11 Comparative Study on Judgment Rules of Patent Infringement in China and Japan^(*)

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The Supreme Court of PR.C issued the Judicial Interpretation on Several Issues concerning the Application of Law in the Trial of Patent Infringement Dispute Cases in 2009, which is the important guidance for Chinese judges in patent cases hearing, but arguments of patent infringement judgment still exist, especially in specific cases. Japanese judicial system is similar to that of China, which belongs to continental legal system. Japan has set up the Intellectual Property High Court of Tokyo since 2005, while China has just established the three IP Courts in November and December of 2014. Through comparative study on judgment rules concerning patent infringement and some running system in IP Courts in China and Japan, the report first gets the whole picture of the judgment rules, relevant judicial precedents and special running system of IP Courts in the two countries. Then the similarities and differences between those of the two judicial systems will be analyzed. Based on above basic study, the advantages and disadvantages of different judgment rules will be analyzed, including the doctrine of literal infringement, the doctrine of equivalents, indirect infringement, the theory of dedication, prosecution history estoppel, etc. In the end, the report will discuss the possibility of borrowing Japanese experience in Chinese judicial practice, the possibility of borrowing relevant running system in IP Courts in China, in order to keep the balance of protecting the rights of patentees and the interests of the public.

I Introduction

1 Judicial interpretation concerning patent infringement judgment

Supreme Court of P.R.C issued the Interpretation on Several Issues concerning the Application of Law in the Trial of Patent Infringement Dispute Cases in 2009, while it had come into force since Jan.1st, 2010. This interpretation is the most important guidance for Chinese judges to follow when dealing with patent infringement cases. Even though Patent Law of China had come into force for more than 20 years,¹ but arguments of patent infringement judgment rules still exist, especially in specific cases hearing.

2 Intellectual property as state strategy and the establishment of intellectual property courts

As we all know, lots of countries regard intellectual property as state strategy nowadays, including Japan and China. Japan had passed Basic Law on Intellectual Property in December of 2002, and defined the Japanese government's policy as "an intellectual property-based nation". On April 1 of 2005, the Intellectual Property High Court (hereinafter referred to as the "IP High Court"), was established as a special branch of Tokyo High Court, which is specialized in intellectual property cases. China also released the *State Intellectual Property Strategy Framework* in June of 2008, and the three Intellectual Property Courts (hereinafter referred to as the "IP Courts") had been established in December and November of 2014, which are specifically located in Beijing, Shanghai and Guangzhou. ² IP courts hear trial cases of technology-related civil and administrative cases. Beijing IP court has the exclusive jurisdiction on the administrative cases against the decisions from State Intellectual Property Office (SIPO) and the Trademark Office of State Administration for Industry and Commerce (SAIC).

3 Intellectual property influence on industry and economy

Nowadays, the role of intellectual property in different countries, especially patent rights, has become more and more important, so we should pay much attention to keep the balance of the interests of patentees and the society to avoid any overprotection of patents or overprotection of public interests. To protect patents properly, we should classify the scope of claims and the public boundary of prior art correctly, never trespass the interests of the public or ignore the interests of

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patentees.

II Patent judgment rules in Japanese legal system

In this part, to discuss the patent judgment rules in Japan legal system, we will discuss the rules of claim construction and specific construction methods of relevant claims first, and then discuss rules of patent infringement judgment, relationship between patent infringement suits and patent invalidation trial proceedings and relevant proceedings to help judges in patent cases.

1 Rules of claim construction

Claim construction is the first and the most important step to judge patent infringement, which can decide the protection scope of the patents. Even though patent laws of different countries generally stipulates clearly how to determine the technical scope of patents, there are still lots of arguments on the rules of claim construction in judicial and attorney's practices.

Prosecution history estoppel is an important rule to construe claims of patents. In the quick measurement method of blood serum CRP case³, the High Court of Tokyo used this rule to construe the technical scope of the patent. In the Rice Cake case made by the IP High Court, the court stated "There is no reason that Plaintiff's statement regarding the meaning of the claim description in its retracted Amendment has binding power."⁴

Except general rules of claim construction, we must pay attention to some specific claims which are written in different ways. One is functional claims, the technical scope of which cannot include all the possible ways to realize the relevant function, but should be determined on a case by case basis with reference to the descriptions of the specification. The other is the Product-by-process claims (hereinafter referred to as the "P-B-P Claims"), which may be used only when drafting of the claims is difficult without employing elements in a process. In Pravastatin sodium case⁵, Grand Panel of IP High Court classified P-B-P claims into two categories, genuine and pseudo P-B-P claim.

In Article 71 of *Patent Act of Japan*, we can see there are two kinds of opinions, which are advisory opinion and expert opinion on the technical scope of a patented invention given by JPO. One is upon the request from the party, the other is upon the request of the Court. The advisory opinion does not have binding force and cannot be appealed.⁶

2 Rules of patent infringement judgment

In the early judicial practice in Japan, there were two ways for patent infringement judgment rules which had been used, whereas have been substituted now. One is the doctrine of superfluity establishment theory, which had been used in early stage when the patent claims could not be written properly, it was called π 完全利用論 in Japanese. The other one is narrowing of the claim scope, under which courts often construed claims very narrowly, excluding the publicly known or used technical features from the claim.

Literal infringement is now widely used in Japanese patent infringement judgment. But in the history, it also had the period and experience of usage of backward modification of invention to prevent infringement, and the doctrine of superfluity establishment theory, thus the conclusion of infringement would be easy to reach.

The court can find patent infringement not only through literal infringement, but also as an infringement under the Doctrine of Equivalents (hereinafter referred to as "DOE"). In the Ball Spline Case⁷, the Supreme Court of Japan analyzed five requirements of DOE, which are non-essential elements, the possibility of replacement, obviousness of interchangeability at the time of infringement (the easiness of replacement), novelty and inventive step of accused embodiment, no disclaimer. This case has great influence in the application of DOE, and it has become the precedents followed by practice.

Indirect infringement is the specific and characteristic regulation in Article 101 of *Patent Act* of Japan. In Ichitaro Case⁸, IP High Court found that manufacture and sale of a word processing software constitutes indirect infringement of Article 101, Subparagraph 2 of the Patent Act, but does not constitute indirect infringement of Subparagraph 4.

3 Relationship between patent infringement suits and patent invalidation trial proceedings

Before Kilby case, it is the trial board of JPO to determine the invalidity of a patent. Courts cannot invalidate a patent. The Supreme Court of Japan delivered the Kilby Case on Apr. 11, 2000, stated that "When it is clear that the patent in issue has reasons to be invalidated, requesting an injunctive relief and payment of damages based on the patent right should be deemed as an abuse of patent right and is thus prohibited unless there are special circumstances." After Kilby case, Patent Act was amended. From Kilby Case to the amendment of Patent Act, we can find that the amended article does not require obviousness in existence of ground for invalidation, which differs from Kilby case.

Now Japan is implementing double track system in patent litigation, which means both JPO and the Courts can make the decisions upon the invalidation of the patents in issue. From the interview with Courts and JPO, we can get the first impression that most of time the two different organizations can get the unified outcome. Even there would be some differences, the IP High Court which hears all the administrative cases against the trial / appeal decisions from JPO, and also hears all the patent civil cases for appeal, thus this court would have the same words concerning the validity of the patents in issue. As for the effect of two different decisions made by JPO and the Courts, it is clear that only JPO has the right to invalidate a patent, while the courts' decision can only have the effect between the parties in specific case, not effective to the society and public.

4 Relevant proceedings to help judges in patent cases

Judicial research officials are full-time court officials assigned to IP High Court and also to the intellectual property divisions of the Tokyo District Court and the Osaka District Court. These research officials are composed of former JPO trial examiners and patent attorneys. According to the *Code of Civil Procedure of Japan*, it specifically stipulates the affairs of judicial research official in cases relating to intellectual property; Technical advisors should be part-time officials upon requirement, who come from various technical fields as leading scholars, scientists, patent attorneys and researchers of public or private institutes. So far the IP High Court has appointed about 200 leading experts as technical advisors.

III Patent judgment rules in Chinese legal system

1 Rules of claim construction

From Article 59 of *Patent Law of China*, it is quite clear that the claims determines the protection scope of patents, together with description and drawings to interpret the claims, while designs are determined by drawings or photographs. Article 2 of the *Interpretation of the SPC on Certain Issues Concerning the Application of Law in the Trial of Patent Infringement Cases* mentioned the concept of ordinary skilled person in the art, who is the symbol of a group of skilled persons in the art, which helps us to determine the technical scope of patents. China uses the principle of Neutralism which emphasizes the harmony of claim construction, so claim cannot be extremely narrowly or broadly construed, but be in a neutral stand.

Theory of dedication comes from U.S. judicial practice. CAFC first mentioned this theory in Maxwell v. Baker case in 1996. In 2002, CAFC made en banc hearing in Johnson & Johnston Assocs. v. R.E. Serv. Co. case⁹, in which theory of dedication had been analyzed. CAFC held that all the technical features written in specifications instead of claims cannot be construed as the technical features of the patent, but should be regarded as dedication to the public. In China, we also have this doctrine of dedication in Article 5 of *Interpretation of the SPC on Certain Issues Concerning the Application of Law in the Trial of Patent Infringement Cases*.

Prosecution History Estoppel is stipulated in article 6 of *Interpretation of the SPC on Certain Issues Concerning the Application of Law in the Trial of Patent Infringement Cases.* There is no argument that prosecution history estoppel should be used to avoid overprotection of patentees, but arguments lie in what kind of abandon or modification can be treated as out of the protection scope.

Article 4 of Interpretation of the SPC on Certain Issues Concerning the Application of Law in the Trial of Patent Infringement Cases stipulates the way to construe the scope of functional claims, which is taking into account the specific way of implementation of the functions or effects described in the specification and drawings, equivalent way of the or the specific implementation. As for the functional claims during the reviewing period, Guidelines of Examination of SIPO stipulates that functional claims should be including all ways to get relevant functions. There is no contradiction here.

2 Rules of patent infringement judgment

Literal infringement and doctrine of equivalents are widely used in patent infringement judgment cases in China. But in Chinese legal system, there is no concept of indirect infringement.

From the history of judicial practice, we also experienced the usage of backward modification of invention to prevent infringement and the doctrine of superfluity establishment theory. In 2009, Article 7 of the Supreme Court of China issued the Interpretation of the SPC on Certain Issues Concerning the Application of Law in the Trial of Patent Infringement Cases in which states the principle of literal infringement, or what we call as the rule of all the technical features.

DOE has been regulated in judicial interpretation back to 2001. Article 17 of the Interpretation of the Supreme People's Court on Several Issues Concerning the Application of Law to the Trial of Patent Dispute Cases (2001) stipulates it. From the provisions, we can find that equivalent features refer to the features which use substantially the same means, perform substantially the same function and produce substantially the same effect as the stated technical features and which can be contemplated by an ordinarily skilled artisan in the art without inventive labor. Here 3 the same have been emphasized, together with the requirement of no inventive labor by ordinary person skilled in art. DOE is substantially to broaden the technical scope of patents, but the application of DOE is not the same in different courts all over China. Furthermore, some parties do not want to collect and present relevant evidences to prove the 3 the same and the obviousness, just want the court to simply agree with them of the application of DOE.

Indirect infringement has brought debated discussion during the process of modification of Patent Law of China. But the amended Patent Law didn't adopt the concept of indirect infringement since there is no concept of indirect infringement in Tort Law of China (2009), only the concept of joint infringement and abetting or assisting infringement. When we find whether there is indirect infringement, it requires the existence of direct infringement as the premise. If there is no direct infringement, then it will not constitute indirect infringement.

3 Relationship between patent infringement suits and patent invalidation trial proceedings

In Chinese legal system, it is SIPO who has the power to invalidate patents, while courts have no power to discuss the invalidity of patents in patent infringement civil cases. Under this single track system, if the parties don't satisfied with the decisions of SIPO, they can bring an administrative lawsuit to Beijing IP Court for judicial review and can appeal to Beijing High Court. In patent infringement suits, it is common for the defendant to make the invalidation defense. Usually the defendant will ask for the suspension of the civil cases hearing while the invalidation claims have been accepted by SIPO, but the cases will not certainly suspend.

4 Relevant proceedings to help judges in patent cases

With the establishment of the three IP Courts in China, the Supreme Court of China issued Provisional Regulations on the performance of Judicial Research Officials in litigation in Intellectual Property Court on Dec. 31, 2014, which stipulates the duties of judicial research officials; Patent attorneys and relevant engineers of the parties are often technical experts in specific field of the patents in issue. During the court hearing. their statements often help judges to understand the technical issues well; Expert witness is the system in common law countries which has been borrowed and developed in China. Article 61 of Judicial Interpretation of the Regulations of the Rules of civil Evidence in Civil Litigation released by the Supreme Court of China in 2001, it stated that the parties can apply to the court for the appearance of those who has special knowledge to make statements of relevant special issues to judges: In Chinese judicial system, the panel can be composed of judges or of judges and jurors together in the cases of first instance. The participation of jurors who have specific professional knowledge can also help judges to resolve the technical problems; Under some circumstances, judges may consult with some experts in specific fields about some technical issue of the case; Judicial appraisal is always the last course to solve technical issues in Chinese patent infringement judicial practice.

IV Comparison of patent infringement judgment rules in China and Japan

1 Similarities between patent infringement judgment rules in China and Japan

For rules of claim construction, both of them have the Prosecution History Estoppel to stop the accusation of the disclaimer; For rules of patent infringement judgment, both of them have literal infringement and DOE; Japanese courts have the system of judicial research officials to help judges in patent cases, while the Supreme Court also issued the relevant regulations on the duties of judicial research officials¹⁰ with the establishment of the three IP Courts in China, but the selection and appointment of judicial research officials is under way.

2 Differences between patent infringement judgment rules in China and Japan

For rules of claim construction of P-B-P claims, Japanese courts have the two categories to class P-B-P claims, only in pseudo P-B-P claims can the process narrow the technical scope of the claim, while in genuine P-B-P claims, the process cannot limit the scope of the claim. In Chinese judicial practice, it is widely accepted that the process should limit the technical scope of the claims in P-B-P claims; For the theory of dedication, it is provided in judicial interpretation and is accepted in Chinese practice while no specific concept in Japan; For the requirements of the application of DOE, five requirements are needed in Japanese legal system, while "three substantially the same" and no inventive labor should be met in Chinese legal system; For the indirect infringement, Patent Act of Japan clearly stipulates indirect infringement, while there is no concept of indirect infringement in the Tort Law of China. Courts often use joint infringement or abetting and assisting to solve the issue of indirect infringement claimed by the plaintiffs; As for the relationship between patent infringement suits and patent invalidation trial proceedings, both the courts and JPO can discuss the invalidity of patents in Japanese practice, while China has the single track system which means only SIPO can make decisions about the invalidation of patents; As for the relevant proceedings to help judges in patent cases, we can see the well-developed system of judicial research officials and technical advisors in Japan, and a combination of different proceedings in China to help judges to solve the technical problems correctly and quickly. For the newly established research officials system, it still has a long way to g0.

V Suggestions to patent judgment rules in China

1 Strict application of DOE

Five requirements in Japanese judicial practice can be the threshold of DOE, thus the cases applied DOE would be reduced to some extent. Although we often emphasize to apply DOE strictly, the criteria to use this principle are not the same, not mention the unified standard. So we should borrow from the strict application of DOE in Japan, and ask for the patentees to bear the burden of proof to prove the requirements of DOE in our judicial interpretation.

2 Indirect infringement

Even though no specific laws, regulations or interpretations stipulate indirect infringement in China, cases concerning indirect infringement do exist in judicial practice. It is reasonable that we can deal with them using the concept of joint infringement in the tort law, but the problems still exist. When we hear this kind of cases, the parities will argue indirect infringement and the judges also need to think about this issue. So it should be necessary and possible to borrow this relatively mature system in Japan.

3 Double track system

The most important advantage of the double track system in Japanese system is its great role in enhancing the efficiency of patent infringement cases. We can borrow the experience of double track system to let both the SIPO and IP Courts can make the decisions of the validity of the patents. As for the judicial review proceedings, we can also borrow the more efficient proceeding of Japanese system, which regards the trials in JPO as quasi-judicial proceedings and only one instance for final in the following court proceedings, except for those cases relating to the application of law that meets the requirements to appeal to the Supreme Court.¹¹

4 Well-developed system of judicial research officials

Well-developed system of the full-time judicial research officials and part-time technical advisors is the most impressive aspect of the running of IP High Court and other courts in Japan to help judges to resolve the technical issues in patent case hearing, not only for civil cases, but also for administrative cases. The borrowing of Japanese system can help China to improve the level of technology related cases hearing.

VI Conclusion

1 Rethinking of patent legal system and the state strategy

The establishment of IP Courts is closely related to the promotion of development of the social economy and the technology innovations from the level of state strategy. Patent system should have the closest relationship with innovation and social industry and economy. So we should rethink of patent legal system and the state strategy for intellectual property, and deal with the relationship with patent protection and creativity of innovators from the level of state strategy.

2 Balancing of interests between the patentee and the public

Balancing of interests between the intellectual property right holders and the public is the eternal topic in the intellectual property theory and practice. To keep the balance well, judges should make the decision not only from the facts of the cases themselves, but also from the level of industrial development and the stated strategy.

3 Harmonization in international patent legal system

The development of world economy is increasing very rapidly in recent years, especially under the circumstances of globalization of the world economy. With the cooperation and development of international market, it is important and necessary for China to do further research to make improvements in Chinese relevant system and get the harmonization of the IP system.

- ⁴ Sato's Kiri-Mochi case, Judgment rendered on Sept. 7, 2011, IP High Court of Tokyo, H23 (ne) 10002.
- ⁵ Pravastatin sodium case, Judgment rendered on Jan. 27, 2012, IP High Court Grand Panel, 2010 (Ne) 10043. This case is now under hearing by the Supreme Court of Japan, no final result till now.
- ⁶ Hiroya Kawaguchi, *The essentials of Japanese Patent Law: cases and practice*, Kluwer Law International, on page 74.
- ⁷ Ball Spline Case, Tubakimoto v. THK, judgment rendered on Feb. 24, 1998, Supreme Court of Japan, Hei 6 (0) 1083.
- ⁸ Ichitaro case, judgment rendered on Sep. 30, 2005, IP High Court, 2005 H17 (ne) 10040.
- ⁹ Johnston Assocs. v. R.E. Serv. Co. case, CAFC, 285 F.3d 1046, 2002 (en banc).
- ¹⁰ Even it is called technical investigators in Chinese, it should have the same meaning and duty as that of judicial research officials in Japanese legal system.
- ¹¹ Relevant suggestions also had been made by scholars or judges several years ago, see He Zhonglin: *Borrowing and Enlightenment of overseas intellectual property special court system in China, Journal of Law Application*, No.11 of 2010, from page 84 to 88.

¹ *Patent Law of China* was promulgated on Mar. 12th, 1984 and came into force in April 1st, 1985.

² Beijing IP Court was founded on Nov. 6, 2014, while Shanghai IP Court was founded on Dec. 28, 2014, and Guangzhou IP Court was founded on Dec. 16, 2014.

³ Blood serum CRP case, Judgment rendered on Feb. 1, 2000, High Court of Tokyo, 1712. See 増井和夫、田村 善之: *Guide of Patent Precedents*(特许判例ガイド[第 4 版]), 有斐阁, on page 177.