

# Research on the Construction of Intellectual Property Operation Platform under the Background of “Internet +”

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## Abstract

Intellectual property operation platform serves as an important bridge between promoting and realizing the value of intellectual property. And the construction and improvement of it holds the key to improve the level of intellectual property application and implement Chinese IPR strategy. Moreover, the coming of “Internet +” era creates a favorable environment for intellectual property operation platforms. The purpose of this paper is to explore how to build an intellectual property rights operation platform which has overall function under the background of “Internet +”, then to create a “one-stop” solution for intellectual property operation under demand orientation. The second step is to strengthen the external linkage between intellectual property operation platform and other platforms to integrate resources. The third step is to design the internal business module of intellectual property operation platform, emphasize the compatibility of different subjects’ interest in the platform and avoid the technical, legal and economic risks in the construction process of intellectual property operation platform.

## Keywords

Intellectual Property Rights, Operation Platform, Internet +

## 1. Introduction

It is generally known that innovation has become the first driving force of the current development. To accelerate the integration of inventions, industrial innovation and economic development through the operation of intellectual property is the only way to promote supply-side reform and economic transformation in China. The intellectual property of China has developed very well in

recent years, but the disjunction between intellectual achievements and industrialization is still a problem which demands prompt solution. Compared to the traditional businesses such as patent application, trademark registration and copyright registration, intellectual property operation is still a low-frequency and non-essential service area. The most important issue about intellectual property operating subject and operation platform is how to cultivate the market, dig out the demand of potential users and transfer intellectual property operation from low-frequency business into high-frequency services.

The State Council of China issued *Planning for the protection and application of intellectual property rights in the 13th five-year* on December 30, 2016, which proposed new models such as innovative intellectual property operation modes and service products through “Internet +”. With the development of a new generation of information technology, “Internet + intellectual property operation” mode will become the new developing direction of China’s intellectual property operation service system both at present and in the future. Based on the rapid increase of the number of intellectual property rights, “Internet + intellectual property operation” mode could maximize the value of intellectual property rights, and enhance the competitiveness of enterprises, industries, regions and countries.

## **2. General Development and Problems of Intellectual Property Operation Platform**

Intellectual property operation refers to the process during which the enterprises and other specialized organizations realize the economic value of intellectual property through intellectual property rights licensing, transfer, financing, pricing, and construction of intellectual property alliance. “Internet +” means to apply the innovation of the Internet in all fields of economy and society to promote technological progress, efficiency improvement and organizational change.

### **2.1. Construction of Intellectual Property Operation Platform**

In order to change the present situation of the low operation level of intellectual property rights in China, speed up the transformation of scientific and technological achievements, promote intellectual property operation public service, the ministry of finance and the state intellectual property office jointly issued *Notice on the promotion of the operation of intellectual property rights in a market-oriented manner* on December 16, 2014. The file is aimed to establish the public service platform construction of the national intellectual property operation in Beijing and build two major characteristics pilot platforms in Xi’an and Zhuhai. Then it chooses and supports 20 intellectual property operations which has outstanding industry features, abundant talents resources, good business foundation and advanced operation mode in 10 provinces through equity investment to promote the rapid development of the national intellectual property operation service, and finally forms “1 + 2 + 20 + n” operating service system of

intellectual property rights.

The intellectual property service pilot work has made great progress in 2016. A priority construction fund of industrial intellectual property rights operation has been established to assist the development of 10 sectors which is supported by “*Made in China 2025*”. Four provinces of China has set up the intellectual property pledge financing risk compensation fund to promote the fusion of intellectual property rights and innovation resources, industries and financial capital, and initially formed the “platform + organization + capital + industry” operating service system of intellectual property rights. The state intellectual property office of China issued *A notice on the construction of intellectual property rights operation service* on June 29, 2017. The state intellectual property office of China chose Qingdao, Suzhou, Ningbo, Xi’an, Zhengzhou, Chengdu, Changsha, Xiamen as the construction of intellectual property operation service system supports cities. At the same time, the ministry of finance allocated 150 million yuan support funds for each city at the early stage.

## 2.2. Problems on the Development of Intellectual Property Operation Platform

The intellectual property operation platform has the following problems on its development:

“Internet +” is insufficiently integrated with traditional intellectual property

The traditional intellectual property rights operation process is complicated, so it is hard to realize the effective joint of supply and demand parties and integrate intellectual property alliance, which seriously restricts the effect of intellectual property operation. Compared with the traditional intellectual property, intellectual property rights operation in the “Internet +” era could take the advantage of internet platform, reduce constraints between geographical and industry and realize effective integration of resources, shorten the distance between supply and demand sides of the intellectual property, promote intellectual property transaction and pledge financing. Meanwhile, big data technologies help to form patent alliance among relevant enterprises, reduce unnecessary R & D funds and time and enhance the comprehensive strength of the enterprise.

The resource integration capability of existing platform is insufficient

As an important carrier of intellectual property operation, intellectual property operation platform should be fully match the main part such as intellectual property supply party, operation service institutions and intellectual demand party, which is conducive to obtain intellectual property resources, grasp the operation of supply, demand information, strive for the support policy from the government and promote the effective operation and sustainable development of platform. However, the existing platform innovation subjects and operational service resources are loosely distributed, platform is set up relatively late, the scale is small and propaganda is not enough [1]. Given this, enthusiasm of all

kinds of subjects involved cannot be fully mobilized, which causes some platform to have poor operating efficiency. Besides, the traded the number of intellectual property rights, intellectual property rights transaction successful cases still remain to be improved.

The service content of existing platform needs to be more comprehensive

Although the scope of intellectual property operation service is extensive, the majority institutions' business focuses on traditional agent, license and transfer service of intellectual property and there are no high-end operating chains such as intellectual property value assessment, pledge financing, early warning and rights protection. The cooperative operation organizations of intellectual property rights are more conservative because of the small scope of service objects and these organizations are subject to specific target orientation. Overall, the service content of existing platform is single cure, lacking specialization and synthesis [2].

Professional compound talents in intellectual property operation are insufficient

The comprehensive promotion of the service capacity of intellectual property operation platform cannot be separated from professional high-quality talents. Our country basically established an intellectual property right talent troop, but it still lacks specialized intellectual property rights operation talents. In addition, due to the limitation of institutions service content and the new employment channels, intellectual property complex and professional talents who are familiar to the field of professional and technical knowledge and understand the international law are insufficient, which leads to insufficient service capacity of platform.

The platform operation funds are single and insufficient

Nowadays, the financial sourcing of intellectual property public service platform mainly includes the government investment, building operator's investment and a few social capital. The non-profit orientation of platform makes investors lack enthusiasm. Besides, the platform is unable to be efficiently operated and it is difficult to attract social capital. The operation funds of social operation institutions are mainly derived from self-financing of enterprises and small amount of government funds. In practice, the operating income of intellectual property rights is very little and it still needs the compensation of traditional business income.

### **3. The "One-Stop" Solution for Intellectual Property Operation Platform under Demand Orientation**

#### **3.1. The Operating Demand of the Innovation Subject**

The meaning of intellectual property rights operation platform construction is to meet the demand of innovation subject of intellectual property rights operation. Different innovation subjects have different requirements for the operation of intellectual property. The operation of intellectual property rights in enterprises,

especially high-tech enterprises, is one of the most effective means to acquire the initial R & D investment and economic return. Therefore, it is a natural and rational choice for enterprises to attach great importance to the operation of intellectual property rights [3]. Moreover, it is easier to achieve the commercialization of research findings if enterprises carry out R & D activities based on market demand and their own advantages. Enterprises can independently achieve the general operation of intellectual property or by means of industry-university-research cooperation. However, enterprises need the help of intellectual property operation platform because they lack qualifications or capacity in some areas, such as high-value intellectual property acquisition, the formation of patent pool, technology import and export, intellectual property capital operation and so on.

Universities and research institutes are important subjects to create intellectual resources and intellectual property rights. They are also responsible for intellectual property operation. With strong impetus of national policies, many universities and research institutes have established and improved their own transformation institutions of scientific and technological achievements. But there are still large rooms to improve intellectual property operation effect. Many factors restrict the conversion rate of innovation achievements of universities and research institutions. For example, internal approval process still exists after cancellation of external approval of the scientific and technological achievements transformation. Scientific and technological personnel who hold the leadership position have limited the transformation of scientific and technological achievements. Risk of unsuccessful operation still resist and so on. Therefore, it is an important choice that universities and research institutes turn to the intellectual property operation platform to carry out the whole trusteeship of intellectual property, establish the intellectual property alliance and protect intellectual property rights.

### **3.2. The Supply of Operating Services**

The intellectual property operation platform needs to solve the following two “disjointed phenomena” [4]: First, the creation of intellectual property rights and the market demand of intellectual property are out of line and the creation does not meet the demand; Second, the demand for intellectual property operations is disconnected with the supply of services and demand is not satisfied. The root of the problem lies in the information asymmetry between supply and demand. Therefore, during the construction process, the platform will focus on the intellectual property operation demand of the innovation subject in the operation link and the ability of operating service providers to build information communication and sharing channels, and adhere to the innovation subject intellectual property rights operation demand as the orientation to provide directional guidance for innovation, and finally realize the seamless connection between supply market and demand market. At the same time, the platform plays the service derivative role to create the operating demand, which reverses push

order-oriented R & D and innovation.

The traditional intellectual property service mainly includes transfer, licensing and shareholding, etc. In the process of construction and development of intellectual property rights operation platform, we should constantly improve the traditional service mode and improve the service level. We should also pay attention to the reality, take positive response to the new situation and actively explore and develop intellectual property insurance, intellectual property rights collateral financing, securitization of intellectual property mode to revitalize the value of the intellectual property rights [5]. The platform is oriented by demand to accelerate the pace of innovation and promote the service mode of the old and new service. The daily operation of the platform and the process of providing services require financial support. For the public welfare platform, it is necessary to increase the support of external funds such as finance to provide the necessary financial support for platform operation and sustainable development. For a for-profit operating platform, it's a reasonable distribution of operational revenue, not only to meet the needs of stakeholders, but also to ensure the normal operation of the platform and achieve win-win results.

### **3.3. Awareness Enhancement**

Intellectual property operation platform construction is an important part of the intellectual property operation forms. Its effects are not limited to intellectual property service itself, for a series of derivative effects are also included. Such as, the platform construction can promote the formation and development of high-tech services, accelerate the development of high-tech industry, provide new opportunities for the innovation of the financial industry of science and technology, clarify the scope of government's responsibility in the service industry of intellectual property and realize the precise positioning of government role.

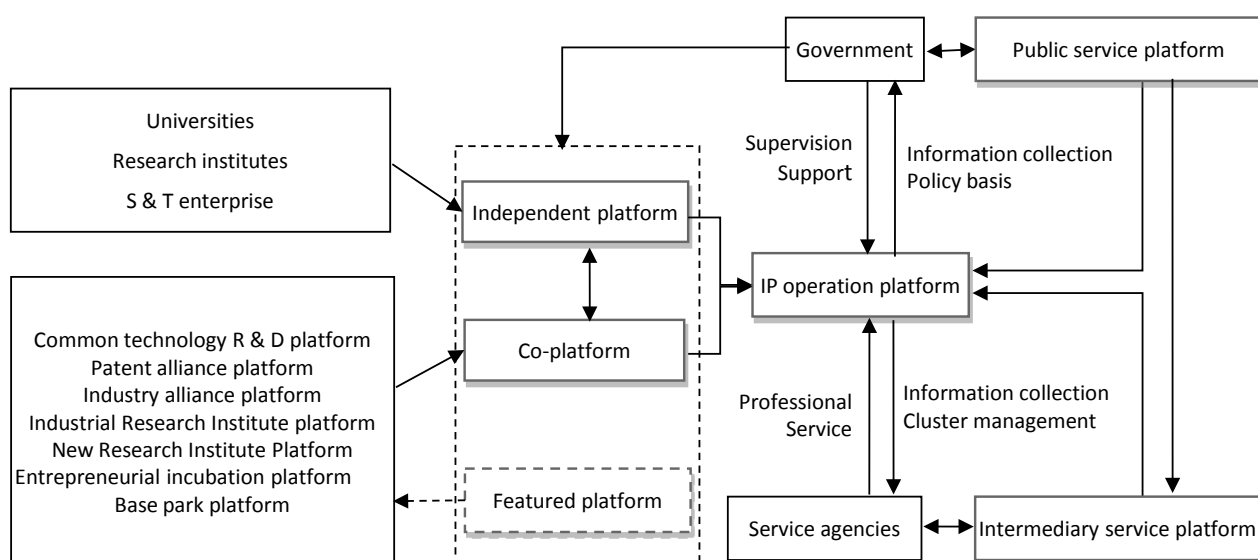
Although the construction of intellectual property rights operation platform is important, the marketing of the platform is also very important because of the platform's resource integration capabilities and service delivery capabilities. Otherwise, even if we can provide a "one-stop" solution to intellectual property operation, it is too narrow to expand the development situation because the service and the benefit side are too narrow. The intellectual property operation platform fully plays the publicity opportunity. In special occasions, such as "4 × 26" world intellectual property day, China patent week, "3 × 15" consumer rights protection day, and "4 × 23" world reading and copyright day, platform goes into universities, scientific research institutes, enterprises, communities and parks [6]. Platform promotes the advanced practice of intellectual property operation services through consultation of the plaza, itinerant speeches, media advertising, BBS salon, publication of typical cases, policy interpretation to expand the breadth and depth of intellectual property promotion and improve the awareness of the platform.

## 4. External Linkage Construction of Intellectual Property Operation Platform

### 4.1. Relationship between Intellectual Property Operation Platform and Other Platforms

The construction of intellectual property operation platform is inseparable from the active participation of the innovation subject and its consortium which can also be regarded as the main responsibility platform for the operation of intellectual property rights. According to the cooperation status of the subject of intellectual property rights operation, intellectual property operation platform can be divided into the following two categories: one is independent intellectual property operation platform which includes enterprises, universities, research institutions, other business unit and its self-established intellectual property transfer promotion agency; the other is the coordination of intellectual property operation platform, including maker spaces, pioneer park, incubator, accelerator, university science park, study abroad returnees pioneer park, industrial base, science and technology park, free trade zone, new research institute, patent technology alliance and industry alliance which undertake the operation of intellectual property rights [7]. As shown in the **Figure 1**.

For these two categories, the independent operation platform of intellectual property rights is mainly the unification of intellectual property creation subject and application subject. According to *Law of the People's Republic of China on Science and Technology Progress*, *Law of the People's Republic of China on Promoting the Transformation of Scientific and Technological Achievements* and other relevant laws and regulations, enterprises, especially the high-tech enterprises, are the predominant subject of the technical innovation and intellectual property operation; Universities and research institutes should undertake their transformation tasks after producing scientific and technological achievements.



**Figure 1.** The relationship between the IP operating platform and other platforms.

The public policies such as Implementation of *the provisions on Promoting the Transformation of Scientific and Technological Achievements*, *Action plan of Promoting the Transformation of Scientific and Technological Achievements*, *Suggestions on the transformation of scientific and technological achievements in high education institutions*, require universities and research institutes to establish and improve their own transformation institutions for scientific and technological achievements; they also require companies to strengthen cohesive relationship between R & D department and production department and shorten the period of scientific and technological achievements from the creation to the operation, then send the scientific and technological achievements and intellectual property related information concurrent to the information system of scientific and technological achievements [8]. The intellectual property rights co-operating platform obtains the right of authorization and management of the corresponding intellectual property due to the specific objects within the service scope. Such platforms can basically achieve the creation of intellectual property rights to the initial operation by absorbing and integrating resources and promote collaborative innovation among the participants in the platform.

#### **4.2. Formation of Intellectual Property Operation Characteristics Platform**

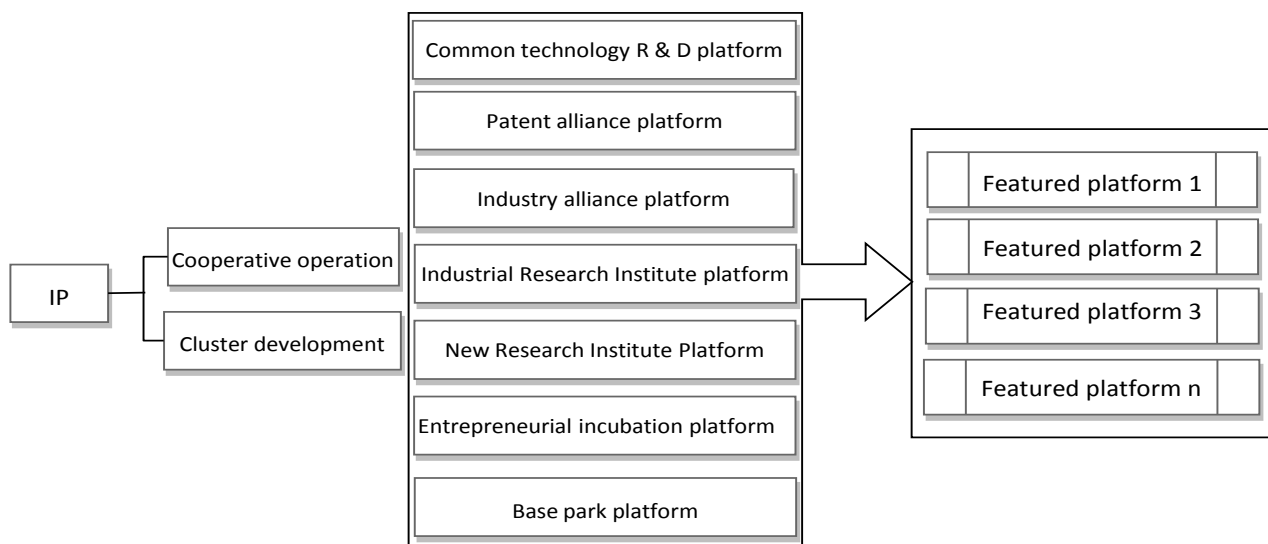
The construction of intellectual property rights operation platform needs to evaluate the actual situation in the region and carry out the layout of the related characteristic intellectual property operation platform. For instance, the most representative feature of Hefei is the cooperative operation platform of intellectual property which possesses the function of cooperative operation and agglomeration development. As a result, platforms of technology research and development, patent alliance, industry alliance, new research facilities, entrepreneurial incubation and Base Park will be the primary choice of Hefei intellectual property featured operation platform, as shown in the **Figure 2**. The number of featured platforms is about 2 - 5.

The specific form of the intellectual property rights operation platform needs to be designed under the overall framework during the construction of the featured platform. The platform can be independent platform or based on chief platform. The two national intellectual property public service featured platform are unique platform of independent operation, the national intellectual property operation and financial innovation public service platform (hengqin) pilot platform and the national intellectual property operating civil-military integration platform (xi'an) featured platform [9].

#### **4.3. Resource Integration under the Main Cluster**

The emphasis on the independent and distributed construction of intellectual property of various platforms does not mean there is no connection between platforms. It refers to blend intellectual property operation with comprehensive layout of the construction of the platform in order to ensure that all kinds of





**Figure 2.** The formation of intellectual property operations platform.

platforms enhance coordination and interaction, seeking their own development in the cooperation. It is necessary to construct various platforms to improve the comprehensive operation efficiency and operation service level of intellectual property. The linkage of all kinds of platforms requires the integration of various subjects. Regardless of the “Who dominates” factor, the intellectual property operation platform requires the comprehensive cooperation of the subjects such as “government-industry-university-research-finance-user”, and the compatibility of different roles. Considering the factors of “Who dominates”, the intellectual property operation platform requires the dominant to lead other subjects and fully mobilize their initiative and enthusiasm. Every subject which wants to enter intellectual property operation platform must meet certain standards, otherwise, herd phenomenon will fail to achieve high quality service.

The close cooperation of subjects is beneficial to the integration of advantageous resources, such as innovation chain, industry chain, capital chain, policy chain resources, policy chain and so on. The integration of various resources can help to exert its agglomeration effect, which increases the platform’s credibility, influence and attraction. Simultaneously, the integration of all kinds of resources makes it possible to create a “one-stop” service of intellectual property operation integrated platform without the need for other alternatives. In addition, the comprehensive platform of intellectual property operation is the choice of different subjects and their carrying resources, which reflects the characteristics of the intellectual property operation platform.

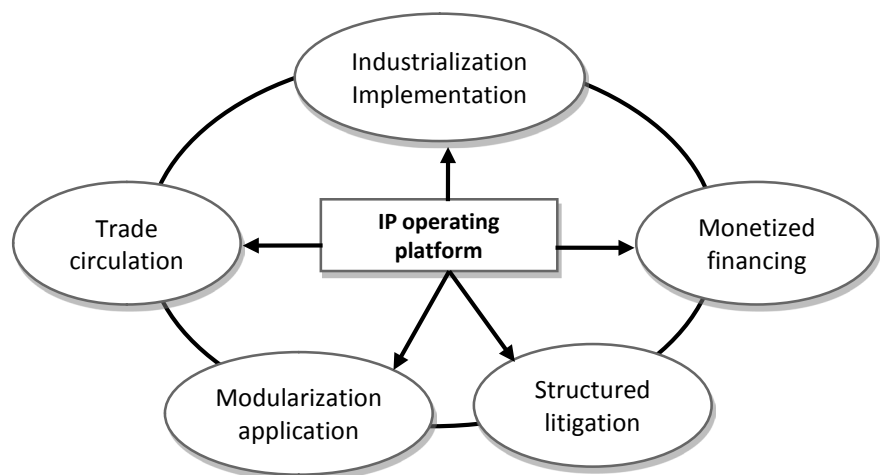
## 5. Modular Construction of Intellectual Property Operation Platform

### 5.1. Module Design of Intellectual Property Operation Platform Business

Intellectual property operation platform undertakes a number of specific oper-

ating services. According to different ways of operation of intellectual property, the intellectual property operation platform has at least the following five core business modules as shown in the **Figure 3**: Firstly, intellectual property rights industrialization implementation module (including internal implementation, external implementation and implementation of internal and external cooperation, etc.); Secondly, intellectual property rights trade circulation module (including intellectual property licensing, intellectual property transfer, technology acquisition, technology import and export, etc.); Thirdly, intellectual property monetized finance module (including the shareholding of intellectual property rights, intellectual property rights securitization of direct financing, intellectual property mortgage or pledge loan of indirect financing, intellectual property trusts) [10]; Fourthly, intellectual property rights modularization application module (including the necessary patent portfolio, the construction of patent pool, the establishment of intellectual property alliance, etc.); Fifthly, the intellectual property rights structured litigation module (covering obtain compensation through negotiation, obtain compensation for damages for infringement through litigation, etc.).

Among them, the industrialization module of intellectual property aims at the embodiment and industrialization of scientific and technological achievements through self-implement, allowing others to implement or co-implemented with others in order to carry out subsequent test, exploitation, application, promotion to form new technology, new materials and new products. It requires that the platform may have to undertake corresponding technical risk, have to understand all kinds of business rules, business model, and have strong failure tolerance, and leave enough space for its members to start up business. The intellectual property right trade circulation module itself does not carry out the corresponding scientific and technological achievements, but transfers it out, which can fully realize intellectual property value, and simultaneously also avoid the risk of implement failure. The intellectual property monetization financing



**Figure 3.** Five business modules of intellectual property operation platform.

module itself points to the existing financial services institutions which provide intellectual property financing services. The combination of intellectual property rights has overlapped with the above mentioned intellectual property rights co-operating platform, and the former is the important component of the latter, which specializes in the intellectual property portfolio operation. The structured litigation module of Intellectual property rights is based on the professional legal services of legal service institutions or legal departments of enterprises, and carries out intellectual property rights defensive or offensive rights protection through legal combination strategy, so as to obtain the corresponding economic interests.

## 5.2. Benefits Compatible with Business Integration

The intellectual property operation platform firstly needs to make the choice of operation mode such as to choose what services to provide; Secondly, the design of corresponding business modules should be carried out to meet the specific operational requirements. In order to realize the maximization of intellectual property value, the intellectual property operation platform also needs to carry out the comprehensive measurement of related business to select the optimal solution of intellectual property operation. The variation in advantages of different intellectual property rights operating business modules also lead to differential interest pursuit. For integrated platform, the main purpose of the construction is public benefit, which directly relates to the service types, service range, service enthusiasm, service efficiency, etc. provided by the operating services [11].

For the independent operation of intellectual property rights, it is less involved in other operations besides implementing the corresponding scientific and technological achievements, and they often seek out the “outsourcing” of operation services. In terms of the cooperative operating subject of intellectual property, the choice of profit or public welfare is best suited to the combination of public welfare and profitability in a certain scope. For intellectual property operation intermediary services, it is indispensable to pursue the maximization of economic benefits, and there are also services for self-promotion and brand building for short-term public welfare. In terms of the funding of intellectual property rights operation, the balance between public welfare and profitability should be balanced. The operation of public services of intellectual property rights is difficult to recover due to its great investment, while profit-making market subjects have no incentive to provide such services, so the government should be responsible for the provision of public services. Therefore, public service platform of intellectual property rights operation take achieving the maximum extent of public welfare as its starting point and the end.

When different subjects, business resources, interest demands of platform cooperate in the same platform for a long-term, a containment effect would appear for which the demand can be resolved and the platform can remember the

customer preference. With the help of big data analysis, it is easy to generalize the innovation rules, to induce the new consulting business, and to realize the service extension under the cooperation.

### **5.3. Supply and Demand Role Swaps**

In most cases, the independent operation platform of intellectual property and cooperative intellectual property rights platform play the role of a demander at the overall operation platform, the two types of platform for its own intellectual property rights have the need to achieve its economic value, and resort to integrated operation platform for service. In addition, for specific purposes, such as acquiring patents for other innovative subjects to build their own patent portfolios, the two types of platforms are also demanders. However, when independent intellectual property rights operation platform and intellectual property co-operating platform provide intellectual property operation services for their internal members, the platforms play the role of a service provider.

Therefore, from a particular perspective, the two platforms should actively integrate into the construction of larger platforms, grasp the optimal conditions to their own development, and form external forces in order to promote their own development and growth. On the other hand, the platform should learn advanced management experience and service mode to improve its operation service of intellectual property.

## **6. The Risk of Intellectual Property Operation Platform Construction and Its Prevention**

The characteristics of the intellectual property rights and the problems in the construction of the platform will bring technical, legal and economic risks to the construction and development of the platform [12], so as to take preventive measures in the construction of the platform.

### **6.1. Technical Risks and Preventive Measures**

Intellectual property rights technology risk is mainly refers to some of the intellectual property rights may exist cannot be used in the actual production or into the actual production situation of little value, the value of low intellectual property rights and intellectual property rights itself value too much volatility and income instability. Aiming at this kind of technical risk, make the following preventive measures:

Firstly, the development of a revised research and development mechanism based on market application. The key to this model is that the demand side actively communicates the demand intention to the platform, and the platform arranges the various requirements and then publishes it to different intellectual property rights providers. Through voluntary orders and competitive bidding, the research and development subject is selected as the demand side service.

Secondly, it is important to analyze the market prospect of intellectual prop-

erty rights. Relying on the platform of internal database retrieval requirements of intellectual property information, Combined with the demand information on the intellectual property supply market correlation analysis to the actual demand and development trends prevail, distinguish between different intellectual property rights of the value of marketing, scientific and accurate prediction of different types of intellectual property market prospects.

Thirdly, real-time review of ownership status and value fluctuations, and alert to the occurrence of significant value fluctuations and ownership stability changes in the operational status of intellectual property. In order to avoid the vicious competition relationship between the rights holders in the patent implementation, the interests of the platform will be damaged, and the information review should be conducted in a real-time and normalized way. The tracking feedback service object and the subject information change situation to provide information reference for adjusting operation strategy.

## 6.2. Legal Risks and Solutions

The legal risks faced by the intellectual property operation platform include the infringement of the operating platform itself, the subjective malicious infringement, malicious litigation and so on. The platform can circumvent such legal risks through the following measures:

Firstly, the platform database should obtain regular information through proper channels. In the process of platform information database, database and talent pool construction, the access channel of information should be legal and strictly negotiated with the intellectual property management departments of each country and region, and obtain relevant information after authorized authorization. As far as the talent pool is concerned, ensure that an expert information is published to avoid platform infringement. When publishing expert information publicly, it is important to ensure that experts agree to avoid platform infringement.

Secondly, actively avoid malicious litigation and infringement. Study the methods of selecting the intellectual property portfolio, focusing on the non-implementation subject's intellectual property operation and preventing the malicious litigation risk of the patent rogue company.

Thirdly, the platform should enhance the international vision of protection. Learn from other enterprises lessons and improve their own level of protection. Improve legal consciousness, pay attention to the formulation of foreign intellectual property dispute countermeasures; actively sought assistance from the government for foreign rights protection. Adhere to the right of litigation and actively respond to litigation joint enterprises involved to win the win-win situation.

Fourthly, the formation of professional legal rights services sector. Actively seek to cooperate with the law firms that are engaged in intellectual property rights protection, as the long-term cooperation department of the platform to carry out the outsourcing of major rights protection and response cases. For

some daily, difficult legal disputes, the platform to set up a daily intellectual property rights legal team, gathering intellectual property legal personnel, the establishment of platform legal rights business, to provide regular legal rights services.

### **6.3. Economic Risks and Responses**

Intellectual property is different from tangible assets. The main way for a right holder to acquire a right is to apply or register. Influenced by the national legal system and the characteristics of intellectual property, the existence of large instability in each type of intellectual property rights causes the platform to face complex economic risks.

Firstly, through the way of online patent research to review status of intellectual property law, clarify its protected fixed number of year; avoid invalid operation of intellectual property, and to provide security for the intellectual property pledge financing.

Secondly, review the actual value to avoid the loss of the guarantee. The property rights of intellectual property rights and their own characteristics make their value uncertain, which affects the guarantee function of intellectual property financing collateral. The operating platform needs to understand the range of the fluctuation of the value of intellectual property rights. The intellectual property rights with large value fluctuation should be re-evaluated and re-determined its value, so as to provide a scientific and reasonable guarantee certificate for the pledge financing of intellectual property rights.

Thirdly, strengthen propaganda and integrate social capital. In the early stage of the construction of the platform, the market influence was insufficient; the fund is severely underfunded, which only rely on government and platform operators. The platform should enhance the platform awareness rate through government website and offline publicity to attract more residents, demand customers and social financial support.

## **7. Conclusions**

The construction of intellectual property operation platform is a systematic project, which cannot be achieved overnight. It is necessary to follow the principle and focus on promoting, step by step implementation. According to the principle of “government guidance, market-oriented operation, resource aggregation, open sharing, model innovation”, to create “a comprehensive intellectual property transaction transformation + professional intellectual property service support” of the new type of intellectual property rights trading operation platform, help to form a public service and specialized service of ecological environment with the use of intellectual property as the main line, enhance the influence of intellectual property resources on industrial operation decision and industrial development pattern, build an open, diverse and symbiotic innovative ecosystem based on intellectual property operation service.

Under the background of “Internet +”, the new mode of intellectual property rights operation platform needs to be combined with “online and offline” and “network and outside network” [13], and construct “a network, a center, multi-bank” mode. “A network” refers to the official website of intellectual property transactions, which mainly provides online one-stop, all-field and whole-process services, such as intellectual property transaction, value assessment, pledge financing and hosting. “A center” refers to the offline intellectual property operation service center, which will provides the whole process service of offline intellectual property operation, including consultation, decision making, analysis, filing, tracking, after-sales and so on. “Multi-bank” is the reserve resources of intellectual property operation platform, which mainly guarantees the normal construction and operation of the online and offline system of the platform, and helps support a number of enterprises to industrialize the high quality patent technology, including intellectual property rights database, innovation demand library, talent pool, service organization library, policy library and fund library, etc.

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