# Research on the Protection of Intellectual Property of Art Porcelain From the Perspective of Internet Big Data Technology

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#### **ABSTRACT**

Art porcelain has high artistic value, economic value and academic value, but often suffers from intellectual property infringement. And intellectual property protection of art porcelain often falls into difficulties due to long cycle, low efficiency and high cost. At present, human beings are in an era of new technology and new business mode of Internet big data. Big data provides an important decision-making basis and technical support for intellectual property protection through the specialized collection, analysis and collation of information. Under the perspective of Internet big data technology, a special professional association for art porcelain and an Internet court for art porcelain intellectual property should be established and combined with the existing intellectual property protection platform, which will be helpful to jointly build a new protection platform for the art porcelain industry. At the same time, the government should play a leading role, strengthen the synergy mechanism between intellectual property protection departments of art porcelain and play the role of higher education institutions and research institutes, so as to form a synergy for intellectual property protection and promote a good atmosphere for intellectual property protection of art porcelain in the whole society.

**Keywords:** Art porcelain, Intellectual property, Internet big data, Professional associations, Internet court.

## 1. INTRODUCTION

Porcelain has been collected as a work of art for thousands of years. Art porcelain refers to porcelain with high collection value in the form of art work. These porcelains are usually fine in texture, complicated in workmanship, rare in variety and mostly made by famous masters, which have high artistic value, economic value and academic value. Jingdezhen art porcelain is taken as an example. Jingdezhen has a long history of porcelain making, and is known as the porcelain capital worldwide and one of the first 24 historical and cultural cities announced by the State Council. In addition, Jingdezhen art porcelain is famous in China and foreign countries for its excellent quality, such as "being white like that of jade, bright like that of mirror, thin like that of paper, and sound like that of chime". 'Jingdezhen' is not only an extremely valuable intangible asset, but also an intellectual property with great market potential, such as the name of origin. [1] Because of this, art porcelain often suffers from intellectual property infringement in the form of imitation while attracting attention, and intellectual property infringement cases occur frequently. "Most of the above phenomenon is that the perpetrators deliberately lean on and play up to other porcelain brands with a certain reputation to get a free ride. It is easy to cause the public to be confused about the source of the porcelain commodities, and its purpose is to gain economic benefits from the confusion." [2]

At present, there are two ways of defending rights against such infringement: first, the victim negotiates or reconciliates privately with the infringer; second, the victim appeals to the relevant protection department. In practice, there are problems of long cycle time, low efficiency, and high cost for both ways of defending rights.

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According to the current law, evidence is the most sensitive issue between the victim and the infringer, i.e. what objective existence is included in the evidence, how to collect the evidence, how to determine the validity of the evidence and how to allocate the burden of proof, all of which can lead to a dilemma in defending rights. Many victims are forced to give up on defending their rights, or even unable to focus on the market and miss the opportunity to develop their products, which instead leads to rampant infringement. Therefore, intellectual property protection of art porcelain is facing a great crisis and challenge. In addition, the Internet has changed people's lifestyles, and the traditional intellectual property protection system of art porcelain suffers an unprecedented impact. Under the Internet environment, intellectual property infringement of art porcelain presents the characteristics of faster time, wider scope, more audience and greater influence, and the situation of intellectual property protection is more complicated and severe. In view of this, in order to make the intellectual property protection of art porcelain further get rid of the dilemma of defending rights, this study tries to propose a cracking path of building a protection platform of art porcelain industry and strengthening the coordination mechanism of intellectual property protection departments of art porcelain under the perspective of Internet big data technology, so as to safeguard the legitimate rights and interests of victims and the market order of art porcelain effectively.

# 2. BUILDING A PROTECTION PLATFORM FOR THE ART PORCELAIN INDUSTRY

Intellectual property refers to the exclusive rights enjoyed by citizens, legal persons or other organizations in the fields of literature, art and science and technology, which are based on the intellectual achievements and created completed by mental labor, including patent rights, copyrights, trademark rights, etc. At present, there are mainly two types of intellectual property protection platforms of porcelain in China: one is the uniformly applicable intellectual property protection platform of each industry (such as the Patent Search and Consultation Center of the State Intellectual Property Office), and the other is the intellectual property protection platform of the porcelain industry (such as the Ceramic Intellectual Property Information Center of Jiangxi Province). Although the two platforms have different responsibilities, they both focus on the protection of patent rights in the ceramic industry. Among them, the protection of intellectual property for art porcelain is mostly limited to the appearance designn in the patent rights. In general, the exchange of information in the field of art porcelain is not sufficient, industry norms are not clear enough, the market is relatively confusing, and judicial remedies are not in place. As we all know, we are in an era of information and an era of new technology and new business mode of Internet big data. Big data refers to data sets with large capacity, multiple types and high application value. Big data, as a new technological change, provides an important decision-making basis and technical support for intellectual property protection through specialized collection, analysis and organization of information. As a result, China should establish a special line organization for art porcelain as soon as possible, strengthen the intellectual property trial organization of art porcelain, use Internet big data technology to interface with the existing intellectual property protection platform and form a joint effort to build a new protection platform of art porcelain industry.

## 2.1 Establishing a Specialized Organization for Art Porcelain Industry

Compared with household porcelain and industrial porcelain, art porcelain has not only the material attributes common to general porcelain, but also high artistic value, economic value and academic value, and the demand for its intellectual property protection goes far beyond patent protection. Therefore, the purpose and mission of the specialized art porcelain industrial organization can be divided into three levels: first is to establish an industrial self-regulatory mechanism, encourage fair competition, and strengthen intellectual property protection; second is to integrate industrial information resources, maintain industrial reputation, and serve enterprises, industry and government; third is to conduct academic research, create a good market environment, and lead the healthy development of the industry. specialized industrial organizations of art porcelain should formulate and improve industry norms according to the current situation of the industry, perform industry management functions entrusted by the government, and govern intellectual property infringement.

## 2.2 Using Internet Big Data Technology

Big data needs to be processed and analyzed with the help of the Internet, which is an important channel for obtaining and disseminating relevant information. With the rapid development of the Internet, there is big data, which accelerates the application of the Internet in turn. It can be seen that big data and the Internet are complementary. "Internet big data refers to obtaining a large amount of information through multiple channels in a period of time, and then sorting it into data that can be used effectively." [3] The confusion of information resources as well as asymmetry in the art porcelain industry would induce intellectual property infringement easily. Many victims are unaware of their intellectual property infringement for a long time, and it even happens that intellectual property is infringed multiple times and repeatedly. Therefore, in order to achieve intellectual property protection of art porcelain, it is suggested to use Internet big data technology to integrate industrial information resources, establish a search platform and information database of art porcelain, and unify registration, coding and public disclosure of intellectual property holders for public inquiry and supervision. The industrial information resources that should be integrated include not only basic information of art porcelain (creator, creation time and product characteristics, etc.), but also related commodity transaction information, guarantee financing information, etc. At the same time, the protection platform of art porcelain industry should establish a mechanism of free public inquiry and incentive for creator registration to encourage creators to register and publicize art porcelain information in a timely manner. On the one hand, the public is able to determine the ownership of art porcelain intellectual property through the search platform and information database. On the other hand, intellectual property holders, specialized art porcelain industrial organizations and relevant protection departments can also use this to grasp the dynamic real-time situation of art porcelain intellectual property, warn of art porcelain intellectual property risks, guide the creation and application of intellectual property, and promptly manage infringement behaviors.

# 2.3 Establishing an Internet Court for Intellectual Property of Art Porcelain

In judicial practice, most of the art porcelain intellectual property litigations are heard by the basic people's courts. Since most of the grass-roots

people's courts have not set up special intellectual property courts, relevant cases are generally heard by civil courts. According to the current law, intellectual property cases are generally under the jurisdiction of the people's court where the defendant is domiciled or where the infringement is committed. As a result, plaintiffs who are victims of infringement may be burdened with higher litigation costs. On the premise of not changing the principle of litigation jurisdiction, this study proposes to establish an Internet court for art porcelain intellectual property, and relevant cases will be unified and submitted to this Internet court for trial. The Internet Court of Art Porcelain Intellectual Property will mainly adjudicate cases with clear facts and sufficient evidence, while major, difficult and complicated cases will still be heard by the substantive courts that Internet Court belongs to. For cases with clear facts and sufficient evidence, the Internet Court will review the litigation requests and evidential materials of the parties through the Art Porcelain Search Platform and the Art Porcelain Information Database, and decide whether to request the parties to supplement the evidential materials based on the review. After that, the Internet Court presides over the mediation of both parties to the lawsuit. If an agreement is reached through mediation, it issues a mediation agreement, otherwise, it continues to hear the case and makes a decision. Major difficult and complex cases are heard by the substantive courts, and the Internet courts can assist in the judicial process, such as filing cases online and checking the progress of cases online. In short, the art porcelain industrial protection platform, especially the art porcelain search platform and the art porcelain information database should establish a linkage mechanism with the Internet court, and use Internet big data technology to provide support for case trials and compilation of court-directed cases.

# 3. STRENGTHENING THE COORDINATION MECHANISM AMONG PROTECTION DEPARTMENTS OF ART PORCELAIN INTELLECTUAL PROPERTY

"China's intellectual property laws have formed a system. In the face of media and technological changes, intellectual property protection is more difficult, infringement is more complex, and the law needs to adapt to the challenges posed by the new market environment urgently." [4] In practice,

an important reason for the lack of intellectual property protection for art porcelain is the loose connection between departments and the failure to form an effective synergistic mechanism. "In view of the weak concept and awareness of intellectual property holders in China about the legal protection of their intellectual property, the disconnection between the innovation achievements of enterprises and industrial transformation and the lagging property management system, multifarious administrative regulations on intellectual property protection, imperfect administrative legislation, lax supervision and ineffective law enforcement, the government and its affiliated departments should have great potential in protecting intellectual property." [5] Therefore, the government should give full play to the leading role in the protection of intellectual property of art porcelain and strengthen the synergistic mechanism among administrative, legislative and judicial departments. Of course, in addition to the joint participation of industrial organizations. administrative departments, legislative departments, and judicial departments, it is required to play the role of higher education institutions and research institutes by using Internet big data technology as a link to establish relevant disciplines and specialties, conduct academic research, provide intellectual support, and promote the combination of theory and practice to realize the protection of intellectual property of art porcelain.

# 3.1 Forming Administrative Law Enforcement System With the Collaboration Among Administrative Departments

"At present, strengthening the ability to enforce and protect intellectual property is a real problem and challenge faced by administrative, judicial and other law enforcement agencies in China, as well as a long-term strategy to promote the healthy development of intellectual property in various industries." [6] In addition, under the unified deployment of government, the relevant administrative departments should reasonably allocate enforcement authority, unify enforcement standards, and equip professional law enforcement personnel to form an administrative enforcement system for intellectual property. And this is mainly carried out from three aspects. First is to expand the scope of law enforcement. The scope of art porcelain intellectual property protection cannot be limited to patent rights, and it is necessary to strengthen the protection of copyright and

trademark rights. Second is to increase the intensity of administrative enforcement. It is required to depend on the specific infringement situation and the infringer's profit, to increase the amount of fines in accordance with the law, and to impose heavy penalties for multiple infringements and repeated infringements. Third is to improve the administrative enforcement system of arbitration, notarization, appraisal and credit supervision of art porcelain intellectual property, and to implement disciplinary actions for serious breach of trust in the field of intellectual property in accordance with the law.

# 3.2 Improving the Relevance of Legislation With Collaboration Among Legislative Departments

"The legal protection of ceramic intellectual property not only provides legislative protection for the copyright, patent and trademark rights of ceramic products, but also includes the judicial and enforcement protection related to them." [7] On the legislative level, although there are laws such as the Patent Law, Copyright Law, Trademark Law, Tort Liability Law, and Anti-Unfair Competition Law providing a legal basis for the protection of intellectual property of art porcelain, the protection of intellectual property in art porcelain is only general protection rather than special protection because the objects to which these laws apply are relatively broad (not only art porcelain). Therefore, in order to improve the relevance of the legislation, the normative documents on the protection of intellectual property of art porcelain still need to be supplemented and improved. The State Intellectual Property Office would supplement and improve the departmental regulations (such as special measures for the protection of intellectual property rights of art porcelain) based on the status quo of the protection of intellectual property of art porcelain extensive research and demonstration (including industrial protection standards). Such industrial protection standards include technical standards and legal standards for the protection of intellectual property of art porcelain. Among them, the technical standards should take into account the technical commonality and technical characteristics of art porcelain, and reflect the intangible cultural heritage factors of art porcelain; the legal standards should integrate the rules of national and regional localities, reflect the intellectual property protection needs of major porcelain-producing regions, and highlight the operability and bottom-line of the legal standards. In addition, the relevant localities

can formulate specific implementation measures and carry out local legislation, and strengthen the synergy of legislative departments with the consideration of the actual local situation.

# 3.3 Increasing Judicial Protection With Collaboration Among Judicial Departments

The judiciary should be good at summarizing and applying the practical experience in the protection of intellectual property of art porcelain. Judicial departments should use Internet big data technology to analyze, summarize and judge cases of art porcelain intellectual property protection, compare and summarize the infringement situations, infringement types, judicial procedures and trial conclusions of cases, especially major difficult and complicated cases, and issue guiding cases in due course. "In some typical cases, courts not only protect the rights of the parties involved, but also give the infringers a warning, and also give the general public a vivid and concrete teaching material to popularize the legal knowledge of intellectual property protection." [8] The judiciary should improve its working methods and enhance the efficiency of the work procedures of filing and closing cases as well as enforcing art porcelain intellectual property. For example, it is suggested to open a "green channel" for art porcelain (ceramic) intellectual property cases to facilitate the filing and consultation of cases and establish a jury system for art porcelain (ceramic) experts to enhance the professional level of case trials. At the same time, the judicial department should cooperate with the administrative department to improve the art porcelain intellectual property protection between judicial procedures and administrative procedures to form a synergy of intellectual property protection and achieve complementary advantages.

### 4. CONCLUSION

In today's society, intellectual property plays a pivotal role. It not only provides institutional protection for intellectual property holders and mobilizes people's enthusiasm and creativity to create literary and artistic works and engage in scientific and technological research, but also promotes the application, transformation and promotion of intellectual property, which will have good economic and social effects on scientific and technological innovation, industrial upgrading and urban governance. With the development of society and the progress of the rule of law, people pay more

and more attention to the protection of intellectual property. The intellectual property protection of art porcelain in China has achieved certain results, and the relevant normative documents have been gradually improved ("Opinions on Strengthening the Protection of Intellectual Property in the Ceramic Industry" jointly issued by four departments such as the State Intellectual Property Office in 2013), and the public's awareness of rights and laws on intellectual property protection has been increasing, and the ability of intellectual property protection has been improving. At the same time, art porcelain consumers should report counterfeit goods in time when they find them, and ceramic artists should raise their awareness of prevention and rights protection, so as to promote a good atmosphere of art porcelain intellectual property protection in the whole society. Ceramics is a perfect combination of man and nature, and is also a business card to show the unique charm of Chinese civilization. Art porcelain is an outstanding representative of the excellent Chinese traditional culture, and has become an important carrier to promote the exchange and mutual appreciation of world civilization by displaying its unique cultural connotation and artisan spirit. In this context, the intellectual property protection of art porcelain is of great significance to speed up the construction of a strong intellectual property power and to play the role of intellectual property in supporting innovation-driven development.

## **AUTHORS' CONTRIBUTION**

Zhiyu Cao wrote the paper, and Xin Cao was responsible for the revision and editing.

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