Research on Intellectual Property Protection of Ceramics

-- Take Three Kinds of Ceramics in China as an Example

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Abstract

As a famous cultural card in China, ceramics has spanned 7000 years of history and carries the spirit of the times and cultural connotation. However, due to various reasons, there are many deficiencies in the intellectual property protection of ceramics in China, which limits the development of ceramic industry. Based on this, this paper analyzes the common problems existing in the intellectual property protection of Jingdezhen art porcelain, Dehua daily porcelain and Foshan Industrial porcelain, discusses the individual problems existing in the intellectual property protection of the three ceramics in copyright, trademark and patent, and puts forward Intellectual property protection response strategies, which can improve the Top-level design service system, forge a Middle-level universal service model and build the grassroots operation service system of intellectual property protection strategy, hoping to provide some support for intellectual property protection of China's ceramic industry.

Keywords

Ceramic; Intellectual Property; Issues; Coping Strategy.

1. Introduction

China is the hometown of ceramics. According to the historical classics and the earliest pottery unearthed at the site, it is speculated that China's pottery has a history of more than 6000 to 8000 years. The earliest birthplaces of ceramics are the Yellow River Basin and the Yangtze River Basin. However, with the progress and development of ceramics, ceramic producing areas are scattered throughout the country. [1] this paper will select Jingdezhen, the hometown of Chinese ceramics, Dehua, the world ceramic capital, and Foshan, the largest ceramic production base in China, for investigation, and analyze their copyright, trademark right and patent right according to the characteristics of each city. Meanwhile, the paper will provide intellectual property protection for the inheritance and development of ceramic culture, and try to find out the characteristic protection mechanism of "culture + intellectual property" that can be extended to other excellent Chinese traditional culture inheritance and development in China, so as to provide a reference template for the inheritance and development of excellent Chinese traditional culture.

Part 1 of this paper briefly introduces the basic history of ceramics, the basic situation of ceramic industry and the selection of research objects; Part 2 will analyze the common problems existing in the protection of intellectual property rights of Chinese ceramics, such as the lack of awareness of active rights protection, the lack of public services for social intellectual property rights, etc; Part 3 will discuss the personality problems of Jingdezhen art porcelain, Dehua daily porcelain and Foshan Industrial porcelain in terms of copyright, trademark right and patent right respectively; The part 4 puts forward the Countermeasures of intellectual

property protection to improve the Top-level design service system, create the Middle-level universal service mode and build the Grass-roots operation service system; The part 5 is a brief summary of this paper.

2. Common Issues in Intellectual Property Protection of Ceramics in China

2.1. Frequent Infringement and Counterfeiting, Lack of Active Awareness of Rights Protection

After the reform and opening-up, and the proposal of the "Belt and Road" strategy in 2013, the sales volume and scale of ceramics in China have been expanding and exported overseas. However, with the increase of ceramic trading volume, the problem of ceramic counterfeiting and infringement also follows. Due to the continuous improvement of China's legal construction, the number of other types of infringement cases is decreasing. But the ceramic infringement cases in 2020 included in China judicial documents network are nearly twice that in 2015, and the ceramic infringement cases in Jingdezhen in 2020 are up to five times higher than that in 2015.

In view of this phenomenon, ceramic makers and ceramic enterprises, which should take the initiative to protect their legitimate rights and interests, have ignored the infringement and infringement of their products because of their long-standing traditional sales methods. Moreover, because ceramic makers and ceramic enterprises lack knowledge of intellectual property rights, their works, trademarks and patents have not been registered in the corresponding authorities, resulting in a low success rate of litigation. However, it is precisely because ceramic makers and ceramic enterprises generally have the phenomenon of negative rights protection after their ceramic products have been infringed, which makes counterfeiting rampant and has not been effectively treated, and the damage of ceramic enterprises has not been effectively remedied.

2.2. Lack of Social Public Services and Intellectual Property Information

As of September 6, 2021, there were 3761 qualified patent agencies filed on the National Patent Agency Information Publicity Platform of the State Intellectual Property Office and 52384 trademark agencies filed in the Trademark Office of the State Intellectual Property Office. According to China Statistical Yearbook 2020 compiled by the National Bureau of statistics, by the end of 2019, the number of enterprises in China reached 25280211, including 1390741 enterprises in scientific research and technical service industry, that is, each trademark agency will serve at least 483 enterprises and each professional agency will serve at least 370 enterprises in scientific research and technical service industry. Therefore, it can be seen that the intellectual property service agencies in China are in a relatively scarce state.

The lack of Grass-roots Service Institutions of intellectual property society leads to the lack of protection of enterprise intellectual property services and the lack of public access to general intellectual property related information. It will also lead to intellectual property disputes such as difficulty in enterprise trademark registration, rush registration of trademark application, and patent application by others. These problems are the key to the development of ceramic industry, and the frequent occurrence of these problems hinders the innovation and development of ceramic industry.

2.3. Lack of Intangible Cultural Heritage Protection Policies and Imbalance of Industrial Talent Structure

At present, the traditional porcelain making technology is an important part of Jingdezhen intangible cultural heritage project, but the proportion of material processing and preparation technology and tool making technology is low. [2] There is a phenomenon that most skills have

only one or two successors, which is very unfavorable to the inheritance of ceramics; in addition, the inheritance of intangible cultural heritage of ceramics is single, and the inheritors cannot obtain high economic benefits, resulting in an unreasonable age structure of the inheritor population. Moreover, the production and processing of ceramics in the market are mostly completed by skilled workers or family heirs. They rely on the experience formed for a long time for production and processing, and do not form a systematic process.

Secondly, due to economic and regional conditions and other factors, the flow of talents is uneven, resulting in the unreasonable structure of ceramic talents in China. At present, the distribution of ceramic intangible cultural heritage projects and intangible cultural heritage inheritors announced in Jingdezhen are: 11 people in 2 national projects, 55 people in 17 provincial projects and 21 people in 16 municipal projects. In addition, the ceramic processes listed as intangible cultural heritage projects have been neglected, and the intangible cultural heritage resources have not been fully integrated and utilized, so they cannot give play to the actual economic and cultural value. Moreover, due to the low attention of local governments, less investment in ceramic intangible cultural heritage protection, imperfect corresponding infrastructure system and incomplete policies, it is impossible to carry out scientific intangible cultural heritage protection of ceramics.

3. Personality Issues of IP Protection for Different Types of Ceramics

3.1. Personality Problem of Intellectual Property Protection in Jingdezhen Art Porcelain

First, the phenomenon of product homogenization is serious, squeezing the living space of the main body. Since the reform and opening up, the number of various enterprises in China has increased exponentially. Similarly, the number of ceramic enterprises and shops has also increased, which leads to the excessive selection of products in the ceramic industry. The homogenization of ceramic products in subject matter content, creation form, aesthetic taste, cultural concept and industrial pattern is relatively serious. [3] For example, in terms of subject matter content, it can be generally divided into two types. One is the traditional subject matter content, mainly landscape, flowers and birds, character images, etc., which is the subject matter content handed down by ceramic producers for hundreds of years; The other type is the innovative theme content. Although this theme content is called as an innovative theme, it is only new compared with the traditional theme content. But as soon as it appears in the market, it will be imitated and used for reference, and finally become homogeneous theme content. The market is full of extremely similar homogeneous ceramic products, which has squeezed the living space of those innovative ceramic products. "Bad money drives out good money" is just that it is difficult for innovative enterprises and ceramic makers to survive.

Second, the copyright infringement of ceramic works is serious, and the demand for copyright protection is strong. Although Jingdezhen has established a corresponding copyright protection mechanism, copyright infringement is still frequent, and the infringement of makers' own works is common. According to the investigation conducted by the author in Jingdezhen, 62.95% of the makers said that their works had suffered copyright infringement, and 33.07% of the makers believed that copyright infringement had always existed. It can be seen that the infringement of ceramic products was more serious. At the same time, 66.14% of the surveyed makers expect to understand the knowledge related to copyright protection in the copyright knowledge training. It can be seen that makers have a strong demand for copyright protection, and it is urgent to protect the copyright of local ceramic works.

Third, ceramic makers have a weak willingness to protect their rights and distrust the copyright registration of works. Although Jingdezhen regularly invites experts and scholars in the field of copyright to give lectures to strengthen makers' awareness of copyright protection, the

relevant publicity work is still not in place, resulting in low awareness of copyright among makers in Jingdezhen. Makers do not want to protect, neglect to protect, or even want to achieve the publicity effect of free "advertising" by means of infringement.

Jingdezhen has also expanded the scope of copyright registration channels for ceramic works by establishing a ceramic copyright service station, but makers still take a wait-and-see attitude towards copyright registration. Among the respondents, only 43.43% of the makers clearly expressed their willingness to register and protect their works, and 51.79% of the makers expressed that it depends on the situation.

Fourth, the use scope of ceramic copyright is small, and the actual number of copyright transactions is low, according to the 2020 China Intellectual Property Melting Index Report released by Guangzhou intellectual property trading center, the number of contracts in which copyright was transferred, licensed and copyright contract registration was handled in 2019 was 20313. The National Copyright Administration divides the registration of copyright contracts into eight types, most of which are books, with a total of 16144, accounting for 79% of the total. Among these 8 types, there is no ceramic category, only 1080 pieces in other categories. In other words, even if the other categories are all ceramic copyright transactions, the number is very small. Moreover, other categories cannot only have ceramic industry, which shows the low actual number of ceramic copyright transactions in China. In the development of individual ceramic makers and enterprises, most of the self-designed ceramic patterns, patterns and shapes are only applicable to the ceramic production of individual ceramic makers or internal production and use of enterprises, and there is little involvement in overseas copyright transactions. Similarly, because the application of copyright only stays within individual ceramic makers and enterprises, and there is a lack of external copyright transactions, individual ceramic makers and enterprises ignore the external protection of ceramic copyright, providing an opportunity for ceramic copyright infringement.

3.2. Personality Issues of Intellectual Property Protection of Daily Porcelain in Dehua County

First, the awareness of trademark protection is weak and ceramic enterprises and merchants do not pay attention to ceramic well-known trademarks. Since Dehua ceramics which is famous all over the country have been brought all over the world in the Ming and Song Dynasties, it is natural not to worry about its ceramic sales. This Sales habit of relying on historical accumulation has led Dehua County to ignore its ceramic brand and weak trademark awareness. At the same time, because the industrial structure of Dehua ceramics is dominated by small and medium-sized micro enterprises, it often pays more attention to the accumulation of tangible assets such as houses and buildings, machinery and equipment, raw materials and supplies, products in process and finished products, while ignoring the important role of trademarks in the development of enterprises. The operators of small, medium and micro enterprises pay more attention to the profits brought by products and sales, and are not aware of the role of intangible assets such as trademarks on the development of modern enterprises, [4] therefore, Dehua County has a weak awareness of ceramic trademark protection. At the end of 2016, Dehua had more than 2600 ceramic enterprises. However, according to the list of well-known trademarks publicized by China's trademark office, as of October 27, 2016, Dehua County had only three well-known ceramic trademarks, namely Fujian Quanzhou Desheng Group Co., Ltd., Fujian Dehua Xie luminous foreign pottery Co., Ltd., and Fujian Quanzhou longpeng Group Co., Ltd, it can be seen that Dehua County does not pay attention to the well-known trademark of ceramics.

Second, the trademark lacks an international perspective, and the trademark is registered first by other countries. Since the proposal of China's "Belt and Road" initiative, "Belt and Road" has become the widest and largest international cooperation platform in the world in the past eight

years, bringing great opportunities and dividends to all countries in the world. Of course, as one of the famous cultural cards in China, ceramics are also sold to around the world with the development of "Belt and Road". In 2019, the export value of Dehua ceramics reached more than 23 billion yuan, and its products were sold to more than 190 countries and regions around the world. However, due to the lack of international perspective on trademark protection, domestic enterprises ignore the international registration of trademarks, so that the brands established by enterprises for decades or even hundreds of years are registered first by foreign enterprises. Foreign enterprises rush to register the trademarks with great influence in the world in order to weaken the competitiveness of Chinese enterprises in the international market, resulting in the loss of sales market and even international market. [5] If the enterprise does not choose to redeem the trademark, it can only choose to register a new trademark, operate a new brand again, and then enter the market of the country. This way will cost a lot of resources, resulting in an increase in the cost of the enterprise's international strategy, and it is difficult to seize the international market.

Third, the lack of strategic layout of trademarks and the decline of the status of enterprise brands. Trademark strategy is a business strategy and institutional arrangement with the creation, application, protection and management of trademarks as the main link and the promotion of brand value as the core content.[6] Dehua's ceramic enterprises are mainly small and medium-sized micro enterprises. Affected by their own business mode and management mode, their management personnel believe that registering and protecting trademarks is a matter of little profit, and even a "superfluous" that consumes a lot of human and material resources. Therefore, most of China's small and medium-sized micro enterprises have not registered their own brands. Even if some enterprises have applied for trademark registration of their own brands, after their application, they only take them as the logo of their own enterprises and an additional item in the publicity of their own enterprises. They only focus on the use of the early benefits of the trademark, but do not carry out long-term operation planning for the trademark and bring it into the future development track of the enterprise. This negative way of brand protection and management may make it fall into the dilemma of trademark infringement. Because when the trademark of a ceramic enterprise is recognized in the market, the manufacturers counterfeiting the trademark will continue to emerge. Because the enterprise has not carried out the trademark strategic layout, it can only bear the inferior products of the ceramic counterfeiting manufacturers, which lowers the public's awareness of the commodity quality of its own enterprise, resulting in the decline of the brand value and status of the enterprise.

3.3. Intellectual Property Protection of Foshan Industrial Porcelain

First, the technical content of ceramic products is low, encountered many countries of antidumping. After making statistics of patent applications in both domestic and foreign markets, we can see that the national protection of more and more patents. In terms of the total number of applications, China has surpassed Japan and is the country with the largest number of ceramic patent applications. As of December 31, 2018, China has applied for 24137 building ceramic patents, including 3907 invention patents, 2592 utility model patents and 17638 design patents. However, in terms of application categories, ceramic patents focus on design, accounting for 70% of the total number of applications, which is an important factor for the low technical content of product patents in China. "Social dumping" is a disguised trade protection theory put forward by some developed countries according to different labor standards. The theory shows that due to the low labor standards and the failure to provide reasonable wages to workers, the export prices of similar products in developing countries are mostly lower than those in developed countries, resulting in a phenomenon similar to "dumping". [7] The low technical content of China's ceramic industry and the large population and cheap labor force

directly lead to the price of ceramics exported by China is far lower than that of other countries. Therefore, China's exported ceramic products were identified as dumping by other countries, and anti-dumping duties and other boycott measures were implemented on China's ceramic products. From 2001 to 2019, China encountered as many as 27 anti-dumping cases, which had a great impact on the overseas export volume of ceramic enterprises.

Table 1. Summary of anti-dumping cases against Chinese ceramic products (2001-2019)

	Summary of ant	i-dumping c		t Chinese ceramic products (200	1-2019)
national	product in question	Date of filing	Date of final decision	Final ruling	Implementation
India	Unglazed ceramic tile	2001/8/6	2003/2/4	Anti-dumping duty of USD 8.28 / m2	close
Columbia (District of, or University etc)	Ceramic tableware	2004/2/9	2004/11/19	Differential tax on imports of ceramic tableware at FOB prices below US\$ 0.84/kg	close
South Korea	Glazed and unglazed porcelain tiles	2005/6/22	2006/4/18	2.76 to 13.33% anti-dumping duty	2018/7/19 Third Sunset Review Ruling Continued Anti-Dumping Duties of 9.06 to 29.41%
Pakistan	Glazed and unglazed porcelain tiles	2006/3/27	2007/3/30	14.85% to 23.65% anti-dumping duty	close
India	glazed tile	2008/10/17	2009/10/9	Rs. 137 / sq m of anti-dumping duty	close
Thailand	Glazed and unglazed porcelain tiles	2009/12/3	2011/6/2	2.18 to 35.49% anti-dumping duty	2016/5/31 Sunset Review ruled to continue the anti- dumping duty of 2.18 to 35.49% of the CIF price A
EU	Floor tiles, wall tiles, mosaics	2010/6/19	2011/9/15	26.3% to 69.7% anti-dumping duty	2016/9/13 Final Sunset Review Ruling Continues 30.6-69.7% Anti-Dumping Duties
Indonesian	Ceramic tableware	2011/6/21	2012/4/25	87% anti-dumping duty	close
Argentina	Unglazed ceramic tile	2011/7/27	2013/1/29	Polished porcelain, USD 12.2/m2; non-polished porcelain, USD 8.77/m2 anti-dumping duty	Sunset Review and Change of Circumstances Review of 28 November 2018 Continued imposition of anti-dumping duties of 27.7% of FOB price
Peruvian	Glazed wall tiles	2011/8/5	2012/10/18	Case closed without prejudice	No measures
EU	Ceramic Kitchenware	2012/2/16	2013/5/15	13.1 to 36.1% anti-dumping duty	Sunset review on May 15, 2018
Mexico	Ceramic tableware	2012/8/30	2014/1/14	The difference between the import price and the anti-dumping duty is levied on imports below US\$2.61/kg, up to the amount of dumping	2018/12/1 Sunset Review
Brazi1	Ceramic tableware	2012/12/26	2014/1/17	Anti-dumping duty of US\$1.84 to US\$5.14/kg	Anti-dumping duty collection period not yet expired
Argentina	Ceramic, marble and glass tile waistline	2013/1/2	2014/7/2	Anti-dumping duty of USD 11.42/m2 valid for 5 years	close
Brazil	Unglazed ceramic tiles, ceramic mosaics and similar products	2014/7/3	2015/1/5	Price commitment 3.34 to 6.42% anti-dumping duty	Anti-dumping duty collection period not yet expired
Columbia (District of, or University etc)	Glazed and unglazed tiles	2015/2/25	2016/7/12	Case closed without prejudice	No measures
Mexico	Unglazed and glazed tiles	2015/5/8	2016/10/24	Price commitment 2.9% to 12.42% anti-dumping duty	Anti-dumping duty collection period not yet expired
India	ceramic tile	2015/10/13	2017/4/8	0 to 1.87 USD/m2 of anti-dumping duty	Anti-dumping duty collection period not yet expired
Pakistan	Wall and floor tiles	2016/2/19	2017/10/11	9.35 to 36.35% anti-dumping duty	Anti-dumping duty collection period not yet expired
Argentina	Glazed tiles	2016/8/18	2018/2/16	Anti-dumping duty of 27.7% of the FOB price for customs clearance	Anti-dumping duty collection period not yet expired
Turkish	Daily Ceramic Products	2016/9/24	2018/3/3	8% anti-dumping duty based on CIF prices	Anti-dumping duty collection period not yet expired
India	Ceramic roller bar	2017/4/19	2017/5/3	5 to 50% anti-dumping duty	Anti-dumping duty collection period not yet expired
Argentina	Ceramic sanitary ware	2017/5/19	2018/10/5	Case closed without prejudice	No measures
Argentina	Unglazed tiles	2018/1/19	2018/11/27	Tax rate of 27.7% of FOB price	Anti-dumping duty collection period not yet expired
GCC (Association of Southeast Asian Nations)	tiles	2018/11/5	2020/4/30	21.5 to 76% anti-dumping duty	Anti-dumping duty collection period not yet expired
Philippine	Ceramic floor and wall tiles	2018/12/20	2019/5/17	a temporary safeguard tax of 3 pesos/kg (about \$0.40).	close
United States	tiles	2019/5/1	2019/11/17	229.04%~356.02% anti-dumping duty	Anti-dumping duty collection period not yet expired

Data source: Compiled from the trade remedy case database of the Ministry of Commerce of China.

Second, enterprise litigation lacks enthusiasm and patent protection is passive. Through case analysis at home and abroad, we will find that most foreign enterprises are plaintiffs in patent infringement cases, and foreign enterprises win a higher proportion, while Chinese enterprises lose or even do not respond to litigation. [8] China has long regarded "no litigation" as the symbol of good operation of enterprises. When patent infringement is found, it will be more inclined to use non legal means to solve it, and the awareness of applying litigation to protect its own rights and interests is very weak. Through the interview and investigation of some large ceramic enterprises and their branches, the author found that most enterprises put a lot of funds and talents in the design and technology research and development of ceramic products, and did not pay attention to the construction of intellectual property protection of enterprise ceramic products. It is precisely because the R & D Department of the enterprise does not pay attention to intellectual property rights, does not apply for patent application for direct use after the R & D of its new technology, and will not retain the evidence in case of technical ownership disputes in the later stage, which makes it impossible to give effective evidence for technical ownership disputes in court after its ceramic patented technology is infringed, Finally, the judge can only decide that the defendant does not infringe. The new ceramic technology or products developed by enterprises that spend a lot of material and human resources are used by others, but they make wedding clothes for others. Therefore, enterprises will choose not to carry out legal rights protection, which will eventually lead to the passivity of patent rights protection.

Third, overseas patents lack layout and speed is not as fast as international development. Chinese ceramic enterprises have certain advantages and competitiveness in competing for foreign markets, but domestic enterprises have the problems of small number of overseas patent applications and single type. According to the statistical report of the world's top five intellectual property offices in 2018, the number of patents authorized in China in 2018 was 432147, of which the number of foreign registrations was 86188, accounting for only 19.9% of the total number of patents authorized in China in 2108. It can be seen that Chinese enterprises do not pay attention to overseas patent protection, and are not willing to do even the most basic foreign patent applications, not to mention setting up a special intellectual property organization for overseas patent infringement cases to protect the rights of patent infringement. All these show that Chinese enterprises lack foresight in terms of overseas profits.

With the successful application of 22187 patents, China ranked first in the total number of ceramic equipment patents in the world in 2018, becoming the largest source of patented technology in the world ceramic industry. However, in terms of patent export, the output rate of Chinese ceramic enterprises is less than 6%, and Japan ranks first with an output rate of about 25%, and hundreds of patented technologies are exported to China from developed countries such as Japan, the United States and Italy. According to the above data, the original contribution rate of China's ceramic equipment industry to the development of the global ceramic industry is still relatively low.

4. Provide Reference: Countermeasures for Intellectual Property Protection of Chinese Ceramics

4.1. Improve the Top-level Design Service System

First, formulate incentive measures for ceramic intellectual property protection. Based on the investigation of this work, the three provinces and three places can fully learn from relevant advanced experience at home and abroad to prepare incentive measures for ceramic intellectual property protection, prepare a series of ceramic intellectual property strategy and protection and development plans for the three provinces according to local conditions, and help the development of local ceramic industry to present a new situation of "steady progress"

and continuous development". Through incentive measures, the main body of the ceramic industry is encouraged to actively participate in work creation, technology R & D and intellectual property operation, so as to promote the growth of local ceramic output value on the basis of realizing its own economic value.

Second, assist in the construction of the "strict, big and fast" protection mechanism. Ceramic bases in three provinces and three places can be protected by building a characteristic mechanism of "strict protection", "big protection", "quick protection" and "same protection" of intellectual property rights: first, establish intellectual property legal service stations to improve the efficiency of dispute resolution through Grass-roots services; Second, strengthen the administrative law enforcement of intellectual property rights and implement the characteristic intellectual property protection mode of "two track system"; Third, promote the construction of ceramic intellectual property fast maintenance center and reduce the cost of rights protection; Fourth, help the construction of the country's first ceramic culture inheritance and innovation pilot zone and promote the construction of intellectual property rights in the central region.

Third, play an exemplary role as a leader in the ceramic industry. By formulating excellent ceramic intellectual property works, operation projects, demonstration parks and other measures, ceramic industry leaders are encouraged to play an exemplary and leading role in the ceramic base. Make use of the unique local cultural value orientation to improve the overall level of ceramic intellectual property rights. With local well-known enterprises as the core, promote enterprise transformation and upgrading, from point to area, so as to mobilize the enthusiasm of ceramic intellectual property operators. With the guidance of core units, the production of local enterprises can be carried out smoothly.

4.2. Create a Middle-level Universal Service Model

First, enhance public awareness of intellectual property protection. The three provincial ceramic bases jointly carry out intellectual property competition and intellectual property essay solicitation activities, which not only expand the popularization scope of intellectual property, but also encourage local people to participate with people outside the province, from point to area, so as to achieve the established goal of "full coverage" of districts and cities within the three provinces as well as three places and the spread of radiation outside the province.

Second, expand the scope of intellectual property publicity and popularization. Form an expert team to publicize intellectual property knowledge, actively promote intellectual property knowledge to "enter schools", "enter communities", "enter scenic spots", "enter enterprises" and "enter units", and promote relevant industry personnel to understand the importance of brands and how to use copyright to protect ceramic products. Relying on the unique local cultural advantages, continue to promote the "intellectual property + ceramics" model, and use this referential "ceramic intellectual property protection model" from point to area to provide a new path for the exploration of national traditional culture protection, and lay a solid foundation for the in-depth development of ceramic culture and the intellectual property value of Chinese excellent traditional culture.

4.3. Construction of Grass-roots Operation Service System

First, open a green channel for ceramic intellectual property registration. In view of the relatively complex process of ceramic intellectual property protection and the neglect of intellectual property protection by ceramic enterprises, this paper puts forward the Countermeasures of "opening a green channel for copyright registration of ceramic works". Set up intellectual property protection centers in various places to provide convenient channels; Make professional websites, take charge of ceramic work registration and ceramic patent application, simplify the procedures of copyright registration and patent application, improve

the timeliness, and fundamentally solve the problems of difficult application and registration of ceramic works

Second, build a ceramic intellectual property transaction agency platform. Promote the construction of ceramic intellectual property trading platform, establish a ceramic intellectual property information sharing database through centralized collection of relevant data and information of ceramic industry and unified input into the platform database, provide free search and screening services for individuals and enterprises, and support the intellectual property work of the government, enterprises and institutions. Secondly, we should actively play the intermediary role of the intellectual property transaction agency platform to maximize the efficiency of the transaction agency platform. So as to improve the information retrieval ability of ceramic practitioners, so that they can track the market information and adjust the protection strategy in time.

Third, establish the International Intellectual Property Exchange Association of ceramics. Communication promotes development. We have put forward the strategy of "establishing an international intellectual property protection and Exchange Association for ceramics" in a more forward-looking manner. Promote scientific decision-making with scientific management methods, promote consensus through communication, and gradually go abroad for the exchange of ceramic culture and intellectual property rights. Through international intellectual property exchanges, we should avoid unrealistic foresight and decision-making, improve the foresight and stability of the future development of ceramic industry, integrate traditional and modern, and extract the essence and the dross. Promote exchanges at home and abroad, keep pace with the international pace, and explore an appropriate overseas development path of Chinese ceramic culture.

5. Conclusion

As a very important business card of Chinese culture, the value of ceramics itself is self-evident. However, the development of China's ceramic industry is not satisfactory. Therefore, the author studies the development of ceramic industry from the perspective of intellectual property rights. The author studies the common problems of ceramic intellectual property protection in three provinces and three places, as well as the copyright, trademark right and patent right of the three places, and finds that the intellectual property protection of ceramic enterprises in China is still in a relatively incomplete state. Therefore, this paper puts forward a series of countermeasures from the Top-level design level, Middle-level popularization level and bottom-level operation level, hoping to improve the deficiencies of ceramic protection in China's intellectual property law through the Top-level design of intellectual property, and improve the awareness of ceramic makers and the public of intellectual property protection through Middle-level popularization measures, Finally, at the bottom operation level, through the establishment of intellectual property service stations, intellectual property trading centers and other measures to help ceramic makers realize the registration, application and protection of intellectual property rights.

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