

Analysis of the Development of Protection of Trade-related Aspect Intellectual Property Rights of China

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Abstract

With more and more attention paid to the protection of intellectual property rights, trade-related intellectual property rights are affected in some ways. Intellectual property rights, to some extent, can maintain the uniqueness and differentiations of goods and services, which is of crucial importance for trade. This paper analyses the contribution work of protection of intellectual property rights of China, the development of trade-related intellectual property right of China and then the effects of protection of intellectual property right of China. Finally, this paper points out the recommended policies for improving the protection of trade-related intellectual property right of China.

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Keywords: Intellectual property rights, Intellectual property sensitive commodities, Technical trade barrier, TRIPs

1 Introduction

Nowadays, all economies are keeping a close eye on intellectual property rights (IRPs) and international trade. During the 18th National Congress of the Communist Party, National Intellectual Property Strategy is highlighted again.

The 21st century is an era of knowledge and technology. It's time to do some investigation about TRIPs. At the same time, Cross-border trade is also a central point of the development of all countries. The paper is in the hope of appealing more attention to the protection of IPRs as well as international trade.

This paper analyses the effects of TRIPs on cross-border trade of China, mainly from two

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aspects, including positive and negative impacts and the strategies and measures China should adopt towards the issues on protection of TRIPs.

2 Literature Review

As early as 1993, Michael J. Frantino already pointed out the effect of international recognition of intellectual property in “The effect of intellectual property rights on international trade and investment”. He said that membership in intellectual property treaties increased the flows of payments and receipts for intellectual property as long as domestic patent protection was sufficiently strong, and that U.S. parent companies exported more to subsidiaries in other countries which did not adhere to such treaties, however their impact on foreign investment was minimal. However, those conclusions were drawn from the investigation in the context of U.S. exports, foreign affiliate sales and flows of royalties and license fees, rather than focusing on China.

In their paper “Intellectual Property Protection and the Conversion of Chinese Import Trade Structure” (2011), Qi Jiangyi, Xu Helian and Lai Mingyong explained the structural transformation of import trade in China from the perspective of IPRs protection. They argued that IPRs protection affected the import trade structure of China through the market expansion effect, the market power effect and the strong sensitivity to IPRs protection of high-tech products. Furthermore, the empirical analysis by using interprovincial panel data of China showed that the relationship between IPRs protection and high-tech products imports was significant and positive.

According to the observation of the current situation of IPRs-related trade China involved in, Xiong Ying and Shi Jing wrote a paper titled “Puzzles and Its Countermeasures in Foreign Trade of Domestic Intellectual Property” (2011), they illustrated that TRIPs in China is often trapped in infringement dilemma for the lack of independent intellectual property, intellectual property management dispersion and other problems. To get rid of this dilemma, China must strengthen the independent innovation system and intellectual property awareness and the coordination of relevant departments of foreign trade in intellectual property management.

Based on “Agreement On Trade-Related Aspects Of Intellectual Property Rights”, in the year 2012, Liu Yanmei studied how to provide China a fine environment for TRIPs. She argued that what Chinese government need do was to improve related regulations and rules to create sound and well-organized circumstances for TRIPs.

Yan Bingshu delivered a paper titled “Analysis of Existing Problems and Countermeasures for China’s Intellectual Property Protection in International Trade” in 2012. He took the relationship of intellectual property theory and international trade as the starting point, mainly analyzed the current situation and existing problems of intellectual property in China, and also proposed countermeasures of intellectual property protection.

3 The Situation of Protection of Intellectual Property Rights of China

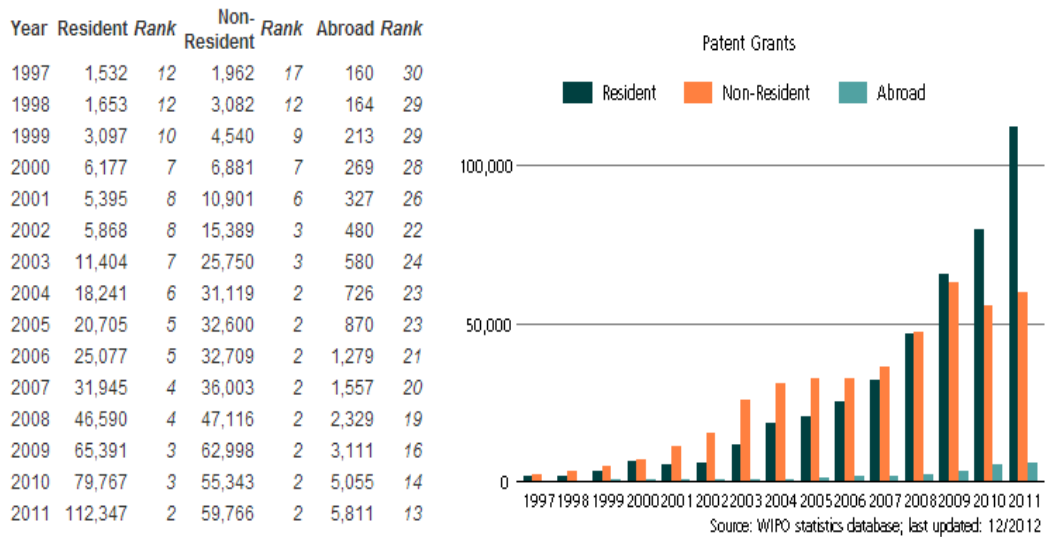
With the development of economy, China actually occupies an outstanding position in IPRs field. From figure 1, over 112,000 patent grants were given to Chinese residents merely in the year 2011, almost twenty times more than that ten years ago. And patents

granted to Chinese residents are in a rising tendency ranking No.12 in 1997 to ranking No.2 in the world in 2011. What’s more, overseas Chinese are another group of people who owns large amounts of patents with 5,811 grants in 2011, ranking No.13. In a word, China is a strong powerful country concerning patent grants.

Similarly, figure 2 illustrates the quantity of trademark registrations of China. From observation, it is clear that China has been occupying the first position since the year of 2000, and the amount of trademark registrations reached its peak, up to 1211,428 in 2010, increasing by about ninefolds than the very beginning of the 21st century. In addition, trademarks registered by Chinese abroad are also of satisfying ranking in world, which attained a top 10 position in 2011. Gernerally speaking, no country can match China as far as the quantity of annual trademark registrations is concerned.

Besides, the situation of industrial design registrations is presented in figure 3. The number is increasing year by year showing a promising trend. And China has occupied the No.1 seat for several years since 2003. The amount of industrial design registrations even surprisingly reached 366,428 in the year of 2011. It is natural to conclude that China is not weak in innovating industrial commodities.

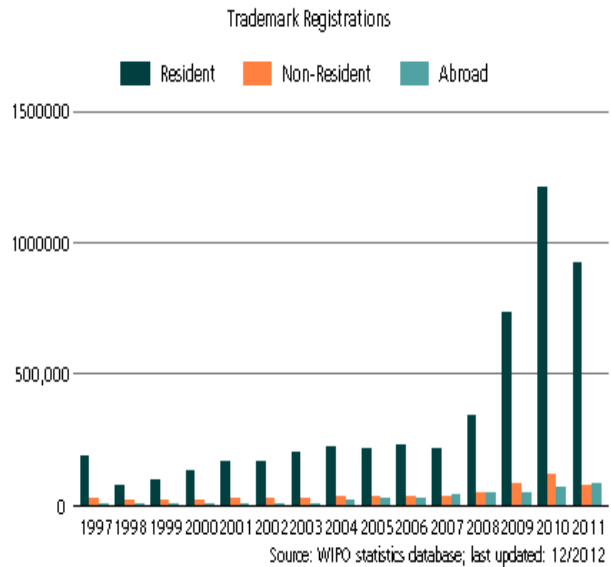
To sum up, China is one of the powerful contries concerning IPRs. Thus, there exists great chance for China to be involved in international trade connected with IPRs. However, all above is merely about the quantity rather than quality of patents, trademarks or industrial designs. If also taking the value into consideration, China may become a relatively inferior nation with regard to IPRs.



Source: WIPO statistics database

Figure 1: Patent Grants of China, 1997-2011

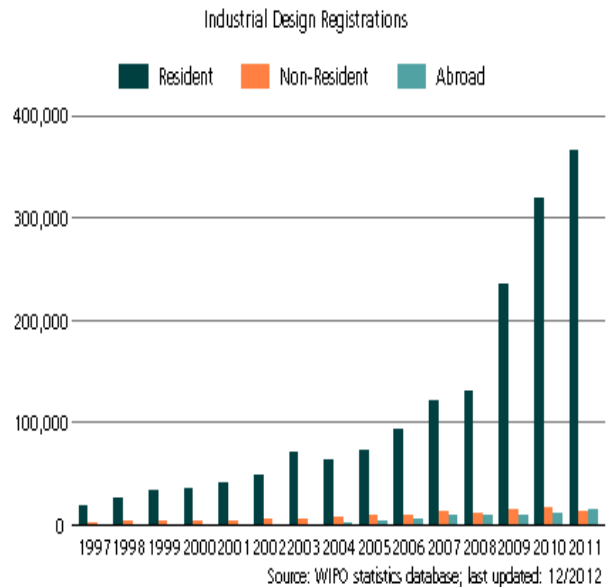
Year	Resident Rank	Non-Resident Rank	Abroad Rank
1997	188,047	2	29,558
1998	80,095	3	18,866
1999	96,139	2	18,420
2000	129,441	1	21,520
2001	167,563	1	24,986
2002	169,904	1	29,005
2003	206,070	1	27,060
2004	225,394	1	32,528
2005	218,731	1	34,402
2006	228,814	1	38,193
2007	215,161	1	33,036
2008	342,498	1	46,617
2009	737,228	1	81,405
2010	1,211,428	1	121,669
2011	926,330	1	80,786



Source: WIPO statistics database

Figure 2: Trademark Registrations of China, 1997-2011

Year	Resident Rank	Non-Resident Rank	Abroad Rank
1997	17,672	5	2,488
1998	26,006	4	3,248
1999	32,910	4	3,241
2000	34,652	3	3,267
2001	39,865	2	3,731
2002	49,143	2	4,299
2003	69,893	1	6,273
2004	63,068	1	7,187
2005	72,777	1	8,572
2006	92,471	1	10,090
2007	121,296	1	12,502
2008	130,647	1	10,954
2009	234,282	1	15,419
2010	318,597	1	16,646
2011	366,428	1	13,862



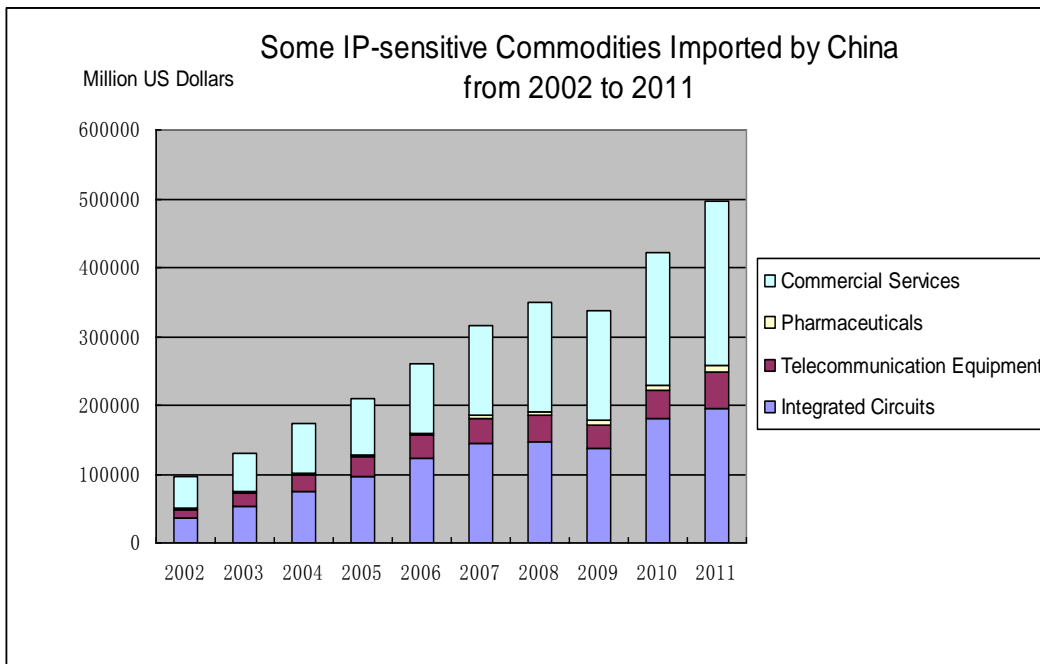
Source: WIPO statistics database

Figure 3: Industrial Design Registrations of China, 1997-2011

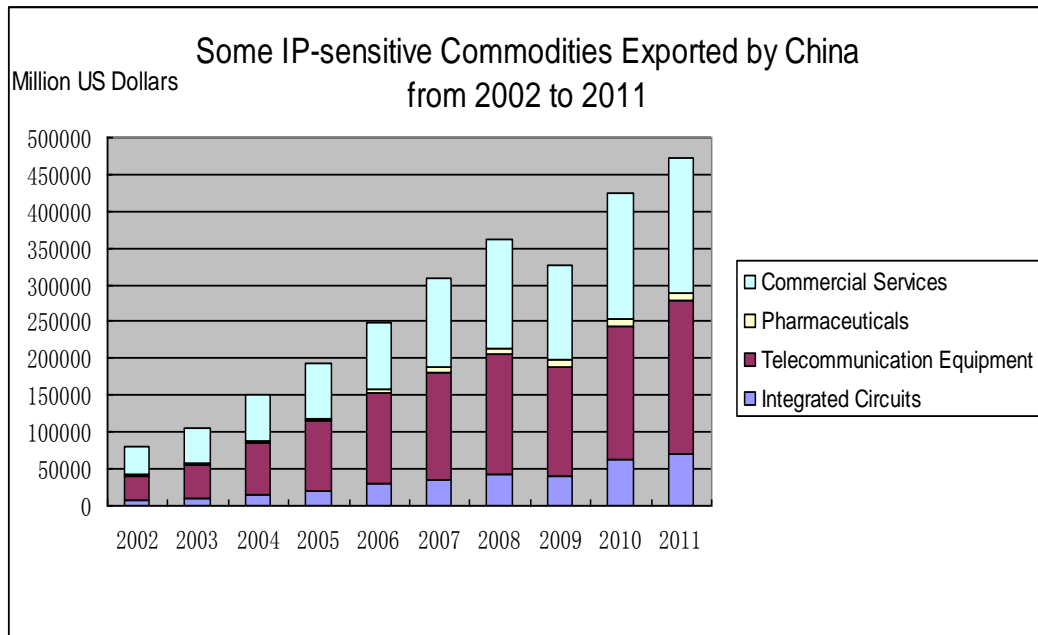
4 The Situation of Trade-related Aspect Intellectual Property Rights of China

Since intellectual property is intangible, it is difficult to measure or count the value of intellectual property in trade. And the data of intellectual property traded among countries is not available from anywhere, even World Trade Organization. Thus, it's hard to tell exactly how much intellectual property weights in cross-border trade of China. Actually, almost each transaction contains certain Intellectual Property. There is no doubt that each category of commodity requires certain brainwork to get finished. Some sectors are relatively IP-sensitive in which IP occupies a dominant position in value, such as advanced technological products, pharmaceutical and medicine manufacturing and almost every category of services, etc.

As we all know, patents as well as trademarks occupy major parts of value of pharmaceuticals, telecommunication equipment and integrated circuits. As for commercial services, goodwill and unique management and service process, which belong to trademarks and trade secrets respectively, are prominent factors to conclude transactions between importers and exporters in international trade.



Source: World Trade Organization, International Trade and Market Access Data
 Figure 4: Intellectual Property Sensitive Commodities Imported by China, 2002-2011.
 (Million US Dollars)



Source: World Trade Organization, International Trade and Market Access Data

Figure 5: Intellectual Property Sensitive Commodities Exported by China, 2002-2011.
(Million US Dollars)

From the figure 4 and 5, those IP-sensitive commodities including integrated circuits, telecommunication equipment, pharmaceuticals and commercial services, account for a large amount with nearly USD 500,000 in importing section and more than USD 450,000 in exporting in 2011, and take about a one-seventh share and a two-thirteenths share of the total respectively (including merchandise and commercial services) imports and exports of China. Telecommunication equipment and commercial services respectively occupy a big share with more than 30% of trade. And these commodities are transacted in a larger and larger quantity from 2002 to 2011, except the year 2009, due to the worldwide financial crisis. Therefore, it is reasonable to predict that IP-sensitive commodities will take a big share in cross-border trade of China in the future.

Of course, there are many other commodities containing certain value of intellectual property which are not covered in figure 4 and figure 5, like beverages, cosmetics and perfume, to which trademarks and trade secrets are of great importance. If also taken all other commodities into consideration, the figure will be much larger. So, it is not hard to find that a considerable quantity of cross-border trade of China is related to intellectual property. Since such a huge amount of trade is in close connection with intellectual property, then, keen attention should be paid to the effects of IPRs on international trade of China.

5 The Effects of Protection of Intellectual Property Rights on Cross-border Trade of China

5.1 The Positive Effects of Protection of IPRs on Cross-border Trade of China

5.1.1 Improving international trade of China

IPRs takes up a certain portion of the international trade of China. Actually, besides these commodities presented in figure 4 and figure 5, chemicals and electrical machinery, telecom and office equipment, and many other products frequently transacted between countries or regions are also contain great amounts of intellectual property in value. IPRs hold a big share in the value of a quite large group of commodities in international trade of China.

5.1.2 Maintaining varieties and differentiations of trade commodities

Protection of IPRs is vital for sustaining the uniquenesses and differentiations of commodities. On the other hand, obtaining and enjoying those uniquenesses is one of the main purposes to conduct foreign trade with other countries. If without any protection of IPRs, people can freely make use of patents, trademarks, copyrights and any other form of IPRs, then, excluding other conditions, each country will produce similar or exactly the same products, so that there exists no incentive or intention, even no chance, for international trade of these IP-sensitive products. In other words, protection of IPRs is the basis of maintaining comparative advantages of certain companies or countries to great extent.

To sum up, IPRs is a certain part of the objects transacted in international trade, therefore the protection of it can make a big difference only concerning the trade volume of a country or region, especially when the country is a powerful trading party like China. Meanwhile, the protection of IPRs also acts as a stimulation for multinationals to focus on innovating and R&D so as to maintain the differentiations and varieties of commodities they produce and comparative advantages over competitors.

5.2 The Negative Effects of Protection of IPRs on Cross-border Trade of China

5.2.1 Rising prices and lowering demands of traded goods

Protection of IPRs is very likely to make it easier for a small amount of firms to become monopolies in the world market, such as Boeing and Airbus in aircrafts manufacturing, Coca-Cola and Pepsi in softdrinks making, Apple in smartphones and laptops producing, etc. Thus, it is harmful to forming valid and benign competitive atmosphere without sufficient competitiveness. Those monopolies could lift the prices of their products to some extent in order to obtain more profits. As we all know, higher price leads to lower demand in world market, thus less international trade.

5.2.2 Acting as technical trade barriers

In addition to imposing tariffs on imported commodities, most countries, even those nations who intensively advocate free trade, also impose non-tariff barriers, especially when some countries are faced with such a deep recession since 2007. Technical barrier seems much easier to be disguised and much harder to be supervised, so that almost all countries are taking such measures to restraint imports from other countries in the name of protecting domestic infant industry, lowering unemployment rate or defending national security. And IPRs is one of the most useful and allowable measures applied to erect a wall between two trading sides. As a matter of fact, the United States is enhancing technical barriers by strengthening '337' investigations when U.S. are faced a huge deficit trading with China. The primary remedy available in Section 337 investigations is an exclusion order that directs Customs to prevent infringing imports from entering the United States. '337' investigations conducted by the U.S. International Trade Commission are often involved with claims regarding intellectual property rights, including allegations of patent infringement and trademark infringement by imported goods. Other forms of unfair competition with imported products, such as infringement of registered copyrights, misappropriation of trade secrets, may also be asserted.

According to the release of American International Trade Commission, since 2002 China has been the biggest target of American '337 investigation'. And among the goods distrained by the United States in the name of infringing IPRs, Chinese commodities accounted for more than 50% part of the total commodities under '337 investigation' from 2003 to 2009. What's more, Chinese goods occupied 81.5% of the commodities detained by Japanese customs due to the infringement of IPRs only in the year 2008. And that figure was 58% in EU during the year 2007.

6 The Recommended Policies for Improving Protection of Trade-related Intellectual Property Rights of China

China is supposed to protect existing IPRs as well as to encourage innovating to realize more and high-end IP-sensitive commodities, Chinese government should optimize the existing regulations and legislation on protecting IPRs and reinforce the supervision and retribution over pirated products.

6.1 Enhancing Intellectual Property Creation and Innovation

To gain more benefits from IPRs, China should take measures to raise the quality of intellectual property rights protection and innovation efficiency of products, improve the relevant intellectual property examination management, i.e., patent, trademark, copyright, new plant varieties, etc., improve the IP performance evaluation system, encourage the IP creators and innovators to transfer their focus from the quantity to the quality of products.

6.2 Strengthening Intellectual Property Layout in Key Industries

IPRs is vital for the economy development for all countries, especially for certain industries such as the IP-sensitive commodities. China should promote the integration of IP and industry development policies, strengthen the IP risk assessment in strategic

emerging industries and industries with regional advantages, reinforce the guidance to the IP layout in key industries, and guide the industries and enterprises to enhance their capacities of IP protection in global competition.

6.3 Promoting Utilization of Intellectual Property

As a strong power in IP world, of course, China is supposed to take full advantage of its own superiority. To do so, the most important things are strengthening the key role of enterprises in IP utilization, improving the transformation and commercialization mechanism for IP-linked and IP-based innovations, implementing policies to facilitate IP transformation and promote the materialization, commercialization and industrialization of IPRs.

6.4 Reinforcing Protection of Intellectual Property Rights

There are necessary measures for China to take to reinforce IP protection, such as refining IP-related laws and regulations, improving the long-term mechanism of combating IP infringement according to the law, implementing the performance evaluation of IP protection, enhancing the effectiveness of judicial IPR protection and the capacity of administrative enforcement, implementing the special protection operations and assistance programs for key fields and industries, promoting the information disclosure of IP cases subject to administrative penalty, enhancing the ability of dealing with international law cases.

7 Conclusion

As a certain part of trade itself, protection of IPRs is essential to international trade. And IPRs protection could maintain the varieties and differentiations of commodities to some extent, which is of great significance and necessity to trade. After comprehensive evaluation from the aspects of economy as well as political or diplomatic relationships with trading partners, China should devote herself to, first, protecting IPRs. Secondly, creating more patents, copyrights and trademarks to make sustainable development possible.

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