

The Practice Status and Legal Risks of Data Intellectual Property Pledge

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Abstract: *With the release of the Outline for Building a Strong Intellectual Property Country (2021-2035) and the 14th Five-Year Plan for the Protection and Use of Intellectual Property Rights, the protection and use of data intellectual property rights have gradually become the focus of attention from all walks of life. Many places have successively carried out pilot work on data intellectual property rights, and data intellectual property pledge has gradually entered the public eye as an emerging financing method. However, in practice, the pledge of data intellectual property rights is faced with conflicts with the legalism of intellectual property objects, as well as the problem of the validity of real rights caused by violations of the legal principles of property rights, so that the pledge contract is partially invalid, and the right holder can only seek relief based on the liability for breach of contract. In addition, the pledge of data intellectual property rights is insufficient due to the obstacles to its disposal and realization. The core value of data asset guarantee is not limited to the single function of debt repayment, but is more reflected in promoting innovation and promoting the sustainable and healthy development of the data economy.*

Keywords: *data intellectual property, Guarantee, Legal risks*

1. Proposal of pledge of data intellectual property rights

In 2021, the Central Committee of the Communist Party of China and the State Council issued the Outline for Building an Intellectual Property Power (2021-2035), which pointed out that it is necessary to build a system of intellectual property rules in emerging fields and specific fields that are timely and reasonably protected, and study and construct rules for the protection of data intellectual property rights. In the same year, the "14th Five-Year Plan for the Protection and Use of Intellectual Property Rights" also proposed to study and construct rules for the protection of data intellectual property rights. In 2022, the State Intellectual Property Office issued the Notice of the Office of the State Intellectual Property Office on Identifying Pilot Places for Data Intellectual Property Work, identifying eight places to carry out pilot work, including Beijing, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong and Shenzhen. The registration and pledge of data intellectual property rights in the eight places are in full swing with the support of policies. Taking Zhejiang Province as an example, in March 2022, the Zhejiang Provincial Product and Engineering Standardization Association issued the "Data Intellectual Property Pledge Service Regulations", a group standard related to data intellectual property pledge; In May, 11 departments, including the Zhejiang Provincial Administration for Market Regulation, issued the Measures for the Registration of Data Intellectual Property Rights in Zhejiang Province (for Trial Implementation); Article 51 of the Regulations of Zhejiang Province on Optimizing the Business Environment, adopted at the second session of the 14th Zhejiang Provincial People's Congress on January 26, 2024, stipulates that market entities may apply to the provincial data intellectual property registration platform for the registration of rights and interests in the collection of data collected in accordance with the law, processed by certain algorithms, and with practical value and intellectual achievement attributes. The registration certificate issued by the provincial data intellectual property registration platform may be used as a preliminary certificate for the collection, circulation, and trading of the data, income distribution, and protection of rights and interests.

In December 2022, the Central Committee of the Communist Party of China and the State Council issued opinions on building a basic data system to better play the role of data elements, proposing to promote data trading and circulation. Establish a compliant, efficient, and on-site data element circulation and trading system. The important purpose of the opinion is to give full play to the advantages of China's massive data scale and rich application scenarios, activate the potential of data elements, strengthen and

expand the digital economy, enhance the new momentum of economic development, build new national competitive advantages, and also provide new guidance for the development of China's data intellectual property rights.

In January 2024, the State Intellectual Property Office (CNIPA) held a data intellectual property pilot work meeting, and on the basis of the eight existing pilots, nine new localities, including Tianjin, Hebei, Shanxi, Anhui, Henan, Hubei, Hunan, Guizhou and Shaanxi, jointly carried out the pilot work on data intellectual property.

As of 2023, eight provinces and cities, including Beijing, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, and Shenzhen, have carried out pilot work, launched a data intellectual property registration platform, and issued more than 2,000 data intellectual property registration certificates to business entities. The total amount of data intellectual property pledge financing in the pilot areas has reached 1.1 billion yuan.

China is undergoing changes unseen in a century, and a new round of scientific and technological revolution has brought us new opportunities for development. As a new economic form, the digital economy has become an important force supporting high-quality economic development. As a major country in data resources, China should provide a Chinese solution for data property rights for the global data governance system based on China's national conditions. In the context of building a strong country with intellectual property, the Central Committee of the Communist Party of China and the State Council have successively put forward the "Outline for the Construction of an Intellectual Property Power 2021-2035" and 20 pieces of data to promote the development of data. The registration of data intellectual property rights and the pledge of data assets have gradually entered the public eye, and the related issues of data have also entered a heated discussion.

2. Practical exploration of data intellectual property pledge

2.1. There is no legal reference to the pledge of data intellectual property

The provisions of the national law on data only stay in data protection, and there are no detailed provisions on the pledge of data intellectual property rights.

For example, Article 127 of China's Civil Code stipulates that if the law has provisions on the protection of data, follow those provisions. Although this article is only an induction clause, it can provide a bridge for the subsequent construction of the legal system. Recognizing data as a new form of civil rights and giving it legal status provides legal protection for various data assets in the Internet era and is of great significance to data research. In particular, in the first draft of the General Provisions of the Civil Law (draft), data was stipulated as the object of intellectual property, but due to the considerable controversy between the parties over the concept of data and the attributes of rights, the data was finally removed from the provisions on the object of intellectual property rights, and a separate provision was set up later. The Civil Code follows the provisions of the General Provisions of the Civil Law, and if there are provisions on the protection of data in Article 127, such provisions shall be followed. The change in the legislative thinking of data is also due to the consideration of insufficient data research. As a basic law, the Civil Code should be forward-looking, and the provisions on data in the Civil Code well meet the development of subsequent data legislation research.

The Personal Information Protection Law, which came into effect on November 1, 2021, aims to focus on the protection of rights and interests in personal information, regulate personal information processing activities, and promote the rational use of personal information. Although the law specifically stipulates the rules for the processing of personal information and the rights enjoyed by individuals in information processing activities, according to the scope of application of the law, it only applies to the content of personal information, and according to the classification of data, data includes not only personal data but also non-personal data, and there is no legal provision for other data, such as the content of non-personal information processed by enterprise data. In addition, the law only deals with the processing of personal information, and for data, there are multiple links such as circulation and transactions, which are not covered by the law.

It can be seen that at the national legislative level, data is still at the level of protection, focusing on data security, and there are not many ways to use data. Hopefully, legislators have taken note of the value of data driving the economy. In the legislative plan of the Standing Committee of the 14th National People's Congress, the Digital Economy Promotion Law, as a second-class legislative project, is in the

stage of "needing to work quickly and submitting it for review when the conditions are ripe". At the same time, it is worth noting that legislative projects in data ownership and network governance are listed as the third category of legislative projects, which are in the legislative conditions that are not fully met and need to be continuously studied and demonstrated. It can be seen that although legislators recognize the value of data and hope to promote the development of data, they are still in a cautious attitude towards the determination of data ownership.

2.2. *The current status of data intellectual property pledge practice*

In response to the Notice of the Office of the State Intellectual Property Office on Determining Pilot Places for Data Intellectual Property Work issued by the State Intellectual Property Office, data intellectual property practices have been launched in various localities. In March 2024, the Zhejiang Provincial Administration for Market Regulation issued the "Opinions on Deepening the Reform of Data Intellectual Property Rights and Promoting the Empowerment and Development of Data Elements (Draft for Comments)", proposing that by 2025, the chain of data intellectual property ownership registration, value assessment, circulation and use, and rights and interests protection will be effectively opened, and the data intellectual property protection and application system will be basically established. As of February 2024, 64 Zhejiang enterprises in Zhejiang Province have completed data intellectual property pledge financing of 2.204 billion yuan. ^①In June 2023, Beijing launched a data intellectual property registration platform, and as of January 2024, the Beijing Intellectual Property Protection Center has obtained data intellectual property registration certificates for 57 applications for data intellectual property registration after being publicized. In 2023, Beijing will also complete the registration of the city's first data intellectual property pledge, with a pledge amount of 2.98 million yuan. ^②The notice of Shanghai Municipality on the "2023-2025 Work Points of the State Intellectual Property Office of the Shanghai Municipal People's Government to Build a High-level Reform and Opening-up Intellectual Property Strong City" proposes to deepen the pilot of data intellectual property work, explore the rules for the protection of data intellectual property rights, carry out data intellectual property registration on a pilot basis, and establish the responsible units and completion time limits. Jiangsu Province has promulgated and implemented the Administrative Measures for the Registration of Data Intellectual Property Rights in Jiangsu Province, established a dual protection mechanism for data intellectual property registration and commercial landing, and as of March, Jiangsu Province has realized 71.8 million yuan of pledge financing for data intellectual property rights. ^③Shenzhen is the first in the country to propose and construct a complete process of data intellectual property certificate registration procedures, and provide public services for data intellectual property registration to the society. Since the pilot work was launched half a year ago, Shenzhen has built a complete closed-loop system for data intellectual property registration. In addition, a number of provinces and cities, such as Anhui Province, Hainan Province and Hebei Province, have successively introduced measures for the registration of data intellectual property rights to promote the circulation of data transactions.

Zhejiang Province is the only province authorized by the State Council to carry out the pilot trial of the data basic system, and it is also the first batch of pilot provinces for data intellectual property rights in the country. Taking Zhejiang Province as an example, in May 2023, 11 departments, including the Zhejiang Provincial Administration for Market Regulation, issued the Measures for the Registration of Data Intellectual Property Rights in Zhejiang Province (for Trial Implementation), which mainly stipulates the scope of application of registration, registration steps, and the role of registration certificates. With the support of this measure, Zhejiang enterprises can achieve financing through the pledge of data intellectual property rights. For example, Zhejiang Tongbo Technology Development Co., Ltd. independently developed and pioneered the Beidou ship position indicator, through which the equipment can generate a report data every 5 to 10 minutes, including the report time, longitude, latitude, speed, heading, temperature and alarm information. Since 2022, the company has completed the storage of 30 pieces of data on the "Zhejiang Intellectual Property Blockchain Public Evidence Preservation Platform" and applied for 10 data intellectual property registrations from the "Zhejiang Provincial Data Intellectual Property Registration Platform". ^④ In addition, through the pledge of data intellectual property rights, the company obtained a loan of 3 million yuan from Bank of Hangzhou, and successfully handled 18 data intellectual property insurances. For another example, Shunpu Arts & Crafts Co., Ltd.

① Zhejiang Province implements data intellectual property pledge financing

② Explore the rules of data property rights and promote the efficient circulation of data

③ Jiangsu preached the management of enterprise data intellectual property rights to help the entry of data assets into the table and the development of the digital industry

④ Shenzhen is the first to explore the data intellectual property system: registration certificates to promote the circulation of data transactions

applied for registration of its commercial data such as the sales ratio and production efficiency level of different styles of overseas hats, and obtained the "Zhejiang Provincial Data Intellectual Property Registration Certificate". The local financial institution completed the evaluation of the pledge of the company's data intellectual property. And successfully obtained a credit line of 50 million yuan for the enterprise. Through the above two examples, it is fully demonstrated that through the implementation of the Measures for the Registration of Data Intellectual Property Rights in Zhejiang Province (Trial), Zhejiang Province is gradually promoting the basic data system, promoting the market-oriented allocation of data elements, and promoting high-quality economic development.

According to the data of Zhejiang Provincial Intellectual Property Office, as of May 2024, Zhejiang Province has publicized and registered 6,073 data intellectual property rights certificates, radiating to 11 provinces and cities across the country, and has achieved a total of 2.425 billion yuan in data intellectual property pledge financing, insurance, securitization, trading, licensing and other transactions.

3. Legal risks of data intellectual property pledge

3.1. Risks of the validity of data intellectual property pledges

3.1.1. The conflict between data intellectual property rights and the legalism of intellectual property objects

There are two ways to interpret data intellectual property rights in practice. The first interpretation path is to identify some specific data as copyrights and trade secrets, that is, to rely on the first seven items of Article 123 of the Civil Code to determine the nature of specific data. For the sake of a unified understanding, this part of the specific data is defined as data intellectual property rights, and the data intellectual property rights are collectively referred to as this part of the specific data.

The second way is to solve the dilemma that the existing IP subject matter is difficult to cover all data, so the data is established as a new type of IP. This approach is the new intellectual property theory of data mentioned above. Although some scholars have elaborated on this path in theory, it is limited by the strict legalism of the subject matter of intellectual property. Article 123 of the Civil Code provides for seven types of intellectual property rights and a catch-all clause in the form of a closed list. This catch-all clause excludes the creation of new types of intellectual property rights such as administrative regulations and local regulations, and adopts a strict statutory doctrine. ^[1]The reference to data IP is basically a policy document. For example, some local judicial documents and group standards issued in practice either define or set the scope of application of data intellectual property rights. Zhejiang Province Zhejiang Provincial Measures for the Registration of Data Intellectual Property Rights (for Trial Implementation) provide that these Measures apply to data collected in accordance with law, processed by certain algorithms, and with practical value and intellectual achievement attributes. The Shandong Provincial Rules for the Registration and Management of Data Intellectual Property Rights (for Trial Implementation) defines data intellectual property rights as the rights and interests enjoyed by rights holders in terms of independent control, processing and use, business licenses, and income from data collections that have been obtained in accordance with laws and regulations and processed by certain rules, and which have practical value, intellectual achievement attributes, and non-disclosure. In the "Data Intellectual Property Pledge Service Regulations", a group standard related to data intellectual property pledge issued by Zhejiang Product and Engineering Standardization Association, data intellectual property rights are defined as the property rights and interests enjoyed by natural persons, legal persons and unincorporated organizations in accordance with the law in the data products and services formed after their lawful processing and data processing. These policy documents are not hierarchical enough, and the provisions on data intellectual property rights violate the legal doctrine of intellectual property objects in the Civil Code and have no legal effect.

In summary, although the definition of data intellectual property is stipulated in the policy document, data intellectual property is in conflict with the legal doctrine of intellectual property objects. The concept of data intellectual property has no legal implications.

3.1.2. The pledge of data intellectual property rights violates the law on property rights

In practice, various localities have successively carried out data intellectual property pledges based on policy documents, but data intellectual property pledges still face conflicts with property rights laws. The legal principle of property rights means that the types and contents of property rights should be clearly defined by law. It includes the type of property right, the content of the property, the validity of

the property, and the method of publicity. This principle is stipulated in Article 116 of the Civil Code, and the type and content of property rights shall be prescribed by law. The law here is generally considered to refer to the law in the narrow sense. On the basis of this provision, Article 440 of the Civil Code stipulates that the right of the debtor or a third party to dispose of it may be pledged. Paragraph 5 stipulates that property rights in intellectual property rights such as the exclusive right to use registered trademarks, patent rights, and copyrights that can be transferred may be pledged. This article adds an equal word to the enumeration of intellectual property pledges, which provides a way for the pledge of intellectual property rights other than the exclusive right to use registered trademarks, patent rights, and copyrights. However, as mentioned above, the legitimacy of data intellectual property rights has been questioned, and there is no legal provision for its inclusion in intellectual property rights. Therefore, it is natural that Item 5 of this article cannot be invoked for the pledge of data intellectual property rights.

The fifth item cannot provide a path for the pledge of data intellectual property rights, so can the catch-all clause of this article be invoked? The catch-all clause of this article stipulates that other property rights that may be pledged as provided by laws and administrative regulations may be pledged. As mentioned above, the content of property rights is prescribed by law, and the law of the department should be regarded as a law in the narrow sense, and the catch-all clause adds provisions of administrative regulations. Therefore, some scholars believe that the "law" of the legal property right can and should be interpreted broadly, and at least the administrative regulations can be completely included in the legal "law" of the real right.^[2] However, the author believes that in the absence of legal exceptions, the law of property rights should be followed, which is a law in the narrow sense. As a basic civil system, property rights should be regulated by law. For the interpretation here, please refer to the official interpretation of Article 116 of the General Provisions of the Civil Law: "The "law" in the legal principle of property rights refers to the law, that is, the law enacted by the National People's Congress and its Standing Committee. The catch-all clause in Article 440 of the Civil Code is a law in the official interpretation, which clearly stipulates that it can be prescribed by administrative regulations. However, as far as data is concerned, there are no laws or administrative regulations that stipulate that it can be pledged, and data is only a right and right under the framework of the Civil Code. Therefore, there is a dilemma in determining the property rights of data rights that are still disputed whether the data rights are confirmed, not to mention that it is difficult to meet the preconditions for the pledge of rights, which are stipulated by laws and administrative regulations.

3.2. Risk of the validity of data intellectual property pledge contracts

As mentioned above, there is a conflict between data intellectual property rights and the legalism of intellectual property objects, and the pledge of data intellectual property rights conflicts with the property rights law. The pledge of data intellectual property that should not have appeared is nothing more than the merit advertised in the response policy documents of various places. In practice, the so-called pledge of data intellectual property rights faces the risk of having no real right effect.

If the property right is not valid, then does the pledge contract property have the validity of the contract? According to the principle of distinction, the validity of the pledge contract can still be determined by clearly distinguishing the basis for the validity of the contractual act and the basis for the validity of the change in the real right.^[3] According to the principle of distinction, although the real right has not been established, if the contract creating the real right meets the requirements for the contract to be effective, the contract is still a valid contract. The security interest contract is valid, and the rights of the pledgee can be protected in accordance with the terms of the contract. This concept is also reflected in Article 63 of the Interpretation of the Supreme People's Court on the Application of the Civil Code of the People's Republic of China on the Guarantee System. This article stipulates that if a creditor and a guarantor enter into a guarantee contract and agree to establish a guarantee with a property right that has not yet been provided for by laws or administrative regulations, and the parties claim that the contract is invalid, the people's court shall not support it.

3.3. Disposal risk of data intellectual property pledge

As an innovative financing method, data intellectual property pledge provides a new channel for data asset holders to obtain funds, but its disposal involves multiple risks. These risks are not only due to the particularity of data intellectual property itself, but also closely related to the complexity of the market environment.

First of all, the transferability and realizability of data assets are poor, and data assets usually have

high technical and specific application fields, and the suitable transferee group is relatively limited. This makes it difficult to find a suitable assignee in the market, and the transaction is narrow. At the same time, due to the exclusive nature of data assets, the number of suitable buyers is small, and it is difficult to find buyers who are willing and able to pay a reasonable price. This has a direct impact on the market liquidity and monetization ability of data assets. Secondly, it is difficult to form a data asset trading market, and there is great uncertainty in the valuation of data assets due to the lack of unified market prices and reference standards. There is no reasonable market price as a reference, which makes it difficult to evaluate and determine the value of data assets. Third, the value of data assets is unstable. The market price of data assets is affected by a variety of factors and fluctuates greatly, resulting in unstable value. Finally, the enforcement remedies realized by data assets are difficult to apply, and the high specialization and technical nature of data assets make them directly related to the intelligence and skills of the holder. If the holder does not cooperate or cooperates ineffectively, it is difficult for the transferee to fully obtain the actual control and use rights of the data assets, which affects the successful transfer and value realization of the data assets.

4. Conclusion

Throughout the development of IP pledge financing, the proposal of IP pledge financing is more like a policy tool implemented by the government to promote IP innovation and solve the problem of enterprise financing. [4] Today's so-called data intellectual property pledge financing seems to have undergone the same development path as intellectual property pledge financing. As mentioned earlier, data assets have value and security capabilities, but they are subject to disposal risk. The value secured by data assets is clearly not commensurate with the current amount of financing. Therefore, the author believes that the functional positioning and value objectives of data asset guarantee should be corrected, and the real purpose of data asset pledge financing is to promote innovation and promote the development of data economy.

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