

16 Study on the Doctrine of Equivalents in Patent Infringement—Focus on Laws and Practices Comparison China and Japan

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How to define the scope of patent protection rationally is an important problem with regard to the patent system. The doctrine of equivalents plays an important role in defining the scope of patent protection and has already been accepted and applied in both China and Japan. The doctrines of equivalents of China and Japan have areas in common as well as areas that differ. Based on legal provisions and administration of justice, this paper compares the doctrine of equivalents between China and Japan.

The main content of this paper includes the relevant legal provisions of the two countries, the history of the doctrine of equivalents and an overview of the practice of this doctrine, the requisites of this doctrine, the applications of this doctrine adopted by the court, and the party's burden of proof related to the doctrine of equivalents in action for infringement of a patent.

1 Relevant statutory provisions on the doctrine of equivalents

At present, there is no clear statutory provision on the doctrine of equivalents on patent rights in either China or Japan. The relevant regulation in Japan is Article 70 of the Japanese patent law and in China is Article 56 (1) of the Chinese patent law.

Although there is no consistency in the legal construction and use of language in the above-mentioned regulations of the two countries, the legal principle and meaning of the regulations are basically the same, confirming that the patent claims formulate the basis of ascertaining the scope of protection, whilst the patent specifications and associated diagrams are used for explaining the rights of the patent. Based on the aforementioned requirements, it follows that the existence of the doctrine of equivalents is essential as well as possible.

2 History and overview of the doctrine of equivalents

In Japan, the application of said principle can be divided into three stages: Before 1959, where the principle did not exist and there were no judgments. From 1959 to February 1998, where the principle was finally accepted after various debates and passive application. After February 1998, whereby the Japanese Supreme Court applied said principle in the “Ball Spline” case.

In China, the application of the said principle can be divided into two stages: From April 1, 1984 to June 2001, where although such a principle had

been widely accepted for use by the academics and practitioners, there was no standardized way of applying the principle. After July 2001, courts of law at all levels had applied the principle based on the directive entitled “Several regulations on handling the applicable legal questions on patent disputes” issued by the Supreme People's Court.

3 Requirements of the Principle

(1) Non-essential part

The first requirement is “the non-essential part” as indicated by the Japanese Supreme Court in their judgment which states that “the different parts are not essential parts of the patented invention.” “Essential part” does not refer to the composition of different parts of the patented invention but to the innovative technical idea of the patented invention.

In the judicial explanation of the Supreme People's Court of China, there is no regulation of concerning “non-essential part,” but there is a connection with this in “with basically the same means.” “Basically the same means” concerns the technical characteristics, but the court is occasionally deals with whether the means that the patented technology adopts is the same with the accused infringer.

If the means of the accused infringer and the patented technology are compared at the same time, there is a similarity in this requirement between the two countries. But if the means of the technical characteristics are compared, “basically the same means” and “non-essential part” have obvious differences. This requirement is the greatest obstacle to equating with this

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doctrine in Japan. In China there are too few cases that are equivalent because of means.

(2) Possibility of Interchangeability

The second requirement is assumed up as “possibility of interchangeability.” The Japanese Supreme Court points out in its judgments, “Different parts can be replaced with the corresponding part in the patented invention, producing the same operation and effect, and realizing the same purpose.” This means that “operation and effect” are the same; after being replaced by different parts, the operation and effect of the whole technical scheme is the same and can still realize the purpose of the invention.

One of the requirements stipulated in the judicial explanation of the Supreme People's Court of China that equates characteristics is that the technical characteristic recorded with the patent claim “realize basically the same function, obtain basically the same result.” While asserting whether the function and result are basically the same, the court generally considers the characteristic function and result of patented technology in the purpose of realizing the patent, because often the accused infringing technology is compared with the results of patented technology.

The one thing in common with Japan and China is “operation and effect (function).” The difference lies in the fact that Japan emphasizes the realization of the purpose of invention, while Chinese courts must consider the function and result due to changes to the technical characteristics, and this has caused a dispute regarding “improvements.”

(3) Ease of Interchangeability

The third requirement is summed up as “ease of interchangeability.” The Japanese Supreme Court points out, “the above-mentioned replacement is easy to think of for a person skilled in the art.” To assert ease of interchangeability, the standard for a person skilled in the art is an ordinary technical staff in this field, generally the level of an average engineer. The time is when the infringing products are made. The technical standard is easy to think for a person skilled in the art without a lot of effort.

One of the requirements stipulating in judicial explanation of the Supreme People's Court of China which equate the characteristics is the “characteristic that a person skilled in the art does not need creative efforts to think of.” The standard is the range of an ordinary technical staff, the technical level is that requiring creative efforts and the time, although not stipulated, is generally in practice the time that the accused infringer is manufactured.

It is obvious, from looking at the standards, this requirement is very similar in both China and Japan; the result with very few denied by this requirement alone.

(4) Non-prior art

The fourth requirement is summed up as “non-prior art”. The Japanese Supreme Court points out in judgments, “technology used in infringing products are different from prior art used in the patented invention on the application date or different from technology, easily derived by a person skilled in the art.” The subject of this comparison in non-prior art is the accused technology but not the replacement part. It is generally acknowledged that this technology fits the progressing standard.

There is no clear definition about the non-prior art in the judicial explanation of the Supreme People's Courts of China. But defense of prior art plays the same role. If the accused infringer is closer to the prior art and has certain differences with the patented one, then no infringement is established.

According to the purpose and result, this requirement in both China and Japan are basically the same. Its difference lies in that, first, Japan compares the accused technology with the prior art, whereas China compares the accused technology with the prior art and the patented technology respectively. Second, Japan regards the prior art as the prerequisite while China takes it as a counterplea for non infringement.

(5) Special circumstances and estoppel

The fifth requirement is summed up as “special circumstances”. The Japanese Supreme Court points out in its judgments that “There are no special circumstances that consciously remove the accused infringer from the patent claim in the process of filing.”

There are none of the aforementioned items stipulated in the judicial explanation of the Supreme People's Court of China. However, estoppel is generally accepted by the courts and used in practice.

The “conscious exclusion” in Japan is very similar to “estoppel” in China. But “conscious exclusion” mentioned by the Japanese Supreme Court is only one type of “special circumstance.”

4 Application of Doctrine of equivalents in judicial proceedings

(1) Is the application of the doctrine of equivalents fundamental or an exception?

In Japan, it is an exception. Basically, only when the party makes a clear demand will the judge consider the application of the doctrine of

equivalents.

In the judicial explanation of the Supreme People's Court of China, the scope of patent protection includes the corresponding equivalent technical features related to the patent claim. In this way, the doctrine is regarded as fundamental.

(2) Order of requirements when the court adopts the doctrine of equivalents

The order of requirements which are used by the Japanese courts are the second, the first, the third and then the fourth and fifth, whereby the fourth and fifth are only used when one party makes a demand.

In China, first, the court considers if the functions and results are the same; if the means are the same; if it can be easily thought of by a person skilled in the art without any creative effort; Then, when the accused infringer makes a demand, it is determined whether there is estoppel as well as if the defense is tenable or not.

(3) Is it possible to neglect acknowledged equivalent technical characteristics in the patent claim?

Japan emphasizes equating every composition in the claim. However, there is a theory known as "incomplete use." Up to now, this theory hasn't been completely denied, but it generally isn't applied by the courts.

In China, the judicial explanation of the Supreme People's Court of China emphasizes equating the technical characteristics also, but China has the principle of "surplus designation". Whether this principle is acknowledged requires further discussion.

(4) Technical judgment in the process of applying the Doctrine of Equivalents

In Japan, there is an investigating officer system, special committee system and an appraisal system, which can be used to help the judge solve technical issues in patent related judgments.

In China, there is an investing officer system, expert consultation and the juror system, which can be used to help the judge solve technical issues in patent related judgments.

5 A party's claim of the doctrine of equivalents and the burden of proof in the course of a lawsuit

(1) A party's obligation to claim the doctrine of equivalents in a patent related action

Japanese courts regard the doctrine of equivalents as an "exception". The patentee should declare the use of the doctrine voluntarily.

The Chinese court regards it as "fundamental." Even if the patentee does not declare, the court may apply the doctrine automatically.

(2) A party's burden of proof in the patent related action when the doctrine of equivalents is adopted

In Japan, the first to third requirements should be proven by the patentee, and the fourth and fifth requirements should be proven by the accused infringer. In China, the two requirements, stipulated in the judicial explanation by the Supreme People's Court, should be proven by the patentee. The estoppel and the defense of prior art should be proven by the accused infringer.

(3) The influence of a defendant's independent development on the doctrine of equivalents.

In Japan, basically, it is not recognized that independent development will influence the doctrine. But it has been said that independent development can fall under the fifth requirement of "special circumstances." In China, it is generally acknowledged, that independent development won't influence the application of the doctrine.

6 Conclusion and several issues

(1) Conclusion

The provisions on the scope of patent protection (or range of patented technology) are quite similar both in Chinese and Japanese law. These are the legal foundations of the doctrine of equivalents and also the reason why the doctrine was made. Though each country has a different application history of the doctrine, both countries now recognize the doctrine of equivalents. The requirements of the doctrine of equivalents were established through the judgments of the Supreme Court in Japan and through the judicial explanation in China. Regarding the requirements of the doctrine, the Japanese requirements two, three and five are basically the same as the Chinese judicial explanation and judicial practice: requirement four has a certain difference and requirement one has an obvious difference. With regard to applying the doctrine of equivalents, it is regarded as fundamental in China and as the exception in Japan. But the order of applying the doctrine are similar in both countries. Concerning each party's burden of proof, the methods used in both countries are basically the same.

(2) Several issues

The first issue is whether the doctrine of equivalents and its requirements will change in the future. It would not be impossible to make

the standard of the doctrine of equivalents protect the interests of third parties in the future.

The second issue is how to solve technical issues rationally. The question of how to enable the judge to make an efficient decision, and how to convey the opinion of the technical assistant as opposed to the name of the judge, are still questions for both countries to solve

The third issue is how to maintain a consistent standard when applying the doctrine of equivalents. The Japanese method of concentrating administration of patent cases is a good example for China to study..

The Fourth issue is whether China should adopt a stricter standard for the doctrine of equivalents. In the situation that China is relatively behind scientifically and technically, begs further discussion on whether a stricter standard for the doctrine of equivalents is required.

