# <sup>1</sup>The Role Analysis of Government in Intellectual Property Rights Pledge and Financing of Technological Small and Medium-sized Enterprises

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#### **Abstract**

Nowadays China is in the process of intellectual property rights (IPR) strategy formulation, for government, to correctly play a role in IPR pledge financing of technological small and medium-sized enterprises(SMEs), deciding the building of IPR exchanging market. On the basis of defining the related basic concepts, this paper analyzes and compares the roles of domestic and abroad governments played in IPR pledge financing, concludes government's problems exist in IPR pledge financing of technological SMEs of our country, at last provides some countermeasures.

**Keywords:** technological small and medium-sized enterprises; intellectual property rights pledge; government; r ole analysis

#### Introduction

As the main body of market economy, technological small and medium-sized enterprises (SMEs) usually have advanced technology, patent, copyright for core assets, and lack physical assets available for mortgage. In 2006, based on characters of SMEs, the Bank of Communications Beijing branch first launched intellectual property rights pledge loan, provided a new road for pledge financing of SMEs. And how the government to play a role of incubator in SMEs' intellectual property rights pledge financing, becomes the focus of research.

#### 1. Relevant Concepts

# 1.1 Technological Small and Medium-Sized Enterprises

According to "the Law of Promoting Small and Medium-sized Enterprises of China", small and medium-sized enterprises (SMEs) refer to the lawfully established enterprises of various ownership and forms within the territory of the People's Republic of China to meet the needs of the society, increase employment, in line with the national industrial policy, the production and business operation scale belongs to small and medium-sized. Different industries have different standards.

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At present we do not have a unified definition for science and technology enterprises, It is generally believed that science and technology enterprise is a science and technology economic entity with science and technology personnel as the main body, is mainly engaged in technology development, transfer, consulting, services, training and technology intensive products development, production and sales. At present assets structure of China's SMEs has the following two characteristics: first, fixed assets are relatively small, thus lack of reliable financing channels. Second, intellectual property, intangible assets account for larger proportion of enterprise assets, so it's difficult for them to apply for pledge loans.

# 1.2 Intellectual Property Rights Pledge Financing

Intellectual property rights (IPR) pledge financing refers to a way of financing that a enterprise use IPR as pledge to get loans from commercial banks, meanwhile, contracts the loan interest, deadline and repayment method. The pledge mainly includes: the trademark rights pledge, the patent pledge, copyright pledge, computer software copyright pledge, etc

#### 1.3 The Possibility of IPR Pledge

#### 1.3.1 Government's Policy is gradually perfect

First of all, legally, the 75th article of China's "Security Law" explicitly stipulates the IPR which can be transferred by law: trademark rights, patent rights and copyright rights. Secondly, on the system, the establishment and development of modern enterprise system, provides a good social basis for starting the business.

#### 1.3.2 IPR Assessment System is Gradually Mature

China successively promulgated "the Intangible Assets Assessment Criteria", "the Notice of Strengthening Intellectual Property Assets Appraisal Management Issues", "the Property Law of the People's Republic of China", etc. The laws clearly stipulated the pledged property problem in IPR financing, which make the intellectual property asset valuation more scientific, standardized, accurate.

# 1.3.3 The Gradual Formation of the Trading Market

In 2010, China's State Intellectual Property Office assessed 43 of the existing national patent technology exhibition trading centers, among them 30 centers have successfully passed the examination and acceptance. The gradual formation and perfect of IPR trading market provides a professional service platform for IPR pledge and financing, so that various subjects such as technology-based SMEs, banks, intermediary service institutions can complete capital financing and pledge on an orderly and stable trading platform.

## 2. Role Analysis of China and Foreign Governments

IPR pledge and financing is a practical response to China's strategy of science and technology and rejuvenating the country. As a leader and ministrant beyond IPR trading market, the government's role should not be ignored. For reasonable positioning of government role, promoting the recognition of new loan policy, perfect IPR trading market and sharing credit risk between banks and enterprises, the role of government must be defined.

#### 2.1Foreign Governments Involved in IPR Financing

#### 2.1.1 American Mode

To promote intangible assets pledge such as IPR pledge, the United States established the federal small business administration (SBA) to provide guarantee for technological SMEs, that many enterprises obtain the chance of financing.

The SBA induce commercial banks to offer loans for SMEs through cooperation in a guarantee way. For small loans SBA provides 80% guarantee, for big loans to provide 75% guarantee, loan maturities can last for 25 years. As a bridge that crosses banks and technology-based SMEs, SBA bears no property credit risk after provide opportunities for SMEs, merely strengthen the credit of original enterprises. Nowadays, IPR pledge loan has already become a basic business for commercial banks and other commercial lenders (mainly loan companies).

#### 2.1.2 Japanese Mode

Japan relies on government policy banks and credit guarantee associations to establish a government-leading pattern of IPR pledge financing.

The government-backed Development Bank of Japan plays the dominant role of government in SMEs' pledge financing, as lenders, DBJ directly provides intangible assets financing loans for some SMEs which have abundant intellectual property assets but lack of funds. In addition, it takes a risk sharing of banks through undertaking loans together with financial institutions. What's the most important is the securitization and commercialization of IPR, which can not only add channels for IPR realization, but also increase the enthusiasm of the financial institutions for IPR pledge financing.

## 2.1.3 Swedish Mode

Swedish IPR pledge business does not get a big progress due to the over-reliance on policy-based loan from government. In Sweden, the commercial banks pay attention to the quality requirements, so they have a strict eye on loan assessment review. However, for fostering enterprise purposes, government relatively loosens the quality requirements for IPR guarantee, therefore, although the policy loan amount is small, intellectual property owner is more willing to seek for government loans. In the long term, without business organizations' assist, the burden of government will be sharpened, nor will IPR pledge get a better development.

## 2.2China Governments Involved in IPR Financing

Table 1: The Role Analysis of China Government in IPR Pledge and Financing of Technological SMEs

Government Mode	Representatives	Function	Risk taker	Financing marketiza- tion degree	Characteristics
Direct intervention type	Xiangtan, Nanjing, Neijiang, Nanhai	Executive orders, instruction intervention	Bank	Low	Simple and efficient, fast, effective; against the market rules, bank risk; prone to corruption
Economic subsidy type	Shanghai, Chengdu	Fiscal subsidy, special funds	Government	Middle	Broaden the financing channels, reduce the risk of financial institutions; Limit the long-term development
Policy support type	Beijing, Wuhan	Bank leading, government assist	Both bank and government	High	Complements Banks' funding costs and risk sharing, on the premise of fully respecting the market for auxiliary, guarantees the bank's enthusiasm

#### 2.2.1 Direct Intervention Type

This is a government-leading type requires financial institutions to provide IPR pledge financing and loans for SMEs government recommended, and government fully tracks the whole process to get feedback. It mainly exists in second and third-tier cities of China, such as Xiangtan city, defines a working way professional departments actively participate in cooperation by establishing a department-jointly-pushed working mechanism and the joint conference system of finance and science and technology. The IPR pledge financing of Neijiang city in Sichuan province is also under strong administrative intervention of government.

# 2.2.2 Economic Subsidy Type

The government of Shanghai and Chengdu separately take fiscal fund subsidies of loan interest and set up a special fund to prevent risks. The Pudong new area government in Shanghai yearly arranges 20 million for setting up special funds in order to ease the IPR pledge loan risk. While Chengdu government annually takes special funds from the three charges of science and technology for IPR pledge loan guarantee. If there is a default, productivity promotion center will bear a loss of 90%, and banks bear a loss of only 10%.

#### 2.2.3 Policy Support Type

To push the new financing method of property rights pledge, local governments have formulated all kinds of normative documents. Zhongguancun administrative committee carried out the document "the Suggestion About Accelerating IPR Pledge Work of Zhongguancun National Innovation Demonstration Area "in 2009, formally put IPR pledge into agenda, and provided discount loans proportionably according to different enterprises' credit "star", the benchmark interest rate of loans for general subsidies ranges from 20% to 40%. On May20,2009, Intellectual Property Office of Wuhan city and the Wuhan branch of people's bank of China jointly issued the "Patent Pledge Loan Operation Guidelines of Wuhan City", regulated and promoted the IPR pledge of SMEs.

# 3. The Reason for the Dislocation of Government's Role

#### 3.1 The Imperfection of Laws and Regulations

Government' financial subsidies and incentives for IPR pledge of technological SMEs are far from enough. Although the pledge can be trademark right, patent right, copyright and layout-design right of integrated circuits, most of the local government still lack differentiated support policy based on the IPR category. The regulatory documents about power division among central government and local government are few, which leads to the high concentration of power and increases time costs and capital costs of SMEs' IPR pledge financing.

# 3.2 The Lack of Intangible Assets Financing Experience

Although the IPR pledge policy has been carried out for a long time, its pledge and financing has not become the main source of corporate loans because of the variability and intangibility of IPR. Secondly, the management talent gap is big, the IPR pledge still lack a talent team for professional skills and practical knowledge. A functional organization is also required for coordination.

# 3.3 The Difficulty for IPR Assessment

First, China lack of a perfect, scientific, unified IPR assessment system and management standard, so we can not accurately assess the value of IPR. Second, currently there are three methods for evaluating IPR: cost method, market comparison method and income present value method, different assessment methods and institutions lead to different results. Thirdly, Intermediaries themselves lack of assess ability and experience to support intellectual property evaluation.

#### 3.4 The High Risk for IPR Financing

The imperfection of China's financial market, the absence of SMEs' financing channels, the deficiency of capital market, make SMEs lack of funds in a high risky environment. It's difficult for risk market to seek unity and standardization because of the complexity of risk control. SMEs can not have quick, accurate and effective communication with banks due to their system is not sound and information acquisition is not in time, that add difficulty for IPR to liquidate.

# 4. Countermeasures of IPR Pledge and Financing for Government

The government plays a indispensable role in SMEs' IPR pledge and financing as server, promoter, vindicator and supervisor. For, government, we can do as the following aspects.

#### 4.1 Adjust Measures to Local Conditions, Implement Policy of Characterization

Under the premise of government guidance and market leading, regard the patent pledge as the breakthrough point, gradually improve relevant laws, regulations and policies, promote IPR pledge business characteristic and specific. The government should focus on process of pledge registration, evaluation and market transaction, formulate operation rules and standards, make them applicable and operable. We can also conduct a characteristic IPR market mainly embodied with patent rights through enlarging pilot areas, constructing trading platform, constructing the pledge registration channel, building enterprise credit databases, and encouraging financial institutions to lend.

# 4.2 Setting up a Diversified Pledge Mode with Various Participants

(1) Absorb more stakeholders into the establishment procedure of local administrative regulations, let all commercial institutions, the mediation guarantee agencies, SMEs participate in the hearing to ensure the effectiveness, comprehensiveness, timeliness and pertinence of the policy. At the same time, to set up a IPR pledge financing service system completely including assessment, pledge and transactions.

(2) We should gradually establish a market-oriented IPR pledge loan mode under the government's help. Nowadays in China we can conclude the SMEs' credit guarantee system to"a whole, two wings, three-tier". "a whole" means to regard the SMEs' credit guarantee system in a city, province and country, "two wings" indicates commercial guarantee agencies and mutual guarantee agencies aiming at SMEs in urban and rural communities, "three-tier" means in guarantee system, there are three service targets: SMEs' credit guarantee institutions at the provincial level, SMEs' credit guarantee institutions at the city level, the community mutual guarantee agency and commercial guarantee institutions.

## 4.3 Introduce Science and Technology; Build a Network Service Platform for IPR Pledge Financing

- (1) Set up a stable management network service system of SMEs' IPR pledge financing, construct a dynamic IPR database for column sorting, to provide a user login system for enterprises, banks, intermediaries to search results, so information can be shared and disclosed to every user.
- (2) Accelerate the construction of SME network credit system. Build rating system and credit system of SME pledge financing. Although China has introduced some stipulations and files for IPR pledge registration, but it's difficult to work in specific operation because of IPR's abstraction which add problems for getting feedback. Building a network credit system for SMEs can not only provide reference and basis for banks to offer loans, but also regulate and formulate the pledge financing market of IPR.
- (3) Establish a database of talents specialized in intellectual property. Put certified public valuer, industry experts, legal experts and scholars into the talents database so that enterprises can get counsels.

#### 5. Conclusion

In the process of implementation of IPR pledge financing, the government plays an important role. As a government department, it should not only to provide a certain amount of subsidies, reduce the financial burden of enterprises, but also focus more on building a good intellectual property trading environment. Based on this situation, this paper suggests to cultivate a regulating and controlling role for government in IPR pledge and financing, establishes a market-oriented operation platform consist of government, banks, guarantee agencies, law firms and enterprises, etc.

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