

Legal Text Identification and Intervention Analysis of Intellectual Property Rights of Intelligent Cross-Border E-Commerce Products

Ning Mao

Department of Business, Hunan Institute of Information of Technology, Changsha Hunan, China

Abstract—This paper uses the cross-border e-commerce comprehensive pilot zone as the research background to study the legal text identification and intervention analysis of product intellectual property rights. First, it analyzes the risk of cross-border e-commerce intellectual property rights infringement; secondly, it analyzes the intellectual property rights in the cross-border e-commerce field. The reasons for infringement were discussed; finally, feasible countermeasures and suggestions were put forward on how to strengthen the protection of intellectual property rights in cross-border e-commerce, aiming to raise the society's awareness of the importance of intellectual property protection in cross-border e-commerce and strengthen intellectual property legislation, Law enforcement, justice, for the healthy and rapid development of cross-border e-commerce, the results show that the protection of intellectual property rights has increased by 7.5%

Keywords—*Legal Text Identification, Intellectual Property Rights, Cross-Border E-Commerce Products, Intervention Analysis*

I. INTRODUCTION

With the continuous development of cross-border e-commerce, the fields involved are also increasing, and the scope of intellectual property rights has also expanded to the fields of patents, trademarks, text, audio and video copyrights. Not only that, Amazon, EBay and other large foreign e-commerce companies have also entered China, and Chinese merchants have also joined in large numbers. China's Alibaba can directly provide services or goods as operators, and can also be expressed in the form of patents or trademarks, which belong to knowledge. The scope of property rights; and other technical information and important business information that do not meet the requirements of intellectual property objects can be regarded as trade secrets.

In cross-border e-commerce, the electronic operator information carried by the network is more open and fluid, but at the same time, it also catalyzes the occurrence of violations of operators' intellectual property rights and trade secrets. Cross-border e-commerce is different from traditional trade. Cross-border e-commerce involves different countries and systems. In the process of cross-border e-commerce, it is characterized by complicated domestic and overseas situations, that is, the purchase channels of commodities are complex, the production sources of commodities are diverse, and there are still problems such as OEM for domestic sales to the world. Therefore, trademarks are widely used by commodity producers or operators. On the one hand, they play a role in distinguishing goods or services; on the other hand, they also play a role in publicizing and promoting brands. However, my country's current "Trademark Law" does not protect a certain

dynamic process appearing on the Internet as a trademark [7-14].

E-commerce transactions are different from traditional face-to-face transactions. Customers cannot see real and intuitive products. They can only rely on graphics, text and information to identify products and services. Faced with a large amount of product information, trademarks with distinctive features will naturally become as the darling of e-commerce, trademarks play a very important role in e-commerce. Once e-commerce leaves trademarks, it will become uncompetitive. From the perspective of trademark owners, customers can easily select high-quality goods or services and their sources on the network platform by identifying trademarks. By protecting trademark rights, it is beneficial to safeguard the trademark rights obtained by trademark owners in accordance with the law, and at the same time avoids the risk of customers buying counterfeit and shoddy goods and services. However, as a graphic symbol, trademarks can easily be copied or counterfeited by technical means on the Internet, which undoubtedly increases the difficulty of protecting trademark rights. In the civil rights system, intellectual property is different from traditional property ownership. Intellectual property is English "intellectual property" or "intellectual property right", which can be translated as "intangible (property) ownership" or "intelligent property right". Based on the definition of intellectual property by domestic scholars, its connotation and extension can basically be expressed as follows: Intellectual property is the right that people enjoy in accordance with the law based on the results of their own intellectual activities and the marks and reputation in business and management activities. Considering that "So far, most countries' legal sciences, laws and international treaties have clarified the concept of intellectual property rights from the delineation of scope, or just defined property rights." Therefore, use the list of intellectual property rights. The main content method to express the concept of intellectual property is a method commonly used at home and abroad. Among them, the relevant provisions in Article 2(8) of Although the extension of national information security in cross-border e-commerce includes the information security of domestic consumers and operators (Including Counterfeit Commodity Trade) (hereinafter referred to as "TRIPS") are the most important. Judging from the current situation, the domestic cross-border e-commerce industry is still in the groping stage, with disordered management, violations of intellectual property rights, and the promotion of counterfeit and shoddy products [15-21].

According to the main body of information generation and control, the national level also includes some large-scale or public content information.. For cross-border e-commerce intellectual property assets accumulation and risk prevention, many companies lack the internal driving force and the technical realization capability. Some infringing products even Use complex cross-border export methods to evade tariffs and

intellectual property rights, thereby evading administrative supervision [22-24].

II. THE PROPOSED METHODOLOGY

A. Smart Cross-Border E-Commerce Products

The development of information technology has given new ways for commodity trading to develop. The emergence of cross-border e-commerce and the rapid occupation of the consumer market, and at the same time, has broken the regional trade restrictions and regional restrictions, providing a powerful way for economic integration and trade globalization. driving force. Among them, the most notable point is that many unique agricultural products have been brought to the international market.

$$y_j^u = +1, \sum_{i=1}^n w_{ij} x_i > \theta_j \quad (1)$$

$$y_j^u = -1, \sum_{i=1}^n w_{ij} x_i \leq \theta_j \quad (2)$$

According to data analysis by government departments, from 2015 to 2018, cross-border e-commerce has seen a leap in the scale and growth rate of agricultural products transactions, and some data indicators have even surpassed some developed countries. Through in-depth research, we found that the main reason for the present situation is that cross-border e-commerce is more convenient and efficient than the trade circulation under the traditional model, and consumers can directly obtain information about production companies and agricultural products through the Internet. This is obviously more in line with the psychological needs of consumers; the reason why cross-border e-commerce of agricultural products can develop rapidly is because cross-border e-commerce reduces the circulation links of the traditional trade model, optimizes the traditional trade model, and enables consumers to directly use the Internet. Face companies and get information on agricultural products. Cross-border e-commerce can effectively reduce the transaction cost of agricultural products under the traditional trade model, effectively shorten the transaction time of agricultural products under the traditional trade model, and effectively increase the profits of primary producers of agricultural products and related enterprises. Cross-border e-commerce relies on the Internet. The Internet has been integrated with the development of modern society. Consumers can directly learn and compare agricultural products from the Internet, and finally purchase high-quality and inexpensive agricultural products. In addition, through the operation of cross-border e-commerce, a supply and marketing platform between consumers and production enterprises or farmers is directly established, so the transaction time and material cost are reduced to a large extent. A platform that can quickly reflect the market has maximized the profit margins of agricultural product manufacturers.

The reason for this is mainly because cross-border e-commerce was born and developed relying on the Internet, and the Internet has long been integrated with modern society. Consumers have already possessed relevant and complete Internet thinking.

B. Intellectual Property Rights of Cross-Border E-Commerce Products

The acquisition of patent rights is based on the conditions and procedures stipulated in the Patent Law, an application is filed with the State Patent Office, and the right to invention and

creation is granted upon examination and approval. In my country, patents mainly include three types: inventions, utility models, and designs. Patent right is the exclusive right of the creator or its assignee to the invention and creation within a certain period of time. It is manifested as: manufacturing, using, promising to sell, selling and importing its patented products for production For example, a country's financial data, national consumption data, industrial market trends, top-level design of national economic strategies, etc., these information may be directly related to national economic security and interests.

Tab. 1. Important coefficient of intellectual property

n	β_1				β_2				
	bias	SD	SE	R_{res}	bias	SD	SE	R_{res}	
400	Ge-ar1	-0.0011	0.0132	0.0132	0.985	0.0003	0.0133	0.0131	0.936
	Qr-inde	-0.0015	0.0329	0.0309	0.936	0.0015	0.0310	0.0311	0.950
	proposed	-0.0004	0.0226	0.0224	0.932	0.0002	0.0215	0.0224	0.942
800	Ge-ar1	0.0006	0.0096	0.0093	0.950	-0.0004	0.0095	0.0093	0.950
	Qr-inde	-0.0010	0.0213	0.0221	0.946	0.0021	0.0213	0.0221	0.962

In cross-border e-commerce, patent infringement mainly focuses on infringing on sales promises, importing patented products or using its patented methods, counterfeiting patented products, etc. For example, in recent years, many sellers in Yiwu, Hangzhou, Jiangsu, Shanghai and other places have been sued by many wedding dress companies in the United States, believing that the wedding dresses sold by the defendant Chinese sellers on cross-border e-commerce platforms infringed their design patent rights, and applied for the court freezes the funds in the PayPal accounts of cross-border e-commerce sellers, and these sellers will also face high patent infringement claims. On the one hand, it is imperative to strengthen the border protection of intellectual property rights. Because, with the increasing development of international trade and scientific and technological exchanges, the infringement of intellectual property rights has become increasingly prominent. This not only harms the legitimate interests of the right holders and disrupts the international trade order, but also poses a threat to the national security interests of all countries and even the lives and health of the people. It is an objective necessity and inevitability to implement and strengthen border protection of intellectual property rights; but on the other hand, it should be noted that countries in the world, including China, have questions about how to protect, how to define the scope of protection, and how deep the protection should be. Different understandings and practices, even because of excessive protection power and wide scope, have spawned new trade protectionism and non-tariff barriers, hindering the normal development of international trade and the widespread dissemination of science and technology.

C. Legal Text Identification and Intervention Analysis of Intellectual Property

The intellectual property system was implemented late in our country, and cross-border e-commerce is a new business format developed in recent years. Therefore, in the development process, the phenomenon of inadequate management and lack of systems is common. Many small companies only focus on opening up the market and seeking more. The order of the company lacks understanding of the importance of intellectual property rights, and cannot consciously respect the intellectual property rights of others, and copy the intellectual achievements of others at will. Using logos similar to the registered trademarks of others on their own products, the claimant knew that his actions were illegal and caused unnecessary economic losses to the enterprise.

$$N_{step} < N_{max} \quad (3)$$

$$0 \leq Y_i \leq Y_{lim} \quad (4)$$

Judging from the current domestic legislation, there is still a big gap with the international legislation on intellectual property rights. At present, my country is revising the "Regulations on the Customs Protection of Intellectual Property Rights" and the "Customs Implementation Measures on the "Regulations on the Protection of Customs Intellectual Property Rights". The internationalized and trans-regional administrative enforcement system of intellectual property customs protection must be brought into line with international standards as soon as possible, and the role of China Customs in the international protection of intellectual property rights must be brought into full play. International treaties such as TRIPS, "Patent Cooperation Treaty", and "Madrid Agreement on the International Registration of Trademarks" have made certain provisions on the principle of public power intervention, which is worthy of our reference. For example, TRIPS stipulates the principle of public power intervention: "In order to reduce the distortion and hindrance of international trade, promote the effective and adequate protection of intellectual property rights, and prevent these measures and procedures from becoming obstacles to legal trade", it clarifies public power intervention. It must be restricted.

In the World Customs Organization's Model Law on Border Protection of Intellectual Property Rights, the role and role of the border protection system are also more clearly defined. "The holders of intellectual property rights are primarily responsible for taking measures to protect their rights." It is said that the intervention of public power should be a kind of assistance. This gives a better reference to the principle of public power intervention-the principle of limited public power intervention.

CONCLUSION

This article studies the intellectual property rights of cross-border e-commerce products based on artificial intelligence-based legal text recognition and legal intervention. It should also start with improving legislation, strengthening law enforcement, developing internal industry autonomy, raising awareness of intellectual property protection, and strengthening legal assistance. Provide protection for cross-border e-commerce products with intellectual property rights. Only in this way can we promote the healthy development of this field, enable various high-quality products to occupy a place in international competition, and vigorously promote the sustainable development of my country's agricultural industry and cross-border e-commerce industry.

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