Report on Notice 2023-27

Paradigm Operations LP

June 19, 2023

I. Introduction

Paradigm Operations LP ("Paradigm") and several online marketplaces for nonfungible tokens ("NFTs") welcome the opportunity to comment on Notice 2023-27, which describes the IRS's current method for determining whether an NFT is a section 408(m) collectible and requests comments on the taxation of NFTs.[1] Paradigm is an investment firm that backs entrepreneurs building innovative crypto and Web3 companies and protocols. We appreciate the IRS's proactive approach to engaging with market participants on the taxation of NFTs. We believe that an open dialogue with industry stakeholders and other market participants is essential for producing fair and effective tax policy in this rapidly evolving area.

A summary of our recommendations follows:

- We believe the IRS's proposed definition of NFTs is underinclusive. We recommend defining NFTs by reference to their inherent indivisibility instead of their potential use cases or other common features.[2]
- We think the IRS should consider whether section 408(m) collectibles include only tangible property. If they do, then NFTs that reference or represent digital images or other intangible works ("digitally native NFTs") are not section 408(m) collectibles.[3]

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1 Consistent with Notice 2023-27, we refer to assets treated as collectibles within the meaning of section 408(m) as "section 408(m) collectibles."

All references to "section" herein are to the Internal Revenue Code and the regulations promulgated thereunder.

2 *See* Part II.

3 *See* Part III.

- We recommend replacing the look-through analysis adopted in Notice 2023-27 with a facts-and-circumstances analysis that holistically considers what an NFT represents. We further recommend that, if the IRS determines digitally native NFTs can be works of art, it adopt a "predominant purpose rule" for those NFTs. Under the predominant purpose rule, if a digitally native NFT's predominant purpose is aesthetic and the NFT references or represents a work of art, the NFT will be treated as a section 408(m) collectible.[4]
- We think the IRS's apparent view that all NFTs are "digital representations of value" within the meaning of section 6045(g)(3)(D) is overbroad. Consistent with the Financial Action Task Force ("FATF") guidance on virtual assets, we think the IRS should interpret the phrase "digital representation of value" to mean any token that is predominantly financial in nature and does not represent ownership of another financial instrument.[5]
- We think the IRS should expressly provide that the receipt of digital art NFTs through an airdrop, mint pass, or loot box is not taxable. In the case of an airdrop, the recipient should take a zero basis in the new NFT. In the case of mint passes and loot boxes, the recipient should take a carryover basis in the replacement NFTs.[6]
- While we do not make a recommendation on their tax treatment, we raise fractionalized NFTs as a possible area of future study for the IRS.[7]

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4 *See* Part IV.

5 *See* Part V.A.

6 *See* Part V.B.

7 *See* Part V.C.

- We recommend that, pending the issuance of future guidance, the IRS expressly permit taxpayers to adopt a reasonable approach, consistently applied, to determine whether their NFTs are section 408(m) collectibles.[8]

II. Definition of NFT

Notice 2023-27 defines NFT as "a unique digital identifier that is recorded using distributed ledger technology and may be used to certify authenticity and ownership of an associated right or asset," and requests comments on the definition.[9]

For the reasons discussed below, we recommend the following alternative definition: "An NFT is a token that is inherently indivisible." We recommend defining a token as "a package of data recorded on an electronic ledger."

A. The IRS's features-based definition is under-inclusive

The IRS's effort to define NFTs by reference to their uniqueness, enabling technology, or potential use cases results in under-inclusiveness. As drafted, the IRS's proposed definition arguably does not capture: (i) tokens that are identical but indivisible (sometimes referred to as "semi-fungible tokens"), like those used to represent in-game items and editioned artwork; (ii) tokens transferrable on permissioned blockchains; (iii) Bitcoin-native NFTs (sometimes referred to as "ordinals") and other NFTs whose relevant data is all intrinsic to the token; or (iv) tokens that do not certify authenticity or ownership.

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8 *See* Part V.D.

9 *See* Notice 2023-27, Question 1.

i. Uniqueness

Tokens commonly understood to be NFTs might be used to represent swords, shields, skins, and other in-game items. They might also be used to represent open-edition artworks. In each case, the individual tokens within an NFT collection might not in fact be unique from each other, or might be unique only from a technical perspective that is not readily apparent or relevant to end-users.

A token's fungibility with other tokens in the same collection should not necessarily preclude it from being an NFT. By analogy, a visual print might constitute art notwithstanding the existence of an identical print.

ii. Distributed ledger technology

Defining NFTs by reference to distributed ledger technology begs the question of what constitutes a distributed ledger. That question might become increasingly difficult to answer as market participants build so-called "permissioned" blockchains, which contain smaller validator sets than Bitcoin, Ethereum, Solana, and other public blockchains.

Decentralization is hard to measure.[10] Moreover, we do not think the degree to which a digital token's enabling technology is decentralized should be dispositive in determining whether the token is an NFT.

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[10] *See* Gabriel Shapiro, Medium, *Defining Decentralization for Law* (Apr. 15, 2020) (proposing a definition by reference to multiple metrics), https://lex-node.medium.com/defining-decentralization-for-law-58ca54e18b2a.

iii. Identification

Many tokens commonly understood to be NFTs are not "identifiers," because they do not contain data that points to a digital file or other external asset. For example, Bitcoin-native NFTs include all information needed to render an image or other work within the data attached to them. They thus cannot be said to "identify" anything.

Other tokens commonly understood to be NFTs, like those published through the online generative art gallery ArtBlocks, contain information that interacts with other on-chain assets to render an artistic work in real-time on standard web browsers.[11] It is unclear whether those types of tokens, which figure into the manifestation of the referent artwork, can be said to "identify" that artwork.

However, many tokens commonly understood to be NFTs do arguably "identify" a digital file. For example, most Ethereum- and Solana-based visual NFTs do not contain all of the data necessary to render the referent image, but instead contain data that points to a work stored on the InterPlanetary File System ("IPFS"), Arweave, or another storage system.

Each type of token described above might carry different assumptions relating to the permanence and mutability of the relevant data. For example, a user might believe that IPFS is a less permanent storage solution than Ethereum, or that one chain is likely to outlast another. We do not think those assumptions should be dispositive in determining whether the token is an NFT.

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[11] *See* Druid, *How 'On-Chain' is Art Blocks?*, Medium (Aug. 18, 2021), https://medium.com/the-link-art-blocks/how-on-chain-is-art-blocks-5ccd553dd370.

Analogously, a painting rendered on light-sensitive paper might be less permanent than one rendered on canvas, but both can be art.

iv. Certification

As discussed in greater detail below in Part III.C.ii., many tokens commonly understood to be NFTs do not purport to "certify authenticity or ownership" over an associated right or asset, but merely contain data that produces or references digital media.

We do not think that a token's failure to certify authenticity or ownership over a right or asset should be dispositive to determining whether the token is an NFT. By analogy, paintings can still be art, even without a certificate of authenticity, and even if (as is typical) the artist retains copyright over the artistic work.

B. Any technical definition of NFT must be broad

A technical definition of NFT is more appropriate than a features-based definition. However, any technical definition must be broad enough to encompass tokens that are vastly different from each other at a technological level. A brief look at NFTs on Ethereum, Solana, and Bitcoin is illustrative.

i. Ethereum

The Ethereum blockchain enables software programs, called smart contracts, to be deployed onto it. Smart contracts can be programmed to emit tokens. Most smart contract developers hew to specific token standards, which are formats that the developer community widely agrees to use in the interest of promoting a composable blockchain-based ecosystem. Ethereum's ERC-721 token standard enables a single smart contract to emit tokens that are indivisible and may be unique

from each other, making it a common standard to represent concert tickets, club memberships, artistic works, in-game items, social media "likes" and "followers," financial positions, and title to property.[12] Ethereum's ERC-1155 token standard more easily accommodates semi-fungible tokens, making it a common standard for editioned artwork and in-game items.[13] Most Ethereum-native tokens referred to as NFTs are issued under one of those two standards.

ii. Solana

Unlike Ethereum, Solana does not require an artist or publisher to deploy a new smart contract to emit new tokens. Instead, Solana uses a single token program to which another program, called a "mint account," can send minting instructions. The same token program is used for all types of tokens, but NFT mint accounts specify "decimals 0" in their instructions to ensure that the minted tokens are indivisible.[14]

iii. Bitcoin

Bitcoin-native NFTs can be analogized to drawings on dollar bills. Because the Bitcoin blockchain does not accommodate tokens in denominations other than BTC, artists and publishers create Bitcoin-native NFTs by attaching data to an individual satoshi, the smallest unit

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[12] The Ethereum Foundation, *ERC-721 Non-Fungible Token Standard* (Apr. 7, 2023), https://ethereum.org/en/developers/docs/standards/tokens/erc-721.

[13] The Ethereum Foundation, *ERC-1155 Multi-Token Standard* (Apr. 7, 2023), https://ethereum.org/en/developers/docs/standards/tokens/erc-1155.

[14] Matt Lim, *Solana's Token Program, Explained*, Medium (Oct. 29, 2021), https://pencilflip.medium.com/solanas-token-program-explained-de0ddce29714 (broadly describing Solana NFTs); The Solana Foundation, *Token Program*, https://spl.solana.com/token#example-create-a-non-fungible-token (last visited May 31, 2023) ("Create the token type with zero decimal place.").

of BTC.[15] To keep track of "inscribed" satoshis, market participants use ordinal theory, an arbitrary ordering system that assigns each satoshi a unique number. Because the Bitcoin protocol does not formally recognize ordinal theory, Bitcoin-native NFTs remain fungible with other satoshis in that they can be used to pay for transaction fees, although the data inscribed into them will survive indefinitely under the current Bitcoin protocol.[16]

C. Recommendation

Our proposed definition of NFTs as indivisible tokens replaces the IRS's features-based definition with a technical definition that is sufficiently broad to encompass all tokens commonly understood to be NFTs. By focusing on indivisibility instead of uniqueness, our proposed definition captures editioned digital artwork and other semi-fungible tokens. By eliminating Notice 2023-27's reference to distributed ledger technology, our proposed definition remains flexible enough to capture electronic tokens that are transferrable on permissioned blockchains that might not be "distributed." By eliminating the notice's reference to identification, our proposed definition captures tokens that contain all data necessary to render a digital image or other work. And by eliminating the notice's reference to certification, our proposed definition captures tokens that do not certify to authenticity or ownership over an associated right or asset.

We acknowledge that our proposed definition arguably is over-inclusive because it captures the smallest denominations of fungible crypto tokens (e.g., satoshis in the case of BTC, wei in the

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[15] This report uses ticker symbols to refer to crypto tokens while spelling out the names of blockchains.

[16] *See generally* James Nelson, *What Are Ordinals? A Beginner's Guide to Bitcoin NFTs*, Decrypt (May 1, 2023), https://decrypt.co/resources/what-are-ordinals-a-beginners-guide-to-bitcoin-nfts.

case of ETH, and lamports in the case of SOL), which are not further divisible.[17] We think our recommendation below in Part IV to apply a facts-and-circumstances analysis to determine an NFT's section 408(m) collectibles status adequately addresses this potential over-inclusivity.

III. Digitally native NFTs as section 408(m) collectibles

Section 408(m) defines collectibles, in pertinent part, as "(A) any work of art…or (F) any *other* tangible personal property specified by the Secretary" (emphasis added). Notice 2023-27 requests comments on what factors might be relevant to determining when (1) a digital file is a "work of art," (2) an asset is "tangible personal property," and (3) an NFT is described in section 408(m) when its associated right is less than full ownership of an asset.[18]

We think section 408(m)'s use of the word "other" suggests that tangibility is a precondition to section 408(m) collectibles status. If so, NFTs that reference or represent digital images or other intangible works (collectively, "digitally native NFTs") should not be treated as section 408(m) collectibles. We discuss the text of section 408(m) in greater detail below.

In addition, section 408(m)'s legislative history and the fundamental differences between tokens and items traditionally understood to be works of art seem to support the proposition that digitally native NFTs cannot be "works of art." In short, it is difficult to fit tokens into a traditional conception of "work of art," whose dictionary definition suggests tangibility.[19] Applying the IRS's look-through analysis underscores that difficulty: a digitally native NFT

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[17] There are 100,000,000 satoshis in each BTC, 10^18 wei in each ETH, and 10^9 lamports in each SOL.

[18] Notice 2023-27, Question 3.

[19] Merriam-Webster, *Work of Art*, https://www.merriam-webster.com/dictionary/work%20of%20art (last visited May 31, 2023) ("a product of one of the fine arts, especially: a painting or sculpture of high artistic quality").

typically does not represent ownership over any asset besides the token itself, and any rights it confers are not the types of rights that typically travel with works of art.

The remainder of this Part III presents the argument that digitally native NFTs are not "works of art" within the meaning of section 408(m). Part IV explains how a digitally native NFT's provenance might nevertheless be likened to an artist's signature on a tangible work of art under a facts-and-circumstances analysis if the IRS determines that digitally native NFTs can in fact be works of art.

A. Statutory text

As mentioned above, section 408(m) defines "collectible" to mean, in relevant part: "(A) any work of art…or (F) any other tangible personal property specified by the Secretary." The inclusion of the word "other" in clause (F) of the definition implies that the preceding categories, themselves, must be tangible personal property. The Supreme Court's decision in *Paroline v. United States* supports that interpretation.[20]

The question at issue in *Paroline*—just as it is here—was whether a limiting condition contained in clause (F) of a six-part definition modified all preceding clauses. The relevant statute provided for restitution to victims of child pornography, and in that context defined the "full amount of the victim's losses" to include: "(A) medical services relating to physical, psychiatric, or psychological care…and (F) any *other* losses suffered by the victim *as a proximate result of the offense*."[21]

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[20] 572 U.S. 434 (2014).

[21] 18 U.S.C. § 2259(c)(2) (emphasis added).

The Court held that the "proximate cause" language in clause (F), italicized above, modified each of the categories that preceded it. According to the Court, "when several words are followed by a clause which is applicable as much to the first and other words as to the last, the natural construction of the language demands that the clause be read as applicable to all."[22] Moreover, catchall clauses "are to be read as bringing within a statute categories similar in type to those specifically enumerated."[23]

The Court rejected the victim's argument that the rule of last antecedent described in *Barnhart v. Thomas* required a contrary result. Under that rule, "a limiting clause or phrase…should ordinarily be read as modifying only the noun or phrase that it immediately follows."[24] However, the Court in *Barnhart* cautioned that the rule of last antecedent was "not an absolute and can assuredly be overcome by other indicia of meaning."[25] Moreover, *Barnhart* interpreted a statute that did not contain an enumerated list.[26]

Section 408(m) is constructed in the same way as the statute at issue in *Paroline*: an enumerated definition whose last category is a catch-all that contains a limiting modifier ("tangible personal property"). Based on the reasoning in *Paroline,* it appears that modifier should be read to apply to all other categories within section 408(m).

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22 572 U.S. at 447, *quoting Porto Rico Ry., Light & Power Co. v. Mor*, 253 U. S. 345, 348 (1920).

23 *Id.* at 448, *quoting Maritime Comm'n v. Seatrain Lines, Inc.*, 411 U. S. 726, 734 (1973).

24 *Barnhart v. Thomas*, 540 U.-S. 20, 26 (2003).

25 *Id.*

26 *See* 2 U.S.C. §423(d)(2)(A) (a person is disabled "only if his physical or mental impairment or impairments are of such severity that he is not only unable to do his previous work but cannot…engage in any other kind of substantial gainful work *which exists in the national economy*") (emphasis added); *Barnhart*, 540 U.S. at 29-30 (determining that it was reasonable for the Social Security Administration to interpret the italicized language as not modifying "his previous work").

B. Productive capital formation

Legislative history indicates that Congress enacted section 408(m) to encourage productive capital formation.[27] A collector's acquisition of an item traditionally understood to be a work of art typically makes that item publicly inaccessible so that it cannot be put to productive use. The same right of exclusive use is inherent in the other assets enumerated in section 408(m).

By contrast, exclusive use rights do not inhere to digitally native NFTs. For example, an online image of Leonardo da Vinci's Mona Lisa is fundamentally different from the referent painting, whereas an online image of Claire Silver's Paracosm #4 is the same image regardless of whose browser it is launched in and who owns the related NFT.[28] Thus, the acquisition of a digitally native NFT does not preclude others from accessing and using identical instantiations of the reference work.

Because digitally native NFTs do not come with exclusive use rights, the acquisition of a digitally native NFT does not prevent the artist, publisher, or even third parties (in each case, to the extent permitted by applicable copyright law) from putting the associated work to productive use in other ways.

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[27] H.R. Rep. No. 97-201, at 143 (1981) ("investments in collectibles do not contribute to productive capital formation"); J. Comm. on Tax'n, 97th Cong.,*General Explanation of the Economic Recovery Tax Act of 1981*, JCS-71-81 (same); *see also* Letter from Harry J. Conaway, Associate Tax Legislative Counsel for the Treasury Department (July 5, 1988) (antique cars and other section 408(m) collectibles do not give rise to economic "multiplier effects").

[28] For an online image of the artwork, see Claire Silver, Paracosm #4, https://bright-moments-flex-mainnet.s3.amazonaws.com/2000004.png (last visited May 31, 2023); for token owner information, see Etherscan, https://etherscan.io/nft/0x7c3ea2b7b3befa1115ab51c09f0c9f245c500b18/2000004 (last visited May 31, 2023).

C. Other distinctions between digitally native NFTs and tangible works of art

Digitally native NFTs are fundamentally different from items traditionally understood to be works of art in other ways, including in NFTs' potential use cases as (1) community tokens, (2) bare provenance, and (3) commercial licenses.

i. Community tokens

Because NFTs are associated with their holders' public blockchain addresses, they can serve as evidence of membership in a community. In addition, artists, publishers, and even unrelated third parties often design experiences that can be unlocked by holders of particular NFTs. Examples include access to exclusive online chatrooms or real-life events, discounts on other works, and rights to claim free merchandise. By contrast, items traditionally understood to be works of art typically do not have applications beyond their aesthetic properties.

ii. Bare provenance

Many NFTs do not provide holders with any associated rights. For example, in August 2022, famed glitch artist XCOPY announced that they would apply the "CC0" license to all of their noncollaborative NFTs.[29] Under the CC0 license, the artist waives "all copyright and related rights in their works to the fullest extent allowed by law."[30] As a result, the artist, the NFT

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[29] XCOPY *Creative Commons*, https://xcopy.art/creative-commons (last visited May 31, 2023) ("All XCOPY works are licensed CC0.").

[30] *CC0*, Creative Commons, https://creativecommons.org/share-your-work/public-domain/cc0(last visited May 31, 2023).

holder, and everyone else in the world has equal rights to exploit the underlying intellectual property. Other popular CC0 NFT collections include CrypToadz,[31] mfers,[32] and Moonbirds.[33]

The value of an NFT that does not grant its owner special intellectual property rights relative to anyone else often is primarily attributable to a common understanding that the token represents the artist-endorsed instantiation of the underlying work, notwithstanding that everyone can experience an identical instantiation of the work through their own web browser. We refer to this common understanding as "provenance."

Tangible works of art also come with provenance, which might be evidenced by an artist's signature or a certificate of authenticity issued by a gallery. But tangible works of art always feature something *in addition to* provenance: the right of exclusive use. Two autographed editions are fundamentally different property from each other, and the owner of each can deny others access to it. By contrast, digitally native NFTs can represent provenance and nothing more.

iii. Commercial licenses

NFTs that do not solely represent provenance typically grant the owner some commercial use rights. Most such commercial use rights are extremely limited (e.g., $100,000 of gross revenue

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[31] CrypToadz, https://www.cryptoadz.io/ (last visited May 31, 2023) ("To the extent possible under law, Gremplin has waived all copyright and related or neighboring rights to CrypToadz.").

[32] Mfers, https://mfers.art/ (last visited May 31, 2023) ("this project is in the public domain; feel free to use mfers any way u want.").

[33] Proof, Moonbirds, https://www.proof.xyz/moonbirds (last visited May 31, 2023) (Moonbirds "are distributed under a creative commons (CC0) licence [sic], meaning that any and every creative can use the artwork to build their own collections and products").

per year),[34] although a few NFT publishers have granted more extensive commercial use rights. By contrast, it is exceedingly rare for commercial use rights to travel with items traditionally understood to be works of art.

IV. The look-through analysis

Under the look-through analysis adopted in Notice 2023-27, an NFT is a section 408(m) collectible if its "associated right or asset" is a section 408(m) collectible. The notice defines an NFT's associated right or asset as the right that it provides or the ownership of an asset that it certifies. The notice requests comments on instances in which there are concerns with applying the analysis and in which an alternate analysis may be more appropriate.[35]

We are concerned that the look-through analysis treats NFTs as separate assets from what they represent. That approach does not work well for NFTs that represent legal title, because divorcing legal title from physical ownership is generally inconsistent with traditional tax principles. It also does not work well for digitally native NFTs, which often do not grant any material rights to their holders or certify ownership of any asset other than the NFT itself.

Accordingly, we recommend replacing the look-through analysis with a facts-and-circumstances analysis that holistically considers what the NFT represents. If the IRS determines that digitally native NFTs can be works of art, we further recommend that it adopt a "predominant purpose rule" for those NFTs. Under the predominant purpose rule, if a digitally native NFT's predominant purpose is aesthetic and the NFT references or represents a work of art, the NFT

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34 *See, e.g.*, *NFT License*, nftlicense.org (last visited May 31, 2023).

35 Notice 2023-27, Question 2(a).

will be treated as a section 408(m) collectible. Because aesthetic value is subjective, "predominant purpose" necessarily depends on the owner's intent; however, all surrounding facts and circumstances may be considered in determining that intent.[36]

A. Application to NFTs that represent legal title

The look-through analysis appears to treat NFTs as separate assets from what they represent. For example, under the notice, an NFT that "certifies ownership of a gem" is a section 408(m) collectible because the gem, itself, is a section 408(m) collectible. The notice thus appears to recognize two separate section 408(m) collectibles—the NFT and the gem itself.

If "certifies ownership of" means "represents legal title to or an economic interest in," a transfer of the NFT in the notice's gem illustration should be treated under traditional tax principles as a transfer of all or a portion of the gem itself; the NFT and the gem should not be two separate assets. Analogously, tax law would not treat a piece of paper bearing legal title to a gem as a different asset from the gem itself.

If certification means something other than legal title, it is unclear why the NFT in the illustration would be a collectible.

Consistent with traditional tax principles, a facts-and-circumstances analysis would treat an NFT that represents legal title to an asset as the asset itself. By treating legal title the same way

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[36] *Cf. Bobsee Corp. v. United States*, 411 F.2d 231, 238 (5th Cir. 1969) ("Theoretically the question of purpose [under section 269] is purely subjective; pragmatically, however, the trier of fact can only determine purpose from objective facts.").

regardless of how it is memorialized, a facts-and-circumstances analysis reflects technological neutrality, which we think is a sound policy goal.

B. Application to digitally native NFTs

Assuming the IRS determines that digitally native NFTs can be works of art, the look-through analysis articulated in Notice 2023-27 is difficult to apply to them because it assumes the existence of associated rights or assets. As discussed above in Part III.C.ii., many digitally native NFTs do not grant any material rights to their owners or certify ownership over any property.

A predominant purpose rule treats digitally native NFTs—other than those with predominantly non-aesthetic purposes—as if they *are* the work they reference or represent, even if they do not grant any material rights to their owners or certify ownership over any property. The underlying theory is that an aesthetic work's value is primarily attributable to its provenance, not to any associated rights or assets, and an NFT's recordation in an electronic ledger represents provenance in a manner analogous to an artist's signature or certificate of authenticity. For example, an artist who otherwise would have sold signed prints of their digital artwork to distinguish them from unsigned prints that are visually identical might instead publicly endorse a particular Ethereum smart contract, so that NFTs emitted by that smart contract function as representations of the "official outputs." Most digital artwork represented by NFTs does not need an accompanying physical manifestation, because an electronic ledger tracks ownership transparently enough to dispense with the need for physical proofs.

The predominant purpose rule thus would likely result in a greater number of digitally native NFTs being treated as works of art than the look-through analysis, which apparently would not treat a digitally native NFT as a work of art if the NFT has no associated rights or assets.

C. Ancillary rights

Notice 2023-27 requests comments on how its proposed look-through analysis should apply to NFTs with more than one associated right or asset.[37] As mentioned above in Part III.C.iii., some artists or publishers do attach rights to their NFTs. Under a predominant purpose rule, any such rights generally would be disregarded in determining whether an NFT is a section 408(m) collectible if the NFT's predominant purpose is aesthetic. We believe this approach is consistent with the tax law's general bias against componentizing indivisible instruments.[38]

For example, Tyler Hobbs' long-form generative art collection *Fidenza* grants its holders an unlimited worldwide license to share and adapt the referent images for noncommercial purposes.[39] Under a predominant purpose rule, assuming the IRS determines that digitally native NFTs can be works of art, a *Fidenza* NFT would be treated entirely as a section 408(m) collectible, and no value would be attributed to the associated license.

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[37] Notice 2023-27, Question 2(c).

[38] *See, e.g.*, *Chock Full O'Nuts Corp. v. United States*, 453 F.2d 300 (2d Cir. 1971) (issue price of a convertible debenture was not allocated between the debt and embedded conversion right); *Universal Castings Corp. v. Comm'r*, 37 T.C. 107, 116-17 (1961) (stock and notes of the same issuer treated as a single investment where shareholders agreement precluded separate transferability); Rev. Rul. 1975-33, 1975-1 C.B. 115 (additional dividend rights that were inseparable from other rights inherent in stock issued in a reorganization were attributes of that stock, not separate property); Treasury regulations section 1.1275-4 (rejecting componentization of contingent payment debt instruments in favor of an "all-or-nothing" approach, contrary to prior proposed regulations).

[39] *See* Tyler Hobbs, *Fidenza*, artblocks.io (Jun. 11, 2021), https://www.artblocks.io/collections/curated/projects/0xa7d8d9ef8d8ce8992df33d8b8cf4aebabd5bd270/78 (specifying "CC BY-NC 4.0" license); Attribution-NonCommercial 4.0 International (CC BY-NC 4.0). Creative Commons, https://creativecommons.org/licenses/by-nc/4.0/legalcode (last visited May 31, 2023).

By contrast, Yuga Labs' Bored Ape Yacht Club ("BAYC") NFT collection purports to grant its holders an unlimited worldwide license to use the referent images for commercial purposes.[40] Related marketing materials describe BAYC NFTs as "your membership to a swamp club for apes,"[41] suggesting a greater focus on community membership than on visual appeal. Under a predominant purpose rule, BAYC NFTs are unlikely to be section 408(m) collectibles. That result is consistent with the legislative history's focus on encouraging productive capital formation:[42] buying into a brand allocates capital to a sponsor with the expectation that the sponsor will deploy that capital toward enhancing the brand.

V. Other observations

Notice 2023-27 requests comments on other guidance relating to NFTs that would be helpful.[43] This Part V responds to that request.

A. NFTs as "digital representations of value"

Notice 2023-27 and the IRS's website describe NFTs as "digital assets."[44] Section 6045(g)(3)(D) defines digital assets as "any digital representation of value that is recorded on a cryptographically secured distributed ledger." Accordingly, the IRS appears to consider all NFTs

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40 Bored Ape Yacht Club Terms & Conditions, https://boredapeyachtclub.com/#/terms (last visited May 31, 2023).

41 Bored Ape Yacht Club Website, https://boredapeyachtclub.com/# (last visited May 31, 2023).

42 See Part III.B.

43 Notice 2023-27, Question 5.

44 See Notice 2023-27 at n.3 ("This notice does not address the fiduciary duty and related provisions applicable to investments in NFTs, cryptocurrency, or *other digital assets*.") (emphasis added); *see also* IRS, *Digital Assets*, https://www.irs.gov/businesses/small-businesses-self-employed/digital-assets (last visited May 31, 2023) ("Digital assets include...NFTs.").

to be digital representations of value. We are concerned that the IRS's broad interpretation of the phrase "digital representation of value" could have inappropriate and unintended consequences. We recommend instead defining "digital representation of value" to mean any token that is predominantly financial in nature and does not represent ownership of another financial instrument.

i. Problems with a broad interpretation of "representation of value"

NFTs can represent many things, including arena seats, club memberships, artistic images, in-game items, social media "likes" and "followers," and title to property. We think it would be inappropriate as a policy matter if those things became subject to broker reporting obligations under section 6045 because they were represented as NFTs, where no such obligations would exist if they were represented in a centralized entity's private ledger.

Moreover, the phrase "digital representation of value" appears in the IRS's definitions of virtual currency and cryptocurrency.[45] It seems unlikely that the IRS's guidance relating to transactions in liquid divisible tokens like BTC and ETH will be equally applicable to less-liquid, indivisible tokens. For example, as discussed below in Part V.B., we think airdrops of digital art NFTs should be nontaxable, even if airdrops of divisible, financial tokens continue to be taxed at ordinary income rates when received in accordance with current IRS guidance.[46]

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[45] *See* Notice 2014-21 (virtual currency); Rev. Rul. 2019-24, 2019-44 I.R.B. 100 (cryptocurrency).

[46] *See* Rev. Rul. 2019-24.

ii. Defining "digital representation of value"

As a threshold matter, we observe that the phrase "digital representation of value" technically does not describe the vast majority of crypto assets. For example, BTC is not semiotic—it does not *represent* anything. Nevertheless, we think it is clear that the phrase "digital representation of value" was intended to capture BTC and ETH.[47] It thus is necessary to define the phrase differently from its plain meaning.

Our recommendation to define "digital representation of value" as a token that is predominantly financial in nature is broadly consistent with FATF guidance on virtual assets, under which tokens "that are in practice used as collectibles rather than as payment or investment instruments" are not digital representations of value.[48] We further recommend explicitly excluding tokens that represent ownership of other financial instruments to eliminate the possibility of dual reporting obligations under section 6045 in the case of tokenized stock, bonds, and other financial instruments.

B. Treatment of airdrops, mint passes, and loot boxes

Notice 2023-27 requests comments on how an NFT owner's potential to receive additional rights or assets (such as additional NFTs) due to ownership of the NFT (even in the absence of a specific contractual right under the NFT) should be treated.[49]

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47 *See* Notice 2014-21 (describing BTC as a digital representation of value).

48 FATF, *Virtual Assets and Virtual Asset Service Providers* ¶ 53 (2021), https://www.fatf-gafi.org/content/dam/fatf-gafi/guidance/Updated-Guidance-VA-VASP.pdf.

49 Notice 2023-27, Question 2(d).

At the outset, we caution that because it is impossible to predict all future NFT use cases, we think it would be inadvisable to issue guidance that applies to all such receipts of additional rights or assets. However, we would welcome guidance that addresses the receipt of NFTs representing digital artwork, whether or not a section 408(m) collectible ("digital art NFTs"), through airdrops, mint passes, and loot boxes, each as defined below.

i. Airdrops

As mentioned above in Part III.C.i., many artists, publishers, and third parties reward NFT holders, or entice them to join new communities, by designing experiences that their NFTs can unlock. One such experience may be the opportunity to receive or mint new NFTs, often referred to as an "airdrop."

Airdrops of digital art NFTs come in different flavors. The "new NFTs" might be sent directly to a set of accounts "whitelisted" based on their ownership of the "old NFTs" or other activities as of a certain date. More often, however, a set of such whitelisted accounts is given access to a smart contract or other program that mints the new NFTs for a specified period of time. Sometimes the minting experience, itself, is part of the new NFT creation process; as mentioned above in Part II.A.iii., in long-form generative art projects, an NFT's own transaction hash (a unique identifier) is fed into a script to generate the unique artistic image associated with that NFT.

We think that, in the interest of administrative ease, airdrops of digital art NFTs should not give rise to immediate taxation.[50] Subsequent sales should be taxed at the applicable capital gains or collectibles rate (as appropriate), unless the airdropped NFT was a gift of an artistic composition or other ordinary income asset described in 1221(a)(3)(C).

It would be administratively difficult to enforce a rule that instead requires holders to include the fair market value of the new NFTs in income when received. First, a significant number of airdropped NFTs are spam. It would be difficult for the IRS or taxpayers to establish whether the taxpayer intended to enjoy dominion and control over an NFT sent directly to their account. Second, because digital art NFTs tend to be fairly illiquid, it would be difficult for the IRS or taxpayers to establish a new NFT's fair market value at the time of an airdrop. Third, in the case of airdrops that give holders the right to participate in the digital art NFT creation process, it is unclear how the IRS or taxpayers would value the receipt of that right.

ii. Mint passes and loot boxes

Some NFTs, called "mint passes" and "loot boxes," entitle a taxpayer to redeem their NFT for replacement digital art NFTs in the future.

Mint passes tend to be more predictable than loot boxes. A mint pass holder might be aware, for example, that their pass will become redeemable for a new NFT that represents a randomly selected or generated work by a specific artist, whereas loot boxes tend to be redeemable for

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[50] *Cf.* Rev. Rul. 79-431, 1979-2 C.B. 108 (airline miles not taxed on receipt); *see also* General Counsel Memorandum 37971 (June 1, 1979) (a taxpayer's receipt of a transferrable right to sell a designated amount of milk at a premium price was not taxable, despite the existence of an established fair market value).

multiple randomly selected works by different artists or publishers, with greater variability among the "contents" of each loot box.

Consistent with general tax principles, we think that if a holder acquires an NFT that represents the right to receive one or more replacement NFTs in the future, they should not be taxed on receiving the replacement NFTs,[51] and should allocate their basis among the replacement NFTs based on a reasonable determination of their relative fair market values.[52]

C. Fractionalized NFTs

Although NFTs are inherently indivisible, market participants can create fractionalized interests in one or more NFTs by contributing the NFTs to a smart contract or other program in exchange for divisible tokens.

There are many reasons why people might do this. One might be to co-steward an art collection. Another might be to co-access a gaming or other application. Another might be to obtain economic exposure to a diversified basket of NFTs.

The creation of fractionalized interests in NFTs raises issues that are beyond the scope of this report. However, we observe that the IRS has privately ruled that shares in a grantor trust that holds gold are not section 408(m) collectibles unless the grantor trust makes in-kind distributions.[53] We would be interested in discussing with the IRS in the future whether a

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[51] *Cf.* Treasury regulations section 1.1001-3(c)(1)(ii) ("an alteration of a legal right or obligation that occurs by operation of the terms of a debt instrument is not a modification").

[52] *Cf.* Rev. Rul. 86-24, 1986-1 C.B. 80 (taxpayer's basis in birthed calf equals premium paid for pregnant cow).

[53] *See* PLR 201446030; PLR 200732026.

divisible token that represents a fractional interest in one or more NFTs that are treated as section 408(m) collectibles would, itself, be so treated, as well as other tax considerations that might be relevant to taxpayers who create, acquire, or dispose of fractional interests in NFTs.

D. Effective date

Notice 2023-27 provides that the IRS intends to apply the look-through analysis "pending the issuance" of future guidance relating to NFTs. In light of our recommendation that the look-through analysis be replaced with a facts-and-circumstances analysis, we request that, pending the issuance of future guidance, the IRS permit taxpayers to adopt a reasonable approach, consistently applied, to determine whether their NFTs are section 408(m) collectibles.

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We appreciate your consideration of our observations and recommendations. If you have any questions or comments regarding this report, please feel free to contact us and we will be glad to discuss or assist in any way.

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