DISTRIBUTION OR INFORMATION NETWORK DISSEMINATION: A PROSPECT FOR THE LEGAL CHARACTERIZATION OF NFT DIGITAL WORK TRANSACTION

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I. INTRODUCTION

Non-fungible token (NFT) is a brand new application of blockchain technology, manifesting the prosperity of the digital economy. NFT is represented as a set of time-stamped metadata on the blockchain. The metadata, in the form of a specific URL link or a set of hash, has unique and permanent directivity with a digital file stored in a certain location in the network. Unlike Bitcoin and Ethercoin which are fungible in order to facilitate exchanges, every NFT is unique and identifiable, which can serve as a trustworthy certificate of authenticity or proof of ownership. The ownership of an NFT is recorded in the irreversible blockchain and can be transferred by the owner, allowing the NFT to be sold and traded. The digital contents traded through NFT platforms are usually works with originality under copyright law, including works of fine art, digital music, audiovisual works, etc. The work traded through NFT is called "NFT digital work" or "NFT digital collection".

The global NFT market has witnessed rapid development since 2017 and experienced dramatic growth from 2020 to 2021: the trading of NFTs in 2021 increased to more than \$17 billion, up by 21,000% over 2020's total of \$82 million.⁴ It is predictable that with the development of Metaverse, the emerging NFT market will continuously expand in the future. However, such a new transaction mode also presents significant challenges to the relatively lagging legal governance. In 2022, China's first NFT copyright infringement decision (hereinafter "the first NFT case") was handed down in Hangzhou Internet Court, attracting heated discussions over the legal characterization of the transaction of NFT digital work under the Copyright Law of the People's Republic of China (2020 Amendment) (hereinafter Copyright Law (2020)).

¹ See Zhang Bingqing (张冰清), Li Lin(李琳), Jiyu Qukuailian Jishu de Shuzi Banquan Liyi Pingheng (基于区块链技术的数字版权利益平衡) [Balancing of interest of digital rights management based on block-chain technology], 22 ZHONGGUO CHUBAN(中国出版) [CHINA PUBLISHING JOURNAL] 25, 23 (2019).

Wikipedia, Non-Fungible Token, https://en.wikipedia.org/wiki/Non-fungible_token (accessed 17 January 2023) [hereinafter NFT Wikipedia].

³ See Tao Qian (陶乾), Lun Shuzi Zuopin Feitongzhihua Daibihua Jiaoyi de Falv Yihan (论数字作品非同质代币化交易的法律意涵) [On the Legal Meaning of Non Homogeneous Tokenization Transactions in Digital Works] 70 DONGFANG FAXUE (东方法学) [ORIENTAL LAW] 80, 71 (2022).

⁴ See NFT Wikipedia, supra note 2; See Su Yu et al. (苏宇等), NFT Zhengce Yanjiu Baogao (NFT政策 研究报告) [NFT Policy Research Report], 137 SHANGHAI FAXUE YANJIU JIKAN (上海法学研究集刊) [SHANGHAI LEGAL STUDIES] 155, 137 (2022).

Part I of this article will first highlight the core issue of the debate by identifying the stages in the NFT digital work transaction. A theoretical comparison of distribution and information network dissemination will be depicted in Part II. Part III will therefore illustrate that the sale of NFT digital works is more appropriate to be deemed as an act of distribution instead of information network dissemination. Part IV will further focus on the flaws of the judgment of China's first NFT case. Finally, Part V will conclude the article and prospect the future of China's copyright law legislation or interpretation.

II. THE STAGES OF NFT DIGITAL WORK TRANSACTION AND THE ESSENCE OF THE ISSUE

The issue of the academic debate is commonly expressed as "whether the transaction of NFT digital works is an act of distribution or an act of information network dissemination". However, such a general and broad description is highly likely to confuse the emphasis on the issue. It is important to first segment the entire transaction process to identify at which stage the problem arises.

The trading process of NFT digital works can be generally divided into three stages. The first step is uploading and minting, which is also recognized as the preparation stage of the whole transaction. The seller uploads the work to the server or the blockchain in the NFT digital works trading service platform, creating a new reproduced copy of the work. The digital work is converted into a hash of a specific length through the hash algorithm, and then the hash, publisher, timestamp, and other information are written into the smart contract to generate a non-fungible token.⁵ Thus, NFT is only an abstract information record that cannot be appreciated directly, but it has a one-to-one mapping relationship with the certain work uploaded by the user.⁶ The second stage concerns the promised sale, which is also known as the propagation stage. The platform provides a preview of the work on the webpage of the platform to attract potential buyers (except for several platforms adopting the selling mode of "blind box"). The third stage is the sale stage. Buyers pay the consideration and service fee through the digital wallet, triggering the "automatic execution" code embedded in the smart contract which generates new owner information on the blockchain.

The nature of the acts in the first two stages under the copyright law is relatively less controversial among the theory and the practicing field. Uploading and minting create a digital copy stored on the blockchain, which might cause an infringement of the right of reproduction if not permitted by the copyright

⁵ See Tao Qian (陶乾), supra note 3, at 72.

⁶ See Deng Jianpeng (邓建鹏), Li Jianing (李嘉宁), Shuzi Yishupin de Quanli Pingzheng —NFT de Jiazhi Laiyuan, Quanli Kunjing yu Yingdui Fangan (数字艺术品的权利凭证——NFT 的价值来源、权利困境与应对方案) [The Right Certificate of Digital Artwork—The Source of Value, Right Dilemma and Solution of NFT], 87 TANSUO YU ZHENGMING (探索与争鸣) [EXPLORATION AND FREE VIEWS] 95, 87 (2022).

owner.⁷ Exhibiting the work on the webpage enables the public to obtain the content of the work at the time and place selected by them, which might cause an infringement of the right of dissemination via information networks if not authorized. What invokes widespread dispute is the final selling stage. "The first NFT case" held that such a sale cannot satisfy the criteria for distribution, mainly because the NFT digital work is not fixed on any tangible carrier,8 which is a requirement of distribution explicitly stipulated in domestic9 and international regulations¹⁰ and reflected in case law.¹¹ However, the opposite opinion insists that such a sale is an act of distribution in the network environment, and the principle of the exhaustion of rights (also known as the First Sale Doctrine in American Copyright Law) is applicable.¹² Before the attempt to settle the dispute, one prerequisite should be clarified that "sale" is an independent and different stage compared to "promised sale". Displaying the preview of the work can be separately evaluated as typical information network dissemination and should not be confused with the subsequent act of sale. Thus, the main focus should be the third stage, and the proper statement of the issue should be "whether the *sale* of NFT digital works is an act of distribution or an act of information network dissemination".

III. A COMPARISON OF DISTRIBUTION AND INFORMATION NETWORK DISSEMINATION

A. The Significant Difference Between "Works" and

⁷ Guojia Banquanju Guanyu Zhizuo Shuzihua Zhipin de Zhuzuoquan Guiding (国家版权局关于制作数字化制品的著作权规定) [Copyright Regulations of the National Copyright Administration on the Production of Digital Products] (promulgated by National Copyright Administration, December 9, 1999, effective March 1, 2000), art. 2 (Chinalawinfo).

⁸ Shenzhen Qicediechu Wenhua Chuangyi Youxian Gongsi yu Hangzhou Yuanyuzhou Keji Youxian Gongsi Qinhai Zuopin Xinxi Wangluo Chuanboquan Jiufenan Yishen Panjue Shu (深圳奇策选出文化创意有限公司与杭州原与宙科技有限公司侵害作品信息网络传播权纠纷案一审判决书) [Shenzhen Golden Idea Cultural and Creative Co., Ltd. v. Hangzhou Yuanyuzhou Co., Ltd.], (2022)淅0192民初1008号(Hangzhou Internet Court 2022) [hereinafter (2022)淅0192民初1008号].

⁹ Zhonghua Renmin Gongheguo Zhuzuoquanfa Shihi Tiaoli (中华人民共和国著作权法实施条例) [Regulation for the Implementation of the Copyright Law of the People's Republic of China] (promulgated by State Council, January 30, 2013, effective March 1, 2013), art. 2 (Chinalawinfo).

Agreed statement concerning Articles 6 and 7 of World Intellectual Property Organization Copyright Treaty, WCT, December 20, 1996, art. 6-7; Copyright Law of the United States, art. 102(a).

¹¹ See BY v. CX (Judgment) C-637/19, Fifth Chamber (28 October 2020), ¶20.

¹² E.g. Zhang Weijun (张伟君), Zhang Lin (张林), Lun Shuzi Zuopin Feitong Quanyi Pingzheng Jiaoyi de Zhuzuoquanfa Guizhi—Yi NFT Zuopin Qinquan Jiufen Diyian Weili (论数字作品非同质权益凭证交易的著作权法规制——以NFT作品侵权纠纷第一案为例) [On the Copyright Law Regulation of Non Fungible Rights Certificate Transactions in Digital Works: Taking the First Case of NFT Works Infringement Dispute as an Example] 19 ZHONGGUO CHUBAN(中国出版) [CHINA PUBLISHING JOURNAL] 24, 19 (2022); He Lianhong (何炼红); Deng Xinxin (邓欣欣), Shuzi Zuopin Zhuanshou Xingwei de Zhuzuoquanfa Guizhi—Jianlun Shuzi Faxingquan Youxian Yongjin Yuanze de Queli (数字作品转售行为的著作权法规制——兼论数字发行权有限用尽原则的确立) [The Regulation of Copyright Law on the Resale of Digital Works—Also on the Establishment of the Principle of Limited Exhaustion of Digital Distribution Rights] 22 FASHANG YANJIU(法商研究) [STUDIES IN LAW AND BUSINESS] 29, 22(2014).

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"Original/reproduced Copies of Works"

According to Art.10 of Copyright Law (2020), the object of the right of distribution is the "original or reproduced copies" of the work.¹³ While the object of the right of production, as well as other rights of dissemination, including the right of performance, projection, broadcasting, and dissemination via information networks, is the "works" themselves.¹⁴ This difference in terminology is of great significance in understanding the boundary between the act of distribution and information network dissemination. First, whereas distribution requires the transfer of ownership of the copy of the work, information network dissemination solely involves the content of the work and has nothing to do with the copy. Second, as a remote interactive method of disseminating the content of the work, information network dissemination is generally accompanied by the production of new copies (no matter they are temporary copies during online browsing or formal copies after being liscensed to download). The process of distribution, obviously, does not produce new copies.

From this perspective, the crux to distinguishing distribution and information network dissemination is the "original or copy of the work" and the "content of the work". Tangibleness, although frequently mentioned and widely accepted as a necessary element to constitute the act of distribution, is superficial and might not be the real emphasis. Prior to the advent of NFT, the technical conditions were not advanced enough to produce a "intangible copy" on the Internet of similar nature to those tangible ones, thus, when merely the tangible carriers can be distributed, tangibleness can temporarily serve as a descriptive factor. However, the situation will change after employing blockchain and NFT technology in the copyright domain.

B. The Applicability of the Principle of Exhaustion of Rights

Regarding the limitation of rights, the distinction between the right of distribution and information network dissemination is also reflected in whether they are subject to the principle of exhaustion.

The first question is why the right to distribution is restricted by such a principle. It is generally accepted that if the right of distribution is able to control the resale of the copy, it will cause a conflict between the right in rem and intellectual property right on the same object. Two deeper reasons can be found, nevertheless, if this interpretation is further explored from a doctrinal or legal economics standpoint. The first reason is that the right of distribution is created as a supplement to the right of reproduction. From the production of the copies to their first circulation in the market, the scope of the communication

¹³ Zhonghua Renmin Gongheguo Zhuzuoquanfa (中华人民共和国著作权法) [Copyright Law of the People's Republic of China] (promulgated by the Standing Comm. Nat'l People's Cong., November 11, 2020, effective June 1, 2020) [hereinafter China Copyright Law 2020], art. 10(5) (Chinalawinfo).

¹⁴ China Copyright Law 2020, *supra* note 13, art. 10(12).

¹⁵ See CUI GUBBIN (崔国斌), ZHUZUOQUANFA: YUANLI YU ANLI (著作权法:原理与案例) [COPYRIGHT LAW: CASES AND MATERIALS] 397 (2019).

of the works has experienced a qualitative expansion from "zero" to "one". If a licensed copy of a work reaches the market without further financial reward to the copyright owner, it will not only deprive the copyright owner of the economic benefits he should have received, but also affects the future publication and distribution of the work because the first-time circulation has already enabled a mass number of people with the possibility to access the work.¹⁶ But from the first circulation to the second circulation, or even more distinct, such a substantial expansion of the dissemination scope will never occur, and it is also unnecessary to give the copyright owner over-incentives. The second reason is that, as a kind of intangible property or information, works contain the intrinsic qualities of public goods, which will easily result in undersupply in the absence of the intervention of external institutions. The copyright system, nevertheless, transforms intellectual property with an inherent feature of public goods into private property that can be traded on the market. Through trading these commodities, not only are copyright holders incentivized by receiving financial rewards, but social welfare is also increased because of adequate supply.¹⁷ To some extent, the economic basis of the copyright system lies in the creation of scarcity. In the early days of the copyright system, works could only be disseminated on tangible carriers like books, which is extremely scarce because of the underdeveloped and therefore monopolized printing technology. Thus, in the absence of information networks, or even broadcasting technology, the scarcity of media itself completely ensured the scarcity of the content of works. When scarcity is sufficient for effective property transactions, there is no need and actually impossible to overprotect intellectual property rights by interfering with the right in rem.

The second question is why the right of information network dissemination is not limited by the principle of exhaustion of rights. The model of scarcity established by traditional tangible carriers, however, is destroyed after the widespread application of information networks. In the past, for example, people can only access a piece of novel by purchasing first-hand or used physical books. But with the network technology, even if only one copy of the novel is distributed, as long as the owner of the copy uploads the content to the internet, everyone is possible to enjoy the novel. On the information network, the content of the work can be endlessly and low-costly reproduced without the circulation of a tangible carrier, making it possible for the public to access works from all over the world at any selected time and place. Thus, the scarcity of carrier and the scarcity of content are separated, and the scarcity of carrier is no longer able to protect the scarcity of content. In order to guarantee effective

¹⁶ See Wang Qian (王迁), Lun Wangluo Huanjing Zhongde "Shouci Xiaoshou Yuanze" (论网络环境中的"首次销售原则") [On "Principles of First Sale" in Internret Environments], 117 FAXUE ZAZHI (法学杂志) [LAW SCIENCE MAGAZINE] 121, 120 (2006).

¹⁷ See Wu Weiguang (吴伟光), Zhuzuoquanfa Yanjiu—Guoji Tiaoyue, Zhongguo Lifa yu Sifa Shijian (著作权法研究——国际条约、中国立法与司法实践) [Research on Copyright Law - International Treaties, Chinese Legislation and Judicial Practice] 621-626 (2013).

property transactions and to protect the legitimacy of the copyright system, which is based on the creation of scarcity, the copyright law gives the exclusive privilege to the qualified right-owners¹⁸ to control the dissemination of works on the internet so that they can be reasonably compensated from the spread of the content of their work.

The logic of information network dissemination is entirely different from that of traditional physical property transfer, and no conflict between property rights and intellectual property rights will occur at all, thus there is no ground for the First Sale Doctrine in the context of information network dissemination. Moreover, if the First Sale Doctrine is still applicable, which means the copyright owner will lose control of the further dissemination of the work once it has been first disseminated on the information network, the scarcity maintained by the establishment of the right of information network dissemination will be negatively affected, breaking the balance of interests between the copyright owner and the general public.

In summary, rather than the tangibleness of the carriers, the key to distribution is the specific "copy" of the work and its ownership transfer,¹⁹ and the requirement of scarcity determines that the principle of exhaustion is inapplicable in the context of information network dissemination.

IV. THE SALE OF NFT DIGITAL WORKS: AN ACT OF DISTRIBUTION

It has been indicated that the argument of distribution or information network dissemination focuses on the third stage of the transaction process, namely, the sale stage. Moreover, the core features that differentiate distribution from information network dissemination are the object (copy rather than content) and its ownership transfer (without producing new copies). Combining these two conclusions with the technical mechanics of NFT trading, it is more likely to deem the sale as an act of distribution.

A. The Object of the Tokenized Transaction

There is no legal basis to apply the current tangibleness-based ownership rules to intangible things, and Civil Code does not explicitly recognize network virtual property as an object of ownership. But as a kind of "civil interest" under

¹⁸ See A.F. Christie and Fiona Rotstein, The Nature of Intellectual Property, p.9 (2006), http://achristie.com/wp-content/uploads/2015/01/Christie+Rotstein-Nature-of-IP.pdf (accessed 13 January 2023), citing N.MacCormick, On the Very Idea of Intellectual Property: An Essay According to the Institutionalist Theory of Law, Intellectual Property Quarterly 227, p.236 (2002).

¹⁹ See He Huaiwen (何怀文), Wangluo Huanjing Xiade Faxingquan (网络环境下的发行权) [Distribution Rights in the Network Environment], 150 ZHEJIANG DAXUE XUEBAO (RENWEN SHEHUI KEXUEBAN) (浙江大学学报(人文社会科学版)) [JOURNAL OF ZHEJIANG UNIVERSITY (HUMANITY AND SOCIAL SCIENCES)] 159, 150 (2013).

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Art.126 of the Civil Code,²⁰ virtual property is still worth protecting.²¹ Domestic courts, including Hangzhou Internet Court,²² the trial court of "the first NFT case", have already treated NFT digital work as a kind of virtual property that has a similar legal character as other tangible objects of property right. The NFT transaction model allows each digital file to be uniquely marked, and each copy of a digital work is referred to by a unique string of metadata, resulting in "quasi-tangibility", "uniqueness" and most importantly, "scarcity".23 In other words, after the separation of the scarcity of media and the scarcity of content brought by the information network technology, the emergence of NFT bridges the gap that traditional digital copy cannot obtain uniqueness only from the form of their carrier, making it possible that even on the internet, the digital copy can still be inherently scarce without the additional intervention of legal design and can still be traded like offline physical goods. "Tokens are the vehicle through which blockchain technology re-introduces scarcity into the digital domain."²⁴ In summary, the object of the tokenized transaction is the unique and scarce "copy" of the work instead of the "content" of the work, which provides the foundation for the application of the right of distribution rather than the right of information network dissemination in the Internet environment.

B. The "Ownership" Transfer of the NFT Digital Work

Because NFT digital work cannot be categorized as a kind of civil right currently, according to the principle of *numerus claususno*, the virtual property will not be subject to "ownership" in the literal sense. However, the tokenized transaction of NFT digital work is completely capable to have an equivalent legal effect to the transfer of ownership. "The NFT transaction model is essentially a buying and selling relationship in which the digital asset is the content of the transaction, and the purchaser is acquiring a property interest, not a license to use a digital property, nor a license to an intellectual property right." Just as dealing with a book acquired from a publisher or a bookstore, the buyer can freely decide whether to resell or donate the NFT digital work he purchased to the next buyer. Some scholars have even drawn an analogy between the

²⁰ Zhonghua Renmin Gongheguo Minfadian (中华人民共和国民法典) [Civil Code of the People's Republic of China] (promulgated by Nat'l People's Cong., May 28, 2020, effective January 1, 2021), art. 126 (Chinalawinfo).

²¹ Id., art. 127; See Yang Lixin (杨立新), Minfa Zongze Guiding Wangluo Xuni Caichan de Hanyi ji Zhongyao Jiazhi (民法总则规定网络虚拟财产的含义及重要价值) [The Meaning and Important Value of the Stipulation of Internet Virtual Property in the General Principles of Civil Law], 64 DONGFANG FAXUE (东方法学) [ORIENTAL LAW] 72, 64 (2017).

²² See Pinshousu Qinggou de "NFT Shuzi Cangpin Manghe" Bei Tuikuan, Maijia Suopei 9 Wan Yuyuan, Fayuan Panle (拼手速抢购的"NFT数字藏品盲盒"被退款,买家索赔9万余元,法院判了),Nov. 29, 2022, https://mp.weixin.qq.com/s/WWnZAxqiIVJ-dHO90eoBVw.

²³ See Tao Qian (陶乾), supra note 3, at 73.

²⁴ See Bodó B, Gervais D, and Quintais JP, Blockchain and Smart Contracts: The Missing Link in Copyright Licensing? 26 International Journal of Law and Information Technology 311, p.315 (2018).

²⁵ (2022)浙0192民初1008号, supra note 8.

²⁶ See Tao Qian (陶乾), supra note 3, at 74.

blockchain and the register system of property rights, arguing that blockchain can serve as proof of the ownership of the interests it represents, allowing third parties to rely on the ownership status displayed on it.²⁷ In addition, considering the intention of both parties, under most circumstances, the buyer can easily appreciate the work by simply browsing the webpage of the platform, which occurs in the second stage of the transaction process. So what the buyer intends to obtain through the platform transaction is not access to the content of the digital work, but a certain digital copy that has a unique NFT identifier. What the buyer seeks is to have their ownership information permanently marked on the quasi-immutable blockchain, achieving the purpose of collecting or even "showing off".²⁸ Existing NFT transaction examples from both China²⁹ and abroad³⁰ have already described the NFT holder's right to the NFT as "ownership".

Moreover, the sale of the NFT digital work will not produce new copies. The mechanism of NFT trading relies on the automatic execution of the smart contract to change the ownership information on the blockchain. Since NFT exclusively points to the specific digital file stored in the server or the blockchain, no matter how many times it is resold, the object of the transaction is always the digital file initially uploaded by the minter, with no additional copies created throughout the process.

It is important to notice that NFT digital work transaction is substantially different from the other various modes of communicating works through the internet, for example, paying to watch a movie on the Tencent Video App, buying a digital album on Apple Music, or an e-book on Amazon, or even resell them to the next user.³¹ Concerning the object of the transaction, the latter deals with access permission to the content of a particular work rather than the copy itself: the seller is the licensor, and the buyer is the licensee.³² In terms of the "ownership" transfer, in the absence of blockchain and NFT to guarantee the uniqueness of the copy, every dissemination is accompanied by the creation of new copies (e.g. the cached file on the user's device). For example, in the *ReDigi* case concerning second-hand digital music, the American court held that

²⁷ See Yu Chengyuan (于程远), Lun Minfadian Zhong Qukuailian Xuni Daibi Jiaoyi de Xingzhi (论民法典中区块链虚拟代币交易的性质) [On the Nature of Blockchain Virtual Token Trading in the Civil Code], 139 DONGFANG FAXUE (东方法学) [ORIENTAL LAW] 151, 139 (2022).

²⁸ See Leonid Bershidsky, NFT Art Is All About the Hype (2021), https://www.bloomberg.com/opinion/articles/2021-03-04/the-nft-phenomenon-is-for-real.

²⁹ "Huanhe" Ruanjian Xuke ji Fuwu Xieyi ("勾核"软件许可及服务协议), art. 2.1, https://www.trzrb.com/baike/7136.html (accessed 12 January 2023).

³⁰ Terms of Use of NBA TOP SHOP, art. 4 (Ownership, License, and Ownership Restrictions), https://nbatopshot.com/terms (accessed 16 January 2023).

³¹ E.g. Tom Kabinet (Judgment) C-263/18, Grand Chamber (19 December 2019). The Court held that the resale of the second-hand e-book is not distribution.

³² See Guo Yafei (郭雅菲), Jiyu Qukuailian de Shuzi Zuopin Faxingquan Yongjin Yanjiu (基于区块链的数字作品发行权用尽研究) [Research on the Exhaustion of Rights of Digital Work Distribution Based on Blockchain], 73 SHANGHAI FAXUE YANJIU JIKAN (上海法学研究集刊) [SHANGHAI LEGAL STUDIES] 87, 75 (2022).

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every resale operation will result in making at least one unauthorized copy, infringing the right of reproduction, which will never fall within the scope of distribution.³³

Consequently, the sale of the NFT digital work satisfies the two core characteristics of distribution, namely, "a certain copy" and "the transfer of the copy's ownership", which constitutes an act of distribution rather than information network dissemination.

C. The Principle of the Exhaustion of Rights in the Resale of the NFT Digital Work

As an act of distribution, it is reasonable to apply the principle of the exhaustion of rights to the NFT digital work transaction. Although not recognized by existing law, the uniqueness and scarcity of the NFT digital work are analogous to the tangible object, which will result in a potential conflict between the "quasi-property right" over the digital copy of the work and the intellectual property over the content of the work. Thus, as long as the distribution of the digital copy is permitted by the copyright owner or its authorized entity, then after paying consideration to NFT minters, buyers of NFT digital works can freely resell them without infringing the copyright owner's right of distribution. Therefore, the smart contract shall not absolutely and indefinitely prohibit the subsequent resale of NFT digital works.³⁴

V. CHINA'S FIRST NFT COPYRIGHT INFRINGEMENT CASE: A CONTRADICTION OF THE NEW TRANSACTION MODE AND THE RELATIVELY LAGGING LEGISLATION

The trial of China's first NFT case was held on 20 April 2022 and issued its judgment shortly afterward. The lawsuit was filed by Shenzhen Qice Diechu Cultural Creativity Co., Ltd. (hereinafter "the plaintiff"), the copyright owner of the "Fat Tiger" illustration series, against Hangzhou Yuanyuzhou Technology Co., Ltd. (hereinafter "the defendant"), which operates an NFT market-place called Bigverse, a digital art trading platform. The work in question is a comic image called "Fat Tiger Vaccination" belonging to the "Fat Tiger" series. The plaintiff found on Bigverse that a user had created and sold an NFT digital work that was identical to the copyrighted work in question, and even had the artist's Weibo watermark on it. The plaintiff therefore sued the defendant for copyright infringement. The trial court held that "the act of network users trading "Fat Tiger Vaccination" NFT digital work through the accused Bigverse platform operated by the defendant without the plaintiff's permission should be considered as infringement of the plaintiff's right of information network

³³ Capitol Records, LLC v. ReDigi Inc., 910 F. 3d 649 (2018).

³⁴ See Zhang Weijun (张伟君), Zhang Lin (张林), supra note 12, at 22.

dissemination".³⁵ The appeal court upheld the lower court's decision.³⁶ According to the previous analysis in this article, the judgment of "the first NFT case" has flaws in two aspects, but both of them are understandable because the court must and can only rule within the framework of the existing law.

First, when answering the question "why not distribution", there is an inconsistency in the logic of the court's decision. On the one hand, the court admitted that the NFT digital copy of the work is identical to tangible things. The trial court held that "each digital file is uniquely marked, and each copy of a digital work is referred to by a distinct string of metadata, producing effects such as "uniqueness" and "scarcity". "The holder of an NFT digital work has the right to exclusively possess, use, dispose, and benefit from it".³⁷ The appeal court further confirmed that NFT and blockchain technology can effectively avoid the risk of repeatedly copying the work in their subsequent circulation, enabling the sale of NFT works to have an effect similar to the "delivery" in property law. Thus, "the purchaser is acquiring a property interest, not a license to use a digital property, nor a license of an intellectual property right". ³⁸These statements indicate that the basis for the application of the distribution right already exists because of the "quasi-tangible" character of the NFT digital copy. Then, however, the court still denied the applicability of the right of distribution by sticking to the requirement of "tangible carrier"; and by referring to the vague definition of "civil interest", the court asserts that there will never be a transfer of "ownership".³⁹ These arguments are completely contrary to the court's previous conclusion.

Second, when answering the question "why is information network dissemination", the court misunderstood the essential distinction between information network dissemination and distribution. The trial court held that "NFT digital works are provided in the public Internet environment and traded with the unspecified public ... Each transaction can make NFT digital works available to the public at the selected time and place, which satisfied the characteristics of information network dissemination". However, there are two possible mistakes in this argument. On the one hand, the court confused the promised sale stage and the sale stage. The principle of the latter is completely different from the former and cannot be confounded. On the other hand, it has been clarified that the foundation to comprehend the relationship between distribution and information network dissemination is to distinguish the "original or copy of the

^{35 (2022)}淅0192民初1008号, supra note 8.

³⁶ Shenzhen Qicediechu Wenhua Chuangyi Youxian Gongsi yu Hangzhou Yuanyuzhou Keji Youxian Gongsi Qinhai Zuopin Xinxi Wangluo Chuanboquan Jiufenan Ershen Panjue Shu (深圳奇策迭出文化创意有限公司与杭州原与宙科技有限公司侵害作品信息网络传播权纠纷案二审判决书) [Shenzhen Golden Idea Cultural and Creative Co., Ltd. v. Hangzhou Yuanyuzhou Co., Ltd.], (2022)淅01民终5272号(Hangzhou Internet Court 2022) [hereinafter (2022)淅01民终5272号].

³⁷ (2022)新0192民初1008号, supra note 8.

³⁸ (2022)淅01民终5272号, supra note 36.

³⁹ (2022)淅0192民初1008号, supra note 8.

⁴⁰ *Id*.

work" and the "content of the work", but not "selected time and place". This does not mean that the latter is not the key component of information network dissemination, it merely means that the latter should be deemed as a distinction with other dissemination acts, such as projection, performance, broadcasting, etc., but not with distribution. The opposite opinion may argue that after owning the digital copy, the buyer still needs to appreciate the content of the work at selected time and place through the Internet. However, such an act has no correlation with the selling process because the transaction has already ended. The so-called "access to the NFT digital copy" is an act of using the copy based on the buyer's property right, which is just identical to opening and reading his tangible book. Such an act is not related to the topic of this article.

In fact, even the professional participating in the trial of the first NFT case believes that it is more proper to deem the sale of NFT digital works as an act of distribution, and the court can only come to a conservative conclusion due to the ambiguity and limitation of existing law.⁴¹ Specifically, there are two obstacles that hinder the recognition of distribution right. First, the Civil Code has not yet clarified the legal position of civil interests, thus, there is no legal basis to confirm a transfer of "ownership" over the NFT digital work. Second, the right of distribution is still limited to the formal requirement of "tangible carrier", and the majority opinion of academia still tends to compeletely negate the applicability of right of distribution in the network environment.

VI. CONCLUSION AND PROSPECT

In conclusion, concerning the issue of whether the transaction of the NFT digital work constitutes an act of distribution or an act of information network dissemination, two main points should be properly addressed: one is to distinguish different transaction stages and avoid confusion, and the other is to correctly comprehend the fundamental difference between distribution and information network dissemination. NFT technology is capable to ensure the scarcity and uniqueness of the digital copy as a tangible carrier, while the block-chain and smart contract can guarantee a similar legal effect as the transfer of property rights. Therefore, it is reasonable to deem the sale of the NFT digital work as distribution rather than information network dissemination.

Copyright law is constantly evolving with the development of new technologies. From traditional paper media to wired or wireless broadcasting, and then to the "Internet of everything", the copyright law system has reformed every time the new dissemination method emerged. Nowadays, the development of NFT technology has greatly changed the perception of carrier scarcity in the network environment. The emphasis on the requirement of tangible carriers is only intended to avoid the abuse of the right of distribution in order to prevent

⁴¹ See Wang Jiangqiao (王江桥), NFT Jiaoyi Moshi Xiade Zhuzuoquan Baohu ji Pingtai Zeren (NFT交易模式下的著作权保护及平台责任) [Copyright Protection and Platform Liability under NFT Trading Mode], 70 CAIJING FAJING (财经法学) [LAW AND ECONOMY] 80, 74-75 (2022).

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the copyright owner from not being able to obtain sufficient returns from the information network dissemination of the work, but does not mean that only tangible carriers can be applied to the right of distribution. Therefore, distribution is not exclusively designed for tangible carriers, and tangibility is not a sufficient condition for distribution. As long as this relationship is correctly understood, it is reasonable to believe that characterizing the NFT digital work transaction as an act of distribution is not an abuse of the right of distribution, but a possible direction for future legislative improvement.