Research on intellectual property protection of digital assets

Wen Si

Southwest University of Political Science and Law, Chongqing 401120, China

Abstract: Intellectual property protection is conducive to promoting the utilization and transformation of intellectual property, broadening the path of realizing the value of intellectual property, and promoting technological innovation. Digital assets as a product of the new era, promoting the protection of intellectual property rights of digital assets can promote the healthy development of intellectual property industry and activate the vitality of digital assets innovation. Based on this, this paper studies the intellectual property protection of digital assets, expounds the relevant concepts of intellectual property protection of digital assets, analyzes the important value of intellectual property protection of digital assets, and puts forward specific practical strategies, aiming at providing theoretical support and practical guidance for the intellectual property protection of digital assets.

Key words: Digital assets; Intellectual property protection; High-quality development

Introduction

With the rapid development of information technology, digital assets have become an important part of modern society, covering a wide range, including digital art, database, digital music and other forms. However, digital assets are faced with serious intellectual property rights infringement due to their easy reproduction and propagation. In September 2021, the Outline for Building an Intellectual Property Power (2021-2035) issued by the Central Committee of the Communist Party of China and The State Council clearly proposed to "comprehensively improve the level of creation, application, protection, management and service of intellectual property". As a key legal system to protect the rights and interests of creators, encourage innovation and promote industrial development, intellectual property is particularly important in the field of digital assets. Therefore, in-depth research on intellectual property protection of digital assets will not only help safeguard the legitimate rights and interests of creators, but also provide a strong guarantee for the healthy development of the digital industry.

1. Concepts related to intellectual property protection of digital assets

Digital assets are an emerging asset type, representing various types of assets that exist in digital form and can be created, stored and traded through electronic technology, including digital currencies, digital securities, digital artworks, digital commodities and other types of assets created based on digital technology. With the rapid development of information technology and the popularity of digital currency, the concept of digital assets has gradually become familiar to people, and has shown great potential and value in many fields such as finance, economy and art. Intellectual property is a kind of intangible property, including copyright, patent right, trademark right and other forms, which refers to the exclusive right enjoyed by people in the intellectual achievements produced in the process of creative activities. In the field of digital assets, the protection of intellectual property rights is particularly important, which not only concerns the rights and interests of creators, but also directly affects the healthy development of the digital industry. Digital assets have the characteristics of no physical form and strong Matthew effect, and the protection of intellectual property rights mainly focuses on how to effectively protect the originality and uniqueness of digital assets such as digital content, software and network domain names, and prevent them from being illegally copied, embezzled or tampered with. This protection process involves the comprehensive application of technical, legal and market means to ensure that the owners of digital assets can fully enjoy their due rights and interests. Today, with the rapid development of the digital economy, strengthening intellectual property protection of digital assets has become an important guarantee for promoting the healthy development of the digital industry.

2. The important value of intellectual property protection of digital assets

2.1 It is conducive to the healthy development of the digital industry

Digital assets are an important part of the digital economy. Promoting intellectual property protection for digital assets can lay a solid foundation for the healthy development of the digital industry, ensure that the originality and uniqueness of digital assets are respected, prevent piracy and infringement, and create a good environment for fair competition and sound development of the digital industry. In addition, intellectual property protection can stimulate investment enthusiasm in the digital industry, attract more capital, promote the research and development and application of digital technologies, and further enhance the competitiveness and influence of the digital industry.

2.2 It will help stimulate the innovation vitality of the digital industry

Intellectual property protection theoretically provides an incentive mechanism for innovation, and by giving creators and inventors exclusive rights to their intellectual achievements, it stimulates their enthusiasm for innovation in the digital sphere. The creators and inventors can obtain financial returns and social recognition, so they are more motivated to invest in new innovation and research and development, forming a positive incentive mechanism, and then promote the emergence of new technologies, new products and new services in the digital industry, and inject continuous vitality into the sustained growth of the digital economy.



2.3 To help protect the rights and interests of creators

The creators of digital assets mainly include software developers, content creators, designers, etc., and are important participants in the digital industry. The fruits of their labor not only reflect their personal wisdom and creativity, but also serve as valuable resources to promote the development of the digital industry. Through legal means, intellectual property protection provides creators with exclusive rights protection for their intellectual achievements, prevents unauthorized use and encroachment by others, helps safeguard the legitimate rights and interests of creators, stimulates their creative passion, and provides more high-quality and unique digital assets for the digital industry.

3. Intellectual property protection measures for digital assets

3.1 Raise public awareness and strengthen the popularization of intellectual property rights

Since the development of digital assets started relatively late, it is particularly important to carry out its intellectual property protection. Relevant publicity and popularization should be strengthened to raise public awareness of the protection of digital assets' intellectual property rights. First of all, publicity and popularization should be strengthened. Enhancing public awareness of intellectual property rights is a prerequisite for protecting digital assets. Through extensive publicity and education campaigns, all sectors of society should be made aware of the importance of intellectual property and understand the basic concepts and laws and regulations of intellectual property, especially in key areas such as brand protection, trademark law and patent law. Popular science videos on intellectual property of digital assets can be regularly released on social media or online platforms and other channels to publicize the basic concepts and importance of intellectual property protection of digital assets to the public, so that all sectors of society can fully realize that intellectual property protection is not only a legal requirement, but also a necessary condition for promoting economic development and social progress. Secondly, the practice of IPR protection should be encouraged. The public should be encouraged to actively participate in the practice of IPR protection, so as to form a good atmosphere for the common concern and participation of the whole society. For example, in terms of brand protection, brand is an important asset of enterprises and an important part of digital assets. Enterprises and individuals should learn how to register, maintain and manage their own brands, prevent brands from being illegally registered or infringed, establish a brand protection mechanism, detect and deal with infringements in a timely manner, and safeguard their legitimate rights and interests. Regarding the trademark law, relevant departments should popularize the knowledge of trademark law, including the registration, use, renewal and rights protection of trademarks, so that enterprises and individuals can use trademarks legally and in compliance with the law and avoid infringing on the trademark rights of others. As for the patent law, there are many innovative achievements in the digital field, such as software algorithms, technical methods, etc., which can be protected through patents, and relevant departments should popularize the knowledge of patent law in a timely manner, encourage enterprises and individuals to actively apply for patents, and protect their innovative achievements from being illegally exploited by others. Finally, promotion should be carried out close to daily life. Relevant departments can establish cooperation with museums, art galleries and other institutions to promote and publicize with the help of people's actual life scenes, so as to attract more people to understand the protection of digital asset property rights; They can also cooperate with the entertainment industry to release film and television works or music works about the protection of intellectual property rights of digital assets, so as to arouse the enthusiasm of public participation and enhance public awareness through entertainment. By raising public awareness of intellectual property rights, we can effectively enhance the social awareness of intellectual property protection for digital assets and lay a solid foundation for building a healthy and orderly digital market environment.

3.2 Improve the regulatory system and strengthen intellectual property protection

Improving the regulatory system is the key to ensuring the effective implementation of intellectual property protection measures for digital assets, and is of great significance to ensuring market compliance. First, relevant policies and regulations should be formulated. The government should strengthen supervision of the digital asset market, formulate and improve relevant laws and regulations, clarify rules on the ownership, use and protection of intellectual property rights of digital assets, formulate standards for the identification and punishment of violations, and ensure that all work is based on laws. Second, a transaction reporting mechanism should be established. In order to effectively monitor digital asset trading activities and prevent infringement, relevant departments should establish a transaction reporting mechanism to obtain transaction data in a timely manner, including identity information of both parties to the transaction, transaction time, transaction amount, transaction items, etc. The regulatory authorities shall monitor and analyze the data, find abnormal trading behaviors, take corresponding measures to deal with them in a timely manner, set up reporting and complaint channels, and encourage the public to actively participate in the supervision of digital asset transactions. In the process, cooperation should be established among various departments, law enforcement should be intensified, and infringements should be severely cracked down on. For example, regarding the copyright of online courses, the ownership of the copyright of online courses should be clearly defined during the production and release of online courses to avoid infringement disputes caused by unclear copyright ownership. The online course platform should establish a sound copyright review mechanism, strictly review the uploaded online course content to ensure that it does not infringe on the copyright of others, and delete the infringing content in time and notify the creator after it is found. For example, as for the digital copyright, modern information technology means should be used to establish a copyright supervision platform to realize quick query of copyright information, online mediation of copyright disputes and real-time monitoring of copyright infringements, so as to improve the efficiency of copyright protection. Finally, a special rights protection mechanism should be established. The rights protection mechanism is an important means to protect the intellectual property rights of digital assets. Regulators should set up a special rights protection mechanism to deal with infringement complaints and

disputes in the field of digital assets, promptly conduct investigations after receiving infringement complaints, verify infringement facts, punish infringers according to law, and provide legal aid and guidance for victims to safeguard their legitimate rights and interests. At the same time, attention should be paid to promoting the establishment of digital asset intellectual property protection platforms, providing convenient infringement complaints and rights protection services, reducing the cost of rights protection and improving the efficiency of rights protection. In addition, digital assets are cross-border in nature, and infringements often involve multiple countries and regions. Regulators of various countries should strengthen communication and cooperation to jointly crack down on transnational infringements and maintain the healthy and stable development of the global digital asset market.

3.3 Strengthen platform management and vigorously develop the digital economy

Platforms serve as an important channel for the trading and dissemination of digital assets. Strengthened management can improve the protection of intellectual property rights of digital assets and promote the development of the digital economy. Therefore, platforms should strengthen management to protect the rights and interests of digital asset creators and promote the healthy and rapid development of the digital economy. First, a strict platform access mechanism should be established. The platform should set up clear access standards, involving security measures, compliance awareness and other aspects, strictly audit the brand of the entered merchants, ensure that the brand qualification, product quality certification and reputation meet the requirements, regularly review the brand, timely detect and deal with violations, and prevent the inflow of fake and shoddy goods from the source. Secondly, a sound mechanism for protecting intellectual property rights should be established. The platform shall formulate strict intellectual property protection policies, clarify the responsibilities and obligations of merchants' brands and platforms in intellectual property protection, strengthen brand protection, establish brand libraries, implement brand monitoring, etc., and timely detect and deal with violations of brand rights and interests. The platform shall promote merchants to register trademarks and enhance their brand awareness and legal awareness; Set up a trademark registration guidance service to provide merchants with consultation and assistance on the trademark registration process, costs, precautions and other aspects. For brands suspected of infringement, the platform should refuse to trade them on the shelves, flag uploaders and conduct stricter review of their next uploaded works; And strengthen cooperation with relevant intellectual property law enforcement departments to jointly crack down on infringement, piracy and other illegal activities. Platforms should earnestly fulfill their management responsibilities, create a fair and safe market environment for merchants and consumers, and jointly promote the prosperity and development of the digital economy.

Conclusion

To sum up, intellectual property protection of digital assets plays an irreplaceable and important role in promoting the healthy development of the digital industry, stimulating the vitality of innovation and protecting the rights and interests of creators. In the face of the increasingly severe problem of intellectual property infringement, it is necessary to strengthen intellectual property protection work, pay attention to raising public awareness, build a sound regulatory system, strengthen platform management, build an all-round and multi-level intellectual property protection system, and promote the in-depth development of intellectual property protection work of digital assets. To provide solid legal guarantee and institutional support for the sustained prosperity and innovative development of the digital industry.

References:

[1] Zhen Hongredline, Wang Xi, Fang Hongxing. Intellectual property administrative protection and Enterprise Digital transformation [J]. Economic Research Journal, 2023, 58(11):62-79.]

[2] Bai Jie, Yang Pengfei, Sun Guanghua, et al. Digital copyright Application based on CNWW3 blockchain system standard [J]. Information Technology and Network Security.2020.07.004.

[3] YAN Zouxian, Shang Qiufen. Research on the Positioning and Basic Framework of Digital Asset Table [C]// Branch of Higher Engineering Colleges of Accounting Society of China. Accounting Innovation under High-quality Economic Development in the New Era -- Proceedings of the 25th Annual Conference of Higher Engineering Colleges Branch of Accounting Society of China (2018). School of Economics and Management, Beijing University of Technology; College of National Radio and Television Administration; , 2018:7.

[4] Huang Huanming. Digital Asset Insurance product design -- taking NFT Asset Protection Insurance as an example [D]. Guangdong University of Finance and Economics, 2023.

[5] Lu Gaopan. Design and Implementation of digital asset management platform based on NFT [D]. Shandong University, 2022.