do not share in the long-term financial success of their works because works of visual art are produced singularly and valued for their scarcity. . . . [I]n many, if not most instances, only the initial sale of a work of visual art inures the benefit of the artist and it is collectors and other purchasers who reap any increase in that work’s value over time.²¹¹

The Copyright Office has recommended that Congress follow the lead of more than seventy other countries and consider a resale royalty for this reason.²¹² Con-

202. Jensen, *supra* note 36.

203. Kayvon Tehranian, *How NFTs Are Building the Internet of the Future*, TED (Aug. 2021), https://www.ted.com/talks/kayvon_tehranian_how_nfts_are_building_the_internet_of_the_future [<https://perma.cc/7CGA-MPQP>].

204. *Id.* at 7:30.

205. Jensen, *supra* note 36.

206. See John Gilbert & Ornella Hernandez, *How NFT Royalties Work—and Sometimes Don’t*, BLOCKWORKS (Nov. 4, 2022, 11:33 AM), <https://blockworks.co/news/nft-royalties-sometimes-they-work-sometimes-they-dont> [<https://perma.cc/7Q2A-KHUL>] (on how Rarible’s terms of service requires that NFT creators agree to grant the platform royalty-free rights to content posted on the platform); see also Joe Guagliardo, Partner, Dentons’ Venture Tech. & Emerging Growth Cos., in *Public Roundtables*, *supra* note 40, at 3:00:50.

207. See Gilbert & Hernandez, *supra* note 206 (on how an NFT with a royalty term set up on Rarible will not transfer if that same NFT is later listed by the proprietary owner on OpenSea).

208. See *id.*

209. See *id.*

210. See *id.* (on LooksRare, Magic Eden, and X2Y2 implementing a royalty-optional system).

211. Letter from Maria A. Pallante, Reg. of Copyrights & Dir., U.S. Copyright Off., to Honorable Jerrold Nadler, U.S. H.R. (Dec. 12, 2013), https://www.copyright.gov/docs/resale_royalty/usco-resaleroyalty.pdf [<https://perma.cc/CZF7-JR8B>] (cover letter to OFF. OF THE REG. OF COPYRIGHTS, U.S. COPYRIGHT OFF., *RESALE ROYALTIES: AN UPDATED ANALYSIS* (2013)).

212. *Id.*

gress sought these royalties through a seven percent royalty split between an author and nonprofit museums through the Equity for Visual Artists Act of 2011.²¹³ This statute would have allowed for copyright infringement claims for failure to transfer those royalties.²¹⁴

The Copyright Office questioned the feasibility of a mandated royalty system because of the secretive nature of the traditional art market. In a 2013 Copyright Office study, the “[s]ecrecy norms” that “pervade the art market” created a challenge to the codification of a federal resale royalty right.²¹⁵ Although information has become more accessible, “the identities of buyers and sellers are still routinely concealed and the largely subjective methods by which visual artworks are valued remain something of a cipher to those not invited behind the scenes in the art market.”²¹⁶ The Copyright Office recommended that “any resale royalty law should cover . . . instances in which ‘an art market professional is using a web-based platform or service’”²¹⁷ The Copyright Office suggested that a resale royalty law should “exclude sales between private individuals, which . . . would present substantial enforcement difficulties.”²¹⁸ California currently has a resale royalty act that requires a royalty fee from sellers who reside in California or transactions executed in California. Unfortunately, galleries and artwork agents have largely ignored these royalty requirements.²¹⁹ California has also found it difficult to administer gains resulting from the royalty requirement.²²⁰

Artists and art professionals should encourage the adoption of NFT technology to track transfers. To start, using NFT technology could provide a solution to the resale royalty conundrum. NFTs would create a publicly accessible record of transfers of NFTs to create a more transparent and less secret market. Moreover, more use of NFT technology to transfer artworks would grant the Copyright Office more access to assess the benefit of resale royalty rights.

Moreover, the use of NFT technology to transfer artworks increases the potential for enforcement. Artists should use NFT technology to transfer their works to put pressure on galleries and artwork agents to follow suit. The federal government could then in real time track transfers recorded through NFT technology. The government could then easily assess whether those transfers include an automatic resale royalty.

213. Equity for Visual Artists Act of 2011, H.R. 3688, 112th Cong. § 3 (2011) (“Whenever a work of visual art is sold as the result of an auction of that work by someone other than the artist who is the author of the work, the entity that collects the money or other consideration paid for the sale of the work shall, within 90 days of collecting such money or other consideration, pay out of the proceeds of the sale a royalty equal to 7 percent of the price.”).

214. U.S. COPYRIGHT OFF., *supra* note 211, at 24.

215. *Id.* at 26 (quoting Stephanie B. Turner, *The Artist’s Resale Royalty Right: Overcoming the Information Problem*, 19 UCLA ENT. L. REV. 329, 334 (2012)).

216. *Id.* at 28–29.

217. *Id.* at 74.

218. *Id.*

219. *Id.* at 22.

220. *Id.* at 23.

Creators of NFTs can also include terms for licensing to ensure continuous financial incentive.²²¹ Distribution of the NFT communicates those rights to the public.²²² This public communication makes it easier for creators to track down rights holders to gain permission to borrow from their works to create something new and the correct right holders get paid.²²³

VIII. TRADITIONAL PROPRIETARY RIGHTS AND COPYRIGHTS FOR NFT OWNERS AND COPYRIGHT OWNERS WHO LAWFULLY CREATE NFTS

The full scope of legal rights and obligations that come with the transfer of NFTs is far from settled in the United States. Nevertheless, cases are entering U.S. courts, U.S. government offices are investing in these studies of NFTs, and high courts around the world are finding legal rights in NFTs—all of which should lead to a more settled approach to NFTs in the near future. To start, although the United States Supreme Court has yet to speak on this issue, cases involving legal rights and NFTs are just beginning to enter lower U.S. courts. Then, although the U.S. Patent and Trademark Office (USPTO) and the U.S. Copyright Office (USCO) joint study into issues surrounding intellectual property rights and NFTs has yet to produce answers, they announced an investigation in July 2022.²²⁴ Finally, although holdings from common law courts outside the United States are nonbinding on U.S. States courts, these holdings provide potentially persuasive clarification of legal rights that may accompany the transfer of NFTs in the United States.

A. Providing Clarity on Legal Rights in Relation to NFTs from U.S. Courts

U.S. courts have addressed NFT ownership and its accompanying legal rights on a limited basis.²²⁵ To start, traditional property rights should endow an

221. Morgan Reed, App Ass'n, *in* Public Roundtables, *supra* note 40, at 00:36:56–00:38:30; Angela Kalsi, Greensfelder, *in* Public Roundtables, *supra* note 40, at 2:50:12–2:50:52.

222. Reed, *supra* note 40, at 00:36:56–00:38:30.

223. *Id.* at 00:58:46–00:59:08.

224. Letter from Kathi Vidal, Under Sec'y of Com. for Intell. Prop. & Dir. of the USPTO & Shira Perlmutter, Reg. of Copyrights & Dir. U.S. Copyright Off., to Thom Tillis & Patrick Leahy, U.S. Senators (June 9, 2022), <https://www.copyright.gov/laws/hearings/response-to-june-9-2022-letter.pdf> [<https://perma.cc/AK47-5DKX>].

225. *See* Notorious B.I.G. LLC v. Yes. Snowboards, No. LACV1901946JAKKSX, 2022 WL 2784808, at *6 (C.D. Cal. June 3, 2022) (on how only a copyright owner can create or authorize the creation of an NFT without infringing copyright); *Hermes Int'l v. Rothschild*, 603 F. Supp. 3d 98, 107 (S.D.N.Y. 2022) (on successful claims for trademark infringement, trademark dilution, and cybersquatting based on the creation of NFTs using Hermes' trademarked images); *UMG Recordings, Inc., v. OpenDeal Inc.*, No. 21 Civ. 9358 (AT), 2022 WL 2441045 at *1 (S.D.N.Y. July 5, 2022) (on claims for trademark infringement and unfair competition under the Lanham Act through NFTs); *Raymond Pirtle Jr., Plaintiff, v. Netflix, Inc., Defendant.*, No. 1:21-CV-02096-WMR, 2021 WL 6751868, at *1 (N.D. Ga. Oct. 7, 2021) (on a claim for rights over NFT application); *United States v. Chastain*, No. 22-CR-305 (JMF), 2022 WL 13833637, at *1 (S.D.N.Y. Oct. 21, 2022) (on Government charges for wire fraud in violation of 18 U.S.C. § 1343 and money laundering in violation of 18 U.S.C. § 1956(a)(1)(B)(i) by purchasing NFTs before OpenSea featured those NFTs on its homepage and by selling the NFTs for profit).

NFT owner with the “exclusive right to vend the transferred copy” embedded as an NFT after the “copyright owner parts with title to a particular copy.”²²⁶ Then, traditional copyright should prevent the transfer of copyright ownership by the mere transfer of NFT artwork ownership.

NFTs should be capable of legal possession as tokens recorded on a blockchain. U.S. courts have separately recognized tokens recorded on the blockchain as capable of legal possession.²²⁷ In a case of first impression focusing on the ownership of cryptocurrency, *Shin v. Icon Foundation* focused on who lawfully possesses cryptocurrency.²²⁸ The Court implied that tokens recorded on a blockchain are possessable if there is (1) title, (2) possession, and (3) control.²²⁹ Because NFTs are tokens recorded on a blockchain, they are possessable so long as there is title, possession, and control. NFTs therefore should carry the legal rights of possession.

NFTs should be capable of possession because there is title, possession, and control. In *UMG Recordings, Inc. v. OpenDeal, Inc.*, the Court acknowledged that “NFTs can be easily sold and re-sold, with their transaction history stored on the blockchain, NFTs can function as investments that can store value and increase over time.”²³⁰ *McKimmy v. OpenSea* already alleges that NFTs can be stolen as property.²³¹ The claimant seeks the return of the NFT as property and damages after security vulnerabilities on an NFT platform led to the sale of a Bored Ape Yacht Club NFT for below market value.²³²

Under traditional copyright law, transfers of NFT ownership should not transfer copyright ownership. Limited U.S. case law considers NFTs in the context of copyright.²³³ Still, traditional copyright law should govern ownership of NFTs containing embedded copyrightable artworks and accompanying legal rights in the art context. Because “an NFT is a ‘digital representation’ of the underlying asset,” it is assumed to fall under the Copyright Act.²³⁴ Therefore, copyright law should govern NFT ownership and its accompanying legal rights in the art context.

Copyright law protects “original works of authorship fixed in any tangible medium of expression.”²³⁵ Works of authorship include “pictorial, graphic, and sculptural works.”²³⁶ According to West’s Historical Notes of 17 U.S.C.A. § 102, “[those] ‘pictorial, graphic, and sculptural works’ . . . [are] intended to comprise not only ‘works of art’ in the traditional sense but also works of

226. See *United States v. Wise*, 550 F.2d 1180, 1187 (9th Cir. 1977).

227. See, e.g., *Shin v. ICON Found.*, No. 20-CV-07363-WHO, 2021 WL 6117508, at *4–5 (N.D. Cal. Dec. 27, 2021).

228. *Id.* at *1.

229. *Id.* at *5.

230. *UMG Recordings, Inc.*, 2022 WL 2441045, at *2.

231. Complaint at 3, *McKimmy v. OpenSea*, No. 4:22-CV-00545 (S.D. Tex. Feb. 18, 2022).

232. *Id.* at 6.

233. *Notorious B.I.G. LLC v. Yes. Snowboards*, No. LACV1901946JAKKSX, 2022 WL 2784808, at *5 n.3 (C.D. Cal. June 3, 2022).

234. *Id.*

235. 17 U.S.C. § 102(a).

236. *Id.* § 102(a)(5).

graphic art.”²³⁷ Therefore, copyright law should protect both physical and digital arts such as the underlying asset digitally represented as an NFT.

Still, the proprietary owner of an NFT minted by or with the authority of the copyright owner of the underlying artwork can transfer the ownership of that NFT because that NFT is likely a copy. Under the First Sale Doctrine codified in 17 U.S.C. § 109, the owner of a lawfully made copy can transfer or authorize the transfer of “that copy” without authority of the copyright owner.²³⁸ To start, a copy is lawfully made with the authority of the copyright owner under 17 U.S.C. § 106. Then, under *Perfect 10, Inc. v. Amazon.com*, “a photographic image is ‘fixed in a tangible medium of expression’ when it is stored in a computer’s server or hard disk or other storage device,” thus becoming a copy.²³⁹ An NFT as a digital representation of an underlying entity should be a copy because (1) it is a photographic image of an underlying entity, (2) it is fixed in a tangible medium of expression as a digital representation, and (3) it is stored on a blockchain—another storage device. As a copy, West’s Historical Notes of 17 U.S.C.A. § 109 state that “the copyright owner’s exclusive right of public distribution would have no effect upon anyone who owns ‘a particular copy . . . lawfully made . . .’ and who wishes to transfer it to someone else”²⁴⁰ Therefore, so long as the copyright owner of the underlying artwork minted or authorized the minting of the NFT, the NFT owner can transfer or authorize the transfer of ownership over that copy.

Still, transfer of ownership of an NFT does not transfer ownership of copyright because “copyright ownership and ownership of a material object in which the copyrighted work is embodied are entirely separate things.”²⁴¹ Under 17 U.S.C. § 202, “[o]wnership of a copyright, or of any of the exclusive rights under a copyright, is distinct from ownership of any material object in which the work is embodied.”²⁴² In the case of NFTs, the artist’s copyright ownership over the underlying asset and ownership of the digitally representative NFT in which the copyrighted work is embodied are entirely separate things and thus carry different legal rights. According to 17 U.S.C. § 106, “the owner of a copyright . . . has the exclusive rights to do and to authorize” reproduction of the copyrighted work in copies, preparation of derivative works based on the copyrighted work, and distribution of copies of the copyrighted work to the public by sale or other transfer of ownership.²⁴³ Still, a proprietary owner can transfer ownership without authorization from the copyright owner because “[t]ransfer of ownership of any material object, including the copy or phonorecord in which the work is first fixed, does not of itself convey any rights in the copyrighted

237. 17 U.S.C.A. § 102 Historical Notes: Categories of Copyrightable Works (West, Westlaw through Pub. L. 118-6).

238. 17 U.S.C. § 109(a) (emphasis added).

239. *Perfect 10, Inc. v. Amazon.com, Inc.*, 508 F.3d 1146 (9th Cir. 2007).

240. 17 U.S.C.A. § 109 Historical Notes: Effect on Further Disposition of Copy or Phonorecord (Westlaw).

241. *Id.* § 202 Historical Notes (Westlaw).

242. 17 U.S.C. § 202.

243. *Id.* § 106.

work embodied in the object. . . .”²⁴⁴ When someone sells or buys an NFT, that person transfers ownership of a material object in which the work is fixed—which does not of itself convey any rights in the copyrighted work embodied in the object. An NFT collector therefore receives proprietary ownership but “does not automatically receive copyright ownership.”²⁴⁵ Therefore, a copyright owner does not transfer rights as a copyright owner merely by transferring ownership of an NFT.

U.S. courts should find that NFTs can infringe on copyright owners’ rights just as they have found that NFTs can infringe on trademark owners’ rights. In *Playboy Enterprises Int’l, Inc. v. www.playboyrabbitars.app*, the Court found Playboy likely to succeed on its claims because it owned the registered marks, it demonstrated prior use of the mark in connection with NFTs, and the defendant counterfeited the exact marks and NFT services as Playboy.²⁴⁶ Because U.S. courts have found that NFTs can infringe on trademark owner rights, they should also find that NFTs can infringe on copyright owner rights. Therefore, only copyright owners can legally mint an NFT of their underlying asset. Thus, ownership of an NFT should grant proprietary rights but preserve copyright owner rights.

B. Continued Clarity from the U.S. Patent and Trademark Office (USPTO) and the U.S. Copyright Office (USCO)

Legal rights in relation to NFTs will likely become less speculative in the future because the U.S. government is prioritizing its clarification. To start, the Judiciary Subcommittee on Intellectual Property requested both the USPTO and USCO to conduct a joint study on legal rights related to NFTs.²⁴⁷ Its June 9, 2022, letter to USPTO and USCO stated that “[i]t is imperative that we understand how NFTs fit into the world of intellectual property rights.”²⁴⁸ The subcommittee expressly asked the agencies to address several concerns including how the transfer of an NFT impacts the IP rights in the associated asset, how infringement applies, potential IP protections, and the overall application of 17 U.S.C. § 106.²⁴⁹

The USPTO and USCO mirror the prioritized focus on intellectual property rights in relation to NFTs. On July 8, 2022, USPTO and USCO accepted the assignment to conduct the joint study.²⁵⁰ Their joint study will “examine various matters related to intellectual property that have arisen from the growth in the use of non-fungible tokens.”²⁵¹ The joint study will likely provide more clarity on legal rights in relation to NFTs.

244. *Id.* § 202.

245. Carron, *supra* note 34, at 14.

246. *Playboy Enterprises Int’l, Inc. v. www.playboyrabbitars.app*, No. 21 CIV. 08932 (VM), 2021 WL 5299231, at *2 (S.D.N.Y. Nov. 13, 2021).

247. Letter from Kathi Vidal to Thom Tillis & Patrick Leahy, *supra* note 224.

248. *Id.*

249. *Id.*

250. *Id.*

251. *Id.*

C. Persuasive Clarification of Legal Rights That Accompany the Transfer of NFTs from Common Law Courts Outside the United States

Courts outside of the United States have brought persuasive clarity to legal rights that may accompany the transfer of NFTs. Singapore and the United Kingdom—both common law legal systems like the United States²⁵²—have found that NFTs carry possessory rights that are protectable in courts. These decisions should offer persuasion for future U.S. decisions.²⁵³

In one of the first cases in the world to address property rights in NFTs, Singapore’s High Court recognized that NFTs are a form of legal property when it granted a proprietary injunction for an NFT.²⁵⁴ On one hand, the Court found the NFT was not a very unique artwork, so not the only one in existence but “an image file which [could] be copied many times over.”²⁵⁵ Instead, the Court reasoned that “[w]hat [was] truly unique, and irreplaceable here [was] the string of code that represent[ed] the [underlying asset] on the blockchain.”²⁵⁶ The string of code had “an individual, and unique hash number recorded on the blockchain together with a unique token ID which served as publicly verifiable proof of its provenance”²⁵⁷ and established ownership through “exclusive control over its transfer.”²⁵⁸ Furthermore, the Court found “metadata [was] central to an NFT” and that “metadata . . . distinguishe[d] one NFT from another.”²⁵⁹ The Court granted the proprietary injunction²⁶⁰ because any transfer to third parties could prevent recovery of the “truly unique, and irreplaceable . . . string of code that represent[ed] the . . . NFT on the blockchain.”²⁶¹ Therefore, the Court reasoned that “the loss suffered by the claimant could not be compensated by an award of damages as the . . . NFT was a unique and irreplaceable artwork,”²⁶² because “the string of code that represents the . . . NFT on the blockchain” was something “truly unique, and irreplaceable.”²⁶³

The United Kingdom has similarly found that blockchain-based assets can constitute property. In *AA v Persons Unknown*, the High Court held that “crypto

252. *Introduction to Singapore’s Legal System*, GUIDEMESINGAPORE, <https://www.guidemesingapore.com/business-guides/immigration/get-to-know-singapore/introduction-to-singapores-legal-system> [perma.cc/A9YL-QGS2].

253. See *U.S. Relations With Singapore*, U.S. DEP’T STATE (Oct. 1, 2021), <https://www.state.gov/u-s-relations-with-singapore/> [https://perma.cc/3VXV-YHRM] and *Policy & History*, U.S. EMBASSY & CONSULATES UNITED KINGDOM, <https://uk.usembassy.gov/our-relationship/policy-history/> [https://perma.cc/Y44A-A5DZ] (outlining the strong relationships and influences between the United States, Singapore, and the United Kingdom, which should make the United States more likely to adopt these nations’ recognition of NFT possessory rights).

254. *Rajkumar v. Chefpierre*, [2022] SGHC 264 (Sing.).

255. *Id.* ¶ 80.

256. *Id.* ¶ 8.

257. *Id.* ¶ 8.

258. *Id.* ¶ 58.

259. *Id.* ¶ 69.

260. *Id.* ¶ 81.

261. *Id.* ¶ 80.

262. *Id.* ¶ 44.

263. *Id.* ¶ 80.

currencies are a form of property capable of being the subject of a proprietary injunction.”²⁶⁴ The U.K. High Court extended this reasoning to NFTs in *Lavinia Deborah Osbourne v. (1) Persons Unknown and (2) Ozone*, finding NFTs could qualify as property under English law.²⁶⁵ Persons unknown removed NFTs representing digital works of artwork from claimant’s crypto asset account without her knowledge or consent.²⁶⁶ The Court found that NFTs could arguably “be treated as property as a matter of English law.”²⁶⁷ The Court stated that NFTs “have a particular, personal and unique value” and readily granted a proprietary injunction.²⁶⁸ The United States should follow the trends of these Common Law countries to establish and protect proprietary ownership rights of NFT owners in U.S. courts.



Sales of artworks embedded as NFTs have plummeted. The weekly trading of NFTs went from \$6.2 billion in January 2022 to \$114 million in September 2022—a drop of 98%.²⁶⁹ Still, the long-term value of embedding artworks in NFTs and tracking ownership transfers outweighs the short-term risks of a speculative market.

Major players in the art world already embrace the potential benefits of NFTs. Museums like the Guggenheim and MOMA have embraced the technology to “connect with younger, tech-obsessed audiences and catch the interest of any crypto millionaires who might donate.”²⁷⁰ Sotheby’s has an international team to “attract sellers and buyers from all over the world and achieve many of the highest prices ever achieved on the market.”²⁷¹ Sotheby’s has since established Natively Digital—a marquee sale exclusively for NFTs and digital art—and Sotheby’s Metaverse.²⁷² Christie’s announced a similar platform in September 2022, explaining that “[b]y incorporating regulatory tools, such as anti-money laundering and sales tax, we have built an inclusive solution where both

264. *AA v. iFINEX trading as BITFINEX* [2019] EWHC (Comm) 3556 [61] (Eng.).

265. *Osbourne v. Ozone* [2022] EWHC (Comm) 1021 [13] (Eng.).

266. *Id.* [7]–[8].

267. *Id.* [13].

268. *Id.* [18].

269. Ameya Paleja, *NFT Sales Plummet 98% in Eighth Months of This Year*, INTERESTING ENGINEERING (Sept. 29, 2022, 6:52 AM), <https://interestingengineering.com/culture/nft-sales-plummet-98-percent> [https://perma.cc/C565-FJAP].

270. Zachary Small, *Even as NFTs Plummet, Digital Artists Find Museums Are Calling*, N.Y. TIMES, <https://www.nytimes.com/2022/10/31/arts/design/nfts-moma-refik-anadol-digital.html> [https://web.archive.org/web/20230910001639/https://www.nytimes.com/2022/10/31/arts/design/nfts-moma-refik-anadol-digital.html] (Nov. 2, 2022).

271. *Upcoming Auctions & Exhibitions*, SOTHEBY’S, https://www.sothebys.com/en/department/s/nft?locale=en&cmp=pse7000001034&skwid=AL!13028!3!589207683839!p!g!!nft%20artworks&gclid=CjwKCAjw5P2aBhAlEiwAAAY7dCwChsZrzzbNUOqIGys8DVAcrdBx8vwvp0UN6rJFpCYGhDLSiCLZxoC23UQAvD_BwE (last visited Sept. 12, 2023).

272. *Id.*

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veteran and new NFT collectors can feel secure in transacting with Christie's 3.0."²⁷³

Copyright owners of copyrightable artworks should mint their works in technology like NFTs. Although U.S. courts have only begun to evaluate rights under NFTs, this technology provides the ability to control market scarcity, legitimize ownership, authenticate the source, and control the narrative around the artwork. It also provides a way for artists to financially benefit from their works long term. Most importantly, copyright and trademark law should protect such NFTs.

Moving forward, the art world should attempt to create a platform for NFT technology that more fully and certainly protects artists who mint their works as NFTs. Government offices could also mint an NFT at the issuance of a trademark or copyright registration.²⁷⁴ Regardless, NFT platforms should implement seller identification procedures, content recognition solutions, and practical notice and takedown programs to police infringing activity.²⁷⁵

273. Sam Thompson, *Christie's Auction House Announces On-Chain NFT Art Platform*, COINDESK <https://www.coindesk.com/business/2022/09/27/christies-auction-house-announces-on-chain-nft-art-platform/> [https://web.archive.org/web/20230325201925/https://www.coindesk.com/business/2022/09/27/christies-auction-house-announces-on-chain-nft-art-platform/] (Sept 28, 2022, 1:54 PM) (quoting Christie's director of digital art sales, Nicole Sales Giles).

274. Thad Chaloentiarana, Chair, ABA Intell. Prop. L. Section, *in* Public Roundtables, *supra* note 40, at 2:17:46–2:18:34; Angela Kalsi, Greensfelder, *in* Public Roundtables, *supra* note 40, at 2:50:12–2:50:52.

275. *See* Victoria Sheckler, General Counsel, Recording Indus. Ass'n of America, *in* Public Roundtables, *supra* note 40, at 1:42:00–1:44:00.