

On the Legitimacy of Pledge Financing of New Plant Variety Rights

Linqi Li, Si Li

School of Law, Henan Normal University, Xinxiang 453007, China

Abstract

In the context of the knowledge economy era, the property of new plant variety rights has become increasingly prominent, and the manifestation of its property value is not limited to simple two-way transactions. Financing guarantee behaviors with new plant variety rights as the object of pledge have emerged, but China's related The law does not clearly stipulate the pledge of new plant variety rights, which causes many problems in the pledge financing of new plant variety rights in practice. China's current social and legal basis, as well as the property attributes, economic value and exchange value of new plant variety rights, all provide a legitimate basis for the establishment of the new plant variety rights pledge financing system.

Keywords

New Plant Variety Rights; Pledge Financing; Legitimacy.

1. Introduction

With the advent of the era of big data, all kinds of emerging information, culture, technology, etc. are integrated in daily life, and continue to create rich economic benefits. As a knowledge-intensive type of rights, the property value of intellectual property rights increasingly prominent. At present, copyrights, patents and other types of rights in China's intellectual property rights have been included in the scope of rights pledge rights, and have been stipulated through legislation, but there is still controversy over whether the new plant variety rights in the branch of intellectual property rights can be pledged. Therefore, to explore the legitimacy of new plant variety rights as the object of pledge of rights is of great significance for improving China's legal system of pledge rights and solving the financing of seed industry enterprises.

2. The Social Basis of Pledge Financing of New Plant Variety Right

In a market economy, the development of any economic activity has its social basis. The objective requirements for financing of seed industry enterprises and the increasing development of new plant variety rights provide a broad social basis for the financing of new plant variety rights pledge.

2.1. The Growing Development of New Plant Variety Rights

Plant variety rights are developing day by day, and the market for buyers and sellers has matured. The maturation of the domestic seed market has laid the foundation for the development of the new plant variety rights pledge financing business. After 30 years of development after the reform and opening up, China's seed industry has basically formed an industrial development system. On the one hand, the scale of the seed industry market continues to expand, and by 2010, China has become the second largest seed market in the world; on the other hand, after the survival of the fittest, a large number of new seed companies have been formed in the seed industry, and the profitability of seed industry companies has

been continuously improved. At present, the main body of China's seed market is becoming more and more clear, the market is becoming more active, and the transactions are becoming more and more standardized. China has produced a number of seed companies with certain international competitiveness, such as Shandong Denghai Seed Industry, Hunan Longping Hi-Tech and other outstanding enterprises. Secondly, China already has certain research and development capabilities, and in terms of seed trade, China also has certain trade capabilities. Finding methods and channels for financing of new plant variety rights and improving the system and regulations for financing of new plant variety rights will help strengthen the development of small and medium-sized seed industry innovative enterprises and ensure the continuous advancement of their innovation.

2.2. Objective Requirements for the Development of Seed Industry Enterprises

Pledge financing of new plant variety rights can broaden the financing channels of small and medium-sized enterprises, solve the financing difficulties of small and medium-sized enterprises, reduce the shackles of enterprise development, and fully tap the economic value of intellectual property intangible assets of enterprises. As far as the overall domestic environment is concerned, in recent years, a large number of growing, high-tech, small and medium-sized seed enterprises are in urgent need of transformation and reorganization. Funds play a decisive role in the survival and development of enterprises. Conventional financing activities often cannot meet the needs of enterprises. According to fixed assets, it is difficult to obtain a large amount of financing funds, and intellectual property rights have been idle for a long time. According to the survey data of the Ministry of Agriculture and Rural Affairs, more than 80% of small and medium-sized enterprises with an annual income of less than 5 million have difficulty in obtaining loans, and financial institutions such as banks are seriously insufficient in supplying loans to small and medium-sized enterprises. In the past, only fixed assets were used as collateral objects, and the choice of collateral was small, which made it difficult to solve the dilemma of small and medium-sized enterprises' financing difficulties.

2.3. Enhance the Soft Power of National Development

In the era of knowledge economy, intellectual property rights have become the institutional basis and policy basis for high-tech development in various countries, and an important symbol of a country's "soft power". Countries all over the world have widely recognized the huge economic value and social benefits of intellectual property rights. In today's economic globalization, the international trade competition of agricultural and forestry products is becoming increasingly fierce, and high-quality germplasm resources have become an active competition for both developing countries and developing countries. object. The research of institutional economics shows that the efficiency of the system determines the development of an economic entity and the growth rate of the stock of knowledge and technology. Therefore, the effective supply of knowledge products and the increase of the stock also require an efficient institutional arrangement. The emergence of this institutional arrangement comes from the need to ensure the effective supply of knowledge products, and the framework of this institutional arrangement is inseparable from the economic and inherent characteristics of knowledge products. As the core of agriculture, the importance of independent innovation in the seed industry is self-evident. For the development of society, the use of new plant variety rights as collateral can speed up the transformation of intellectual property into intellectual capital. As a branch of intellectual property rights, plant variety rights are one of the fields with the most technological content. Technological innovation is also an important engine of social development, and it is a powerful tool for globalization and the seed industry in global competition.

2.4. Legitimacy under the Incentive Mechanism Theory

The theory of incentive mechanism is widely accepted and recognized in the United States. The formation of this theory is closely related to the market background of free competition in the United States. The main content of the incentive mechanism theory refers to the author, inventor or businessman being given the corresponding intellectual property rights and related rights by the state or the law, the purpose is to encourage the author, inventor and businessman to create more information products, the ultimate purpose for the public interest. [1]The pledge financing of new plant variety rights under the theory of incentive mechanism has certain legitimacy. First of all, the purpose of cultivating new plant varieties has strong social value and social purpose, and ultimately is to provide social services and increase common social wealth. The new plant variety rights are included in the scope of intellectual property pledge financing, which broadens the channels for the marketization of new plant varieties. Secondly, increasing the circulation of new plant variety rights and converting new plant variety rights into material property is a necessary means to promote the enthusiasm of breeders. The value of a plant variety right is reflected in the price at which it is exchanged in the market. Pledge financing of new plant variety rights increases the way of marketization of new plant varieties, and increases the way for breeders to obtain labor returns. From the perspective of social development, it encourages breeders to cultivate more and better new plant varieties, which can also be better. serve the society.

3. Legal Basis for Pledge Financing of New Plant Variety Rights

The legitimacy of the subject matter is the primary condition for it to become a pledge. In the financing of the pledge of new plant variety rights, whether it is foreign or domestic, the new plant variety rights have become intellectual property rights recognized and protected by law, and the new plant variety rights are also the legal object of pledge.

3.1. Extraterritorial Development of Legal Authorization and Protection of New Plant Variety Rights

The United States, the United Kingdom, Germany and other countries have successively provided legal recognition and protection for creative new plant varieties. From the perspective of international development, "the recognition and protection of new plant varieties can be divided into three different stages, beginning in the pre-UPOV era, when the breeding technology has not been fully scientifically proven, and gradually evolved through selection and hybridization. The era of traditional breeding dominated by biotechnology is now closely integrated with the global trade of agricultural products, opening up a new era of biological breeding." [2] The first United States to recognize and protect new plant varieties through legislation adopts the dual protection model of patent law and special law. In 1930, the United States passed and promulgated the "United States Plant Patent Act", which listed new plant varieties as technologies that received special legislative protection in the same way as industrial inventions. However, what is authorized and protected by the U.S. Plant Patent Law is only "novel plant varieties invented or discovered by asexual reproduction, and the protected plant species include cultivated buds, mutants, hybrids, and newly discovered seedlings, but excludes plants grown from stems and plants found in an uncultivated state". [3]In the 1970s, the United States enacted the "Plant Variety Protection Act" to protect plant varieties cultivated through sexual reproduction. [4]In 2018, the revised U.S. Plant Variety Protection Act protects vegetatively propagated varieties. [5] At the same time, the European continent on the other side of the ocean is also actively exploring the legislative confirmation and protection methods for new plant varieties. Restricted by traditional patent law theory, it is impossible to protect new plant varieties by setting patents. After nearly 30 years of exploration, European countries have authorized and protected new plant varieties by setting special protection laws and

regulations. . On August 10, 1968, France, the Federal Republic of Germany, Belgium, the Netherlands, Italy, and other European countries formulated and signed the UPOV Convention, which entered into force after the Federal Republic of Germany ratified it. This convention can not only protect the breeding technology for new varieties, but also fully encourage innovation and incentives for the seed industry.

3.2. China's Legal Authorization and Protection of New Plant Variety Rights

After the founding of New China, the protection of Chinese seeds has gradually entered the right track. Until 1997, the promulgation and implementation of the "Regulations of the People's Republic of China on the Protection of New Plant Varieties" became the beginning of China's new plant variety protection system. In 1999, it was approved by the Fourth Session of the Standing Committee of the Ninth National People's Congress and decided to join the UPOV (1978 text) Convention. In accordance with the relevant principles and systems of international conventions, China has gradually refined the protection system for new plant varieties, and has successively promulgated a series of departmental regulations supporting the "Regulations on the Protection of New Plant Varieties". Detailed Rules (Agricultural Part)" (Amended in 2014), "Regulations on Handling of Infringement Cases of New Varieties of Agricultural Plants". In 2015, China upgraded the protection level of new plant varieties and implemented and revised the "Seed Law". The fourth chapter of the "Seed Law" stipulates the protection of new plant varieties, "focusing on solving the problems of low legislative level, low protection level and insufficient encouragement of variety innovation in the protection of new plant varieties in China, and strengthening the protection of new plant varieties rights protection. [6]In 2019, the Ministry of Agriculture and Rural Affairs of the State Council promulgated a revised draft of the Regulations on the Protection of New Plant Varieties, which expands the scope of control of breeders' rights. [7]

In 2021, China will officially enter the "Civil Code Era". The Civil Code is the institutional parent and legal ownership of intellectual property rights, and has made declarative and principled provisions on intellectual property rights. Article 123 of China's Civil Code stipulates: "Intellectual property rights are the exclusive rights enjoyed by the right holder in accordance with the law with respect to the following objects: ... (7) new plant varieties; ..." New plant varieties are clearly listed as the object of intellectual property rights Scope, although the new plant variety has not been protected by a separate law, but the new plant variety is kept on a par with patents, trademarks and copyrights, which is enough to see that the law recognizes and protects the new plant variety right, and improves the authorization and protection of new plant varieties. Legal rank, strengthen the attention and protection of intellectual property rights in the seed industry.

4. Property Attributes of Pledge Financing of New Plant Variety Rights

Possession of property is an important condition for a new plant variety to become the subject of pledge of rights. The purpose of the new plant variety becoming the subject of the pledge is to guarantee the expiration of the debt performance period. If the debtor fails to perform the debt on time, the creditor can have priority in repaying the proceeds from the sale and auction of the pledged property. Therefore, the subject matter of security must be property, that is, the subject matter must be able to secure the creditor's property rights to be realized.

4.1. The Subject Matter of a New Plant Variety Right is Information Property

The law recognizes intellectual property as the property of right, but its property value comes from the value of the object of property rights. [8]The object of new plant variety rights is different from that of traditional property rights. The subject of new plant variety rights is genetic resources, that is, biological genetic information, which is continuously expanded and

developed based on the development of biotechnology. These biological genetic information should belong to the category of information property. Information property refers to information that is fixed on a certain carrier and can meet the needs of people's production and life. It has the characteristics of certainty, controllability, independence, value and scarcity. [9]When this self-replicating genetic information is combined with testing, research, development, etc., it becomes a source of new breeds. After the natural information is transformed into intellectual information, since intellectual property is the property right containing some specific information, this intellectual information may meet the requirements of intellectual property protection, and thus become the protected object. Intellectual property is an intangible property right. In essence, what intellectual property law protects is some specific information products, and intellectual property rights are the property rights enjoyed by some specific information.

4.2. New Plant Variety Rights are Profitable

As one of the functions of intellectual property, the right to benefit from intellectual property has become an independent right after being separated from intellectual property. The right holder of the new plant variety right obtains the corresponding economic benefits through the use or disposal of the intellectual property. Article 3 of Part III of the "Several Opinions on Strengthening the Protection and Management of Intellectual Property Rights Related to Science and Technology" stipulates: "Respect the unit's right to use, transfer and benefit from the technical achievements of the job." The right to benefit is clearly mentioned here. The right of usufruct has been raised to the legislative level as a right that attaches equal importance to the right of use and the right of transfer. Although the specific concept of the right of usufruct The right to benefit from property rights exists as a property right. New plant variety rights have the power to generate income and become the support for their property attributes. The benefits of new plant variety rights specifically include licensing fees, transfer fees, dividends, rewards, and remunerations. The owner of the new plant variety right obtains the right to benefit by implementing the new plant variety right, the license of the new plant variety right, the transfer of the new plant variety right, and the shareholding of the new plant variety right. The way of obtaining and expressing the right to benefit from the new plant variety determines the property right attribute of the right to benefit from the new plant variety right.

5. The Economic Value of Pledge Financing of New Plant Variety Rights

In the financing of the pledge of the new plant variety right, the property attribute of the new plant variety right is not only the exclusive property right enjoyed by the subject of the right to the new plant variety, but also stems from the certain social and economic value of the new plant variety right as an intellectual achievement. [10]According to the different scope of objects of new plant variety rights, new plant varieties can be divided into new varieties of agricultural plants and new varieties of forestry plants, which respectively have great economic value in the fields of agriculture and forestry.

5.1. Economic Value of New Varieties of Agricultural Plants

The social and economic value of new agricultural plant varieties is mainly reflected in the ability to provide high-quality agricultural supply. The development and utilization of new varieties of agricultural plants can improve the comprehensive agricultural production capacity, ensure the effective supply of agricultural products, and increase farmers' income. New plant varieties created and developed through artificial cultivation and the development of existing plants can break through the constraints of arable land, soil and other resources. Taking China's food crops as an example, the research and development of new varieties of excellent agricultural plants has made the new varieties more resistant to stress and higher yields,

ensuring high-quality food supply, and meeting the national food needs and the needs of modern agricultural construction. The increase in the output of new economic plant varieties can also increase farmers' income, help farmers improve their quality of life, and increase the free choice of the market. [11] In addition, the cultivation and research and development of new varieties of agricultural plants have generated new plant genetic information, enriched the genetic pool of genes, and can be used by humans to generate social and economic value.

5.2. Economic Value of New Varieties of Forestry Plants

The new varieties of forestry plants are mainly forest plants. Compared with agricultural plants, forestry plants have the characteristics of long growth cycle, and the cycle required for the selection and improvement of new forestry plant varieties is usually relatively long. [12] In recent years, on the one hand, high-quality trees have gradually replaced traditional trees, and the planting and cultivation of high-quality trees has been increased. The original traditional forest trees are gradually abandoned, but this will lead to the simplification of the selection of planting varieties. Through innovative research and development on the basis of traditional plants, the original plant varieties can be retained, but the weaknesses of traditional plants can be supplemented, and the diversification of forestry species can be maintained. In addition, in terms of the utility of forest trees, forest trees are the raw materials for many production and life. Through the selection and improvement of new varieties of forestry plants, people's production and life needs can be met. Forestry contains huge ecological benefits. For example, it can prevent wind and sand, adjust the climate, prevent soil erosion, and at the same time, it can make up for the shortcomings of urbanization construction, and cultivate trees suitable for growing in the city, which will become a good place for people to relax and entertain.

6. The Exchange Value of Pledge Financing of New Plant Variety Rights

The content of intellectual property pledge is to control the exchange value of intellectual property, which is different from the usufruct of intellectual property with use value as its content. Value or monetary value, and this capital value or monetary value is what we usually call exchange value. [13] The necessary condition for a new plant variety to become a pledge target is that it can be circulated in the market, that is, it has exchange value. The realization of exchange value requires that the object of pledge rights should have the characteristics of certainty, free transferability and publicity of the scope of the object. [14]

6.1. Determination and Publicity of New Plant Variety Rights

The certainty of new plant variety rights mainly comes from the certainty of the protection scope of new plant varieties. In China, all new plant varieties included in the subject matter of pledge should be included in the new plant variety protection list, and the authorization of new plant varieties adopts a strict essentialism, that is, when the right holder proposes the variety to the relevant administrative organ For the right application, the relevant property rights can only be obtained after the administrative organ conducts formal examination and substantive examination. Therefore, when the breeder applies for the breeder right, the object has already been determined.

The publicity of new plant varieties is reflected in the grant of new plant variety rights and the transfer of new plant variety rights. The Chinese Regulations on the Protection of New Varieties of Plants stipulates that after the right holder successfully applies for the variety rights, the examination and approval authority shall make public announcements in accordance with legal procedures. Any creative achievement is inseparable from the use of existing knowledge, so all intellectual property objects are inherently social, and the rights to such objects can only be specially granted by law, and the content of their rights must be determined by law. It is clearly stipulated that the realization of rights also depends more on the protection of public power.

Therefore, the publicity of new plant varieties ensures the security and stability of transactions to a certain extent.

6.2. Free Transferability of New Plant Variety Rights

The reason why the new plant variety right can be transferred is mainly because of its private property. Identifying that the new plant variety right has the attribute of private property is mainly reflected in the following three aspects: First, the variety rights of the creative achievements of the new plant variety are enjoyed by equal subjects, and are enjoyed by the creators individually, and the rights subjects are in an equal position; Second, the benefits generated by plant variety rights are private interests, not public; third, the authorization and confirmation of new plant varieties are protected by private law. The state protects and encourages the innovation and invention of new plant varieties, with the purpose of realizing private rights and interests and stimulating the enthusiasm of the public to create. The new plant variety right has the attribute of private property, which has become one of the conditions for its transfer.

7. Conclusion

Pledge financing of new plant variety rights has opened up a new channel for the marketization of new plant varieties, and provided a new way for seed companies to obtain financing loans. The existing practice and theoretical foundations have been gradually developed and perfected, providing a strong justification basis for the establishment of a legal system for the financing of new plant variety rights pledges.

Acknowledgments

Henan Province Law Research Project in 2022 (Project No. HNLS(2022)A46), Research Project of the Civil Law Research Association of Henan Law Society in 2022 (Project No. HNCLS (2022)27), The 2021 Scientific Research Project for Postgraduates of Henan Normal University (Approved Document Number: [2021]12).

References

- [1] Li Mingde. US Intellectual Property Law(Law Press, China2003), p. 8.
- [2] Li Judan. The Reform and Development of the International Plant Variety Protection System and China's Response (Intellectual Property), (2020) No1, p. 60.
- [3] 35USC 161 Patent for Plants.
- [4] Wu Lizeng, Huang Xiujuan, Liu Weiping. The Theory of Intellectual Property Rights of Genetic Resources (Science Press, China2009), p. 34.
- [5] Intellectual Property Research Center of State Forestry and Grassland Administration. Interpretation of Laws and Regulations on New Plant Varieties in the United States (China Forestry Press, China2021), p. 10.
- [6] Li Judan, Chen Hong. The Positive Effects and Limitations of the New <Seed Law> on the Protection of New Plant Varieties in my country (Journal of Law), (2016) No7, p. 70.
- [7] Yang Hongchao. On the Institutional Innovation of Intellectual Property Protection of Plant Breeding in my country - Centered on the "Draft Amendment to the Regulations on the Protection of New Plant Varieties" (Draft for Comments) (Seed), (2019) No5, p. 149.
- [8] Feng Tao, Zhang Xiaolong. Analysis of Intellectual Property Attributes from a Value Perspective (Science and Technology Management Research), (2014) No22, p. 250.
- [9] Qi Aimin. Defending Property in the Information Society (Peking University Press, China2009), p. 53.

- [10] Su Yuan. On the Property and Scarcity of Intellectual Property (Intellectual Property), (2005) No5, p. 3.
- [11] Deng Xiaolei. Current Situation and Legislation Improvement of New Variety Rights Protection of Agricultural Plants in my country (Seed), (2020) No11, p. 164.
- [12] Yuan Guobao, Zhang Chungui. Thinking about the Problem of Pledged and Secured Loans for Seed Enterprises (China Seed Industry), (2005) No5, p. 28.
- [13] Liu Yuechun. Research on Intellectual Property Pledge System (Law Press, China2013), p. 65.
- [14] Chen Benhan. Re-discussion on the Determination of the Object Scope of the Pledge of Rights (Law Science), (2016) No7, p. 82.