

The Eligibility Analysis of Patent Rights as the Subject of Financing Leases

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Abstract: With the development of patents, China has become a world leader in patent applications. However, the industrialization rate of patents is low, and there is an urgent need for viable patent financing options. Patent rights financing leasing, as a financing method that has evolved in the market, lacks clear legal provisions. Given the unique characteristics of intellectual property, it is worth exploring the eligibility of patents as the subject of financing leases from both a legal and practical perspective. Furthermore, relevant laws and regulations need further refinement to reduce compliance risks associated with patent rights financing leasing.

Keywords: Patent Rights; Financing Leasing; Special Nature of Subject.

1. Introduction

1.1. Background and Significance

1.1.1. Background

In China, intellectual property has been experiencing substantial growth since 2012, with the added value of patent-intensive industries accounting for over 11.6% of the Gross Domestic Product (GDP), and the added value of copyright industries representing over 7.39% of the GDP. However, the industrialization rate of inventions is only 36.7%, indicating a low rate of transformation into viable industries. Many small and medium-sized technology-oriented enterprises possess a substantial number of patents, but due to financial constraints, they are unable to fully realize the industrial potential of their intellectual property. This limitation has hindered the development of patent industrialization in China and impeded the economic value of technology innovation and intellectual property. Effective means of financing are needed to facilitate the transformation of intellectual property, and knowledge property financing leasing has emerged as a viable option in the evolving market economy.

The "14th Five-Year Plan for National Intellectual Property Protection and Application," issued by the State Council, explicitly encourages the innovation of intellectual property financial products and emphasizes the role of financial support in facilitating the transformation of intellectual property. [1]

In China, there is a widespread issue of low transformation rates for patent rights. The "2022 China Patent Survey Report" released by the National Intellectual Property Administration stated, "In 2022, China's industrialization rate of invention patents was 36.7%, an increase of 1.3 percentage points from the previous year." Among the different-sized enterprises, the industrialization rate for large and medium-sized enterprises was 50.9% and 55.4%, respectively, with an increase of 3.8 and 0.8 percentage points from the previous year. For small and micro enterprises, the industrialization rate for invention patents was 45.3% and 22.0%, respectively, showing a decrease of 2.4 and 4.6 percentage points from the previous year. [2] As a result, small and micro enterprises, which hold a significant number of patents, require financial

support through knowledge property financing leasing due to economic constraints and limited financing options.

The eligibility of intellectual property as a subject of financing leasing is unclear from a legal perspective, and financing leasing has been piloted only in select policy cities like Beijing, Fujian, Jiangsu, and Shanghai.

1.1.2. Significance of the Study

Knowledge property financing leasing, as a financial product that has evolved in practice, has inherent compliance risks due to the lack of clear legal provisions. The legal refinement of knowledge property financing leasing and the eligibility of its subject matter are core legislative issues, making this subject area valuable and worthy of exploration.

Patent rights financing leasing represents a new approach to patent financing. At present, patent financing mainly includes pledge loans, securitization, and licensing financing. Among these, pledge loans have the least impact on patent rights in terms of their use and company operations. Financial institutions generally have a negative attitude towards patent financing, making it a pain point in the process of patent industrialization.

Compared to knowledge property pledge loans, financing leasing offers unique advantages. Financing leasing is an innovative financing method that achieves its financing goals through the financing of assets and rights. The financing leasing process has a shorter risk control process, more flexible guarantee methods, higher risk tolerance, and reasonable consideration for financing income and risk. It can be applied to a wide range of projects throughout the country. This innovative model results in a win-win situation where users benefit from new technologies, enterprises accelerate their cash flow, financing leasing obtains financing income, and intellectual property is given economic value. Patent rights financing leasing can help enterprises increase their return on net assets without taking on substantial debt, providing vital financial support. Pledge loans are subject to regulatory requirements from banks and other financial institutions, and using patent rights as collateral for loans often results in lower funds compared to the assessed value. Additionally, the market often requires the debtor to support the pledged rights through counter-guarantees, which adds extra financing costs for businesses. In contrast, the financing

leasing model involves the sale of patent rights, allowing companies to receive the full assessed value of their patents without needing to provide additional guarantees. Overall, financing leasing is a more suitable avenue for patent financing, especially for small and micro enterprises, and holds significant importance in improving the industrialization rate of patents.

1.2. Domestic and International Research Development Status

1.2.1. Domestic Research Status

As practical developments in financing leasing continue, scholars have also been exploring the theoretical framework of financing leasing and generally support the idea of knowledge property financing leasing as a means of local regulation development. Several key points have been discussed:

- Whether intellectual property can be the subject of financing leasing is a practical issue, and it should be approached from the perspective of the development of financing leasing and its actual functions. The suitability of knowledge property as a subject of financing leasing is argued based on the emergence and development of knowledge property financing leasing, the historical changes in the scope of leasing objects in financing leasing systems, judicial practices, and legal foundations.[3]

- From a regulatory perspective, both the provisions related to financing leasing contracts in the Civil Code and the "Judicial Interpretation on Financing Leasing" issued by the Supreme People's Court do not provide clear definitions of the scope of leased property in financing leasing. Only the "Interim Measures for the Supervision and Management of Financing Leasing Companies," issued by the China Banking and Insurance Regulatory Commission in 2020, contains relevant regulations. The paper combines the Civil Code and other relevant provisions to provide legal interpretations and concludes that intellectual property can be recognized as the subject matter in financing leasing contracts. The financing leasing contract should be considered valid. Based on the legal provisions, it is discussed that there are no legal prohibitive regulations that would prevent intellectual property from being used as a subject of financing leasing under the legal principle that what is not prohibited by law is allowed.[4]

- Differences between knowledge property financing leasing and traditional financing leasing are explored, focusing on the intangibility, timeliness, risk factors, and structural characteristics of knowledge property financing leasing.[5]

- By examining theoretical non-conflict and institutional applicability, an analysis is presented. This includes an analysis of the evolution of contract law in China, comparative research on the financing leasing systems in the United States and China, as well as references to the "Model Law on Leasing" of the International Institute for the Unification of Private Law (UNIDROIT), the "Commercial Code" in the Macao Special Administrative Region of China, and regulations in the Taiwan region of China.[5]

In summary, the current research on the suitability of knowledge property for financing leasing primarily focuses on whether knowledge property is applicable to financing leasing, without analyzing whether the nature of knowledge property itself has a negative impact on financing leasing.

1.2.2. International Development Status

The first knowledge property sale-leaseback transaction in the United States occurred in 1993 when Aberlyn Company purchased a biotechnology patent from Rhomed Company for \$1 million. Subsequently, Aberlyn Company granted Rhomed Company a license to use the patent and pay a licensing fee. After a 3-year leasing period, Rhomed Company repurchased the patent for a nominal sum of \$1 and became the patent holder once again.

In the United States, particularly in high-tech and biopharmaceutical industries with high knowledge intensity, patent financing leasing is a common financing method. It allows for the rapid acquisition of financial support and risk reduction by transferring or leasing intellectual property rights. The legal and regulatory environment in the United States provides relatively stable legal protection and regulation for knowledge property financing leasing. The United States has a well-established intellectual property legal framework and dedicated agencies. Additionally, U.S. tax laws offer certain tax incentives for knowledge property financing leasing, further promoting the development of this system.

2. Main Models of Patent Rights Financing Leasing

2.1. Direct Financing Leasing Model

This model operates similarly to the traditional tangible asset financing leasing model. In the first step, a technology company signs a knowledge property transfer agreement with a financing leasing company to realize fund recovery. In the second step, a manufacturing company signs an exclusive license agreement with the financing leasing company and pays a licensing fee, allowing the manufacturing company to acquire the right to use the technology at a lower cost, thereby reducing financial burdens and promoting the industrialization transformation of patents. In the third step, the manufacturing company has the option to purchase the patent rights at a reasonable price within a certain period, completing the transfer of patent rights from the innovative company to the manufacturing company.

This model primarily helps innovative enterprises retrieve funds, allows manufacturing companies to acquire patent usage rights at a lower cost and price, thus reducing risks and financial burdens. However, it comes with notable drawbacks. In this model, the original right holder can exit the scene by cashing out, potentially leading to a significant devaluation of the patent's value due to technological improvements, thus achieving arbitrage goals. Financing leasing companies and manufacturing companies may be exposed to risks related to patent invalidation and value devaluation. Market changes could also result in breaches by manufacturing companies, leading to losses for both parties.

2.2. Aftermarket Sale-Leaseback Model and Aftermarket Sale-Leaseback and Guarantee Model

The aftermarket sale-leaseback model is a common model

in patent rights financing leasing. It involves two main parties: the patent right holder and the financing leasing company. [6] In the first step, the patent right holder transfers the patent rights to the financing leasing company, obtaining a payment for the patent transfer. In the second step, the patent rights are then licensed back to the original right holder through an exclusive license, with the original right holder paying rent to the financing leasing company. In the third step, the original right holder can repurchase the patent rights at an agreed-upon price within a specified period. This model serves the financing needs of the original patent right holder and facilitates the industrialization of patent rights. It effectively aligns the interests of the financing leasing company and the patent right holder, reducing structural risks.

To mitigate the risks associated with patent financing leasing, the market has explored the aftermarket sale-leaseback + guarantee model. Building on the original aftermarket sale-leaseback model, this model requires companies to provide additional patents or assets as collateral to ensure transaction stability and address potential risks. While this model lowers the threshold for patent financing leasing, it also comes with challenges related to asset quantities and credit rating requirements, making it less suitable for small and medium-sized enterprises seeking financing.

The aftermarket sale-leaseback model has indeed become a new avenue for innovative enterprises to secure financing. Through this model, companies can continue using their patent rights without disruption while rapidly accessing funds equivalent to the value of those patent rights as a return on research and development investments. This model supports ongoing innovation within companies and the development of patent industrialization, helping businesses reduce costs and improve efficiency.

Both of the above models meet the dual requirements of "financing" and "financing of assets" that financing leasing entails. In practice, companies secure financing, while patent rights, as assets, are transferred to the lessor, allowing the lessee to effectively possess and use the patent rights.

3. Eligibility of Patent Rights as the Subject of Financing Leasing

3.1. Current Laws, Regulations, and Normative Documents Regarding Patent Rights Financing Leasing

The Chinese Civil Code does not provide specific provisions regarding the subject of financing leasing. According to Article 7 of the "Interim Measures for the Supervision and Management of Financing Leasing Companies," applicable leasing items in financing leasing transactions are fixed assets, except as otherwise provided.

The "Shanghai Municipality Promotion of Financing Leasing Development in Pudong New Area Regulations," which will be officially implemented from October 1, 2023, contains Article 7, which explicitly states that "financing leasing companies conducting financing leasing transactions involving intangible assets, such as patent rights, shall obtain relevant rights, establish a sound valuation and pricing system tailored to the characteristics of intangible assets, and reasonably determine the rental level. Financing leasing companies should closely monitor the risk coverage level of intangible asset values for financing leasing debt,

scientifically determine the value of intangible assets, and formulate effective risk response measures." This local legislation is the first to specify that intangible assets, including patent rights, can be the subject of financing leasing and allows for financing leasing transactions.

The "Provisions of the Supreme People's Court on Issues concerning the Application of Laws for the Trial of Disputes over Financing Leasing Contracts" does not define the scope of subjects in financing leasing contracts.

On September 13, 2015, the Ministry of Commerce and the Beijing Municipal Government jointly issued the "Comprehensive Pilot Implementation Plan for Expanding Openness in the Service Industry in Beijing," which introduced pilot programs for financing leasing of intangible cultural assets, such as copyrights, patent rights, and trademark rights.

In September 2016, the Shanxi Provincial Government issued the "Implementation Opinions on Advancing the Construction of a Strong Intellectual Property Province in the New Era," which explicitly stated that "intellectual property rights can be used for equity, dividends, pledges, and leasing."

Several documents, such as the "Implementation Opinions of the Baotou Municipal People's Government Office on Accelerating the Development of Financing Leasing Industry," the "Opinions of the Fujian Provincial People's Government Office on Promoting the Development of the Financing Leasing Industry," and others issued by various regional governments, have contributed to the development of financing leasing in China. These documents provide support for the promotion of financing leasing activities but are not explored in detail here.

In summary, within the legislative and policy frameworks related to knowledge property financing leasing, there is a clear discrepancy between policy and existing laws. In practice, knowledge property financing leasing is experiencing a series of activities driven by policies. To ensure the legality of knowledge property financing leasing and reduce legal risks, it is essential to align legal regulations with policy directives. Knowledge property should be incorporated as an eligible subject of financing leasing in civil law, intellectual property law, or relevant departmental regulations, thus providing legal safeguards and reducing legal risks associated with knowledge property financing leasing.

3.2. Eligibility of Patent Rights Based on Their Inherent Nature

To investigate whether patent rights can serve as an eligible subject for financing leasing, it is essential to compare patent rights with physical property rights, analyze their differences, and assess how the unique characteristics of patent rights may affect their suitability as subjects for financing leasing. Patents are essentially property rights and do not fundamentally differ from property rights. Like physical property rights, patents also have an assessable value and do not pose inherent theoretical difficulties in the practice of financing leasing.

However, patents exhibit three notable differences compared to physical property: intangibility, limited duration, and inherent risks.

3.2.1. Intangibility of Patents

Patents as intangible assets need the lessor (financing leasing company) to obtain ownership, while the lessee gains practical possession and use.[7]

For these two features, firstly, according to Chinese patent law, patent transfers must be registered with the State Intellectual Property Office. Similar to the registration system used for real estate properties, ownership of patents can be effectively established through registration, without encountering legal or practical issues.

Leasing essentially permits the lessee to occupy and use the leased property. The physical possession of property can generally be determined through physical control, such as equipment located in a factory, or a wallet in someone's pocket. While determining the actual possession of patent rights can be relatively challenging due to their intangible nature, patent rights transfer is confirmed by recording the patent licensing agreement with the National Intellectual Property Administration, serving as a method to establish the patent's transfer of ownership. In addition, the patent right contract can define the scope of patent use through effective contractual agreements.

Furthermore, the exclusive licensing system confines the ownership and control of patent rights to specific contractual parties. This system effectively prevents scenarios of "one item, multiple leases" and maintains control over the rights of intangible assets throughout the financing leasing process, ensuring that patents do not hinder their qualification as subjects for financing leasing.

While patents possess the characteristic of intangibility, the mechanisms in place, such as registration and record-keeping, help confirm the ownership and control of patent rights by the lessor. These mechanisms ensure that patents meet the fundamental requirements of subjects for financing leasing.

3.2.2. Limited Duration of Patents

Compared to "fixed assets," patents inherently have a limited duration.

Property rights related to fixed assets constitute perpetual rights that only extinguish when the asset is destroyed or lost. Therefore, financing leasing periods for fixed assets are typically longer, with lower associated risks. However, patents have limited durations due to the nature of technological advancement and stringent statutory limitations. According to China's Patent Law, the term of an invention patent is 20 years, while utility model patents are protected for 10 years, and design patents for 15 years. In contrast to property rights, the limited duration of patents affects their value assessment and utilization.

Not only because of their limited duration, but the value of patents can also change unpredictably due to technological advancements. Fixed assets can have their value calculated through various accounting methods, such as the market approach or the straight-line depreciation method. These methods consider factors like transaction value and depreciation. However, patents, with their creative nature, do not lend themselves to straightforward calculations, and market approaches are less effective. Preventing risks associated with the limited duration of patents requires specific methods to ensure proper valuation and facilitate financing within the financing leasing process.

Patent assessment, which is a common practice in the market, relies on various techniques, including the market approach, income approach, cost approach, and other derivative methods. These approaches effectively address the challenge of evaluating patent values during financing leasing, considering the limited duration. The income approach, commonly used in assessing intangible assets in the finance sector, is a classic method for patent assessment. The core of

the income approach is to calculate the present value of future earnings based on an appropriate discount rate. The approach can be adjusted flexibly based on various parameters, including but not limited to annual sales, income duration, discount rates, and more. This approach works well for valuing patents and determining financing leasing periods.

The "Guidelines for Patent Valuation," implemented on September 1, 2023, by the State Administration for Market Regulation, provides a specific framework for patent assessment. It outlines the criteria for assessing patents' legal value (including stability, protection scope, determinability of infringement), technical value (technological advancement, technical substitutability, technical applicability, technical independence, technological maturity, and the development trend in the technical field), and economic value (market competition, market application, and patent operation status). These criteria form a legally compliant and effective system for patent assessment, thus clearing obstacles related to patent financing leasing at the national level.

Regarding the issue of usability, the concept of financing leasing involves the utilization of the subject of the lease. [7] While fixed assets are subject to limitations based on their usage period, the inherent nature of patents does not necessarily obstruct their qualification as subjects for financing leasing. The utilization period can be reasonably determined based on market realities and legal stipulations, ensuring that the limited duration of patents does not hinder their eligibility.

3.2.3. Risks Associated with Patents

Patent rights, as legally granted rights, differ from property rights in that they do not automatically come into effect upon the creation of the invention. Rather, patents require a rigorous application process, including examination, publication, and review, before being granted. At each stage of this process, there is the possibility of patent application rejection. Even once granted, patents remain susceptible to invalidation if it is found that they do not meet the statutory criteria. This inherent risk feature of patents can be addressed through market regulation rather than dismissing patents from the category of subjects for financing leasing.

Quality patents with minimal risks, those recognized in the market and considered highly valuable, can be associated with limited risk, and the market can universally accept such patents. Quality patents represent traditional high-value assets. In contrast, patents that are subject to higher risks in assessments may not attract financing leasing participation. The potential invalidation of patents is merely one component of risk in financing leasing. Market selection can efficiently exclude risky patents from the scope of financing leasing.

4. Legislative Recommendations for Patent Financing Leasing

Due to the significant market demand for patent financing leasing and the suitability of patents as subjects for leasing, it is crucial to address the current legal ambiguities and regional policy disparities to ensure compliance within the system. Therefore, providing clear legal or administrative regulations that establish patents as eligible subjects for financing leasing is essential for the development of patent financing leasing.

Specifically:

(1) Include the scope of subjects for financing leasing in the Contract Section of the Civil Code and explicitly state that patents can be utilized in financing leasing.

(2) Develop new judicial interpretations that recognize the validity of patent financing leasing contracts to prevent varying interpretations in different regions.

(3) Create new administrative regulations that specify the models and risk prevention policies for patent financing leasing, ensuring that patent financing leasing can develop healthily within manageable risk parameters.

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