

NON-FUNGIBLE TOKENS (NFTS) AND THE PROBLEM OF COPYRIGHT EXHAUSTION IN THE DIGITAL AGE

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ABSTRACT

This thesis explores the transformative potential of Non-Fungible Tokens (NFTs) within the realm of digital copyright exhaustion. NFTs are unique virtual tokens created through computer code and linked to smart contracts, ensuring their non-fungibility on blockchain technology, a decentralized public ledger.¹ This burgeoning technology is revolutionizing various domains, notably art and creativity, by linking tokens to copyrighted works, enabling secure and transparent transactions, and providing immutable records of ownership and sales history.

This study delves into the significant legal implications of NFTs, particularly in relation to the principle of copyright exhaustion. Traditionally, copyright exhaustion implies that once a copyrighted work is sold, the author relinquishes control over subsequent sales. However, this principle faces challenges in the digital age, where works are often disseminated online as e-books, audio files, and software programs. This thesis examines whether the sale of digital works should be treated equivalently to physical works under copyright law, in line with the principle of technological neutrality.

Through a detailed analysis of key legal precedents, including the Court of Justice of the European Union (CJEU) cases and case from the United States, the thesis juxtaposes differing legal interpretations and their implications for digital content ownership. It further investigates the inherent characteristics of NFTs, their interaction with existing copyright laws, and the evolving policy discussions surrounding them.

¹ Rakesh Sharma, 'Non-Fungible Token (NFT): What It Means and How It Works' (*Investopedia*, 2024) https://www.investopedia.com/non-fungible-tokens-nft-5115211> accessed 14 June 2024.

Acknowledging the nascent stage of blockchain technology, the thesis underscores the need for policymakers to revisit digital copyright exhaustion, considering the opportunities and challenges presented by NFTs. By offering a comprehensive exploration of current practices and future potential, this thesis contributes to the ongoing scholarly debate on the adaptation of copyright law in the digital age.

1. INTRODUCTION

A Non-Fungible Token (NFT) is a type of a virtual token that is created by a computer code and coupled with a smart contract, identifying the token as a unique one or a "non-fungible" one, on a type of Digital Ledger Technology called a blockchain which is a peer-to-peer network that operates as a permanent and decentralized public ledger.² NFTs are already being used for an unsurmountable number of things. Artists are using NFTs to link the tokens with copyrighted works by including, inside the smart contract, a separate link to the digital file that contains a digital copy of the work, such as any pictorial work, musical work, or audio-visual work.³ The potential of the growing industry related to NFTs is reflected through the expected revenue of US \$3,162.00 million by the year 2027.⁴ NFTs can represent various forms of creative content, that includes visual arts, music, or even postal stamps.⁵ Any kind of physical creation could also be minted and attached to an NFT if it is capable of being digitized. However, the true potential of NFTs goes beyond the world of art and creativity as these tokens can even represent property, both movable and immovable and even other rights and rights bearing agreements such as an insurance policy, etc.⁶

When one views an NFT for sale on the internet, one is actually looking at a public display of the digital image of the actual work along with the details of the NFT that is for sale, however, the

² Rakesh Sharma, 'Non-Fungible Token (NFT): What It Means and How It Works' (*Investopedia*, 2024) https://www.investopedia.com/non-fungible-tokens-nft-5115211> accessed 14 June 2024.

³ Balázs Bodó and others, 'The Rise of NFTs: These Aren't the Droids You're Looking For' (2022) 44 (5) European Intellectual Property Law, 1 https://papers.ssrn.com/abstract=4000423> accessed 14 June 2024.

⁴ 'NFT Worldwide | Statista Market Forecast' (*Statista*) <https://www.statista.com/outlook/dmo/fintech/digital-assets/nft/worldwide> accessed 14 June 2024.

 ⁵ Anna Bigda-Wójcik, 'Unlocking the Digital Realm: Exploring NFTs as Catalysts for Digital Copyright Exhaustion' (2023) 18 Journal of Intellectual Property Law & Practice 808.
 ⁶ ibid.

NFT exists separately from the digital image.⁷ When an NFT is purchased, it is not the digital image that has been purchased but the sale has been of a virtual token, a new form of digital property that is stored on a blockchain, along with a content license that the creator has granted to grant the owner of the NFT certain specific rights regarding the work, often copyrighted, associated with the NFT.⁸ This arrangement concerning the sale of a NFT along with a content license granting the owner of the NFT certain rights regarding the use of the associated artwork has resulted in the creation of an entirely new form of decentralized Intellectual Property.⁹

The use of blockchain technology coupled with NFTs have appeared to make possible the trustworthy and transparent resale of digital content, including music, movies, or books in the digital marketplaces.¹⁰ It is achieved by making a secure recording of the transaction related data and providing trails of ownership and sales history of the works. Smart contracts, in their essence, imitate conventional contracts in that they outline the terms and conditions of ownership, keep a record of transactions, note conditions of payments and the limitations of usage. Due to the inherent transparency, immutability and authenticity, NFTs are designed to function as digital certificates certifying ownership over a broad range of assets of both physical and non-physical nature. The amalgamation of these elements may give way to an alternative way of updating copyright law that is more fitting for the digital age.¹¹

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⁷ ibid.

⁸ ibid.

⁹ AA Dolganin, 'Non-fungible tokens (NFT) and intellectual property: The triumph of the proprietary approach?' (2021) 2 (3) Digital Law Journal, 46-47.< <u>https://doi.org/10.38044/2686-9136-2021-2-3-46-54</u>> accessed 11 April 2024.

¹⁰ Bigda-Wójcik (n 5).

¹¹ Mark Giancaspro, 'Pretty, Pricy, Perilous? Demystifying Non-Fungible Tokens and Highlighting Some Key Legal Concerns' (2023) 97 Australian Law Journal, 457. https://www.ssrn.com/abstract=4671438> accessed 11 April 2024.

The idea of copyright exhaustion dictates that, once an author has already gained benefit from their creation with the first sale of the work, they have renounced control, and therefore any ancillary benefit, from all the subsequent ownership transfers. In the digital era, copyrighted works are most commonly accessible only through online methods, such via of e-books, audio files and software programs etc. With the advancement in digitization, the principle of copyright exhaustion has come under quite a lot of scrutiny and has been challenged as being outdated and unfit for the modern cyber landscape. The question of whether the transferring of ownership rights in the virtual world shall carry the same legal implications as it does in the physical world is becoming increasingly important. According to the principle of technological neutrality, winners should not be picked between the alternatives and sale of physical works should be considered equal to the sale of digital works in the digital realm under copyrights law.¹²

The question concerning the applicability of the principle of digital exhaustion to the digital world has given rise to considerable scholarly debate. Although, courts in this regard might take the route of adopting a broad interpretation of the laws for addressing the challenges posited by the constant and regular developments in technology to sufficiently protect intellectual property rights, there would still remain a massive contention in the attempted reconcilement between the application of digital exhaustion between this principle's relation to physical properties in the physical world and the creation and consumption of digital content.

This thesis delves into the future potential within this specific area, starting with an analysis of the copyright exhaustion principle within the existing prominent legal precedents, notably the Court

¹² Winston James Maxwell and Marc Bourreau, 'Technology Neutrality in Internet, Telecoms and Data Protection Regulation' (2015) CTLR (1), 1. http://www.ssrn.com/abstract=2529680> accessed 16 June 2024.

of Justice of the EU (CJEU) decisions illustrated in the landmark cases of UsedSoft¹³, Tom Kabinet¹⁴ and other relevant cases. Following this, an attempt is made to juxtapose the legal implications established by these rulings with the ruling of the US ReDigi¹⁵ case and other relevant cases. After analyzing these legal precedents, we will explore the inherent characteristics of NFTs and how they interact with copyright laws, shedding light on current practices and the ongoing policy discussion.¹⁶ The thesis then ventures into the yet to be explored potential of NFTs and blockchain technology, while acknowledging the risks associated with their integration into the sphere of digital exhaustion and by acknowledging the budding stage of blockchain technology for widespread adoption of copyright exhaustion in the digital realm, the thesis suggests that policymakers reexamine the subject, prioritizing developments surrounding NFTs and the opportunities they present.¹⁷

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¹³ UsedSoft GmbH v Oracle International Corp [2012] ECJ Case C-128/11.

¹⁴ Nederlands Uitgeversverbond and Groep Algemene Uitgevers v Tom Kabinet Internet BV and Others [2019] ECJ Case C-263/18.

¹⁵ Capitol Records, LLC v. ReDigi Inc., 1:12-Cv-95 (RJS)

¹⁶ Bigda-Wójcik (n 5).

¹⁷ ibid.

2. COPYRIGHT EXHAUSTION AND DIGITIZATION

2.1. Exhaustion in the Digital Era

During the last few years, there has been a surge in the popularity of non-fungible tokens (NFTs), which emerged in 2017 as a method for validating the ownership and genuineness of digital assets.¹⁸ NFTs have the capacity to represent diverse forms of digital creative content and, moreover, any physical work that is capable of being digitized.¹⁹ Leveraging blockchain technology, NFTs introduce a potential mechanism for establishing scarcity and competition in digital assets, holding promise for implementing a digital copyright exhaustion framework. Such a framework stands to benefit creators, consumers, and the broader digital economy.²⁰

The principle of copyright exhaustion is linked to the reward theory²¹, which suggests that once a creator has profited from their creative efforts through the initial sale of a tangible copy of their work, they forfeit control over ownership transfers that occur subsequently.²² Essentially, creators establish and receive fair compensation that adequately rewards their creativity, thereby exhausting their distribution rights for that specific copy.²³ This principle has been fundamental to copyright law across continental and common law systems, with its origins traceable to pivotal cases such as the decision in Bobbs-Merrill (1908)²⁴ and the ECJ judgment in Deutsche Grammophon

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¹⁸ Bodó and others (n 3).

¹⁹ Péter Mezei (ed), 'Digital Exhaustion in the European Union and the US', *Copyright Exhaustion: Law and Policy in the United States and the European Union* (Cambridge University Press 2018)

<https://www.cambridge.org/core/books/copyright-exhaustion/digital-exhaustion-in-the-european-union-and-the-us/E6C4125AC65A99F1CF9E68F77E2D4E36> accessed 14 June 2024.

 ²⁰ Ioanna Lapatoura, 'Creative Digital Assets as NFTs: A New Means for Giving Artists Their Power Back?' (2021)
 32 Entertainment Law Review 169. <<u>https://discovery.ucl.ac.uk/id/eprint/10181189</u>> accessed 14 June 2014.

²¹ Michel Walter and Silke von Lewinski, European Copyright Law: A Commentary (OUP Oxford, 2010), 135.

²² Bigda-Wójcik (n 5).

²³ ibid.

²⁴ Bobbs-Merrill Co. v. Straus, 210 U.S. 339 (1908)'

(1974)²⁵²⁶ By offering the opportunity to redeem some of the initial purchase costs, copyright exhaustion allows for the future sale and acquisition of copies of works, allowing them to be more accessible in the secondary market.²⁷ Furthermore, it ensures the availability of works removed from the market, thereby preventing the loss of valuable content and aiding in the safeguarding of heritage.²⁸ This mechanism enables copyholders to resell and lend copies of copyrighted works without any fear of infringement, while enabling the creators to reach broader audiences.²⁹ By this fostering of competition in downstream commerce, copyright exhaustion helps counter monopolies and plays a vital role in fostering creativity.³⁰

In the contemporary digital landscape, copyrighted works are predominantly accessible through online channels, taking the form of e-books, audiobooks, video clips, audio files, or software.³¹ Access is usually facilitated through downloads from providers' websites or streaming services. However, with the ongoing advancement of digitization, the concept is being increasingly challenged as antiquated in the cyber domain.

Courts are expected, at least in common law jurisdictions, to adopt a broad interpretation of laws to accommodate the ongoing advancements in technology for the protection of intellectual property rights. However, the prospect of applying the digital exhaustion principle in a similar way

²⁵ Deutsche Grammophon Gesellschaft mbH v Metro-SB-Großmärkte GmbH & Co KG [1971] ECJ Case 78-70.

²⁶ Bigda-Wójcik (n 5).

²⁷ ibid.

²⁸ Evan Hess, 'Code-Ifying Copyright: An Architectural Solution to Digitally Expanding the First Sale Doctrine'(1971) 81 FORDHAM LAW REVIEW. <<u>https://ir.lawnet.fordham.edu/flr/vol81/iss4/10</u>> Accessed 12 June 2024.

²⁹ Bigda-Wójcik (n 5).

³⁰ Tomasz Targosz, 'Exhaustion in Digital Products and the †Accidentalâ€TM Impact on the Balance of Interests in Copyright Law' in Lionel Bently, Uma Suthersanen, and Paul Torremans (eds) *Global Copyright* (Edward Elgar Publishing, 2010); Peter Mezei, Digital Exhaustion: Furthering Social Justice in a Streaming-Dominated Copyright Ecosystem - Critical Remarks after the ECJ's Tom Kabinet Judgment (2021) Vol. II Collection of Papers "Challenges to the legal system", 190–203. <<u>https://dx.doi.org/10.2139/ssrn.3791934</u> > accessed 12 June 2024. ³¹ Bigda-Wójcik (n 5).

presents significant challenges, as it requires reconciling the principle's traditional association with tangible mediums with the emergence of new methods of consumption of content online.³²

The question of whether the exhaustion principle applies in the digital world has sparked significant scholarly debate.³³ One argument against its adoption is based on the mainly non-ephemeral nature of digital media as compared to physical copies, allowing for unlimited use.³⁴ Judicial bodies have approached the exhaustion principle for digital copies cautiously, primarily due to the issue of electronic replication involved in copying transfers.³⁵

Various forms of exploiting creative content through public performances, websites, and broadcasting technologies like streaming fall within the realm of the public communication right.³⁶ However, the difficulty arises while dealing with uses that are much similar to a sale, where a work is stored on a hard drive and users gain permanent access to it after paying a price.³⁷ Such forms of commercialization is perhaps more appropriately covered under the distribution right.³⁸

³² Deborah S Tussey, 'Technology Matters: The Courts, Media Neutrality, and New Technologies' (2005) Vol 12(2) Journal of Intellectual Property Law, 427, 428 < https://digitalcommons.law.uga.edu/jipl/vol12/iss2/3> accessed 14 June 2024; Baiyang Xiao, 'Copyright Law and Non-Fungible Tokens: Experience From China' (2022) Vol 30 International Journal of Law and Information Technology, 467 < https://doi.org/10.1093/ijlit/eaad007> accessed 14 June 2024; Péter Mezei, 'Hop on the Roller Coaster – New Hopes for Digital Exhaustion?' (2022) 71(11) GRUR International, 1018 < https://dx.doi.org/10.2139/ssrn.4256645> accessed 14 June 2024.

³³ Aaron Perzanowski and Jason Schultz, 'Digital Exhaustion' (2016) Vol. 58 UCLA Law Review, 889, 891 ">https://osf.io/zspky> accessed 14 June 2024; Wolfgang Kerber, 'Exhaustion of Digital Goods: An Economic Perspective' (2016) Intellectual Property Journal, 167 < https://dx.doi.org/10.2139/ssrn.2777459 accessed 14 June 2024.

³⁴ Edward Elgar 'Global Copyright: Three Hundred Years Since the Statute of Anne, from 1709 to Cyberspace' (2010), 321.

³⁵ Sebastian Pech, 'Copyright Unchained: How Blockchain Technology Can Change the Administration and Distribution of Copyright Protected Works' (2020) 1 Northwestern Journal of Technology and Intellectual Property, 1, 42 < https://dx.doi.org/10.2139/ssrn.3578311> accessed 14 June 2024.

³⁶ Bigda-Wójcik (n 5).

³⁷ ibid.

³⁸ ibid.

Regardless, such licensing practices are often upheld as the sole viable methos for the circulation of content online.³⁹ Based on the same model, services such as Netflix and Hulu etc., aim to offer continuous access to digital content as long as their users regularly pay a fixed subscription fee.⁴⁰

Concerns of piracy and copyright infringement have prompted copyright holders to push for measures to curb potential misuse, including the adoption of Digital Rights Management (DRM) technologies and End User License Agreements (EULAs).⁴¹ However, these tools have faced criticism for limiting the rights of the consumers and impeding innovation.⁴² The concept of exhaustion has diminished greatly in its relevance, and the longstanding right and desire of ownership has been substituted by access-based agreements affectively allowing the copyright holders total and complete control over all downstream activities.⁴³

Copyright laws play a crucial role in promoting culture, education, and access to technology and it is important to reimagine the concept of copyright exhaustion to be able to achieve a better balance between the opposing rights of the creators and the consumers with regards to any content in the digital world.

2.2. Case Law Analysis

2.2.1. Exhaustion in the Jurisprudence of CJEU

The CJEU's decision in the UsedSoft case upheld the principle of copyright exhaustion in relation to computer programs downloaded along with a license agreement.⁴⁴ Employing a teleological

³⁹ ibid.

⁴⁰ ibid.

⁴¹ ibid.

⁴² ibid.

⁴³ ibid.

⁴⁴ UsedSoft GmbH v Oracle International Corp (n 13).

approach, it was decided that the act of downloading a copy and obtaining a perpetual license was holistically a single act that transferred the ownership of the said program.⁴⁵ It emphasized that labeling the transaction as a license rather than a sale is not sufficient to circumvent exhaustion.⁴⁶

Pursuant to this ruling, concerns remained regarding its applicability to other works available for download under the InfoSoc Directive⁴⁷. The Court highlighted differences between the Software Directive and the InfoSoc Directive, highlighting that the Software Directive is a special law. The judgement was quite ambiguous and that led to many different interpretations of the rule by different courts in the EU in considering the application of the UsedSoft principle to other kinds of digital media.⁴⁸

2.2.2. UsedSoft v Oracle

In UsedSoft, Oracle sued the German corporation UsedSoft for reselling used software licenses.⁴⁹ Oracle distributed its software both on physical media and through internet downloads, with 85% of users choosing the latter.⁵⁰ Oracle's End User License Agreements (EULAs) specified that users received a non-exclusive and a non-transferable right to use the software internally and indefinitely, without transferring ownership.⁵¹ UsedSoft bought portions of volume licenses where the original purchasers had not fully utilized the available installations, directing clients to download the software from Oracle's website.⁵² UsedSoft launched a resale offer in 2005, backed by certificates validating the original purchase. Oracle brought legal proceedings against this

⁴⁵ Bigda-Wójcik (n 5).

⁴⁶ ibid.

⁴⁷ Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society 2001.

⁴⁸ Bigda-Wójcik (n 5).

⁴⁹ UsedSoft GmbH v Oracle International Corp (n 13) 97–102.

⁵⁰ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁵¹ Ibid., para. 23.

⁵² Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

practice.⁵³ The trial court and the appellate court both ruled in favor of Oracle.⁵⁴ The German Federal Court of Justice (Bundesgerichtshof, BGH) referred some questions to the European Court of Justice (ECJ), seeking clarification on whether subsequent acquirers of a software license who had not signed a EULA could rely on the exhaustion doctrine, and whether this doctrine applied to digitally downloaded software.⁵⁵

The ECJ asserted that under Article 4(2) of the Software Directive, the distribution right exhausts upon the first sale of the software within the European Economic Area (EEA), regardless of whether the sale was via physical media or an internet download.⁵⁶ The ECJ disagreed with Oracle's argument that the EULA constituted a mere license rather than a sale, determining that the combined act of downloading the software and signing the EULA constituted an indivisible transaction tantamount to a sale.⁵⁷ Therefore, the doctrine of exhaustion applied to downloaded software.⁵⁸ The court also concluded that the exhaustion doctrine applied to both tangible and intangible copies of software, emphasizing that digital downloads were equivalent to physical copies for legal purposes.⁵⁹

The ECJ also dismissed Oracle's argument regarding updates transforming the software into a new copy, clarifying that updates under a maintenance agreement are integral to the original software and do not alter the applicability of the exhaustion doctrine.⁶⁰ However, the ECJ upheld Oracle's stance on volume licenses, stating that they must be resold as a complete block.⁶¹

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- 55 ibid.
- ⁵⁶ ibid.
- ⁵⁷ ibid.
- ⁵⁸ ibid.

⁶⁰ ibid.

⁵³ ibid.

⁵⁴ ibid.

⁵⁹ ibid.

⁶¹ ibid.

The BGH subsequently noted that the ECJ's interpretation of sale did not infringe on Member States' property laws and confirmed that the EU could extend the exhaustion doctrine to digital copies under the WCT.⁶² The BGH emphasized that Oracle must receive appropriate remuneration and UsedSoft must demonstrate that resold licenses were perpetual, maintenance agreements were active, and the original software had been deactivated on previous users' computers⁶³.

2.2.3. Post UsedSoft Cases

The UsedSoft ruling by the BGH did not resolve all questions about digital exhaustion under German copyright law⁶⁴. Examining subsequent case law reveals how German courts applied the ECJ and BGH's holdings and whether these rulings serve as precedent.

In UsedSoft III, Adobe had concluded EULAs with educational institutions, making software available for download from its website.⁶⁵ The defendant purchased individual licenses for Adobe's Creative Web Premium and resold some licenses to UsedSoft. In 2012, the OLG Frankfurt am Main ruled that the distribution right of the software copies had exhausted, legitimizing the resale since the total number of licenses remained unchanged.⁶⁶

The BGH affirmed this decision in 2014, reiterating that the distribution right exhausts upon the authorized sale by the right holder, regardless of whether the software was delivered on a tangible medium or downloaded.⁶⁷ The key factor is the authorization of the original distribution, nullifying EULA limitations on transferability for secondary acquirers.⁶⁸ The BGH dismissed the plaintiff's

⁶² ibid.

⁶³ Ibid., para. 33.

⁶⁴ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁶⁵ ibid.

⁶⁶ OLG Frankfurt, 18122012 - 11 U 68/11 [2012] OLG Frankfurt 11 U 68/11 279–285.

⁶⁷ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁶⁸ BGH, 11122014 - I ZR 8/13 [2014] BGH I ZR 8/13.

argument that resale considerations should impact the original pricing, emphasizing that the value assessment at first sale is sufficient.⁶⁹ It also clarified that volume licenses cannot be split but the resale of individually purchased licenses, as in this case, is permissible.

Another decision followed in the Green-IT case.⁷⁰ Here, the defendant lawfully purchased Symantec's Norton 360, including a tangible data medium and a license key, from official distributors.⁷¹ The defendant resold the license keys, directing buyers to download the relevant connected software from Symantec's website, with an option to upgrade to the current version of the software.⁷² The BGH applied the doctrine of exhaustion, asserting that the first lawful sale allowed the plaintiff to set a fair price.⁷³ The court ruled that the physical transfer of the data carrier was irrelevant, as long as the software copy was accessible online and the license period allowed full use of the program. It also confirmed that the plaintiff could not restrict the resale of legally sold copies, granting future buyers access to software upgrades.⁷⁴ The defendant, however, must ensure that the physical copies are destroyed or rendered useless.⁷⁵

In both UsedSoft III and Green-IT, the BGH followed the principles set out in the initial UsedSoft rulings. These decisions advanced the case law by confirming that the exhaustion doctrine applies to license key resales, even if the software was initially available on tangible media but was later downloaded.⁷⁶

⁶⁹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁷⁰ BGH, 19032015 - I ZR 4/14 [2015] BGH I ZR 4/14.

⁷¹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁷² ibid.

⁷³ ibid.

⁷⁴ ibid.

⁷⁵ ibid.

⁷⁶ ibid.

2.2.4. Tom Kabinet

The Tom Kabinet platform facilitated the sale of e-books uploaded by individual users.⁷⁷ In lawsuits brought against Tom Kabinet by the Dutch Publishers Association and the General Publishers Group, the lower court initially rejected the injunction request, being uncertain regarding the applicability of UsedSoft to e-books.⁷⁸ The Hague court referred the case to the CJEU for a ruling on the alleged infringements of Dutch law by the application of the decision in UsedSoft on e-books.⁷⁹

The CJEU emphasized that the distribution right pertains to "fixed copies that can be put into circulation as tangible objects".⁸⁰ However, the CJEU distinguished between software and traditional works, maintaining that the exhaustion principle applied to digital copies of software due to their functional equivalence but not to e-books.⁸¹

This distinction was supported by the Court's view that software becomes outdated with updates, while files like e-books do not.⁸² The CJEU ruled that Tom Kabinet's actions constituted acts of communication, protected books were made available, and the platform's was accessible to the public.⁸³ The Court's interpretation of the InfoSoc Directive in Tom Kabinet further heightened the inconsistencies in the copyright framework, highlighting the need for a reevaluation in the digital age.⁸⁴ In summary, the Tom Kabinet case underscores the need for a reevaluation of copyright

⁷⁷ Bigda-Wójcik (n 5).

⁷⁸ Nederlands Uitgeversverbond and Groep Algemene Uitgevers v Tom Kabinet Internet BV and Others (n 14).

⁷⁹ Bigda-Wójcik (n 5).

⁸⁰ Nederlands Uitgeversverbond and Groep Algemene Uitgevers v Tom Kabinet Internet BV and Others (n 14) para 40.

⁸¹ Bigda-Wójcik (n 5).

⁸² ibid.

⁸³ ibid.

⁸⁴ Caterina Sganga, 'A Plea for Digital Exhaustion in EU Copyright Law' (2018) 9(3) JIPITEC, 213 https://papers.ssrn.com/abstract=3270055> accessed 14 June 2024.

frameworks in the digital age to ensure a fair balance between rightsholders and digital consumers.⁸⁵

2.2.5. ReDigi Case

Following the UsedSoft ruling, the Southern District of New York ruled on a similar issue in the ReDigi case.⁸⁶ ReDigi allowed users to upload legally purchased music files to a Cloud Locker and resell them, ensuring files were erased from the source computer upon upload. Capitol Records sued ReDigi, claiming the migration process involved unauthorized reproductions and therefore a breach of the right of reproduction.⁸⁷ The court ruled against ReDigi, stating that digital transfers involved new reproductions and did not fall under the first-sale doctrine, as it covers redistribution, not reproduction. The court rejected ReDigi's fair use defense, noting it only applies to direct infringements, not ReDigi's indirect actions. The court also dismissed the first-sale defense, arguing the transfer involved creating new phonorecords, thus not protected by the first-sale doctrine.⁸⁸ The debate in ReDigi further underscores the need to balance copyright protection with user rights in the digital age.⁸⁹

2.2.6. Resale of E-Books and Audio Books

One of the very first significant decisions regarding the resale of audiobooks was issued in 2011 by the OLG Stuttgart.⁹⁰ The court concluded that downloading an audiobook from a shop on the web did not exhaust the right of distribution because no ownership transfer of a tangible copy of

⁸⁵ Bigda-Wójcik (n 5).

⁸⁶ Capitol Records, LLC v. ReDigi Inc., 1:12-Cv-95 (RJS) (n 8).

⁸⁷ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁸⁸ Ibid., 649.

⁸⁹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁹⁰ ibid.

the work had occurred.⁹¹ The web shop's general terms and conditions provided a license to use the audiobook while prohibiting its resale. Despite terms like "purchase", "purchase price", and "basket" being used on the website, the court found these terms did not indicate an actual transfer of ownership.⁹² A reasonable purchaser would understand these terms functionally and recognize the prohibition on resale within the contractual terms.⁹³ The court also justified its decision by noting that digital content can be easily reproduced, thus copyright holders should retain control over further uses of their content.⁹⁴

In a different case, a consumer protection association sued an online bookstore to enforce the applicability of the exhaustion doctrine on audiobooks downloaded from the defendant's website. The trial court denied the motion⁹⁵, and the OLG Hamm affirmed the decision.⁹⁶ The OLG Hamm found that an average consumer would take the license as to providing a limited, non-transferable right to use the audiobooks.⁹⁷ The court concluded that data transmission was making content available to the public rather than distribution.⁹⁸ The court relied on existing case law, including the OLG Stuttgart ruling, and the legislative rationale behind the making available to the public right.⁹⁹ The court distinguished the case from UsedSoft, noting that the latter involved computer programs regulated by specific EU and German laws.¹⁰⁰ Similarly, the OLG Hamburg upheld that general terms prohibiting the resale of e-books and audiobooks are valid.¹⁰¹ The court affirmed that the doctrine of exhaustion does not apply to digital content, meaning original acquirers cannot

- ⁹³ ibid.
- ⁹⁴ ibid.

⁹¹ OLG Stuttgart, 03112011 - 2 U 49/11 [2011] OLG Stuttgart 2 U 49/11.

⁹² Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁹⁵ *LG Bielefeld*, 05032013 - 4 O 191/11 [2013] LG Bielefeld 4 O 191/11 688–694.

⁹⁶ OLG Hamm, 15052014 - I-22 U 60/13 [2014] OLG Hamm I-22 U 60/13 [853-863].

⁹⁷ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

⁹⁸ ibid.

⁹⁹ Ibid 856–858.

¹⁰⁰ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁰¹ ibid.

resell these digital items.¹⁰² Case law remains inconsistent as some courts uphold restrictive EULAs, while others argue against the enforceability of terms not clearly presented to end users.¹⁰³

2.2.7. Resale of Audiovisual Works

The market concerning audiovisual content has traditionally relied on the sale of tangible media (video tapes, DVDs, CDs) or streaming via the Internet.¹⁰⁴ The purchase of digital copies has declined in recent years. Currently, online rental services dominate the market and have significant potential for further expansion.¹⁰⁵ There is almost no case law on the application of the doctrine of exhaustion to the resale of these copies.

In the VidAngel case, major Hollywood studios sued a start-up that offered over 2,500 movies and TV episodes for purchase on its website, including more than 80 works owned by the plaintiffs.¹⁰⁶ VidAngel purchases these contents in DVD format, encrypts them using commercially available software, and assigns each a unique barcode within an inventory management database.¹⁰⁷ The DVDs are then broken into over a thousand fragments and tagged for around 100 types of potentially objectionable content. VidAngel claims this tagging complies with the Family Home Movie Act, which permits making imperceptible limited portions of offensive video content.¹⁰⁸

Customers can purchase any movie for \$20 on VidAngel's website. After purchase, VidAngel either retains the DVD while removing the digital copy from the database or ships the DVD to the customer.¹⁰⁹ After viewing, customers can resell the content to VidAngel for a further reduced

105 ibid.

¹⁰² OLG Hamburg, 04122014 - 10 U 5/11 [2014] OLG Hamburg 10 U 5/11 [361–365].

¹⁰³ DSC Communications Corp. v. Pulse Communications, Inc., 170 F.3d 1354.

¹⁰⁴ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁰⁶ Disney Enterprises, Inc. v. VidAngel, Inc., No. 16-56843 (9th Cir. 2017).

¹⁰⁷ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁰⁸ 17 U.S. Code § 110 - Limitations on Exclusive Rights: Exemption of Certain Performances and Displays' (*LII / Legal Information Institute*) https://www.law.cornell.edu/uscode/text/17/110> accessed 14 June 2024.

price, decreasing by \$1 per night for standard definition copies and \$2 per night for high-definition copies, with the lowest resale price being \$1 or \$2 for SD and HD copies, respectively.¹¹⁰

The studios allege that VidAngel infringed their reproduction and public performance rights by copying the decrypted DVDs to the inventory database and offering these contents via streaming.¹¹¹ The studios argue that the Family Home Movie Act does not shield VidAngel from infringement claims, as it only allows modifications to lawful copies, whereas the decrypted movies are illegal.¹¹² They also assert that VidAngel's practices do not constitute fair use, emphasizing that the service is commercial, non-transformative, involves expressive works, and negatively impacts the studios' distribution market.¹¹³

The District Court for the Central District of California agreed with the plaintiffs and granted a preliminary injunction. Although this case primarily concerns reproduction and public performance rights, the DMCA, and the Family Home Movie Act, it also has implications for the first-sale doctrine.¹¹⁴ VidAngel claims it lawfully acquired the DVDs and resold them to its customers.¹¹⁵ However, the court order did not address the first-sale doctrine, which could be tested at the jury trial.

Such a defense seemingly lacks merit. Despite the lawful purchase and sale of tangible DVDs, VidAngel also streams videos, constituting public performance under USCA (and 'making available to the public' under EU law).¹¹⁶

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¹¹⁰ Disney Enterprises, Inc. v. VidAngel, Inc., No. 16-56843 (9th Cir. 2017)'.

¹¹¹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹¹² ibid.

¹¹³ ibid.

¹¹⁴ ibid.

¹¹⁵ ibid.

¹¹⁶ ibid.

2.3. License versus Sale

In UsedSoft, the ECJ concluded that a license might be treated as a sale if the right to use a computer program lasts indefinitely "in return for payment of a fee designed to enable the copyright holder to obtain a remuneration corresponding to the economic value of the copy of the work of which he is the proprietor."¹¹⁷ Furthermore, merely calling a contract a license is not enough "to circumvent the rule of exhaustion and divest it of all scope."¹¹⁸

The ECJ's holding has been criticized by several commentators. Christopher Stothers noted that it is not the ECJ's task to limit the available remuneration of right holders.¹¹⁹ He claimed that "intellectual property normally provides an exclusive right (an absolute right to exclude others from using the intellectual property) and just a right to 'reasonable' royalties.¹²⁰ The actual value of the rights is then determined by negotiation in the marketplace."¹²¹ At the same time, the ECJ did not limit the freedom of right holders to negotiate the value of their rights. What the ECJ said is that the right of distribution is exhausted as soon as the protected subject matter is put into circulation by or with the consent of the right holder in exchange for a reasonable remuneration.¹²² Elsewhere, the ECJ noted that rights holders might demand reasonable remuneration rather than the highest possible remuneration. It is neither a baseless argument nor irrational to rely on the reward theory by the ECJ.¹²³

¹²² Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

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¹¹⁷ UsedSoft GmbH v Oracle International Corp (n 13) para 49.

¹¹⁸ ibid 50.

¹¹⁹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹²⁰ Christopher Stothers, *Parallel Trade in Europe: Intellectual Property and Competition Law* (1st edition, Hart Publishing 2007).

¹²¹ Christopher Stothers, *Parallel Trade in Europe: Intellectual Property and Competition Law* (1st edition, Hart Publishing 2007), 790.

¹²³ ibid.

In a more interesting dimension of the ECJ's ruling, the ECJ defined a sale as the transfer of ownership rights in tangibles or intangibles.¹²⁴ Such a right lacks merit in several legal systems. The meaning of property is set by the legislation of the respective countries.¹²⁵ For example, property interests exist on intangibles in Austria and the Netherlands¹²⁶. German¹²⁷, Austrian¹²⁸, and Dutch courts accepted that computer programs can be sold without the transfer of ownership over the intangible data incorporated in the software.¹²⁹ On the other hand, the German audiobook decisions have taken the stance that the doctrine of exhaustion can only prevail where the distribution involves the transfer of ownership of the protected subject matter.¹³⁰ As audiobooks are digital data, this requirement cannot be met.¹³¹ Oracle unsuccessfully claimed in front of the BGH that the ECJ intruded into Germany's freedom to regulate its property system. The words of the BGH, according to which the ECJ did not determine the definition of ownership but rather declared the transfer of ownership as a sale, fail to convince.¹³² The ECJ expressly stated that a sale means that someone "transfers to another person his rights of ownership in an item of tangible or intangible property belonging to him."¹³³

In the US, the Uniform Commercial Code states that contracts or agreements are those relating to the present or future sale of goods.¹³⁴ The exclusive economic rights under copyright law are,

¹²⁴ UsedSoft GmbH v Oracle International Corp (n 13) para 42,49.

¹²⁵ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹²⁶ Péter Mezei, *Copyright Exhaustion: Law and Policy in the United States and the European Union* (Cambridge University Press, 2018).

¹²⁷ BGH, 22121999 - VIII ZR 299/98 [1999] BGH VIII ZR 299/98 [1–26].

¹²⁸ ADVOKAT Unternehmensberatung, 'Rechtssatz RS OGH 2000/5/23 4Ob30/00s - JUSLINE Österreich' paras 249–253

¹²⁹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹³⁰ ibid.

¹³¹ OLG Stuttgart, 03.11.2011 - 2 U 49/11 (n 91) para 351; OLG Hamm, 15.05.2014 - I-22 U 60/13 (n 96) paras 861–862.

¹³² Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹³³ UsedSoft GmbH v Oracle International Corp (n 13) para 42.

¹³⁴ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

however, subject to ownership and can be transferred by the owner of the rights. Sadly, ReDigi did not address the license versus sale dichotomy directly. Although it is probable that the court treated the acquisition of files from iTunes as a sale rather than a license.¹³⁵ The court noted that "a ReDigi user owns the phonorecord that was created when she purchased and downloaded a song from iTunes to her hard disk."¹³⁶

Before ReDigi, an important ruling was made in Aftermath. This case focused on the exploitation of rights to the sound recordings of Marshall B. Mathers III (aka Eminem).¹³⁷ FBT Records, the original sound recording producer, contracted with Aftermath Records for the sale of the sound recordings via multiple channels, such as iTunes, as well as more generally as ringtones.¹³⁸ Aftermath was allowed to sell the tracks either as "single records" or as copies produced from a licensed master copy. The royalty rate for each sold record was 12–20 percent, while Aftermath owed 50 percent for each copy produced from a master.¹³⁹ Therefore, the key issue in the case was whether Aftermath owed FBT Records 12–20 percent or 50 percent.¹⁴⁰

The district court favored the defendant's submissions and ordered payment of the lower level of royalties. The Ninth Circuit reversed the decision and concluded that Aftermath licensed a single master copy to its contractors, which could have been reproduced in unlimited numbers.¹⁴¹ Consequently, iTunes did not acquire ownership interests over the master copy and any further

¹³⁵ ibid.

¹³⁶ Capitol Records, LLC v. ReDigi Inc., 1:12-Cv-95 (RJS) (n 8), 655.

¹³⁷ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹³⁸ 'F.B.T. Productions, LLC v. Aftermath Records, 827 F. Supp. 2d 1092 | Casetext Search + Citator'

https://casetext.com/case/fbt-prods-llc-v-records accessed 14 June 2024.

¹³⁹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁴⁰ F.B.T. Productions, LLC v. Aftermath Records., 827 F. Supp. 2d 1092, 1.

¹⁴¹ 'F.B.T. Productions, LLC v. Aftermath Records, 827 F. Supp. 2d 1092 | Casetext Search + Citator' (n 138).

copies of it.¹⁴² Unfortunately, there is no similar ruling in this area, as other cases based on similar grounds were settled out of court.

In conclusion, it can be stated that both legislation and case law have been quite conservative in their approach while considering the application of the doctrine of copyright exhaustion on different forms of digital mediums.¹⁴³

2.4. Significance of Digital Exhaustion

The first question to consider is whether the concept of digital exhaustion is even relevant in the modern digital environment or is it merely hype. The doctrine of exhaustion originally aimed to balance personal property rights with the economic interests of copyright holders.¹⁴⁴ However, the concept of ownership has evolved with the technological revolution. The sale and proprietary interest in digital content have been recognized in several countries, leading consumers to desire ownership and redistribution rights over intangible digital copies.¹⁴⁵ This demand extends to cultural institutions like public libraries, which aim to disseminate knowledge and information.¹⁴⁶ Without a digital exhaustion doctrine, libraries cannot participate in downstream digital commerce and must invest heavily in nontransferable digital copies, potentially threatening their relevance in the modern era.¹⁴⁷

Commentators have frequently noted that licensing agreements, often framed as agreements for services, are overshadowing sales contracts, especially online.¹⁴⁸ Most licensors offer temporary

¹⁴² Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁴³ ibid.

¹⁴⁴ ibid.

¹⁴⁵ ibid.

¹⁴⁶ Mezei, (n 45).

¹⁴⁷ ibid.

¹⁴⁸ Mezei, (n 16).

use of content, such as through subscription models from Netflix, Spotify, Steam, and Amazon's Kindle Unlimited. Additionally, many service providers are shifting to cloud-based models, granting temporary access to content in exchange for periodic payments without providing permanent copies.¹⁴⁹ This "software as a service" model allows rights holders to bypass the doctrine of exhaustion. As the streaming model does not involve any transfer of ownership, users retain nothing post-subscription.¹⁵⁰ Despite the trend toward subscription-based cloud services, a significant number of users still value owning permanent copies of copyrighted works.¹⁵¹ Furthermore, these services often struggle with profitability and lack universal rights holder support, raising questions about their long-term viability.

The debate surrounding the concept of digital exhaustion remains unsettled, as seen in ECJ rulings like Svensson¹⁵², BestWater¹⁵³, and AKM¹⁵⁴. These decisions created a new substantive law in the EU where the right of making available to the public is exhausted once the protected material is made accessible online.¹⁵⁵ In Svensson, the ECJ ruled that hyperlinked content made available online does not require new authorization if it targets the same public as the initial communication of the same content.¹⁵⁶ This was reaffirmed in BestWater despite the content being uploaded without rights holder consent, leading to legal controversy. Courts in the UK and Germany have

¹⁴⁹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁵⁰ ibid.

¹⁵¹ ibid.

¹⁵² Nils Svensson and Others v Retriever Sverige AB [2014] ECJ Case C-466/12.

¹⁵³ BestWater International GmbH v Michael Mebes and Stefan Potsch [2014] ECJ Case C-348/13.

¹⁵⁴ Staatlich genehmigte Gesellschaft der Autoren, Komponisten und Musikverleger registrierte Genossenschaft mbH (AKM) v Zürsnet Betriebs GmbH [2017] ECJ Case C-138/16.

¹⁵⁵ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁵⁶ Nils Svensson and Others v Retriever Sverige AB (n 152).

resisted following BestWater, emphasizing that unauthorized content access does not fit into the new public theory.¹⁵⁷

The crux of the matter is that the pursuit of permanent content ownership and the potential for alienation still remain relevant in the modern age which bears witness to the continued relevance of the doctrine of exhaustion, whereas the evolving ECJ case law on digital exhaustion indicates that its boundaries are still not clearly defined in the EU.¹⁵⁸

2.5. Potential Effects of a Digital Exhaustion Doctrine

The notion of a digital exhaustion doctrine, alongside the concept of virtual property (such as digital files, license keys, NFTs), encapsulates how modern copyright law should adapt to current societal realities.¹⁵⁹ Digital exhaustion and virtual property have gained attention, highlighting their societal importance. This perspective is evident in the business models of ReDigi, UsedSoft, and other digital secondhand marketplaces.¹⁶⁰ Any discussion regarding a digital exhaustion doctrine should also consider the interests of rights holders. It should not make any downstream commerce related to digital copies much easier than the first-sale doctrine allows for tangible copies.¹⁶¹

Digital exhaustion could also have significant negative economic effects. Digital copies, being effectively equivalent to originals, can be reused illegally, thereby reducing the need for original purchases and harming the interests of rights holders and intermediaries.¹⁶² This could diminish

¹⁵⁷ Paramount Home Entertainment International Ltd & Others v British Sky Broadcasting Ltd & Others [2014] EWHC 937.

¹⁵⁸ Staatlich genehmigte Gesellschaft der Autoren, Komponisten und Musikverleger registrierte Genossenschaft mbH (AKM) v Zürsnet Betriebs GmbH (n 154) paras 28–29.

¹⁵⁹ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁶⁰ ibid.

¹⁶¹ ibid.

¹⁶² ibid.

the incentives for innovation and increase the price of original copies to compensate for the loss of sales.

The WCT's test consisting of three steps implies that any reselling under the exhaustion doctrine should not be affected by the form of the subject of the sale (digital or analog).¹⁶³ If the form were relevant, rights holders could monopolize downstream commerce unfairly. Second, secondary markets typically offer lower prices, benefiting consumers with less purchasing power and making works more accessible.¹⁶⁴ Third, although it has not yet been empirically proven, the resale of digital goods could positively impact the economy by promoting reinvestment into the copyright ecosystem.¹⁶⁵ This trend mirrors the shift from physical data carriers to digital subscriptions, as seen in the music industry's transition highlighted by the IFPI's Global Music Report 2017.¹⁶⁶ Fourth, the doctrine of exhaustion allows for the potential of rights holders to be remunerated once, after the first sale.¹⁶⁷ This principle was upheld in cases like UsedSoft¹⁶⁸ and Tom Kabinet¹⁶⁹, suggesting no valid reason to restrict this theory in the digital realm. Fifth, voluntary remuneration systems, like those by ReDigi or Tom Kabinet, could mitigate negative effects on downstream commerce, demonstrating a balanced approach to rights holders' interests.¹⁷⁰

A primary argument against digital exhaustion is the potential for infinite reproduction of digital content at effectively zero cost, leading to widespread unauthorized copying. While digital content can be easily duplicated, the desire to possess culturally valuable goods persists amongst humans, regardless of the format of the good and additionally, digital content also degrades over time due

¹⁶³ ibid.

¹⁶⁴ ibid.

¹⁶⁵ ibid.

¹⁶⁶ Mezei, (n 45).

¹⁶⁷ ibid.

¹⁶⁸ UsedSoft GmbH v Oracle International Corp (n 13).

¹⁶⁹ Nederlands Uitgeversverbond and Groep Algemene Uitgevers v Tom Kabinet Internet BV and Others (n 14).

¹⁷⁰ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

to evolving technology which slowly and sometimes rapidly makes older formats practically obsolete.¹⁷¹ This durability of digital copies should not, by itself, preclude a digital exhaustion doctrine.

In conclusion, a digital exhaustion doctrine is not only realistic but also necessary to balance the interests of users and rights holders in the digital age.¹⁷² Its alignment with contemporary technological, social, and legal trends can be achieved to ensure fair treatment and fostering of innovation in the copyright ecosystem.¹⁷³

¹⁷¹ ibid.

¹⁷² ibid.

¹⁷³ ibid.

3. NFTS AND INTELLECTUAL PROPERTY

3.1. De-Centralized Intellectual Property

A Non-Fungible Token (NFT), as discussed hereinabove, is a type of a virtual token that is created by a computer code and coupled with a smart contract, identifying the token as a unique one or a "non-fungible" one, on a type of Digital Ledger Technology called a blockchain which is a peerto-peer network that operates as a permanent and decentralized public ledger.¹⁷⁴ These tokens, essentially lines of code, are obviously not tangible but serve to digitally represent various assets, such as artwork or other items of value. Each NFT possesses a unique identifier known as a token ID, rendering it non-fungible or distinct from all other such tokens.¹⁷⁵ In contrast with cryptocurrencies like Bitcoin that are fungible, meaning one unit is perfectly replaceable with another.

While considerable hype has followed NFTs in the context of digital artwork sales reaching exorbitant sums, their actual and professed utility extends far beyond the art world.¹⁷⁶ NFTs carry the potential to be programmed in a way to represent an array of assets, from collectibles and financial instruments to intellectual property rights and even virtual real estate. Moreover, the versatility of NFTs allows them to encapsulate virtually any concept or idea, proposing endless possibilities for their application.¹⁷⁷ In theory, NFTs provide a means to "tokenize" virtually any conceivable subject matter, limited only by human imagination. Essentially, anything that can be

¹⁷⁴ Sharma, (n 1).

¹⁷⁵ Bigda-Wójcik (n 5).

¹⁷⁶ ibid.

¹⁷⁷ Iterators, 'What Are NFTs? Everything You Should Know about Non-Fungible Tokens' (Iterators, 2021) <https://perma.cc/7YVB-97RG> accessed 14 June 2024; Karly A. Kessler, 'NFTs Are Reshaping Artists' IP Rights' (Bloomberg Law, 2021) <https://perma.cc/TYA5-GVBH> accessed 14 June 2024; Saniya More, 'The Block: This Artist Is Tokenizing His Body, Selling Tattoo "lots" for Stablecoins' (The Block, 2020) <https://perma.cc/AH8K-9DAG> accessed 14 June 2024.

owned or represented digitally can be transformed into a virtual token or NFT.¹⁷⁸ One notable advantage of this process is the establishment of a permanent, immutable public record, ensuring transparency and authenticity in transactions involving these digital assets and the real-world assets attached therewith.

NFTs have not emerged out of nowhere as they are integral to the broader transformation of the Internet, often referred to as Web3.¹⁷⁹ This evolution of the Web can be segmented into three distinct phases, each marked by increasing levels of empowering the end user, the human.¹⁸⁰ While specific dates may vary, the following periods provide a rough estimation.

From 1989 to 2005, Web1, characterized as "read-only" ("RO"),¹⁸¹ offered users a predominantly static Internet experience, limited to consuming content on web pages. The interactive capabilities were minimal, if any, and creating personal websites was extremely complex and therefore, uncommon.¹⁸² Around 2004, Web2 emerged, introducing a more interactive experience termed "read-write" ("RW"). This phase allowed users not only to consume but also to create content, leading to the proliferation of user-generated content (UGC) across various platforms such as blogs, social media networks, and image-sharing sites.¹⁸³ This era witnessed a surge in online participation, enabling virtually anyone with Internet access to contribute content, whether through social media posts or blog entries.¹⁸⁴

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¹⁷⁸ Bigda-Wójcik (n 5).

¹⁷⁹ Chris Dixon, 'Why Web3 Matters' (*a16z crypto*, 2021) < https://a16zcrypto.com/posts/article/why-web3-matters/> accessed 14 June 2024; Ethereum.org, 'Web2 vs Web3' (*ethereum.org*, 2023) < https://ethereum.org/en/developers/docs/web2-vs-web3/> accessed 14 June 2024.

¹⁸⁰ Lawrence Lessig, Code and Other Laws of Cyberspace (Basic Books 1999).

 ¹⁸¹ Nupur Choudhury, 'World Wide Web and Its Journey from Web 1.0 to Web 4.0' (2014) Vol 5(6) International Journal of Computer Science and Information Technologies, 5.
 ¹⁸² ibid.

¹⁸³ ibid.

¹⁸⁴ 'Web 2.0', (*Wikipedia*, 2024) https://en.wikipedia.org/w/index.php?title=Web_2.0&oldid=1228284444 accessed 14 June 2024.

During Web2, tools facilitating a "remix" culture emerged, enabling users to remix and build upon existing artistic creations, as described by Lessig.¹⁸⁵ This period saw the rise of the Creator Economy, where individuals could leverage digital platforms to create, share, and monetize their content in unprecedented ways.¹⁸⁶ Web3 signifies the transition of the Web towards a decentralized model facilitated by blockchain technology and NFTs.¹⁸⁷ This shift empowers Internet users to assume ownership and engage in activities free from the control or censorship of large technology corporations or Internet platforms.¹⁸⁸ Chris Dixon articulated this concept by stating that Web3 addresses the fundamental issue of centralized networks, where the value is concentrated within a single company, often leading to conflicts with users and partners.¹⁸⁹ NFTs serve as a primary mechanism for the decentralization of Web3, enabling individuals to assert ownership and control over digital assets and experiences in a far more distributed and secure manner.¹⁹⁰

As in the case of decentralized finance, the objective of Bitcoin or cryptocurrency is to establish a currency that is immune to any potential manipulation by central authorities such as the Federal Reserve or central banks.¹⁹¹ In the realm of copyright, Decentralized Intellectual Property seeks a comparable decentralization.¹⁹² As discussed previously, legal scholars have long observed how the copyright system tends to favor the financial interests of dominant copyright industries,

¹⁸⁵ Jim Parsons, 'Remix: Making Art and Commerce Thrive in the Hybrid Economy' (2010) 7(1) Journal of Teaching and Learning, 69–70. <u>http://dx.doi.org/10.22329/jtl.v7i1.679</u> accessed 14 June 2024.

¹⁸⁶ Kyle Chayka, 'What the "Creator Economy" Promises—and What It Actually Does' (*The New Yorker*, 2021) <https://www.newyorker.com/culture/infinite-scroll/what-the-creator-economy-promises-and-what-it-actually-does accessed 14 June 2024.

¹⁸⁷ 'Web 2.0' (n 184).

¹⁸⁸ Choudhury (n 181).

¹⁸⁹ Dixon (n 179).

¹⁹⁰ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁹¹ Satoshi Nakamoto, 'Bitcoin Open Source Implementation of P2P Currency' (*P2P Foundation*, 2019) https://p2pfoundation.ning.com/forum/topics/bitcoin-open-source accessed 14 June 2024.

¹⁹² Fabian Schär, 'Decentralized Finance: On Blockchain- and Smart Contract-Based Financial Markets' (2021) 103 Review https://research.stlouisfed.org/publications/review/2021/02/05/decentralized-finance-on-blockchain-and-smart-contract-based-financial-markets> accessed 11 April 2024.

intermediaries, and gatekeepers over those of individual artists. While this alignment may be logical from a macroeconomic perspective, it offers very little solace to individual artists in any given economy.¹⁹³ Decentralized Intellectual Property aims to develop an IP protection framework that directly serves the interests of individual artists rather than catering primarily to industry gatekeepers.¹⁹⁴

As a foundational principle for understanding how NFTs are reshaping Intellectual Property (IP) lies in recognizing that an NFT itself represents a novel form of intellectual property—one that did not originate from legislation or court precedent, but rather from computer code and decentralized technology i.e., blockchain.¹⁹⁵ The World Intellectual Property Organization (WIPO) defines "intellectual property" as protections for "creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names, and images used in commerce."¹⁹⁶ Traditionally, we associate intellectual property with protections under patents, copyright, and trademarks, all intended to enable individuals to gain recognition or financial benefit from their inventions or creations, thereby fostering an environment conducive to creativity and innovation.¹⁹⁷

NFTs satisfy all three criteria of intellectual property. Firstly, they are products of the mind virtual tokens or representations of various subject matters, including creative works.¹⁹⁸ For instance, an NFT representing digital artwork serves as a representation of that artwork. Just as the artwork itself is a product of the mind, so is the virtual token.¹⁹⁹ Essentially, the virtual token is an

¹⁹³ AA Dolganin, 'Non-Fungible Tokens (NFT) and Intellectual Property: The Triumph of the Proprietary Approach?' (2021) 2 Digital Law Journal 46.

¹⁹⁴ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁹⁵ Dolganin (n 193).

¹⁹⁶ WIPO, 'What Is Intellectual Property (IP)?' (WIPO) <https://www.wipo.int/about-ip/en/index.html> accessed 14 June 2024.

¹⁹⁷ Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

¹⁹⁸ ibid.

¹⁹⁹ ibid.

imaginative construct—a virtual existence facilitated by a smart contract stored on blockchain alongside a link to the digital file of the artwork.²⁰⁰ This intricate setup is akin to creating a virtual twin or representation of an artwork. Consider painting on a canvas; now envision that the same painting exists in a virtual realm, owned and the ownership documented on blockchain.²⁰¹ Both instances—the painting on canvas and its virtual counterpart on blockchain—are products of the mind. While copyright law protects the tangible expression of the painting (i.e., the canvas), an NFT embodies its digital manifestation, offering a unique form of ownership and representation.²⁰²

Likewise, owners of NFTs possess exclusive rights to exclude, transfer, and utilize or possess the NFTs they own. Once NFTs are generated for their owners and documented on the blockchain, no other entity holds rights to the NFTs unless the owners wish to transfer the same, with the transaction then being authenticated on the blockchain, confirming the new owner's rights to the NFTs.²⁰³ The blockchain code and smart contracts establish the framework for the exclusive rights associated with NFTs.

Secondly, NFTs provide creators with the opportunity to gain recognition or financial rewards from their creations.²⁰⁴ Indeed, for many independent artists, NFTs offer a more effective means of fulfilling the economic objectives of copyright law by providing authors with appropriate financial compensation for their creative endeavors, particularly for digital artists whose works were previously famously undervalued.²⁰⁵ Thirdly, NFTs contribute to the establishment of an IP system

²⁰⁰ Masterclass, 'NFT Art Explained: What Is NFT Art?' (*MasterClass, 2022*)

https://www.masterclass.com/articles/nft-art> accessed 14 June 2024.

²⁰¹ Bigda-Wójcik (n 5).

²⁰² Mezei, 'Digital Exhaustion in the European Union and the US' (n 19).

²⁰³ ibid.

²⁰⁴ ibid.

²⁰⁵ Dolganin (n 193).

by fostering an environment conducive to creativity and innovation.²⁰⁶ There has been a remarkable surge in creativity within a short span, particularly in visual works.

The primary distinction between NFTs and traditional forms of IP, such as copyrights, patents, and trademarks, lies in their origins.²⁰⁷ Traditional IP is established by statutes.²⁰⁸ NFTs, on the other hand, are created and endorsed by blockchain technology rather than the legislators. At the same time, the exclusive rights conferred by blockchain and NFTs are equally robust, if not more so, than those established by statutes.²⁰⁹ Blockchain technology's resilience to hacking further suggests that the exclusive rights associated with NFTs may be more secure and self-enforcing compared to statutory rights, which often necessitate IP owners to be actively watchful in combatting possible infringement, a task that becomes much more challenging on the web.²¹⁰

The substantial volume of NFT transactions in the last few years, reflected in the buying and selling of NFTs, serves as compelling evidence of their undeniable status as intellectual property. In 2021 alone, NFT sales reached approximately \$27 billion.²¹¹ By introducing a new form of intellectual property in the shape of virtual tokens, NFTs have spawned an entirely new market and fundamentally altered the economic and commercial dynamics of art or creative works sold in tokenized form as NFTs.²¹²

²⁰⁶ Bigda-Wójcik (n 5).

²⁰⁷ ibid.

²⁰⁸ BitLaw, 'Common Law Trademark Rights' (*BitLaw*, 2021) <https://www.bitlaw.com/trademark/common.html> accessed 14 June 2024.

²⁰⁹ Bigda-Wójcik (n 5).

²¹⁰ ibid.

 ²¹¹ Joe Sparrow, 'Report: NFT Sales in 2021 Totalled over \$26.9 Billion Worth of Cryptocurrency' (*Music Ally*, 2021)
 http://musically.com/2021/12/07/report-nft-sales-in-2021-totalled-over-26-9-billion/ accessed 14 June 2024.
 ²¹² Bigda-Wójcik (n 5).

3.2. NFTs and Copyright Exhaustion

The InfoSoc Directive distinguishes between the 'non-exhaustible' right of communication to the public, which is stated in Article 3 and relates to the online dissemination of creative works, and the 'exhaustible' right of distribution, which is described in Article 4 for tangible goods.²¹³ Virtual sales of NFTs appear to be outside the purview of traditional distribution rights, and as a result, are likely to avoid the exhaustion principle given this distinction and the Tom Kabinet case's verdict.²¹⁴

According to current CJEU reasoning, a major obstacle to extending copyright exhaustion to the digital sphere is the functional inevitability of producing a new digital copy of the content during the transfer process of that content.²¹⁵ The likelihood that senders may keep original copies after the transfer is the source of this concern.²¹⁶ The issue of piracy is made worse by transactions which increase the chances of illicit replication and unauthorized public distribution such as those concerning e-books and mp3 files.²¹⁷ Sales of digital works as NFTs, on the other hand, give artists a way to trace ownership and confirm authenticity with regard to the particular digital item sold or bought, while also preventing unlawful copying of the same item.²¹⁸ NFTs provide buyers with a sense of ownership over a one-of-a-kind, specially created digital copy of the work.²¹⁹ NFTs are essentially used to record transactions; they function similarly to a physical invoice in this regard.²²⁰ However, it may be argued that NFTs have merged with the underlying works to such

²¹³ Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (n 47).

²¹⁴ Bigda-Wójcik (n 5).

²¹⁵ ibid.

²¹⁶ ibid.

²¹⁷ Perzanowski and Schultz (n 33) 889, 938.

²¹⁸ Bigda-Wójcik (n 5).

²¹⁹ ibid.

²²⁰ Andrés Guadamuz, 'The Treachery of Images: Non-Fungible Tokens and Copyright' (2021) 16(12) Journal of Intellectual Property Law & Practice, < https://doi.org/10.1093/jiplp/jpab152> accessed 14 June 2024.

an extent that they are now considered part of the underlying work.²²¹ Tokens may also be covered by copyright laws if they link to a digital file that contains a copy of the author's creative work.²²²

The limitations imposed by the Tom Kabinet verdict do not appear to have an impact on NFTs (Non-Fungible Tokens), which prioritize the use of distribution rights above communication rights.²²³ After an NFT is sold and then transferred, the copyright holder is no longer in charge of determining how that particular copy of the work is distributed.²²⁴ Similar to tangible works, the new owner of the NFT is free to use, exhibit, and distribute it as they see appropriate.²²⁵ Nonetheless, the owner of the copyright maintains control over how the work is used, including the ability to produce and market more NFTs with copies of the artwork.²²⁶

After buying and acquiring tokens, the consumer's behavior with regards to the token reflects how on-chain and off-chain assets are handled similarly.²²⁷ The idea that NFTs is liable to be treated as personal property is supported by these behaviors. NFTs may now be managed under property rights and inheritance rules, just as tangible personal assets, thanks to this classification.²²⁸ Legislation governing NFT-related technologies ought to take these similar patterns of use into account, according to property related legal frameworks as opposed to the widely used licensing arrangements.229

The existing legal structure appears to favor licensing arrangements, which reduce owners to mere participants and provide rightsholders everlasting control over the use and transfer of a specific

CEU eTD Collection

- ²²³ ibid. ²²⁴ ibid.
- ²²⁵ ibid.

²²⁷ ibid.

²²¹ Bigda-Wójcik (n 5).

²²² ibid.

²²⁶ ibid.

²²⁸ Ibid 1292.

²²⁹ Mezei, (n 14) 1017–1018.

copy, a situation that would not arise in the event of a physical copy sale.²³⁰ The resale of NFTs is governed by the terms and conditions of the platform or smart contract and is covered by freedom of contract due to the lack of digital exhaustion and its apparent inadmissibility un the existing legislative framework.²³¹ Sellers frequently set their own conditions, which may cause the exhaustion process to reach the opposite balance of rights.²³² Only statutory law allowing for digital copyright exhaustion could invalidate, or render unenforceable, any terms of use relating to these NFTs that are breaching the same.²³³

The law, unfortunately, has been unable to keep up. When consumers acquire digital content, such mp3s or e-books, they frequently believe they are obtaining property rights rather than only a limited permission to use the content as they see fit.²³⁴ People anticipate being able to share digital content with others, particularly if it is purchased for unlimited use.²³⁵ All redistribution of the acquired content is, however, usually subject to contractual limitations, which do not extend to fundamental ownership rights like the ability to resell, rent, lend, or duplicate downloaded material, even for personal use.²³⁶

While the Directive delegates the categorization of contracts for digital content to the national legislative bodies, Article 10 safeguards consumer rights by mandating remedies against undue

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²³⁰ Bigda-Wójcik (n 5).

²³¹ ibid.

 ²³² Ioanna Lapatoura, 'Creative Digital Assets as NFTs: A New Means for Giving Artists Their Power Back?' (2021)
 32(6) Entertainment Law Review, 169, 171. <<u>https://discovery.ucl.ac.uk/id/eprint/10181189</u>> accessed 14 June 2024.
 ²³³ Bigda-Wójcik (n 5).

²³⁴ ibid.

²³⁵ ibid.

²³⁶ Peter Rott, 'Download of Copyright-Protected Internet Content and the Role of (Consumer) Contract Law' (2008) 31(4) Journal of Consumer Policy, 441, 446–447. <<u>http://dx.doi.org/10.1007/s10603-008-9081-6</u>> accessed 14 June 2014

End User License Agreement (EULA) restrictions.²³⁷ The Resale Right Directive²³⁸ provides a foundation for regulations, but broadening its application might help both consumers and artists.²³⁹ The ability for consumers to use and distribute digital goods they have purchased without worrying about copyright violation would increase, while artists might directly market their creations as NFTs, possibly generating more income for all stakeholders involved.²⁴⁰

²³⁷ Bigda-Wójcik (n 5).

²³⁸ Directive 2001/84/EC of the European Parliament and of the Council of 27 September 2001 on the resale right for the benefit of the author of an original work of art 2001.

²³⁹ Bigda-Wójcik (n 5).

²⁴⁰ ibid.

4. CONCLUSION

The advent of NFTs is redefining our conventional notions of ownership in the digital realm, compelling us to reconsider the production, collection, and trade of digital assets and in particular digital art. Utilizing blockchain technology, creators can authenticate their works, bestowing them with a level of authenticity and rarity comparable, and at times superior, to physical assets.²⁴¹ This technology not only opens up new revenue streams for artists but also demands a comprehensive reassessment of current copyright laws, particularly the doctrine of copyright exhaustion.²⁴²

With the continued progress relating to technology, further developments are expected, which could provide increasing levels of protection for creators and buyers of digital artworks. However, the existing legal framework remains fraught with ambiguities, complicated further by varied approaches to NFTs across different regions. Given that courts are limited by existing laws and hesitant to extend copyright exhaustion to digital transfers, there is a pressing need for legislative action to create a clearer regulatory structure that explicitly addresses this issue in digital commerce. Such legislative efforts could reduce potential legal liabilities and minimize the chances of copyright disputes arising from the increasing use of NFTs. Proactive legislative measures would offer clear guidance to judges, copyright owners, and consumers, helping them navigate the complexities of NFT resales in a blockchain-driven market with greater certainty. A well-rounded regulatory framework that includes distribution and reproduction rights, along with a resale royalty right for NFTs, would be beneficial for artists in the long term.²⁴³ Establishing a personal property framework for NFT sales would enhance consumer protections, aligning them

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²⁴¹ ibid.

²⁴² ibid.

²⁴³ ibid.

with the copyright exhaustion principle. This would protect buyers from terms that could infringe upon their rights and help courts treat NFT sales as more than mere licenses, ensuring buyers obtain rights akin to those in physical sales. Despite rapid technological advancements, the expectation that NFT transactions on blockchain auction platforms will soon mirror those in the physical world may still be premature.²⁴⁴ Issues such as violations of economic and moral rights and authenticity concerns of NFTs raise questions about whether the benefits of this technology outweigh its potential drawbacks. Addressing these issues is crucial to avoid legal uncertainties and conflicts, and to balance the interests of all parties involved. Only by considering these factors can NFTs truly serve as a solution to the challenges posed by copyright exhaustion in the twenty first century.

²⁴⁴ ibid.

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