Research on the Transformation of Intellectual Property Achievements in Colleges and Universities in China

Lilong Xu[1,*], Na Chen[1], Xujuan Zhang[1,2]
[1]School of Computer and Artificial Intelligence, Lanzhou Industrial University, Lanzhou, Gansu, China.
[2]School of Computer and Information, Hefei University of Technology, Hefei, Anhui, China.
**Corresponding Author.*

Abstract: Under the accelerating trend of globalized knowledge economy, intellectual property has become an important strategic resource for safeguarding one's own interests and economic security. The transformation of intellectual property achievements in universities is an important link in promoting technological progress and economic development. However, the transformation rate of intellectual property achievements in Chinese universities is relatively low. This article conducts an in-depth analysis of the current situation, characteristics, and existing problems of the transformation of intellectual property achievements in Chinese universities. To promote the transformation of intellectual property achievements in Chinese universities, this article analyzes the management system, awareness and behavior, transformation ability, and transformation channels of intellectual property from multiple perspectives. Combining with the actual situation of Chinese universities, it explores the problems of intellectual property achievement transformation and proposes corresponding countermeasures and suggestions, adjusts the innovative research ideas of Chinese universities, and provides reference for improving the transformation rate of intellectual property achievements in Chinese universities.

Keywords: Universities; Intellectual Property; Achievement Conversion Issue; Multi-Angle; Countermeasures and Suggestions

1. Introduction

The transformation of intellectual property achievements has many advantages. It can not only promote technological innovation and economic development, enhance the scientific research strength and influence of universities, promote the deep integration of industry, academia and research, serve major national strategic needs, but also increase economic and social benefits, stimulate the enthusiasm and creativity of scientific researchers, and contribute to economic and social development [1]. In recent years, with the significant increase in the country's emphasis on scientific research and innovation, the investment in basic research funds for universities has continued to rise. According to the "2023 Statistical Bulletin on National Economic and Social Development" released by the National Bureau of Statistics, the gross domestic product (GDP) in 2023 will be 1.260582 trillion yuan, an increase of 5.2% compared to 2022. The annual research and experimental development expenditure was 3327.8 billion yuan, an increase of 8.1% compared to 2022, of which the basic research expenditure was 221.2 billion yuan, an increase of 9.3% compared to 2022. According to the data in the article "Where is the bottleneck of the conversion rate of scientific and technological achievements in China, which is only about 30%?", the conversion rate of scientific and technological achievements in China is currently very low, only about 30%, while in developed countries, this indicator is 60% to 70%. Among them, the transformation of intellectual property achievements in Chinese universities is particularly difficult [2]. Therefore, identifying the problem of low conversion rate of intellectual property achievements in Chinese universities is of great research significance for improving the conversion rate of intellectual property achievements in Chinese universities. This article analyzes from multiple perspectives and

proposes specific countermeasures and suggestions.

2. Research Status Quo

In the practical case of the United States "Bai Du Act" in my country, the results and experience of institutional innovation can become a key factor in improving the law. It is necessary to modify the disadvantages of the current patent management system. It is necessary to make scientific researchers "rest assured and peace of mind" for the results of the intellectual property rights of colleges and universities [3]. In the report published by the American Academy of Sciences "Endless Store: Science in the next 75 years", it analyzed the challenges facing the development of American scientific research, and proposed a series of measures such as key investment in investment, strategic research, and expanding university partnerships. my country can learn from American experience, build a new national scientific research system, strengthen scientific research funding, give play to the government's overall and coordinated role in the scientific research innovation community, and encourage high -level research universities to carry out application -oriented basic research [4]. The increase in the rotation rate of property rights has a certain impact. In the first half of 2024, procuratorial organs across the country sued 8,894 intellectual property crimes, an increase of 45.5%year -on -year; 1,837 cases of supervision of civil administrative litigation of intellectual property rights, an increase of 74%year -on -year [5]! It can be seen that the protection of intellectual property rights in my country is relatively lacking and the awareness of property rights is weak. The article of Wang Guo [6] pointed out that the formation and transformation of scientific and technological achievements in our universities in my country basically follows the three -phase model of the "project -development -knotting item". Frequent forms make the transformation of intellectual property achievements in universities seem particularly difficult, and the transformation ability is naturally lacking [7-8].

3. The Problem of the Transformation of Intellectual Property in Colleges and Universities

In order to improve the transformation rate of intellectual property achievements in colleges and universities in China, this paper analyzes the main reasons for the low transformation rate of "achievements foam" at this stage, such as the imperfection of the achievements transformation system, the lack of awareness, the weak transformation ability, and the blocked transformation channels [9].

3.1 The Management System is Not Good

1) The lack of specialized intellectual property management institutions and systems has led to irregularities in the application, maintenance, and conversion of intellectual property.

One aspect is the importance of intellectual property management institutions, which are specialized agencies responsible for the application, examination, protection, utilization, and management of intellectual property. In universities, intellectual property management agencies are usually responsible for coordinating and managing intellectual property affairs throughout the school, ensuring the legality and effectiveness of intellectual property. However, some universities lack specialized intellectual property management institutions, resulting in a lack of uniformity and standardization in intellectual property management work.

Secondly, in terms of the necessity of the intellectual property management system, it is an important system for regulating intellectual property management behavior and safeguarding intellectual property rights and interests. It usually includes regulations and procedures for the application, examination, protection, utilization, and management of intellectual property rights. However, some universities lack a sound intellectual property management system, resulting in irregularities in the application, maintenance, and conversion of intellectual property.

2) The intellectual property evaluation system is not sound, making it difficult to accurately assess the value and market potential of intellectual property [10].

The main methods currently used for evaluating intellectual property rights include market approach, cost approach, and revenue approach. However, these methods have certain limitations in practical applications. For example, although the market approach can truly reflect the market value at the time of evaluation, it requires the market to have a

high level of maturity and is difficult to select reference materials. The cost rule does not take into account market demand and information on the market and economic benefits of products related to intellectual property, thus lacking an examination of market and benefit factors that affect the value of intellectual property. The income rule requires estimating the parameters required for discounting expected returns, which involves significant uncertainty. If the estimation is inaccurate, the results will naturally be inaccurate.

3) The insufficient construction of intellectual property trading platforms hinders the effective circulation and utilization of intellectual property. Mainly reflected in the following aspects.

One is the asymmetry of transaction information. Due to the imperfect information disclosure mechanism of intellectual property trading platforms, both parties have insufficient understanding of the value and market potential of intellectual property, which affects the efficiency and success rate of transactions.

The second issue is the cumbersome transaction process. Currently, the transaction process of intellectual property trading platforms is relatively complicated, involving multiple links and departments, resulting in high transaction time and economic costs.

The third issue is the lack of security guarantees for transactions. Intellectual property trading platforms have certain vulnerabilities and risks in terms of transaction security, such as intellectual property infringement and false transactions, which to some extent affect the trust and willingness of both parties in the transaction.

The ability to evaluate intellectual property is insufficient, and intellectual property evaluation is one of the important links in intellectual property transactions. However, the current number of intellectual property evaluation institutions is limited, and the level of evaluation varies, resulting in a lack of accuracy and authority in the results of intellectual property evaluation.

3.2 Weak Consciousness

1) The insufficient awareness of intellectual property protection among teachers and researchers has led to the frequent occurrence of intellectual property loss and infringement [11].

One is the lack of basic concepts and legal knowledge of intellectual property rights. Some teachers and researchers have insufficient understanding of the basic concepts, laws and regulations, and protection methods of intellectual property rights, resulting in ineffective protection of their innovative achievements in scientific research activities.

Secondly, there is a lack of understanding of the value of intellectual property rights. Some teachers and researchers have not fully recognized the potential value of intellectual property rights, resulting in a lack of initiative to apply for, maintain, and manage intellectual property rights.

Thirdly, neglecting the management of job-related inventions and works, some universities and research institutions have not established standardized management systems for job-related inventions and works, resulting in the personal use, licensing, or unauthorized transfer of job-related inventions and works by teachers and researchers, leading to the loss of intellectual property rights.

2) Students' awareness of innovation and intellectual property protection is generally lacking, resulting in some excellent innovative achievements not being effectively protected.

One is the mindset. Many students are influenced by traditional education and are accustomed to receiving ready-made knowledge, lacking the spirit of active exploration and innovation. This leads them to tend to seek ready-made answers when facing problems, rather than trying to come up with new solutions.

Secondly, there is a lack of practical opportunities. Although some schools have realized the importance of innovative education, students often lack sufficient practical opportunities to exercise their innovative thinking in actual operation. Without practice, students find it difficult to transform theoretical knowledge into practical innovative achievements.

The third is the fear of difficulty. Innovation often comes with challenges and risks, and some students may be afraid to try innovation because of the fear of failure or being evaluated. This fear of difficulty will further suppress their innovative consciousness.

3.3 Insufficient Transformation Capacity

1) Some intellectual property rights with market potential cannot be transformed into actual productivity in a timely manner, leading to the loss of resource waste and social benefits.

There is a problem with the trial mechanism of intellectual property rights. Cases of intellectual property rights are classified and managed by the Civil Court, the Executive Court, and the Criminal Court. Litigation activities have brought many inconveniences. In addition, there are many obstacles to the assessment, transactions and transformation of intellectual property rights, making it difficult for intellectual property rights with market potential to transform into actual productivity in a timely manner.

2) School -enterprise cooperation is disconnected. Many intellectual property results of local universities are not mature, lack of social practicality, and difficult to attract enterprise investment.

The cooperation between universities, scientific research institutions and enterprises is not tight enough, resulting in the lack of effective market docking in the transformation of intellectual property rights. On the one hand, the innovation results of universities and scientific research institutions are often difficult to find suitable enterprises for transformation; on the other hand, enterprises lack enough understanding of the innovation results of universities and scientific research institutions, and lack the willingness and motivation of cooperation.

3.4 The Transformation Channels are Not Smooth

The existing college scientific research department or technical transfer center is difficult to effectively promote intellectual property rights, resulting in a single transformation channel and low transformation efficiency [12].

The first is the lack of diversified promotion methods: At present, many colleges and universities' scientific research offices or technical transfer centers mainly rely on traditional promotion methods, such as holding results exhibitions and publishing scientific research results information. Although these methods have certain effects, it is difficult to cover it until it can be covered until until it has a certain effect. More extensive audiences, especially potential corporate partners.

The second is that the cooperation network is limited: the cooperation network between universities and enterprises is not extensive enough, resulting in many excellent scientific research results difficult to be discovered by enterprises. At the same time, due to information asymmetric, companies are often difficult to understand the latest scientific research results and technological progress of universities.

4. Countermeasures and Suggestions

This article aims to improve the transformation of intellectual property achievements, following the elements of the successful implementation of the Baidu Act. In response to the main problems that have arisen in Chinese universities, the main countermeasures from policy to implementation are proposed as follows.

4.1 Improve the Management System

1) Establish a special intellectual property management institution and system, and clarify the standards and processes of the application, maintenance, and transformation of intellectual property rights.

First, colleges and universities should set up a special intellectual property management agency. The institution may be an independent department or a joint working group composed of multiple relevant departments. No matter what form, it is necessary to ensure that the agency has sufficient authority and independence, which can effectively promote intellectual property management. The main responsibilities of the agency include: formulate and implement intellectual property strategies to ensure that the intellectual property work of the enterprise is consistent with the overall development strategy; Legality and effectiveness; strengthen cooperation and exchanges with external professional institutions, and improve the level and efficiency of intellectual property work.

Second, the intellectual property management system is the basis and basis for universities to manage intellectual property rights. Universities should formulate a comprehensive, systematic and operable intellectual property management system according to their actual situation. These systems should include the following aspects: the application system,

clarifying the application process of intellectual property rights, application conditions, application materials, and the method of applying for the application fee. Universities should encourage teachers to actively apply for intellectual property rights and give certain rewards to teachers who have successfully applied for; maintenance systems to regularly maintain and update the intellectual property rights, including paying annual fees, monitoring intellectual property status, timely discovery and processing Infringement issues, etc. At the same time, colleges and universities must also strengthen the publicity and training of intellectual property rights, and enhance employees' intellectual property awareness and capabilities; transformation systems, clarify the method of transformation of intellectual property rights, conversion processes, and distribution methods for transformation income. Universities should actively explore the operating models and strategies of intellectual property rights, and maximize the value of intellectual property rights through permission, transfer, cooperation and other methods.

The third is to clarify the specifications and processes in the application, maintenance, and transformation of intellectual property rights include the following aspects.

① Application process

Consultation: Determine whether the content created by the invention belongs to the content that can apply for a patent, and which type of patent type can be applied (invention, practical new type, appearance design).

Writing application documents: According to the search results and the actual needs of the enterprise, write patent application documents, focusing on the novelty, creativity and practicality of the patent.

Submitting application: Submit the application documents to the intellectual property management department for review and application.

② Maintenance process

Monitoring: Regularly monitor and manage the intellectual property rights, and timely discover and deal with the problems of infringement and disputes.

Update: Regularly update and maintain intellectual property rights to ensure the effectiveness and value of intellectual property rights.

③ conversion process

Evaluation: Make value evaluation of intellectual property rights to be transformed to understand its market value and potential income.

Consultation: According to the results of the evaluation, negotiate with the potential cooperation party to determine the method of transformation, transformation conditions, and distribution of transformation income.

Signing a contract: After the two parties reached an agreement, sign the intellectual property conversion contract to clarify the rights and obligations of the two parties.

Procedures: In accordance with relevant laws and regulations and policy requirements, handle related procedures for intellectual property transformation, such as changing rights certificates and paying relevant taxes and fees.

2) Improve the intellectual property evaluation system, accurately evaluate the value and market potential of intellectual property, and provide a scientific basis for the transaction and transformation of intellectual property rights.

First, the purpose of intellectual property evaluation is to determine the value and importance of intellectual property rights, and provide decision -making references for technological innovation, asset management, and school -enterprise cooperation in more universities. Evaluation can also help universities in risk management, reasonably allocate resources, and improve competitive advantages. The evaluation system must be based on serving economic development and protecting the legitimate rights and interests of knowledge innovation, and standardized, transparent, and fair.

The second is to establish scientific evaluation standards and methods in the following two aspects.

Evaluation standards: Evaluation standards can include the technical level, market demand, and competition situation of intellectual property rights. Technical factors cover the technical level, technical difficulty, and degree of technological innovation involved in intellectual property; market factors cover the market size, market demand, and market competition involved in intellectual property rights.

Evaluation methods: mainly include market law, income method and cost method. The market law evaluates its value through the transaction price of similar intellectual property rights in the market; the income method calculates the value of the assets according to the expected profitability and appropriate discount rate of the intellectual property rights according to the reasonable expected profitability and appropriate discount rate of intellectual property rights; The replacement cost in a new situation will be reused by minus the accumulated depreciation of the period of use. In addition, the expert evaluation method is also an important supplement. Through inviting experts in related fields to evaluate the value of intellectual property rights, it is suitable for the value of intellectual property value to accurately evaluate the market law, cost method, or income method.

The third is to strengthen the construction of assessment agencies and professional teams. Establish a professional assessment agency, colleges and universities can set up a special intellectual property evaluation agency or commissioned professional institution for evaluation. These evaluation agencies can be composed of professional intellectual property appraisers to provide professional and independent evaluation services; cultivate evaluation talents, and colleges and universities should be responsible for training and evaluation talents. Intellectual property evaluation high -end talents. At the same time, asset evaluation associations, evaluation agencies, and universities can cooperate to jointly cultivate high -quality intellectual property evaluation talents.

The fourth is to improve the evaluation process and information disclosure. To improve the evaluation process, colleges and universities should establish a sound intellectual property evaluation process, including assessment preparation, evaluation implementation, evaluation report preparation and review and other links; strengthen information disclosure, strengthen information disclosure and public information disclosure and public can increase the transparency and credibility of the assessment results. Degree, promote the effective use of evaluation results.

Fifth, establish an evaluation supervision mechanism and dynamic adjustment mechanism. Establishing a supervision mechanism and establishing a supervision mechanism for intellectual property evaluation can effectively monitor the evaluation activities of the evaluation agency and evaluation team to ensure the accuracy and reliability of the evaluation results; establish a dynamic adjustment mechanism, the value and potential of intellectual property rights Development and changing. Therefore, in the process of evaluation, enterprises need to maintain a dynamic adjustment mentality, and adjust the evaluation methods and results in a timely manner according to the development and changes of the market and technology.

3) Strengthen the construction of intellectual property trading platforms, realize the effective circulation and utilization of intellectual property rights, and improve the comprehensive benefits of intellectual property rights.

The first is that the intellectual property trading platform should clarify its positioning and functions, that is, as an information center, service center and trading center as an intellectual property transaction. The platform should provide all -round services such as registration, evaluation, transaction, financing, and consultation of intellectual property rights to meet the needs of different users.

The second is to improve trading rules and processes. To formulate trading rules, the platform should formulate clear trading rules, including transaction methods, trading conditions, trading procedures, etc. to ensure fairness, fairness and transparency of transactions; optimize the transaction process, simplify the transaction process, improve transaction efficiency, and reduce transaction costs. For example, through online application, online review, and online payment, rapid transactions of intellectual property rights are realized.

The third is to strengthen informationization and intelligent construction. Informatization technology, using information technology such as big data and cloud computing, intelligent classification, intelligent matching and intelligent recommendations for intellectual property rights to improve transaction efficiency and quality; intelligent services, artificial intelligence and other technologies provide intelligent transaction consulting, Trading evaluation and other services to meet

the user's personalized needs.

The fourth is to establish a credit system and risk prevention and control mechanism. Credit system, establish an intellectual property trading credit system, conduct credit assessment and credit management of trading entities, improve the security and reliability of transactions; risk prevention and control mechanisms, establish a sound risk prevention and control mechanism, and risk risks that may occur during the transaction process. Early warning and prevention and control ensure the smooth progress of the transaction.

The fifth is to strengthen publicity and promotion. Through the combination of online and offline, publicity and promotion of intellectual property trading platforms will be promoted to increase the popularity and influence of the platform; teachers and students are trained to conduct training and education related to intellectual property transactions. Improve trading capabilities and risk awareness.

4.2 Enhance Awareness Education

1) Carry out intellectual property protection awareness training for teachers and researchers to improve their awareness of intellectual property protection.

The first is to formulate training plans and goals. Clarify the training targets, and form a personalized training plan for teachers, scientific researchers, and graduate students in universities and scientific research institutions, set a personalized training plan according to their roles and needs; set training goals to establish awareness of intellectual property protection, understand relevant laws and regulations, understand relevant laws and regulations, and Master specific goals such as intellectual property protection skills.

The second is to enrich the content of training. Basic knowledge of intellectual property, including patents, trademarks, copyrights, business secrets and other basic concepts, as well as the scope of application, application process, protection period, etc. of various types of intellectual property rights; Such as the Patent Law, Trademark Law, Copyright Law, etc.; Case analysis, through actual cases, analyze the types, consequences and legal responsibilities of intellectual property infringement, as well as cases that successfully protect intellectual property rights, enhance the targeted training of training and practicality; the transformation of scientific research results, introduce the transformation of scientific research results, processes, risk assessment and intellectual property protection measures, encourage teachers and researchers to actively participate in the transformation of results; academic integrity and morality, emphasize the importance of academic integrity, educate teachers and teachers and educational teachers and teachers and teachers and teachers and teachers Scientific researchers abide by academic norms to avoid academic misconduct, such as plagiarism and plagiarism.

The third is innovative training. Online training, using online platforms, such as mood classes, live broadcasts, etc., provide flexible and convenient online learning resources to facilitate teachers and researchers to learn anytime, anywhere; offline lectures and seminars, invite experts and lawyers in the field of intellectual property rights lectures, organizational seminars, promoting exchanges and discussions, deepening understanding; practical exercises, through practical activities such as applying for patents and writing copyright statements to allow teachers and researchers to experience the entire process of protection of intellectual property protection; establish a learning team, encourage encouragement teachers and researchers have spontaneously set up learning groups to share their learning experiences on a regular basis and jointly solve the problems encountered.

Fourth, cooperation and internship training of industry -university -research. Industry, university -research cooperation projects, cooperate with enterprises and research institutions to carry out industry -university -research projects, so that students can learn how to protect their innovative results in practice; internship training opportunities to provide students with internships such as intellectual property agencies, law firms and other internships Opportunities to allow students to experience the practice of intellectual property protection.

2) Strengthen the cultivation of students' innovation awareness and intellectual property protection awareness, and encourage students to actively apply for intellectual property protection measures such as patents during the innovation process.

One is the reform of the curriculum system and

teaching content. Add innovative courses, including courses on innovative thinking, design thinking, and entrepreneurial management, to cultivate students' innovative thinking and problem-solving abilities;

The second is practical activities and project support. Innovative practice projects encourage students to participate in research projects, innovation competitions, entrepreneurial plans, and other practical activities, deepening their understanding of innovation and intellectual property protection through practical operations; Patent application guidance, providing patent application coaching services, including patent search, writing patent application documents, submitting applications, etc., to help students understand the patent application process and improve the success rate of applications; Intellectual property workshops are regularly held, inviting intellectual property experts and lawyers to give lectures and training, providing professional guidance and advice to students.

The third is incentive mechanisms and policy support. Establish innovation scholarships specifically designed to reward students who have demonstrated outstanding performance in innovation projects, and motivate more students to participate in innovation activities; Patent application funding, providing financial assistance to students applying for patents, reducing their economic burden, and encouraging more innovative achievements to be transformed into intellectual property; Academic integrity and intellectual property protection education, incorporating academic integrity and intellectual property protection into the student evaluation system, emphasizing the importance of originality and respect for others' intellectual property rights.

The fourth is industry university research cooperation and internship training. Industry university research cooperation projects, collaborating with enterprises, research institutions, etc. to carry out industry university research projects, allowing students to learn how to protect their innovative achievements in practice; Internship and practical training opportunities are provided for students to intern at intellectual property agencies, law firms, and other institutions, allowing them to personally experience the practical work of intellectual property protection.

4.3 Improve the Ability to Transform Achievements

1) Strengthen cooperation with enterprises, promote the integrated development of industry, university and research, and timely transform intellectual property rights with market potential into actual productivity.

The first is to establish a cooperation mechanism for industry -university -research. To build a cooperation platform, the government, universities, scientific research institutions and enterprises should jointly build a platform for industry -university -research cooperation to promote information sharing, complementary resources and collaborative innovation; sign a cooperation agreement to clarify the parties' rights, obligations and interest distribution mechanisms in cooperation, ensure that The cooperation is successfully carried out; the joint R & D center is established, and universities and scientific research institutions and enterprises cooperate to establish a joint research and development center to jointly carry out cutting -edge technology research and product development.

The second is to promote the transformation of intellectual property rights. Intellectual property assessment, professional assessment of intellectual property rights with market potential to determine its value and application prospects; technical transfer and permission, through technical transfer and patent license, transform intellectual property into the actual productive forces of colleges and universities; entrepreneurial incubation, encourage encouragement And support students, researchers, etc. to use intellectual property to establish enterprises to accelerate their growth through the entrepreneurial incubation mechanism.

The third is to optimize resource allocation and policy support. Investment, the government should increase investment in the funds of industry -university -research projects, support key technology research and development and intellectual property transformation; tax discounts, grant tax preferential tax policies to enterprises participating in industry -university -research cooperation, reduce their R & D costs and market risks; talent flow; talent flow , Encourage the flow of talents between universities and scientific research institutions and enterprises to promote exchanges between

knowledge, skills and experience.

The fourth is to strengthen market -oriented and industry docking. Market research, in -depth understanding of market demand and competitive trend, ensure that the research and development direction meets market trends; industrial docking, strengthen cooperation with upstream and downstream enterprises with the industrial chain, form a complete industrial ecological chain, and enhance overall competitiveness; brand promotion, through exhibitions, forums, forums Such activities to enhance the popularity and influence of intellectual property products.

2) Strengthen the promotion of intellectual property rights and operating capacity, and push intellectual property to the market through various channels to maximize its economic value and social benefits.

One is to enhance the operational capability of intellectual property rights. Enhance operational awareness, universities should fully recognize the importance of intellectual property operation, incorporate it into the overall strategic planning of universities, and form a top-down emphasis atmosphere; Optimize management mechanisms, establish and improve intellectual property operation management systems, clarify division of responsibilities, strengthen cross departmental collaboration, and ensure efficient operation of intellectual property operation work; Promote institutional construction, actively participate in and promote the legislative process of punitive damages for intellectual property infringement, ensure that the value of patents is fully recognized and protected at the legal level, and lay a solid foundation for the transformation of patents into actual wealth.

The second is to strengthen the promotion of intellectual property rights. Build a public service platform, accelerate the construction of a national intellectual property operation public service platform, provide one-stop services for intellectual property transactions, reduce transaction costs, and improve transaction efficiency; Promote intellectual property through various channels such as websites, SEO optimization, B2B platforms, and short videos to enhance brand awareness and conversion rates.

The third is to maximize the economic value and social benefits of intellectual property rights. Intellectual property licensing, universities can obtain licensing fees by licensing patents, trademarks, and other intellectual property to other enterprises or individuals for use, while expanding market coverage and influence; Universities can develop reasonable licensing strategies based on their own development strategies and the characteristics of intellectual property, such as exclusive licensing, exclusive licensing, or general licensing.

The fourth is the transfer of intellectual property rights. When a university owns intellectual property that no longer meets its own development strategy or market demand, it can choose to transfer it to other universities or individuals in need; Before transferring intellectual property, universities should commission professional evaluation agencies to assess the value of intellectual property, ensuring the authenticity and legality of the transaction.

The fifth is intellectual property pledge financing. Universities can use their intellectual property as collateral to apply for loans from banks or other financial institutions to solve the problem of funding shortage; Choosing financial institutions with rich experience in intellectual property pledge financing and good service quality for cooperation can improve the success rate and efficiency of financing.

3)Establish a sound transformation mechanism for scientific and technological achievements to provide effective policy support and guarantee for the transformation of scientific and technological achievements.

The first is to strengthen the top -level design and improve policies and regulations. Formulate special policies, introduce policy documents specifically for the transformation of scientific and technological achievements, clarify the goals, principles, tasks and measures of scientific and technological achievements; formulate evaluation standards, incentive mechanisms and guarantee measures for the transformation of scientific and technological achievements to ensure the effective implementation of the policy.

The second is to build a collaborative mechanism and promote the deep integration of industry -university -research. Establish an industry -university -research cooperation platform, build a platform for industry -university -research cooperation, and promote

information sharing, resource complement and collaborative innovation between universities, scientific research institutions and enterprises; encourage universities and scientific research institutions and enterprises to carry out cooperation in joint research and development, technological transfer and talent training. Strengthen the status of university innovation subjects, highlight the main position of the transformation of scientific and technological achievements, encourage universities to increase investment in research and development, and enhance technological innovation capabilities; support innovation platforms such as the construction of research and development centers and laboratories in universities, and promote enterprises to become the main body of technological innovation. Promote the flow and exchanges of talents, promote talent flow and exchanges between colleges, scientific research institutions and enterprises, and encourage scientific researchers to work or start a business part -time or start a business; strengthen the construction of talent teams in colleges and universities, and enhance the technological innovation capabilities and technological achievements transformation capabilities of universities.

The third is to strengthen supervision and evaluation to ensure policy implementation. Establish a regulatory mechanism, establish and improve the supervision mechanism of scientific and technological achievements, and strengthen the supervision and management of scientific and technological achievements transformation projects; regularly evaluate and evaluate the transformation of scientific and technological achievements to ensure the smooth implementation and effective transformation of the project. Strengthen accountability, clarify the responsibilities and obligations of the participants in the transformation of scientific and technological achievements, and investigate the responsibility of violating regulations; Strengthen the risk prevention and response to the transformation of scientific and technological achievements to ensure the smooth progress of the transformation of scientific and technological achievements.

4.4 Broadcasting and Conversion Channels

1) Build an Internet -based intellectual property transformation platform to solve the problem of single intellectual property transformation channels.

The first is to determine the platform positioning and goals. Positioning, the platform should be positioned as a nationwide intellectual property transformation service center, which aims to achieve efficient transformation and industrialization of college intellectual property rights through Internet technology; goals to build a functional property inquiry, evaluation, transaction, incubation and other functions The integrated platform of one -piece promotes the rapid transformation and application of the scientific and technological achievements of colleges and universities.

The second is to improve the platform architecture and functions. Patent warehouse, establish a patented database of colleges and universities across the country, include patent information of colleges and universities, including patent names, abstracts, claims, instructions, etc. to facilitate users to retrieve and query; Divide up in accordance with the dimensions of the technical field, scope of application, and innovation to improve the patent retrieval efficiency and accuracy; quality inspection evaluation, establish a patent quality evaluation system, and evaluate the technological innovation, practicality, and market prospects of patents to evaluate the patent. The transformation of patents provides a basis for decision -making; online transactions provide patent transaction services, including patent transfer, license, pledge, etc., to realize patent online transactions and settlement. At the same time, a third -party payment institution can be introduced to provide safe and convenient payment services for transactions; incubation and maturity, establish a patent incubation fund, incubate and mature patents with market prospects, and promote its industrialization process. At the same time, you can introduce venture capital, government guidance funds, etc. to provide financial support for the transformation of patents.

The third is to build platform operations and services. Marketing, through online and offline methods, promote and promote the platform to increase the popularity and influence of the platform. You can establish official websites, social media accounts, etc., publish platform

dynamics, successful cases, etc., attract user attention and use; user services, provide user registration, login, information modification and other basic functions. At the same time Users provide timely and professional services; technical support, establish professional technical support teams, maintain and upgrade the platform to ensure the stable operation and continuous optimization of the platform. At the same time, it can provide users with support for technical consulting and solutions; cooperation and exchanges, strengthen cooperation and exchanges with universities, scientific research institutions, enterprises, etc., and promote the deep integration of industry -university -research. Patent results transformation forums, technical exchange meetings and other activities can be held to promote information sharing and cooperation among parties.

The fourth is to strengthen platform supervision and security management. Intellectual property protection, strengthen the protection of intellectual property rights, strictly keep and manage patent information on the platform to prevent leakage and infringement. At the same time, it can provide users with services such as intellectual property protection consulting and legal aid; data security, establish a data security management system, and backup and encryption on the platform on the platform to ensure the security and integrity of the data. At the same time, data can be kept backup and recovery exercises to improve data recovery capacity and emergency response capabilities; supervision and evaluation, establish platform supervision mechanisms, and regularly evaluate and evaluate the operation of the platform. At the same time, a third -party evaluation agency can be introduced to evaluate and supervise the service quality and user satisfaction of the platform.

2) Establish a normalized communication mechanism for universities and enterprises to promote the supply and demand docking of scientific and technological achievements.

The first is to build a cooperation platform and mechanism. Establishing school -enterprise cooperation alliances, universities and enterprises can jointly set up school -enterprise cooperation alliances to strengthen communication and collaboration between the two parties through regular meetings, seminars and other activities; Promote the implementation of the cooperation project. To establish a joint R & D center, universities and enterprises can jointly establish a joint R & D center to centrally focus on technological research and development and innovation; the R & D center can implement project system management, clarify the responsibilities and rights and interests of all parties, and ensure the smooth progress of cooperation projects.

The second is to promote the transformation and application of scientific and technological achievements. Establish a platform for scientific and technological achievements, colleges and universities can establish scientific and technological achievements display platforms, and regularly release the latest scientific research results and technological progress; enterprises can understand the scientific and technological achievements of colleges and universities through the platform, find opportunities for cooperation, and promote the transformation and application of scientific and technological achievements. To carry out technical transfer services, colleges and universities can set up a technical transfer center or intellectual property operating institution to be responsible for the evaluation, protection, management and transformation of scientific and technological achievements; enterprises can cooperate with the technical transfer institutions of university-ies to jointly promote the commercialization of scientific and technological achievements.

5. Conclusions

The transformation of intellectual property achievements in universities is an important way to promote scientific and technological progress and economic development. In response to the current problems, measures such as improving management systems, strengthening conscious education, improving the ability to transform results, and broadening channels can effectively improve the efficiency and quality of the transformation of intellectual property achievements in universities, and promote the sustainable and healthy development of my country's intellectual economy.

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