

# Research on the development strategy of Qin Chuangyuan Innovation-driven Platform for Intellectual Property Service in Shaanxi Universities

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**Abstract:** On March 30, 2021, the Construction Conference of Qin Chuangyuan Innovation-driven Platform was held in Xixian New District, announcing the official establishment of Qin Chuangyuan innovation-driven platform. The platform is the general platform and source of innovation and development in Shaanxi Province, the largest incubator and special zone for the transformation of scientific and technological achievements in the province, and also a key measure to break the “blocking point” of scientific and technological advantages and economic development transformation. At the same time, the Shaanxi provincial government has promulgated a series of relevant policies such as the Three-year Action Plan for the Construction of Qin Chuangyuan Innovation-driven Platform, pooling the resources of the province to build this general platform for Qin Chuangyuan innovation. The promotion and application of intellectual property rights is an important part of scientific and technological innovation work. Shaanxi is a province with large science and education resources. How to use intellectual property rights of colleges and universities to serve the development of Qin Chuangyuan innovation-driven platform and serve the high-quality development of the province is one of the important research fields in current scientific research work.

**Key words:** Intellectual property rights; Driving platform; Strategy research

## 1. Research background

(1) Policy background: According to the relevant research data of the “China Patent Survey Report 2022”, the industrialization rate of effective invention patents in China in 2022 is only 36.7%, a large number of patents are still asleep and have not been effectively implemented, and the relevant R&D investment and public resources are seriously wasted; On the contrary, many domestic enterprises still have a large number of technical needs that have not been met. The reasons for these practical problems are complex, including issues related to the patent system structure, as well as institutional mechanisms, innovation and development awareness. As an important part of scientific and technological innovation, the effective implementation of intellectual property rights plays a pivotal role in optimizing the allocation of resources.

(2) On the supply side of intellectual property, a large number of patents need to be further released. According to relevant data, in 2022, the effective invention patent implementation rate of China’s universities and colleges is 16.9%, and the patent conversion and application rate of universities and colleges is significantly lower than that of enterprises. A considerable part of the patent value has not been effectively explored, and it is not that these patents have no market. The reasons are as following: First, there is a certain disconnect between the patented technology and the market. The lack of relevant analysis of patent navigation is difficult to effectively match with the needs of scientific and technological innovation of enterprises. Second, the lack of market-oriented operation requires a professional team of technical managers to match deals and track services.

(3) On the demand side of intellectual property, the channels for smes to obtain patents in Shaanxi Province are relatively lacking. There are shortcomings in scientific and technological innovation, talent reserve and scientific research investment. At present, most enterprises lack effective docking channels to seek IP rights and related service agencies, and there is a serious information asymmetry. At present, the channels for obtaining patent information and intellectual property services in the market can not meet the innovation needs of enterprises. Under the new pattern of accelerating the construction of Shaanxi Province with domestic great circulation as the main body and high-quality economic development, scientific and technological innovation as an important factor of production and intellectual property as the main carrier of technology, focus on the matching of supply and demand, improve the quality of intellectual property, further smooth the flow channels of technological factors, and promote the efficiency of patent resource allocation of innovation entities such as universities. It is of practical significance to effectively promote the new pattern of double cycle development.

## 2. Strengthen intellectual property information service capabilities

### (1) Cultivating high-value patents

Strengthen the cultivation of high-value invention patents, focusing on new materials, light chemicals, intelligent manufacturing, biomedicine, modern agriculture and other industries, and strengthen the cultivation of high-value patents; Focusing on the connection between supply and demand, focusing on the hot and difficult issues in the cultivation and operation of high-value patents, playing a demonstration role in the establishment of high-value patent cultivation system, patent operation system and high-value patent cultivation process and system specifications, and formulating high-value patent cultivation and operation plans, etc. Truly solve the key problems of poor direction, low conversion rate and poor quality of the industrialization of intellectual property transformation between universities and enterprises, promote the High Court to accelerate the transformation and application of patents that have not been implemented and applied to enterprises in demand, make the university patent technology meet the needs of enterprises as much as possible, accelerate the in-depth integration of the two chains, and serve the high-quality development of Shaanxi local economy.

(2) Focus on supporting the special work of patent transformation

In the original innovation-driven platform of Qin, high-value patent cultivation center and patent navigation service base will be laid out to promote the integrated development of innovation chain and industrial chain. Taking key disciplines of colleges and universities as research objects, we make full use of patent literature resources, conduct patent micro-navigation analysis, identify the direction of technological innovation, guide patent strategic layout, enhance core competitiveness, and promote industry-university-research cooperation to specifically guide the patent work of the university. In view of the specific technical routes of scientific research teams, hot spots and blank spots of technological research and development, and the patent layout of main competitors, the analysis report is formed through patent micro-navigation analysis to help university scientific research teams understand the status quo of technological development, grasp the context of technological development, and identify the direction of technological innovation and technological innovation breakthrough. To provide market orientation and decision support for technological innovation in colleges and universities to promote the cultivation and implementation of high-value patents.

(3) Establish Qin Chuangyuan intellectual property rights protection and support workstation

Set up intellectual property rights protection assistance workstation on the Qinchuangyuan Innovation Drive platform, give full play to the role of the bridge and link of rights protection assistance organizations, gather the advantageous resources of relevant governments, universities and institutions, give play to the role of industry associations and other organizations, and establish an effective communication service mechanism. To provide all kinds of public welfare services for trademark, patent, geographical indication, trade secret and other intellectual property rights protection assistance applications of settled science and technology enterprises. To provide reference opinions on intellectual property infringement judgment and compensation estimation, to provide advice on difficult, abuse of intellectual property rights and non-infringement litigation cases, to provide consulting and guidance services on intellectual property laws and regulations, intellectual property case dispute settlement methods, etc. To provide intellectual property analysis and argumentation and early warning services for major research and development, economic and trade, investment and technology transfer activities. To solve the problem of intellectual property rights protection for science and technology enterprises.

(4) To cultivate high-level intellectual property service institutions that Qin Chuangyuan needs for innovation and development

In order to promote scientific and technological innovation, strengthen intellectual property protection, promote the establishment of a strong province of intellectual property in our province, improve the construction of intellectual property operation service system in our province, guide the healthy development of intellectual property industry, improve service quality, give play to the active role of industry organizations, and provide better services for innovation subjects. Focusing on the needs of Qin Chuangyuan innovation and development, great efforts have been made to cultivate a group of high-level intellectual property service teams, focusing on industrial “leading” enterprises and “ascending” enterprises, focusing on a series of aspects such as high-quality innovation, high-value application and high-level management of patented technology to implement accurate improvement, and guiding enterprises to independent innovation and development.

(5) Deepen intellectual property exchanges with the outside world

Strengthen the real-time tracking and research and judgment of international frontier intellectual property trends, and make good response strategies to changes in rules. At the same time, we should take the initiative to widely publicize China’s achievements in IPR protection to enhance understanding and provide a strong foundation for strengthening international cooperation. In 2022, the number of PCT international patent applications in China will reach 70,000, ranking first in the world! While making such achievements, we should also realize that the PCT is only an effective way to apply for patents abroad, and is not the final grant of patents. It is necessary to speed up the establishment of high-quality foreign patent projects of various innovative subjects, achieve comprehensive and overall improvement from policy incentives, intellectual property services, patent technology evaluation and other aspects, and systematically increase support for pillar industries that have formed core technology products and outstanding innovation advantages, so that inventors will increasingly feel the important role of patent technology in international competition. Strengthen the overseas distribution of patented technology and enhance the competitiveness of the international market.

(6) Build a new bridge for international innovation cooperation

In order to effectively accelerate the integration of scientific and technological strength and economic development in Shaanxi Province, starting from the construction of technology transfer value chain and the enhancement of social innovation ability through intellectual property services, we will accelerate the transfer and transformation of intellectual property rights in our province, promote more achievements into industrialization and serve local industrial development, and broaden new horizons and inspire new ideas for entrepreneurs in Shaanxi. To have a comprehensive understanding of the research and development of emerging technology achievements and the realization of industrialization, the mode of innovative technology transformation and patent technology ecosystem, and the technology transfer and exploration of technology transformation strategies to help multinational corporations. Establish a strategic cooperation mechanism of horizontal coordination and vertical linkage, actively organize foreign exchange activities on intellectual property rights, strengthen international exchange and cooperation on intellectual property rights with countries along the Silk Road Economic Belt and other countries in the world, promote foreign cooperation of scientific and technological enterprises, and gradually carry out intellectual property exchanges and cooperation with countries along the Silk Road in light of actual needs. To enhance the ability of intellectual property protection and application, help Shaanxi catch up and surpass development, and build a new bridge for international innovation cooperation.

(7) Accelerating the training of high-level personnel in short supply for intellectual property

First, in the dimension of rule of law, it is necessary to strengthen the research and study of laws related to intellectual property, and further

improve the ability and level of legal protection of intellectual property. Second, in the international dimension, we should further improve the education mechanism for overseas high-level talents and smooth the channels for the introduction of intellectual property talents. Third, from the high-tech dimension, the cultivation of patent and technical talents needs to be based on science and technology. It is necessary to comprehensively establish a lecturing system for intellectual property experts in cutting-edge scientific and technological fields, invite relevant experts to colleges and universities as mentors, and let the experts set up intellectual property courses in related technologies, such as biotechnology, quantum technology intellectual property topics and other courses, with a focus on cultivating talents with intellectual property skills.

(8) Establish an efficient and scientific intellectual property operation system and working mechanism

Plan and guide the standardization of intellectual property services as a whole, promote the construction of a standard mechanism for intellectual property work, further give play to the linking role of intellectual property on the innovation-driven platform of Qinchuangyuan, further build new forms of industrialization, and realize the coordinated development of patented technology and the market. The supporting role of intellectual property services in technological innovation, industrial upgrading and innovative development is becoming increasingly obvious, and it is of great significance to the formation of emerging industries with reasonable industrial structure and high added value. The standard of intellectual property service to society is a standard that stipulates that intellectual property should meet the requirements of the current society, and is used to regulate and guide the technical service behavior provided by the service social organizations and related personnel. The intellectual property service standard system is a scientific and effective organic whole formed by the intellectual property service standard according to its internal relations, and is the system integration of the intellectual property service standard.

(9) Establish a professional intellectual property operation team

Focusing on the innovation and development needs of key industrial chain enterprises in Shaanxi Province, university patent technology transformation, double innovation space and other related projects, through patent transformation, patent technology licensing and investment, with "industry-university-research" as the core, Technology service, technology transfer, commissioned development, cooperative development, school-place cooperation, co-construction of enterprise research and development platform, school-place cooperation fund, science and technology park mode, talent training mode, innovation consortium mode, school-run enterprise mode, science and technology resource sharing mode, co-construction of technology service platform, to realize the effective docking of intellectual property rights and industrial development.

(10) Take the national intellectual property pilot as an opportunity to serve the province's innovation-driven development needs

To anchor the needs of industrial transformation and upgrading, high-quality development of manufacturing industry, expanding and strengthening industrial technology in Shaanxi Province, focusing on the main contradiction between supply and demand of intellectual property, and guiding social resources to actively participate. To guide the transfer and transformation of patented technologies of universities and state-owned enterprises to small and medium-sized enterprises in the province, solve the "dilemma", and help the innovation and development of small and medium-sized enterprises in the province; Focusing on the key emerging industries that our province focuses on supporting the development, through the Qinchuangyuan innovation drive to drive the platform docking, transfer and transformation of patented technologies to small and medium-sized enterprises, solve the pain of short circuit in the upstream and downstream service industry chain, realize the supplement chain, the extension chain, and the strong chain, further help enterprises to cooperate with research and development, and form the industrial integration development of complementary resource advantages and shared benefits.

### 3. Conclusion

High-quality creation of intellectual property rights is the fundamental connotation of innovation-driven development, high-level protection of intellectual property rights is an important institutional guarantee for innovation-driven development, and efficient use of intellectual property rights is an important implementation path for innovation-driven development. As a major province of science and education, Shaanxi Province should fully rely on the advantages of science and technology and talent platforms of universities and institutes, actively explore the development strategy of high-quality intellectual property services for Qinchuangyuan innovation-driven platform, further solve the bottleneck problem of scientific and technological achievements transformation, and comprehensively improve the quality and efficiency of intellectual property development. As a key element of innovation and development, intellectual property is injecting new momentum into the high-quality economic and social development of Shaanxi.

### References:

- [1] Lin Cheng. Promotion Strategy of University Intellectual Property Information Service Integration driven by data [J]. Science and Technology Information Development and Economy, 2021, 006(003):26-30.
- [2] Yuan Liu. Research on the transfer and transformation path of Scientific and Technological Achievements in Universities based on Patent Strategy [J]. Journal of Huaihai Institute of Technology: Humanities and Social Sciences Edition, 2019, 17(11):4.
- [3] Hu Wen. Director of Science and Technology Department of Xi'an University of Science and Technology: University science and education resources build strength Qin Chuangyuan Drives high-quality economic development in Shaanxi [J]. Shaanxi Pictorial, 2022(2):
- [4] Zhun Xie.Jialin Wei. Research on Patent transformation in Chinese universities [J]. Science and Technology for Development,2020,12(06).
- [5] Chang Li,Heng Tang,Yucheng Jin etal. [J]. China Science and Technology Forum, 2019(04):76-82.