# China Patent Case Review 2014

Selected Decisions of:

The Supreme People's Courts
The High People's Courts
The Intermediate People's Courts
The Patent Reexamination Board

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#### **PREFACE**

China is undoubtedly one of the most important countries as well as one of the biggest markets of the world, where inventors seek protection for their patent. Obtaining a patent is the very first step to protect a patentee's right. Patent stability and enforceability play a crucial role in invalidation and infringement proceedings. This relates to several legal issues such as patentability, interpretation of claims, the doctrine of equivalents, the principle of estoppel, distribution of the burden of proof, etc.

Although China is a statutory law country, one cannot find answers dealing with these issues in the laws and regulations without looking into insightful precedents. Therefore, each year the Supreme People's Court, the High People's Courts, the Intermediate People's Courts, and the Patent Reexamination Board select several cases as typical cases to demonstrate to the public the latest trend, and the courts and administrative departments' standards in applying the latest laws and regulations. However, these critical information and cases containing in-depth application of patent law and legislative interpretation are not readily available in English for foreigners.

In order to provide better services to our foreign clients and contribute to the worldwide intellectual property society, Beijing East IP Ltd. started this project of *China Patent Case Review*. In 2014, we selected 29 cases from over 100 typical cases from 2012-2013. Our patent attorneys read and analyzed these case decisions from the courts or the PRB, summarized and provided their analysis into this booklet. We believe this booklet will help many English speaking foreign patent professionals to learn more about the

latest happenings and proceedings in China.

Hope you enjoy it.

Sincerely,

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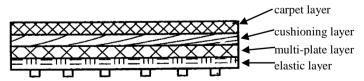
## **Martial Art Carpet**

Fujian Weizhixing Sports Goods Co., Ltd. v. Taishan Sports Industry Group Co., Ltd. et. al. - The Role of the "Purpose of Invention" Plays in Claim Construction (Civil Judgment (2012) Min Ti Zi No.4 by the Supreme People's Court on June 26, 2012)

According to the legislative intent, the scope of protection of a patent should comply with the contribution that the invention made to the prior art. The claim in which the technical solution is defined is disclosed to enable the public to understand the scope of protection and avoid the risk of infringement. However, due to the limitation of language itself and drafting manners of claims, sometimes it is hard to understand the technical solutions defined in the claims properly without claim construction. Therefore, as the first thing to be done when determining patent infringement, claim construction plays an important role in infringement lawsuits. The judge proposed an important principle for claim construction in the following case, holding that the claim construction should comply with the purpose of invention described in the detailed description of the patent application.

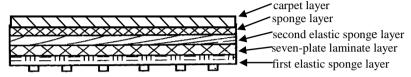
The patentees, Taishan Sports Industry Group Co., Ltd. et. al., own a utility model patent No.ZL200420028451.8 titled "Martial Art Carpet". The claim recites the technical solution as follow:

"A martial art carpet consists of an elastic layer arranged at the bottom, a multi-plate layer with supporting function arranged on the elastic layer, a cushioning layer adhered on the multi-plate layer, and a carpet layer adhered on the cushioning layer." (as illustrated below)



The alleged product comprised of a first elastic sponge layer

arranged at the bottom, a seven-plate laminate layer adhered to the first elastic sponge layer, a second elastic sponge layer adhered to the seven-plate laminate layer, a sponge layer adhered to the second elastic sponge layer, and a carpet layer laid on top of the sponge layer (as illustrated below).



In both of the first instance and the second instance courts, the judges held that, all of the features recited in the asserted claim are the same as or equivalent to the corresponding features of the alleged product. The judges reasoned that although in the alleged product, the carpet layer is simply laid on instead of being adhered to the sponge layer, there exists a significant friction force between the carpet layer and the sponge layer due to the considerable large area of the martial art carpet. It is obvious to a person skilled in the art that, because of this large friction force, it is almost impossible for the carpet layer to have a substantial lateral displacement when the martial art carpet is in use. Therefore, the judges held that the feature "a carpet layer laid on the sponge layer" of the alleged product is equivalent to the feature "a carpet layer adhered to the cushioning layer" recited in the asserted claim.

The alleged infringer, Fujian Weizhixing Sports Goods Co., Ltd. (the "FWSG" hereinafter), appealed to the Supreme People's Court for retrial of the case, and the Supreme People's Court granted the retrial. During the retrial hearing, the FWSG argued that, among all the layers of martial art carpet that are adhered to each other, "a carpet layer adhered to the sponge layer" is expressly recited in the asserted claim. The FWSG further argued that, the term "adhere" recited in the claim should be interpreted as "two layers are firmly bonded together by using chemical methods, e.g., adhesive." The carpet layer of alleged product is simply laid on the sponge layer, rather than being adhered to the sponge layer. Therefore, the alleged product and the technical solution defined in the asserted claim use different ways and realize different results. Consequently, these

features are not equivalent to each other.

Therefore, the question presented in this case during the retrial proceeding before the Supreme People's Court is how to interpret the feature of "a *carpet layer adhered to the sponge layer*" recited in the asserted claim.

The judge pointed out particularly that the claim construction should be conducted by thoroughly considering the purpose of the invention. The claimed technical solution requires all of the layers adhere to each other, to prevent the layers of the martial art carpet from laterally displacing to each other when the martial art carpet is in use. From the viewpoint of a person skill in art of sports equipment, the term "adhere" should be interpreted to mean that surfaces of the layers opposite to each other are firmly bonded together; and the bonded portions can transfer the force. The judge further held that the scope of "adhere" shall be interpreted to cover technical solution in which chemical methods, physical methods, and/or their combination are taken with the bonded portions between two opposite layers transferring the force to prevent the layers of martial art carpet from displacing laterally when the martial art carpet is in use.

Furthermore, the FWSG's argument that the term "adhere" should be interpreted as bonding the two layers together by chemical methods was not supported by the judge, who believed that such interpretation excessively limits the meaning of "adhere". The judge reasoned that, if there exists no bonded portions between opposite surfaces of the layers, or if the bonded portions cannot endure the lateral force, it is difficult to prevent the layers from displacing relative to each other. Thus the problem in prior art cannot be solved and the purpose of invention cannot be realized. Therefore, the feature of "a carpet layer adhered to the sponge layer" should be interpreted to mean that the sponge layer and the carpet layer are bonded securely by using chemical methods, physical methods, and/or their combination and the bonded portions are able to endure the lateral force.

The alleged product cannot obtain the anti-skidding effect for

lack of the feature of "a carpet layer adhered to the sponge layer". The judge of the Supreme People's Court finally concluded that the alleged product does not infringe the asserted claim, reversing the judgments of both the first and second instances.

#### Remarks

In patent infringement lawsuits, the scope of claim may be delimited by the purpose of invention in the step of claim construction. To avoid the court applying Principle of Interpretation or Doctrine of Equivalents to improperly extend the scope of protection in infringement lawsuits and thus reduce the uncertainty of patent enforcement, in some necessary circumstances, especially in China, the purpose of invention should be described in the application documents as clearly, reasonably as possible.

First, the draftsman should make the literal meaning of the claims as clearly as possible to successfully determine the scope of protection in the step of claim construction. It is important to describe or amend the technical solution using terms according to the common understanding of a person skilled in the art during application drafting procedure and examination procedure, in order to realize that the scope of protection of claims is clear and reasonable and can eventually obtain stable patent right.

Second, for the infringers, the principle that claim construction should comply with the purpose of invention can be used to organize the arguments against infringement. In patent-infringement lawsuit, the patentee may improperly extend the scope of claim by means of excessive interpretation. As a defensive strategy, the infringer can use the principle proposed in this case to exclude the solutions which are unable to realize the purpose of invention from the scope of claim.

Like the understanding of "adhere" in this case, the purpose of invention, bonding the carpet layer and the sponge layer together with "adhering" is intend to prevent the layers from laterally displacing from each other when the martial art carpet is in use. However, the alleged product obviously cannot realize the purpose

of invention obviously because the carpet layer is only laid on, not adhered to, the sponge layer. Therefore, the meaning of the term "adhere" should not include the situation of the alleged product in this case.

Additionally, the judicial policy issued by the Supreme People's Court in 2011 also emphasizes that the purpose of invention is critical to determining the scope of protection of a patent, that is, "the protection scope of a patent should not include the solutions having defects or problems in prior art which intended to be solved by the patent."

However, the principle of interpretation proposed in this case is not suitable for all instances. The claim construction should balance the public and the patentee's interest. If a drafting mistake in a claim makes the scope of protection mismatches the real concept of the inventor and the claim has been open to the public, anyone should not substantially change the scope of protection in a manner of simply applying the principle mentioned above. The result of substantially changing the scope of protection is liable to damage the public reliance interest.

Finally, in this case, the reason that the asserted claim doesn't cover the alleged product is the serious drafting defection in the independent claim. If a person takes into sufficient considerations the structure features of martial art carpet before starting to draft the claim, it is likely to avoid the problem arised in this case. For example, the independent claim can be drafted as "a martial art carpet, consisting of an elastic layer arranged at the bottom, a multi-plate layer with supporting function adhered to the elastic layer, a cushioning layer adhered to the multi-plate layer and a carpet layer bonded to the cushioning layer." The manner of "bonded" recited in the claim can be further defined as adhering or laying in dependent claims.

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<sup>&</sup>lt;sup>1</sup> "Opinions of the Supreme People's Court on Issues concerning Maximizing the Role of Intellectual Property Right Trials in Boosting the Great Development and Great Prosperity of Socialist Culture and Promoting the Independent and Coordinated Development of Economy" issued on Dec16, 2011.

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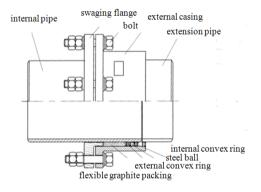
## **Precise Rotating Compensator**

HONG Liang v. Patent Reexamination Board - The Determination of Obvious Mistakes in Patent Application (Administrative Judgment (2011) Xing Ti Zi No.13 by the Supreme People's Court on May 11, 2012)

In patent invalidation procedure, if the technical solution defined by a claim fails to be clearly described in the detailed description, the claim would be invalidated because the claim fails to be supported by the description. In practice, particularly, with respect to patent application for utility model, which does not experience substantive examination, sometimes typing mistakes made when drafting claims is difficult be discovered and corrected. In some instances, although the patentee argues that these typing mistakes can be correctly understood by a person skilled in the art because they are obviously, the arguments usually would not be accepted by the Patent Reexamination Board without support of sufficient evidence. This eventually leads to invalidation of several valuable patents. The judge held in this case that, if, by looking into the nature and degree of the typing mistakes, the person skilled in the art can naturally identify the typing mistakes and appreciate the corrected meaning of the typing mistakes, the typing mistakes shall be interpreted in a corrected manner. Consequently, negative effect of the typing mistakes on validity of valuable patents reduced. especially in circumstance where there exists no post-grant correction procedure for correcting typos and other clerk errors.

The patentee, HONG Liang, owns a utility model patent No.ZL200720128801.1 titled "Precise Rotating Compensator." The patent relates to a rotating compensator, which absorbs the axial thrust and displacement through the relative rotation of an internal pipe and an external casing of the compensator. Claim 1 is reproduced as follows:

"A precise rotating compensator comprises an external casing, an internal pipe, a swaging flange, an extension pipe and a sealing material, wherein a flexible graphite packing is arranged between the internal pipe and the external casing; the butt of the packing is equipped with the swaging flange; the end of the swaging flange and a flange at an end of the external casing is connected by a bolt; a steel ball is positioned between an internal convex ring of the external casing and an external convex ring of the internal casing; the other end of the external casing is connected with the extension pipe, a clearance is left between the components; the characteristics is that, the extension pipe is a straight pipe, the internal diameter of which is the same as the internal diameter of the internal pipe, and they are in coaxial; the external side of the swaging flange is closely matched with the internal side of the external casing." (as illustrated below).



The Patent Reexamination Board (hereinafter, the "PRB") made a decision to invalid the patent upon a request filed before the PRB for invalidation of the patent. The PRB held that, the feature "the other end of the external casing is connected with the extension pipe, a clearance is left between the components" in claim 1 is inconsistent with the corresponding content described in the detailed description, i.e., "the straight extension pipe 5 is external to the external casing, ..., a clearance is left between the extension pipe 5 and the internal pipe 1." Because there exists no clearance between "the components" defined in claim 1 as "the components" were interpreted into the external casing and the extension pipe, which are firmly connected together, (actually, there exists a clearance left

between the extension pipe 5 and the internal pipe 1), the technical solution of claim 1 cannot be obtained directly or generalized from the disclosure of detailed description. Claim 1 is thus invalidated for lack of support of the detailed description under Article 26.4 of the *Chinese Patent Law* (2001).

After reviewing the case, both the court of first instance and second instance affirmed the decision of the PRB. Both courts held that claim 1 fails to be supported by the detailed description because the technical solution defined in claim 1 cannot be undoubtedly obtained from the disclosure of the detailed description. Additionally, the courts did not accept the patentee's argument that "the components" in claim 1 is a typo and can be correctly appreciated by the person skilled in the art.

The patentee initiated the retrial proceedings before the Supreme People's Court, arguing that "the components" defined in claim 1 is an obvious mistake that can be identified and correctly understood by the person skilled in the art after comprehending the detailed description.

The main question presented to the Supreme People's Court is that whether claim 1 fails to be supported by the detailed description because of the typing mistake in claim 1.

The judge held that, Article 26.4 of the *Chinese Patent Law* (2001) was enacted to ensure that the scope of protection of a claim should match the scope of disclosure of detailed description, wherein the protection scope shall not be broadened as exceeding the original disclosure of the detailed description, and shall not be narrowed as being limited to specific embodiments of the disclosed invention.

The judge pointed out that, in practice, the typing mistakes may be left in claims when drafting patent application documents. The typing mistakes can be classified into obvious mistakes and non-obvious mistakes based on the nature and degree of the mistakes. Regarding obvious mistakes, the person skilled in the art can identify these mistakes upon reading the claims, and understand

relevant context and the whole description in a corrected manner correspondingly. Further, the person skilled in the art would not rigidly apply the identified obvious mistakes when practicing the technical solution defined in claim. As a result, where the person skilled in the art can understand correctly the intended meaning to be conveyed by the context of a claim in which there exists obvious typing mistake, it is improper to invalidate the whole claim under Article 26.4 of the *Chinese Patent Law (2001)*, because this would result in imbalance between the protection conferred to the patentee and the contribution that the invention made over the prior arts.

The judge ascertained the following facts. In this case, the precise rotating compensator recited in claim 1 comprises an external casing, an internal pipe, a swaging flange, an extension pipe, and a sealing material, wherein an end of the external casing is connected to the internal pipe by the swaging flange, the other end is connected to the extension pipe. The rotating compensator absorbs the axial thrust and displacement through the relative rotation of the internal pipe and the external casing. It is impossible to connect the internal pipe to the external casing or connect the external casing to the extension pipe while leaving a clearance between them simultaneously. Therefore, "the components" in the feature "a clearance is left between the components" defined in claim 1 refer to the internal pipe and the extension pipe, instead of the external casing and the extension pipe. This interpretation complies with the detailed description, which recites, "the straight extension pipe 5 is external to the external casing 4 of which the inner diameter is the same to the internal pipe, a suitable clearance of 1-10mm is left between the extension pipe 5 and the internal pipe 1."

Finally, the Supreme People's Court reversed the court decisions of first and second instances, holding that claim 1 is valid under Article 26.4 of the *Chinese Patent Law* (2001), because the technical solution of claim 1 can be obtained from the disclosure of the detailed description.

#### Remarks

Drafting patent application documents is challenging.

Sometimes people may make errors when drafting application documents because of subjective reasons like immature drafting skills, and objective reasons like restriction of language itself for describing the technical feature. If the mistakes were discovered in examination procedure, they can be properly corrected. But, if the mistakes were left in the issued patent documents, they are quite harmful to the validity of the patent due to the limited manner under current Chinese legal framework for amending patent documents after granting of the patent right.

Other than China, many countries and regions provide sufficient remedies for correcting mistakes found in the granted patent documents, to balance between the protection granted to the patentee and the public's interest.

For example, in U.S., the patentee can amend the mistakes in claims caused by carelessness after the application has been granted through Reissue Procedure under 35 U.S.C. §251; in Europe, the patentee can amend the granted claims in narrowing manner through Limitation Procedure under EPC Art. 105b; in Japan, with respect to invention patent, the patentee can request an individual "Revised Review" Procedure before the JPO to amend the granted patent documents, with respect to utility model, the patentee can amend the registered utility model patent documents in a certain period after the technical search report has been made or the invalidation appeal has been requested, wherein the requirement of amendment for invention is identical to the requirement for utility model. The requirements both include narrowing the scope of claims, revising typos or mistranslation, interpreting ambiguous record.

In contrast, the granted Chinese patent documents can hardly be amended under current legal framework. Only the claims can be amended for both invention patent and utility model patent through invalidation procedure. Because the claims can only be amended in the manner of deletion of a claim, combination of claims and deletion of a technical solution, most of the mistakes cannot actually be amended through the invalidation procedure. In particular, because preliminary examination is applied to utility model in China, the patentee cannot amend the application documents in the

preliminary examination period, making the amount of utility model patents having drafting mistakes substantively exceed the amount of invention patents. In the earlier examining procedure, besides the three manners of amendment in invalidation procedure, the PRB and the People's Court usually allow the patentee to interpret the meaning of obvious typos only, so almost all of the other mistakes cause the patent to be invalided or partial invalided due to ambiguity or being inconsistent with the description.

The outcome of the decision shows that, the patentee can clarify the meaning of certain drafting mistakes, expending the scope of the drafting mistakes which can be understood correctly. In this case, "the components" in the feature "a clearance is left between the components" recited in claim 1 literally refers to the external casing and the extension pipe. However, according to the mechanism of the external casing, the internal pipe and the extension pipe of the components" refers to only the internal pipe and the extension pipe, rather than the external casing and the internal pipe or the external casing and the extension pipe. Obviously, the reason that the interpretation of "the components" cannot be understood as an obvious typo is based on logical analysis.

What type of drafting mistakes can be interpreted correctly? From the judge's viewpoint, the drafting mistakes can be classified into obvious mistakes and non-obvious mistakes according to their nature and degree. With respect to the obvious mistakes, a person skilled in the art will not improperly understand the literal meaning, but correct the meaning of the mistakes without damaging the public interest. In fact, it is necessary to correctly modify or interpret the obvious mistakes. Compared to the obvious mistakes, it is difficult to interpret the non-obvious mistakes in exclusive and certain manner, because no one knows what the mistakes should be. The amendment or interpretation of non-obvious mistakes should be limited strictly.

How can a person determine that a drafting mistake is obvious or not? A person may take into considerations the following two respects. First, the drafting mistake is obviously incorrect and inconsistent with the objective facts described in the detailed description. Second, a person skilled in the art can arrive only at the correct answer according to the general knowledge in the art, and the content of the patent documents on the basis of logical reasoning.

Although the outcome of the decision has a positive effect on the enforcement of patent right, especially utility model patent right in China, the applicant, especially foreign applicant should pay full attention to the drafting quality of utility model application documents. It is necessary to estimate the stability of the claims and correspondingly limit the scope of claims, and to avoid subjecting the challenge of validity due to the drafting mistake. On the other hand, the drafting mistakes are likely to present in the utility model patent documents filed by foreign applicants because of language translation, literal expression, etc. When dealing with mistakes which may affect the validity of patent, a person can try to find the correct meaning of the mistakes from the patent documents on the basis of logical analysis.

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## Separate Installation Method and Device for Ceiling Built-in Household Appliances

Jiaxing MELLKIT Kitchen Technology Co., Ltd.et.al. v. Zhejiang Youpon Integrated Ceiling Corp. - Interpreting Claims in Multiple Ways (Civil Judgment (2011) Zhe Zhi Zhong Zi No. 241 by the Zhejiang High People's Court on March 5, 2012)

Claim interpretation is the key to determine the scope of protection of claims. The meaning of the claims can be determined based on internal and external evidence using a variety of interpretation methods, wherein the methods of interpretation can verify each other, eliminating contradictory, uncertain or ambiguous conclusions in order to obtain reasonable and accurate protection scope of the claims.

The patentee, Zhejiang Youpon Integrated Ceiling Corp. ("Youpon" hereinafter). has invention patent of No.ZL200410025046.5 titled "Separate Installation Method and Device for Ceiling Built-in Household Appliances", wherein claim 1 is directed to a separate installation method for ceiling built-in household appliances, including the technical feature "mask plate made into the shape of indoor ceiling panel." Claim 3 is directed to the corresponding separate installation device for ceiling built-in household appliances, including the technical feature "at least one ceiling panel below the main body serving as mask plate of the household appliances". The patentee advocates that the alleged infringer, Jiaxing MELLKIT Kitchen Technology Co., Ltd. ("MELLKIT" hereinafter), infringes the installation method and device claimed in its patent, and files a lawsuit with the court. The court of first instance held that there is an infringement. The alleged infringer unsatisfied with the decision, and appealed to the court of second instance.

The main dispute in the second instance court focused on the different understandings of the feature "mask plate" in claims 1 and 3. MELLKIT contends that, according to the patent specification, claims and examination history, the feature "mask plate" in claims 1

and 3 is formed from the available ceiling panel, so they are the same not only in the installation method and shape but also in material, color and style. MELLKIT also contends that, the "mask plate" in the accused infringing products is produced from material different from the existing ceiling panel material, and thus it is different from the "mask plate" in the claims. On the contrary, Youpon holds that the "mask plate" in the claims is the same as the ceiling panel available only in shape and insertion structure, but may not be the same as the existing ceiling panel in other aspects.

The court of second instance explains the meaning of the "mask plate" from the following four points: (1) the meaning of the feature "mask plate" in the claims 1 and 3 should be the same; if "mask plate" in claim 3 is interpreted as being completely the same as the existing ceiling panel, it will narrow the meaning of "mask plate" in claim 1. (2) According to the technical scheme of the invention in the description and the purpose of the invention, mask plate only needs to be the same as the ceiling panel in size and structure, without necessity of being limited on material or color. (3) From the patent examination files, Youpon's statement has neither defined the production order of the roof panel and the mask plate, nor limited the material and color of mask plate. (4) During the invalidation procedure, MELLKIT also recognizes that "mask plate made into the shape of indoor ceiling panel' literally means that the mask plate and the ceiling panel are the same in size and shape. Therefore, the court of second instance concludes that the ground of appeal is not established, and the accused infringement is established. Therefore, the appeal rejected and the original judgment sustained.

#### Remarks

Determining the scope of protection of the claims is the basis of determining infringement, and the claim interpretation is the key to determine the scope of protection of the claims. According to the provisions of Article 56 of the *Chinese Patent Law (2001)*, the extent of protection of patent right for invention or utility model shall be determined by the terms of the claims. However, in judicial practice, it is usually impossible to accurately define the scope of

protection only from the text content of the claims in accordance with the general understanding in the related field. Under such a situation, it requires other evidence to determine the protection scope of claims. The evidence can be classified into internal evidence such as patent application documents, examination files and so on, and external evidence such as dictionaries, textbooks and so on. Generally speaking, internal evidence has more probative force than external evidence.

In claim interpretation, the meaning of the claims should be explained comprehensively based on probative force of internal and external evidence using different interpretation methods, so as to reasonably determine the scope of protection. For example, in the present case, the judges use four kinds of methods to interpret the meaning of the claims reasonably.

First of all, the same term in the claims shall have the same meaning. When a term presents in multiple claims that depend on each other or in a unity, the term shall have the same meaning. According to general understanding, the feature "mask plate made into the shape of indoor ceiling panel" in claim 1 shall mean that the mask plate and ceiling panel have the same shape and structure, without necessity of having the same material, color, etc. If the feature "at least one ceiling panel below the main body serving as mask plate of the household appliances" in claim 3 is interpreted as the mask plate is completely the same as the existing ceiling panel, it will lead to different understandings of the same term "mask plate" in claim 1 and claim 3. When a kind of explanation results in that the same term in different claims has different meanings, the rationality and accuracy of the interpretation shall be questioned.

Second, the claim interpretation shall be consistent with the purpose of the invention. The purpose of an invention usually reflects the inventive step of the invented technical solution over the existing technology, and reflects the scope the inventor intends to protect. Under normal circumstances, the claim interpretation in accordance with the aim of the invention is consistent with the interests of the patentee. In the absence of other evidence, the scope of protection shall not be unreasonably broadened or narrowed. For

example in the present case, in order to overcome the defects in the prior art wherein integrated household appliances installation is inconvenient, the invention adopts the technical solution that the mask plate and household appliances are separately installed. The technical solution requires only that the mask plate and the ceiling panel are the same in structure and shape to facilitate the installation, but there is no limitation to the material and color. However, it should be noted that, if the interpretation of claims conflicts with the public interest, the scope of protection of the claims shall be reconsidered to provide a balance between the public interest and the right of the patentee.

Third, the examination files can be used for claim interpretation. The examination files include Office Action. amended text of the application document, and the applicant's response and other materials in the prosecution process of the patent, and truly reflect the communication between the patentee and the examiner and the applicant's efforts to obtain the patent. The response the applicant made during the examination can be used as the basis to determine the scope of protection of the claims. During the prosecution of the present patent application, in the response to the Office Action, the applicant clearly expresses that the mask plate and the available roof panel are the same in shape and function to facilitate installation and exchange, which further proves the real intention of the patentee for the scope of protection. Of course, during claim interpretation using the examination files, the principle of estoppel should be considered to ensure the patentee will not interpret a claim differently during infringement proceedings and prosecution proceedings, which will damage the public interests.

Final, according to the appellant's statement during the invalidation process and the invalidation decision itself, it can also be determined that "mask plate made into the shape of indoor ceiling panel" means that the mask plate and the ceiling panel are the same in size and shape, and has nothing to do with the material and color etc.

What needs to be emphasized is that, interpretation of the same claim using different interpretation methods may lead to different protection scopes. In this case, a variety of interpretation methods must be used to verify each other, and a comprehensive consideration should be made on the protection scope of the claim, in order to eliminate contradictory, uncertain, or ambiguous interpretation results, and obtain a reasonable and accurate protection scope of the claim.

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## Method for Manufacturing Smooth Metal-shield Composite Belt

Xi'an Qinbang Telecommunication Material Co.,Ltd. v. Wuxi Longsheng Cable Material Factory et.al. – How to Interpret Inconsistent Claims with Detail Specifications (Civil Judgment (2012) Min Ti Zi No.3 by the Supreme People's Court on August 24, 2012)

Obvious drafting mistakes in the claims of a granted patent do not inevitably render the patent invalid. If those skilled in the art upon reading the claims, can immediately realize that there is an obvious mistake in a particular claim and can determine its exclusive and correct meaning in light of the patent specification, the scope of the claim shall be determined based on the corrected understanding. However, if the language of the claim is clear, even if inconsistent with the specification, the claim shall be construed as it would be understood by those skilled in the art, rather than based on the specification.

Xi'an Oinbang Telecommunication Material Co.,Ltd. (hereinafter referred to as "Qinbang") is the patentee of Chinese ZL01106788.8 Invention Patent No. titled "Method Manufacturing Smooth Metal-shield Composite Belt." Oinbang brought a patent infringement lawsuit to the Xi'an Intermediate People's Court against three defendants including Wuxi Longsheng Cable Material Factory (hereinafter referred to as "Longsheng Factory") and other two entities, claiming monetary damages and injunctions.

Claim 1 of the patent involved is reproduced in part as follows:

"1. A method for manufacturing smooth metal-shield composite belt, comprising adhering a plastic thin film to a metal foil surface in an uneven and non-planar manner to form point contacts between the composite belt and a longitudinal wrapped or sizing mold of an optical cable or electric cable, such that friction force can be reduced, and bumps, air-leakage,

mold release and belt breakage of the cable can be prevented, the process and conditions of the method are as follow: ..., (2) transferring a plastic melt or plastic film through a fine meshed steel roller and a squeeze roller rotating with respect to each other, such that there is formed an uneven and rough surface with a thickness of 0.04-0.09 mm on the surface of the plastic film, which is thermally extruded on one side of a substrate facing the metal foil, wherein the steel roller is at a temperature of 35 °C-80 °C, has a diameter of \$\phi240mm-\phi600mm and a mesh number of 40-85, and wherein the squeeze roller has a diameter of \$\phi160mm-\phi480mm; ...."

The court of first instance appointed an appraisal organization to conduct a technical appraisal, in order to determine whether the manufacturing method of aluminum-plastic composite belt of Longsheng Factory and the technical features of the above patented method are identical or equivalent to each other. Regarding the technical feature "there is formed an uneven and rough surface with a thickness of 0.04-0.09 mm on the surface of the plastic film," the appraisal report asserted this technical feature means the thickness of the plastic thin film is from 0.04 to 0.09 mm, while the product manufacturing method of Longsheng Factory produces a plastic film having a surface roughness of Ra 2.47µm to 3.53µm and a thickness of 0.055-0.070mm. Accordingly, the appraisal opinion asserted these two features are equivalent to each other. The court of first instance decided Longsheng Factory constituted an infringement, and shall compensate Qinbang for RMB 3,000,000 (around USD 500,000).

Longsheng Factory and the other defendant unsatisfied with the judgment rendered by the court of first instance, and filed an appeal with the Shanxi High People's Court ("the court of second instance"). The court of second instance affirmed the original judgment upon trial. Longsheng Factory was still not satisfied with the judgment of the court of second instance, and filed to the Supreme People's Court for a retrial. The Supreme People's Court directed the court of second instance to conduct the retrial. The court of second instance upheld the original judgment upon retrial.

Longsheng Factory and the other appellant filed to the

Supreme People's Court for retrial again, and submitted that the feature "there is formed an uneven and rough surface with a thickness of 0.04-0.09 mm on the surface of the plastic film" recited in claim 1 refers to the thickness of the uneven and rough layer on the plastic film surface, instead of the overall thickness of the plastic film, i.e. there is formed a concave-convex surface structure of 0.04-0.09mm (40µm-90µm) on the surface of the plastic film. Regarding the feature "there is formed an uneven and rough surface with a thickness of 0.04-0.09 mm on the surface of the plastic film," the Supreme People's Court found that a person of ordinary skill in the art would construe it's meaning as the thickness of the uneven and rough surface on the plastic film surface being 0.04-0.09mm. The meaning of this feature is clear and definite. If the feature "there is formed an uneven and rough surface with a thickness of 0.04-0.09 mm on the surface of the plastic film" is interpreted as the thickness of the plastic film being 0.04-0.09mm, the modifiers of "surface," "rough surface," and so on in this feature will actually become redundant. Moreover, since the specification of the present patent describes the technical solution in a very simple way, those skilled in the art after reading the claims and the specification, would not come to the conclusion that this feature should be understood as the thickness of the plastic film being 0.04-0.09mm. The surface structure (with a roughness of Ra 1.8µm-5µm) of the plastic film used by Longsheng Factory is very different from the concave-convex surface structure of 0.04-0.09mm (40µm-90µm) formed on the surface of the plastic film in claim 1. These two features are neither identical nor equivalent to each other.

Finally, the Supreme People's Court reversed the judgments of the first instance, the second instance and the retrial, and amended the judgment to reject the claims of Qinbang Corporation.

#### Remarks

As a guiding principle, Article 56 of the *Chinese Patent Law* (2001) provides that the extent of protection of the patent right for invention or utility model shall be determined by the terms of the claims. Accordingly, the meaning of the claim language shall be ascertained in view of the application's specification from the

perspective of those skilled in the relevant art. Particularly, to ascertain the meaning of a term in the claims, a variety of sources may be adopted, among which the words of the claims themselves can be highly instructive, and the specification in most cases is the best source for discerning the proper context of claim terms.

To determine whether a disputed term in the claims is an apparent mistake, this judgment of the Supreme People's Court provided a two-step test. First, if those skilled in the art can definitely determine the meaning of the disputed term in the claims, the claims shall be construed as they would be understood by those skilled in the art, and the specification shall not be used to contradict the meaning of the term in the claims, even if such meaning is inconsistent with the specification. Second, in contrast, if those skilled in the art upon reading the description and the drawings, can immediately realize that the disputed term is an apparent mistake and can directly, unambiguously, and exclusively ascertain the correct meaning of the term according to the description and the drawings, the particular claims in which the disputed term appears shall be construed so as to be consistent with the description and drawings.

In this case, it is very important to determine whether there is an apparent mistake in the feature "there is formed an uneven and rough surface with a thickness of 0.04-0.09 mm on the surface of the plastic film" of claim 1, i.e., whether the "thickness of 0.04-0.09 mm" in the claims refers to the overall thickness of the plastic film or the thickness of the uneven and rough layer on the plastic film surface. The patentee asserted that this feature should be understood as defining the thickness of the plastic film itself, since each of the numerical values "0.04mm," "0.09mm," and "0.07mm" appeared in the embodiments in the patent description represents a respective thickness of the plastic film. Upon reading the written description, there may be a doubt as to whether the term "a thickness of 0.04-0.09 mm" in claim 1 corresponds to the thickness values of the plastic film (0.04mm, 0.09mm, and 0.07mm) provided in the description such that the above feature should be regarded as having an apparent mistake. An apparent mistake in a claim means that a term in the discussed claim can be directly determined to be erroneous and then unambiguously corrected by a person of ordinary skill in the art in the context of the original description and claims, and thus cannot be interpreted in any other plausible way. However, from the specification disclosure, it cannot be unambiguously determined that the above feature means "the thickness of the plastic film is 0.04-0.09mm." In contrast, according to the claim language, it is clear that the "thickness of 0.04-0.09 mm" should be interpreted as the thickness of the uneven and rough layer on the plastic film surface. Therefore, the feature "there is formed an uneven and rough surface with a thickness of 0.04-0.09 mm on the surface of the plastic film" of claim 1 cannot be regarded as an apparent drafting mistake in the claims and then be corrected based on the description, but shall be construed according to the words of the claims themselves.

From the teaching of this decision, several measures may be taken during drafting and examination of a patent application to reduce the ambiguities in subsequent litigation of the issued patent. In order to obtain a broad and reasonable patent right, the applicant should clarify the scope and meaning of the claims at the application stage as clear as possible, rather than attempting to resolve the ambiguity in litigation later. Generally, the usage of a term in one claim can often illuminate the meaning of the same term in other claims, and each term in the claims has its respective meaning and cannot be regarded as redundant. Therefore, the applicant should carefully adopt terms and features used in the claims when drafting the application document, such that identical terms are used for the same meaning and different terms are used for different meanings, thereby avoiding claim indefiniteness issue resulted from literal conflict or inconsistency between the claims and the description.

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## **Mercury-free Alkaline Button Cell Battery**

Dongguan Jiachang Toys Co.,Ltd. et.al. v. Zhaoqing New Leader Battery Industry Co.,Ltd. et.al. - Importance of Specification on Claims Interpretation (Administrative Judgment (2012) Xing Ti Zi No. 29 by the Supreme People's Court on December 20, 2012)

When evaluating whether a claim has novelty and/or inventiveness, the protection scope of the claim should be determined first. Article 56, Paragraph 1¹ of the Chinese Patent Law (2001) stipulates that: the protection scope of the patent right for invention or utility model shall be determined by the terms of the claims; and the description and the appended drawings may be used to interpret the content of the claims. Therefore, the protection scope of a claim should be determined from those skilled in the art, who would understand the technical solution of the claim as a whole and explain the claim in combination with the description and drawings if necessary. In invalidation cases, explanations to technical features of the claim usually determine whether the claim has novelty and/or inventiveness as compared with a reference, so as to determine whether the involved patent is maintained or invalidated.

The patentee, Zhaoqing New Leader Battery Industry Co.,Ltd. et.al. ("New Leader Battery" hereinafter), has a utility model patent No. *ZL01234722.1* titled "Mercury-free Alkaline Button Cell Battery." The involved patent underwent three rounds of invalidation after the date of authorization proclamation. Finally, the Patent Reexamination Board (the "PRB" hereinafter) made the No. 13560 decision on the request for invalidation (hereinafter referred to as the invalidation decision) on June 9, 2008 declaring that all claims of the involved patent are invalidated. In the subsequent

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<sup>&</sup>lt;sup>1</sup> Paragraph 1, Article 56 of the *Patent Law (2001)* revised in 2000 should be applied to the present case, which is modified as Paragraph 1, Article 59 of the *Patent Law (2009)* revised in 2008: "the protection scope of the patent right for invention or utility model shall be determined by the terms of the claims; and the description and the appended drawings may be used to interpret the content of the claims".

administrative litigation, both the court of first instance and second instance judged that the invalidation decision should be reversed. However, the Supreme People's Court reversed the judgments of the court of first instance and the court of second instance and maintained the invalidation decision on December 20, 2012.

The involved patent includes one independent claim and three dependent claims, wherein the independent claim recites:

"An mercury-free alkaline button cell battery, comprising: an anode plate, a cathode cover, cathode calamine cream, a silicon seal, an anode shell and a membrane, characterized in that: a layer of indium or tin material is electroplated on a cathode plate and indium is added into the calamine cream to replace mercury."

Dongguan Jiachang Toys Co., Ltd. et.al. ("Jiachang Toys" hereinafter) requested to invalid the patent before the PRB. Throughout the invalidation procedure and the subsequent litigation procedure, one of the dispute's focuses was how to explain the meaning of the "cathode plate" in claim 1. In the invalidation procedure conducted by the PRB and trials of the subsequent litigations by the court of first instance and second instance, it is held that the "cathode plate" in claim 1 of the involved patent means "a metal sheet with nickel or copper electroplated." In the request for retrial submitted to the Supreme People's Court, however, the Jiachang Toys contends that the "cathode plate" generally refer to a sheet implementing the function of the cathode of a battery, which should not interpreted as "a metal sheet with nickel or copper electroplated". New Leader Battery insisted that the "cathode plate" in claim 1 of the involved patent designates the electroplated structure.

In the administrative judgment of the Supreme People's Court, the Judge explained how to properly explain the meaning of the "cathode plate" in claim 1 of the involved patent.

First, claim 1 of the involved patent does not specify structure of the "cathode plate" and its modeling method. In accordance with

common sense, cathode plate of a battery refers to a sheet functioning as cathode of the battery.

Second, when a claim is explained with reference to the description and drawings, the explanation should be based on the specification, so as to keep the protection scope of the claim fitting the scope disclosed by the specification. The involved patent does not improve the structure of the cathode plate of the battery. Therefore, the "cathode plate" in claim 1 of the involved patent should not be interpreted as designating the electroplated structure for the following reasons...

- (1) according to corresponding recitations in the description<sup>1</sup>, the applicant of the involved patent thinks the way to obtain the mercury-free button cell battery is to find a material to replace the mercury, which can also isolate zinc from other material or metal, but he never make specialized improvements to the structure of the cathode plate of the battery;
- (2) according to corresponding recitations in the description<sup>2</sup>, during exploration of the involved patent, the applicant of the involved patent mainly worked to explore which metal may be electroplated on the cathode plate so as to successfully control contact between the cathode calamine cream and the cathode plate. But the applicant conducted any tentative exploration to change the structure of the cathode plate of the battery;
- according to corresponding recitations description, the applicant of the involved patent thinks that gas

<sup>&</sup>lt;sup>1</sup> the background of the description recites that: "..., zinc was added to prevent the zinc to come into contact with other material (especially metal), to thereby reduce the swelling which results from the evolution of gas."

<sup>&</sup>lt;sup>2</sup> the summary of the description recites that: "..., several experiments is conducted to electroplate gold, silver, copper, indium, tin and the like on the cathode plate. Finally, the inventor found that electroplating indium or tin on the cathode plate of the battery successfully control the gas result from the contact between the cathode calamine cream and the cathode plate..."

the summary of the description recites that: "this utility model electroplates a layer of indium or tin on the cathode plate of the battery. The

expansion caused by contact between zinc and the cathode plate may be prevent by electroplating indium or tin on the cathode plate so as to achieve the invention. But he never mentioned to further improve the completed invention, such as, further improve the structure of the cathode plate of the battery, and make creative efforts to implement the improvements; and

(4) according to corresponding recitations in the description, the cathode plate of the battery may either be a metal sheet without nickel or copper electroplated or a final product with indium or tin electroplated; therefore, the applicant of the involved patent did not realize to distinguish the concept of the cathode plate to reflect that he has improved the structure of the cathode plate of the battery.

Based on the abovementioned explanation on the cathode plate of the battery, the Supreme People's Court considered that claim 1 of the involved patent covers the prior art of the cathode plate of the battery including the laminar structure cathode plate. Therefore, the claim should be invalidated according to evidences of the prior art provided by the petitioner of the request for invalidation of the involved patent.

#### Remarks

Rule 2 of Interpretations of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent specifies that: the people's court should determine the content of the claims stipulated by Article 59, Paragraph 1 of the Chinese Patent Law (2009), according to the recitation of the claims and combined with understanding of the claims by those skilled in the art after reading the description and drawings. Article 12 of the Guidelines for Patent Infringement Determination issued by the

cathode plate with indium or tin electroplated may prevent gas expansion caused by contact between zinc and the cathode plate."

<sup>&</sup>lt;sup>1</sup> the summary of the description recites that: "the electroplating method includes following steps: (1) the cathode plate may be made of sheet metal (such as, an iron plate or a stainless steel plate)"...; (2)...., electroplating a layer of indium or tin, ..., and then made into the cathode plate"

Beijing High People's Court also specifies that, "description and drawings of a patent may be used to make a reasonably explanation on protection scope of technical solutions literally defined by claims of the patent, i.e., technical features identical to those recited in the claims may be explained into the protection scope of the patent, or some technical features recited by the claims may be defined according to the description and drawings of the patent."

Patent documents are a cohesive whole, including the initially filed description, claims, drawings, and amendments and observations in response to Office Actions during the examination. All of the patent documents may influence on the protection scope of the claims during patent invalidation The correspondence between the claims and the description and drawings may be interpreted as that: the claims are generated on the basis of the description and drawings, which are a summarization of the description and drawings; the description and drawings are supplementary explanations to the claims, like a dictionary of the claims.

When writing the patent documents, the patentee should try to keep technical solutions of the claims consistent with the invention purpose and the primary technical problem to be solved. Moreover, the content of the claims should reasonably summarize the technical solutions recited in the description and drawings. Terms, those cannot be definitely and literally defined by the claims, should be definitely illustrated in the description, so that the claims can be properly explained and obtain protection identical to their contribution to improvements of science and technology. For example, in this case, when explaining the technical feature "cathode plate" in claim 1, the patentee proposed that the "cathode plate" means "a metal sheet with nickel or copper electroplated". But that definition is not definitely recited in the description. On the contrary, according to the description, the cathode plate of the battery may either be a metal sheet without nickel or copper electroplated or a final product with indium or tin electroplated, thus the description cannot support the patentee's proposition. The vague recitations in the description lead to ambiguity and the failure to make no contribution to explain the claims, and finally result in

invalidation of the claims.

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## Clothing for Electromagnetic Pollution Protection

Wanqing BAI v. Shanghai Tianxiang Industrial Co., Ltd. et.al. - The Influence of Ambiguity in Claim on Patent Infringement (Civil Ruling (2012) Min Shen Zi No. 1544 by the Supreme People's Court on December 28, 2012)

Regarding problems raised under the condition that distinct defects existed in a claim make the protection scope of the claim unclear. For example, how to define the protection scope of the claim and how to enforce the patent right. This case gives the explicit attitude of the court. The Supreme People's Court explicitly states that: accurately defining the protection scope of a patent right is a precondition for judging whether the accused technical solution constitute an infringement; if the protection scope of a patent right cannot be clearly defined, it should not confirm the infringement act of the accused technical solution.

The case relates to an infringement dispute between Patentee, Wanqing BAI, and Chengdu Nanxun Marketing Service Center (hereinafter referred to as "Nanxun Center"), Shanghai Tianxiang Industry Co.,Ltd. (hereinafter referred to as "Tianxiang Industry"). The patentee is the assignee of a utility model patent No.ZL200420091540.7 titled "Clothing for Electromagnetic Pollution Protection." This utility model patent has only one claim, which recites:

"A clothing for electromagnetic pollution protection, comprising a top and a bottom, characterized in that, the clothing provides metal mesh or film for shielding in its fabrics, wherein the metal mesh or film is constituted of metal filaments or powders with high magnetic permeability and no remanence."

The Patentee brought a lawsuit against the Tianxiang Industry and the Nanxun Center to the Chengdu Intermediate People's Court

(hereinafter referred to as "the court of first instance") on July 19, 2010 for the reason that a top clothing for electromagnetic pollution protection which is produced by Tianxiang Industry and sold by Nanxun Center has infringed the utility model patent right owned by the patentee.

The court of first instance held that, Wanqing BAI failed to specify in the claim the standard for the technical feature "high magnetic permeability," and cannot prove that the magnetic permeability of stainless steel wire utilized by the accused product has achieved the "high magnetic permeability" recited in the claim either; the proposition of the patentee that the feature in the accused product "stainless steel wire" was the same as the feature "the metal mesh or film for shielding, wherein the metal mesh or film is constituted of metal filaments or powders with high magnetic permeability and no remanence" in the claim was untenable; thus the court of first instance rejected the petition of Wanging BAI. Wanging BAI was not satisfied with this judgment, and appealed to the Sichuan High People's Court (hereinafter referred to as "the court of second instance"). The court of second instance supported the opinions of the first instance and rejected the appeal and affirmed the original judgment.

Again, Wanqing BAI was not satisfied with the judgment of second instance and appealed to the Supreme People's Court for retrial. Along with this appeal, Wanqing BAI submitted new evidences such as textbooks, reference books, science literatures, etc., trying to prove that the scope of the technical feature "high magnetic permeability" is clearly defined.

After the retrial procedure, the Supreme People's Court determined that the dispute of this case focused on the definition of the protection scope of the feature "high magnetic permeability" in the claim. The opinions of the Supreme People's Court are as below:

First, the specification of the utility model failed to clearly indicate whether the magnetic permeability in the technical solution of the utility model was a relative magnetic permeability, an absolute magnetic permeability or other meanings, failed to recite

the detailed scope covered by the high magnetic permeability, and failed to describe objective conditions (such as the intensity of magnetic field etc.) used for calculating the magnetic permeability. Based on said specification, those skilled in the art will have difficulty to determine the specific meaning of the feature "high magnetic permeability" in the related utility model.

Second, though the expression of "high magnetic permeability" has been used in some prior arts as proved by the submitted evidences, the meaning of the high magnetic permeability varies a lot, depending on the differences of the magnetic field intensity and the technical field. The difference between values of the magnetic permeability in some literatures is as large as four orders of magnitude. Therefore, the evidences submitted by the patentee cannot prove that person skilled in the technical field to which the utility model belongs have a relatively consistent knowledge of the meaning or scope of the high magnetic permeability.

Last, the patentee contends that those skilled in the art may determine the desired magnetic permeability according to the specific lower limit of magnetic permeability for safety depending on the specific using environment. However, this argument actually covers all the situations that achieve the purpose of electromagnetic radiation protection into the protection scope of this claim, which is to seek a much broader protection scope and lacks supports of facts and laws. In conclude, as the meaning of the technical feature "high magnetic permeability" in the claim 1 cannot be determined definitely, neither can the protection scope of this claim be determined definitely.

The Judge of the Supreme People's Court held that, accurately defining the protection scope of the patent right is a precondition for judging whether the accused technical solution contributes an infringement; if the drafting of the claims has distinct defects, and the meaning of the technical terminology in the claims cannot be determined or the protection scope of the patent right cannot be determined definitely even by combining the specification, common knowledge in the art and related prior art, there is no way to perform meaningful infringement comparison between the patent right and

the accused infringement technical solution, thus it should not confirm the infringement act of the accused technical solution.

Regarding this case, the Supreme People's Court concluded that the judgment of second instance is proper and rejected the retrial request.

### Remarks

In dispute cases regarding a patent right, the protection scope of the patent right should be first determined in order to judge whether the defendant implemented the patent of the plaintiff. In accordance with the stipulations of Paragraph 1, Article 59 of the *Chinese Patent Law* (2009), the protection scope of the patent right for invention or utility model shall be determined by the terms of the claims. The description and the appended drawings may be used to interpret the content of the claims.

In terms of the situation that a defect in the drafting of a claim causes the scope of the claim to become unclear, the Court should not simply refuse to take the case. Instead, the Court may explain the claim based on the contents recorded in "the patent specification and drawings, related claims in the appended claims, patent examination history and effective legal writing." If the meaning of the claim cannot be determined by the above approaches, the claim can be explained by "combining common known literature such as reference book, textbook, etc. and customary understanding of those skilled in the art." However, regarding the situation that, after exhausted all possible methods by combining specification, common knowledge in the art and related prior art, the protection scope of the patent right still cannot be ascertained, the Supreme People's Court specifically alleges in this case that, under this situation, the accused technical solution should not be confirmed as an infringement.

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<sup>&</sup>lt;sup>1</sup> Refer to Rule 13.1, *Guidelines for Patent infringement Determination* issued by the Beijing High People's Court on September 04, 2013. Please be informed that the issued date of this Guideline is later than the date when the Ruling of this case is issued by the Supreme People's Court

<sup>&</sup>lt;sup>2</sup> Refer to Rule 13.2, *Guidelines for Patent infringement Determination* issued by the Beijing High People's Court on September 04, 2013.

In the judgment of the latest case of *Nokia vs. Huaqin*<sup>1</sup>, the court also held that the act of the defendant did not constitute an infringement for the reason that the protection scope of the patent right owned by the plaintiff cannot be determined.

Furthermore, although the unclarity of the claim can cause the patent to be invalidated in accordance with the Rule 65 of the *Implementing Regulations of the Chinese Patent Law (2010)*, however, there does not ever exist an precedent in Chinese patent practice where the Court directly makes judgment on the validity of a patent without the interlocutory administrative procedure (i.e., the invalidation procedure that is submitted to the Patent Reexamination Board (PRB)).

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<sup>&</sup>lt;sup>1</sup> Civil Judgment (2013) *Hu Gao Min San Zhi Zhong Zi* No. 96 by of the Shanghai High People's Court.

# Multifunction Programmable Boxing Training Device

Qiang ZHANG v. Yantai Qixia Dayi Industry and Trade Co.,Ltd. - Division of Technical Features in Patent Infringement (Civil Ruling (2012) Min Shen Zi No. 137 by the Supreme People's Court on August 6, 2012)

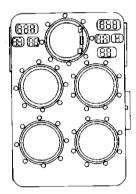
When determining whether an infringement is established by employing the equivalent doctrine, it is necessary to compare technical features of an involved patent with those of an alleged infringing product, so division of technical features will influence determination of an equivalent feature. In this case, the Supreme People's Court suggests that for division of technical features of a claim, a technical unit that is able to implement a relatively independent technical function generally should be considered as one technical feature, and it should not designate multiple technical units that implement different technical functions as one technical feature.

The patentee, Qiang ZHANG, has a utility model patent No. *ZL200420073525.X* with title of "multifunction programmable boxing training device", in which claim 1 is as follows:

"A multifunction programmable boxing training device for boxing training, comprising five target drones, dynamometers, an indicator, a displayer, a speech processing chip, a music chip, an audio playback device, a foldable keyboard, a remote control, a remote control receiver, one or more stepper motors and corresponding drives, and the circuits being controlled by a microprocessor, characterized in that: the dynamometers are installed inside the five target drones respectively, respective signal output terminal of which is connected with an analog signal input pin of the microprocessor through a gating circuit and a preamplifier circuit, the function of the gating circuit can also be replaced by an internal program module within the microprocessor, a set of indicators are arranged around each of the target drones, and each set is connected with a pulse

output pin of the microprocessor via a driver, the microprocessor can only strobe one set of indicators at a time which is consistent with a target drone selected by the gating circuit, the gating circuit has three address lines connected with the output control pin of the microprocessor, one of which is selected by the dynamometer inside the five target drones during a certain period according to a gating address instruction of the microprocessor."

In the claim 1, it is recited that "the training device comprises five target drones." In the specification, it is described that "on the panel, there are five target sites arranged in the order of head, chest, abdomen, each target site has a target drone," as shown below:



The corresponding technical feature of the alleged infringing product includes nine target drones. According to its product specification, the nine target drones are "left head hitting site, right head hitting site, left arm hitting site, right arm hitting site, left rib hitting site, right rib hitting site, abdomen hitting site, left hip hitting site and the right hip hitting site".

After hearing, both of the first and second instance courts consider that the technical feature of "the training device contains five target drones" of claim 1 of the involved patent is different from the corresponding technical feature of "nine target drones" of the alleged infringing product. The patentee should know that the

number of target drones is variable at the date when filing the application, but still defines the number to be five. The assertion that the technical feature of "nine target drones" of the alleged infringing product is equivalent to the technical feature of "five target drones" of claim 1 of the involved patent cannot be supported.

The patentee filed a request to the Supreme People's Court for retrial with an assertion that the "five target drones" of the involved patent is equivalent to the "nine target drones" of the alleged infringing product.

After hearing, the Supreme People's Court considers that the number of target drones of the involved patent differs from that of the alleged infringing product, but the five target drones of the involved patent cannot be deemed as one single technical feature because each of the five target drones functions in a separate way when being hit, but should be split into a head target drone, abdomen target drones, and waist target drones for consideration. The alleged infringing product contains head and abdomen target drones and the hip target drones thereof are equivalent to the waist target drones of the involved patent, and thus the technical solution of the alleged infringing product contains identical or equivalent technical features to the five target drones of the involved patent.

### Remarks

In this case, regarding determination of an equivalent feature, both of the first and second instance courts consider the "five target drones" in claim 1 of the involved patent as one single technical feature and compare it with the "nine target drones" of the alleged infringing product, while the Supreme People's Court divides the "five target drones" in claim 1 of the involved patent into three separate technical features of "a head target drone, abdomen target drones, and waist target drones" based on different functions independently implemented by these target drones and compares the three separate technical features with the corresponding technical features of the alleged infringing product.

When determining whether an infringement is established by

employing the equivalent doctrine, it is necessary to compare technical features of an involved patent with those of an alleged infringing product, so division of technical features will influence determination of an equivalent feature. If the division is too rough, the application of the equivalent doctrine would be unreasonably expanded, while if the division is too specific, the application of the equivalent doctrine would be unreasonably restricted.

The Supreme People's Court, in this case, proposes a method of dividing technical features. That is, for division of technical features of a claim, a technical unit that is able to implement a relatively independent technical function generally should be considered as one technical feature, and multiple technical units that implement different technical functions should not be considered as one technical feature. According to Article 17, Paragraph 2 of Certain Provisions of the Supreme People's Court on Issues Concerning the Application of Law in the Hearing of Patent Dispute Cases, one of the most important steps to determine whether a technical feature of an alleged infringing product is equivalent to that of an involved patent is to determine whether the means, function and effect of them are basically identical. Among them. the means and the effect are closely related to the function. Specifically, the effect is a reflection of a result of the function and the means is a prerequisite for the function.

As can be seen, technical function is an important factor that should be considered in division of technical features. In determination of equivalent features, it is not appropriate to combine and consider multiple technical features implementing different functions as a whole, or to split multiple technical features implementing a same function into individuals. In addition, *Guidelines for Patent Infringement Determination*<sup>2</sup> issued by the

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<sup>&</sup>lt;sup>1</sup> Equivalent feature refers to the feature that is able to implement basically same function with basically same means and attain basically same effect as compared with the descried technical feature and could be conceived by a person skilled in the art without inventive efforts.

<sup>&</sup>lt;sup>2</sup> Guidelines for Patent Infringement Determination can be used for reference by all levels of courts in Beijing to handle patent infringement cases.

Beijing High People's Court also make similar provisions<sup>1</sup>.

However, it should be noted that claim 1 of the involved patent only defines "five target drones," but the Supreme People's Court, based on the description of "on the panel, there are five target sites arranged in the order of head, chest, abdomen, each target site has a target drone" in the specification, divides the "five target drones" in claim 1 into a head target drone, chest target drones, and abdomen target drones. It is controversial whether such division belongs to a clarification of the meaning of the claim or brings a substantial change in content of the claim.

Some people think that interpretation of a claim by referring to the specification and appended drawings should be made with respect to the defect of unclear protection scope caused by any unclearness in the claim.<sup>2</sup> In this case, the feature of "five target drones" defined in claim 1 is clear itself, thus it should not be interpreted by referring to the content described in the specification. Further, replacing the "five target drones" in claim 1 with "head target drone, chest target drone, and abdomen target drone" according to the content described in the specification substantially changes the protection scope of the claim, which increases the unpredictability of protection scope of the claim and departs from the purpose of publication of claims.

But the judge handling the case clearly does not agree on this

<sup>&</sup>lt;sup>1</sup> Rule 5: a technical feature refers to a smallest technical unit or unit combination in technical solution defined in a claim that is able to implement relatively independent technical functions and can attain relatively independent technical effects.

<sup>&</sup>lt;sup>2</sup> For example, *Guidelines for Patent Infringement Determination* issued by Beijing High People's Court stipulates in Rule 11 that interpretation of a claim includes three forms, clarification, supplementation and amendments in particular circumstances, that is, when a technical content expressed by a technical feature in a claim is unclear, the meaning of the technical feature is clarified; and when there is defect in understanding of a technical feature of a claim, the technical feature is supplemented; and when there exists conflict between technical features of claims, the meaning of the technical feature is modified.

viewpoint. The judge reasoned that in this case, the specification describes a specific location of the five target drones, and a person skilled in the art, upon reading the specification, will naturally understand the "five target drones" defined in claim 1 as "a head target drone, chest target drones, and abdomen target drones," and such understanding is to clarify the meaning of the claim.

In summary, this case gives a useful guidance regarding how to divide technical features in application of the equivalent doctrine. As for determining whether interpretation of the claim in this case is reasonable, it involves a balance between benefits of the patentee and the public. This requires needs to consideration of various factors and requires comprehensive evaluation. For this case, the author thinks that a claim of a patent application should have a relatively stable protection scope, should not be interpreted freely with reference to the contents described in the specification, and especially for a clear claim, it should not substantively change the protection scope of the claim by incorporating features of embodiments described in the specification.

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# Device Having Replaceable Liquid Crystal Display Card

Shaohong LIU v. Junpei LIANG - The Standards for Determining an Equivalent Feature (Civil Judgment (2011) Min Shen Zi No.438 by the Supreme People's Court on March 9, 2012)

An equivalent feature is a feature that, as compared to the feature described in a claim, performs substantially the same function by substantially the same means, produces substantially the same effect, and can be associated by an ordinary person skilled in the art without any inventive work. While determining whether a prosecuted product falls within equivalent infringement, the means, function, effect, and inventive work should be determined in the above order. Only when all four elements of a feature meet the above conditions, the feature can be determined as an equivalent feature.

The patentee, Shaohong LIU, owns a utility model patent No. 02225694.6 titled "Device Having Replaceable Liquid Crystal Display Card", where claims 1 and 2 are as follows:

- "1. A device having a replaceable liquid crystal display card, including a case and a circuit board mounted therein, characterized in that, a display window within which a liquid crystal display card be plugged is provided on the case; the circuit board is provided with a microprocessor, a memory storing a plurality of different display types of programs and a display contact connected with a display output terminal of the microprocessor; the circuit board is provided with a conductive rubber strip, one side of which is pressed on the display contact and another side of which is conductively touched with pins of the liquid crystal display card directly.
- 2. The device of claim 1, characterized in that the circuit board is provided with a plurality of touching switches connected with the microprocessor, wherein one or more of the touching

switches can be triggered by a corresponding concave-convex element on an outer side of the liquid crystal display card to output a display type selection signal to the microprocessor."

A prosecuted product is a game console of YD693. Both parties disputed on whether the feature "a short-circuited point provided in the pins of the liquid crystal display card is connected with a program in-out coding contact via a conductive rubber strip, so as to deliver a display type selection signal to the microprocessor on a circuit board" in the prosecuted product belongs to an equivalent feature of the technical feature "the circuit board is provided with a plurality of touching switches connected with the microprocessor, wherein one or more of the touching switches can be triggered by a corresponding concave-convex element on an outer side of the liquid crystal display card to output a display type selection signal to the microprocessor" in claim 2 of the involved patent. There is no disagreement on other features.

The first trial gave a decision that the prosecuted product does not fall within the equivalent scope of claim 2 of the involved patent and there is no infringement. The second trial supported the decision of the first trial.

The patentee submitted a retrial request to the Supreme People's Court and claimed that the prosecuted product falls within the equivalent scope of claim 2 of the involved patent.

The Supreme People's Court made the following opinions after retrial, although the technical features "short-circuit point," "conductive rubber strip" and "program in-out coding contact" in the prosecuted product realize substantially the same functions as those of "concave-convex element" and "touching switch" in the involved patent, different means are employed and different technical effects are achieved. So, the prosecuted product does not fall within the equivalent protecting scope of the involved patent. Accordingly, the retrial request of the patentee was rejected.

### Remark

The Doctrine of Equivalent is an important principle in the patent infringement determination. It expands the literal infringement, reliefs the disadvantageous limits on claims by words and expressions, and provides the patentee with airer and more reasonable protection.

The Doctrine of Equivalent was proposed for the first time in China in Certain Provisions of the Supreme People's Court on Issues Concerning the Application of Law in the Hearing of Patent Dispute Cases. According to this provision, "during determining whether a technical feature of a prosecuted product and a patent technical feature are equivalent, it needs not only to consider whether or not the technical feature of the prosecuted product is a technical feature an ordinary person skilled in the art can conceive without any inventive work, but also needs to consider whether or not the technical feature of the prosecuted product, compared with the patent technical feature, is substantially the same means, performs substantially the same function and achieves substantially the same effect. Only when the conditions in the above two aspects are met at the same time, the technical feature of the prosecuted product and the patent technical feature can be determined as equivalent technical features." 2

In the practice of judicial judgment, the abuse of the Doctrine of Equivalent would expand the patent protection scope of the patentee improperly, and injure the public interest. To prevent the abuse of the Doctrine of Equivalent, conditions of applying the Doctrine of Equivalent shall be limited strictly. Namely, "having substantially the same means, function and effect and being obvious to an ordinary person skilled in the art are necessary conditions for

<sup>&</sup>lt;sup>1</sup> As stipulated in Paragraph 2, Rule 17, an equivalent feature is a feature that, as compared with the feature described in a claim, performs substantially the same function by substantially the same means, produces substantially the same effect, and can be associated by an ordinary person skilled in the art without any inventive work.

<sup>&</sup>lt;sup>2</sup> See the Civil Judgment No.(2010) *Min Shen Zi* No. 181 by the Supreme People's Court, *Shanxi Jingye Fiberglass Co.,Ltd. v. Yongchang Jishui Composite Material Co.,Ltd.* 

the equivalent infringement." <sup>1</sup> The patentee should provide evidence to prove or explain sufficiently that the prosecuted product and the involved patent meet all of the above conditions; and the prosecuted infringer can contend that there is no equivalent infringement as long as he/she puts in a plea that the prosecuted product does not meet any one of the above conditions against the involved patent.

When judging an infringement by applying the Doctrine of Equivalent, a corresponding technical feature in the prosecuted product should be found with reference to a technical feature in the involved patent. A two-step method can be used to judge whether there is an equivalent infringement. In the first step, it is determined whether the two features are substantially the same in terms of means, functions and effect. If so, go to the second step. If the two features are not substantially the same in either means, functions, and effect, it can be concluded that the two features do not belong to equivalent features. In the second step, the question of whether the corresponding technical feature in the prosecuted product is easily contemplated must be determined. If it is not easily contemplated, it can be concluded that there is no equivalent infringement. If it is easily contemplated, it can be concluded that there is an equivalent infringement.

In the present case, the judge explained in detail whether the technical feature (technical feature A hereafter) consisted of "short-circuit point," "conductive rubber strip," and "program in-out coding contact" in the prosecuted product and the technical feature (technical feature A' hereafter) consisted of "concave-convex element" and "touching switch" in the involved patent are equivalent.

Viewed from the function, the function realized by the technical feature A' of claim 2 in the involved patent utilizes the

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<sup>&</sup>lt;sup>1</sup> See the Opinions of the Supreme People's Court on Issues concerning Maximizing the Role of Intellectual Property Right Trials in Boosting the Great Development and Great Prosperity of Socialist Culture and Promoting the Independent and Coordinated Development of Economy issued by the Supreme People's Court on Dec 16, 2011.

concave-convex element on the outer side of the liquid crystal display card to trigger the touching switch on the circuit board so as to deliver a display type selection signal to the microprocessor, i.e., a signal output function.

Viewed from the means, the way to realize a signal output function by the prosecuted product involves in connecting the short-circuit point provided in the pins of the liquid crystal display card with a program in-out coding contact via a conductive rubber strip, so as to deliver a display type selection signal to the microprocessor on a circuit board. Except for the signal input function as above, the "conductive rubber strip" in the prosecuted product also has the same function as the element "conductive rubber strip" in claim 2 of the involved patent, i.e., delivering the display output signal of the microprocessor to the liquid crystal display card via the pins of the liquid crystal display card.

Viewed from the effect, since the "conductive rubber strip" in the prosecuted product has both the signal input and output functions, compared with the involved patent, the prosecuted product reduces elements, simplifies the structure, and makes the input and output more stable and reliable. Thus, the technical effect achieved by the prosecuted product is different from that of the involved patent.

Therefore, the technical feature A in the prosecuted product and the technical feature A' in the involved patent do not constitute equivalent features.

Moreover, in China, the time for determining an equivalent infringement is a date on which the infringement took place. However, some opinions from the court say that, for claims including functional features, the time point of equivalent determination shall be the application date of the patent, and for

of the corresponding technical feature for realizing the function are

<sup>&</sup>lt;sup>1</sup> See Rule 54 of Guidelines for Patent Infringement Determination issued by the Beijing High People's Court: As to a claim including functional features, if not only a corresponding technical feature in the prosecuted technical solution realize the same function, but also the structure and steps

other claims, the time point of equivalent determination shall be a date on which the infringement took place<sup>1</sup>.

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equivalent with the structure and steps in the embodiments recited in the specification of the patent, it can be determined that they constitute equivalent features. The time point to determine the equivalent shall be the application date of the patent.

See Rule 52 of Guidelines of Patent Infringement Determination issued by the Beijing High People's Court, The time point to determine whether a technical feature of the prosecuted technical solution and a technical feature of a claim are equivalent shall be the date on which the prosecuted act took place.

## **Steering Engine**

Zhongyu electronics (Shanghai) Co.,Ltd. v. Shanghai Nine Eagle Electronic Technology Co.,Ltd. - Condition to Apply the Doctrine of Estoppel (DOE) (Civil Judgment (2011) Min Ti Zi No.306 by the Supreme People's Court on April 12, 2012)

The Interpretation of the Supreme People's Court on Several Issues concerning the Application of Law in the Trial of Patent Infringement Dispute Cases stipulates, in Rule 6, "where the applicant or patent right owner abandons a technical solution through amendments to the claims and/or specification or observations during the prosecution of the application or the invalidation proceedings of the patent, the court shall not support the right owner's claim of reclaiming the abandoned technical solution back into the protection scope in the infringement litigation case." Therefore, application of the DOE is premised with a condition that the right owner has abandoned the technical solution through amendments or observations during the patent prosecution or invalidation proceedings. The key issue presented in this case is that abandonment is not justified unless the patent owner has the intention to abandon by amendments or observations.

The patent owner, Zhongyu electronics (Shanghai) Co.,Ltd. (hereinafter referred to as "Zhongyu"), brought a lawsuit for patent infringement against Shanghai Nine Eagle Electronic Technology Co.,Ltd. (hereinafter referred to as "Nine eagle"). The patent owner holds a patent for utility model No. ZL200720069025.2 titled "Steering Engine" including six claims. Its claim 3 recites,

"The steering engine of claim 2 wherein a strip of carbon film and silver film is printed on the driving circuit board of the steering engine, said bracket is secured to the driving circuit board of the steering engine via a securing aperture thereon, and the electric brush on the bottom side of the slider keeps in touch with the carbon film and the silver film."

Claim 2 depends from the independent claim 1 whereas neither

of them has defined the driving circuit board or any parts thereon. The allegedly infringing product differs from claim 3 in that a strip of carbon film and a gilded copper strip, instead of the silver film, are printed on the driving circuit board of the allegedly infringing product. Both the plaintiff and defendant agreed that the silver film and the gilded copper strip were equivalent to each other. The defendant made a prior art defense.

In the invalidation proceedings of the asserted patent, claims 1-2 and 4-6 were declared invalid while claim 3 was maintained valid in the Decision on Request for Invalidation No. 13717 made by the Patent Reexamination Board.

The first instance judgment ascertained the equivalent infringement of the alleged product based upon claim 3, but rejected the plaintiff's claim on merit of the defendant's prior art defense.

The second instance judgment rejected application of the doctrine of equivalence on merit of the DOE, although it concurred that the silver film and the gilded copper strip constituted equivalent technical features. In particular, the second instance court held that maintenance of validity of claim 3 by the Decision on Request for Invalidation essentially implied amendment to claim 1 by adding the features of claims 2 and 3 to claim 1. On such ground, the second instance court identified it as restrictive amendment to the claims for a purpose of maintaining validity of the patent. The added feature restricted the current conducting strip, used as a straight line-type variable resistor on the driving circuit board of the steering engine, to the silver film, implying the patentee's abandonment of other types of material to be used as the current conducting strip. Therefore, equivalent infringement cannot be established. Nevertheless, the second instance court sustained the prior art defense.

The patentee filed for a retrial upon dissatisfaction with the second instance's judgment. The Supreme Court rejected application of the DOE by the second instance court and concluded equivalent infringement. First, the Supreme Court set forth that the DOE is based upon the principle of good faith. The patent applicant usually

tends to expedite granting of patent right by restrictive observation or amendment during the prosecution, and hopes to reclaim the abandoned technical solution back into the protection scope on merit of equivalent infringement during the litigation. To keep the stability and certainty of the granted patent right, the legal system prevents the patentee from benefiting from both sides by abusing the DOE. Second, the Supreme People's Court clarified the condition upon which the DOE is applied. Generally, the DOE is triggered by abandonment of technical solution(s) through either amendments to the specification and/or claims or observations. The Supreme People's Court pointed out that the subject matter and protection scope of a dependent claim would not change with invalidation of the claim from which it depended, and accordingly overruled the grounds of the second instance judgment that maintenance of validity of claim 3 essentially equaled amendment to claim 1. Moreover, it was elaborated by the Supreme People's Court that abandonment stems from restriction to the protection scope of a claim by adding technical feature(s) or restrictive observations on the protection scope of a claim made by the patent applicant voluntarily or in response to the examiner's requirement during the prosecution or invalidation proceedings. In a situation where the independent claim is declared invalid while the dependent claim is maintained valid by the Patent Reexamination Board and the applicant has never made any abandonment as described above, full attention should be paid to the condition that the applicant has not intended to abandon, and thus a strict criteria should be taken to determine abandonment while applying the DOE. If the additional feature of a dependent claim is not encompassed by the independent claim it depends on, it is not justified to say that any technical solutions excluding the additional feature have been totally abandoned, as the additional feature does not have a basis in the original independent claim. Specifically, the silver film recited in claim 3 of the asserted patent had not been defined in claims 1-2. The patentee didn't abandon any technical solutions using other conducting materials than the silver film as the current conducting strip by amendments to the specification and claims or observations. Therefore, it was inappropriate to prevent the doctrine of equivalence from being applied to interpret the additional feature concerning the silver film simply because claims 1-2 were declared

invalid. Meanwhile, the Supreme People's Court held for the infringement instead by rejecting the defendant's prior art defense.

#### Remarks

This case elucidates the conditions upon which the DOE is applied in China, especially where independent claims are declared invalid but dependent claims are maintained valid.

The Interpretation of the Supreme People's Court on Several Issues concerning the Application of Law in the Trial of Patent Infringement Dispute Cases stipulates, in Rule 6, "where the applicant or patent right owner abandons a technical solution through amendments to the claims and/or specification or observations during the prosecution of the application or the invalidation proceedings of the patent, the court shall not support the right owner's reclaiming of the abandoned technical solution back into the protection scope in the infringement litigation case." In other words, application of the DOE is premised with a condition where the right owner has abandoned the technical solution(s) through amendments or observations during the prosecution or invalidation proceedings of the patent.

First of all, this case clarifies that the claims should not be interpreted as having been narrowed in the protection scope when the independent claims are declared invalid but the dependent claims are maintained valid. Each of the claims, either independent or dependent, defines a separate and complete technical solution, despite the difference in drafting format. Accordingly, it is inappropriate to pose any restriction to the protection scope of a dependent claim simply because the independent claim on which the dependent claim depends is declared invalid.

Second, this case restates the condition on which abandonment of technical solution(s) by the patentee is ascertained. Specifically, the condition is that the patentee has restricted the protection scope of the claims, either voluntarily or in response to the examiner's requirement, through claim amendments or restrictive observations during the prosecution or invalidation proceedings of her/his patent.

In a situation where the independent claim is declared invalid while the dependent claim is maintained valid by the Patent Reexamination Board and the applicant has never made any voluntary abandonment as described above, full attention should be paid to the condition that the applicant has not made intentional abandonment and a strict criteria should be taken when determine abandonment while applying the DOE. If the additional feature of a dependent claim is not encompassed by the independent claim which it depends on, it is not justified to determine total abandonment of any technical solutions excluding the additional feature, because it does not have a basis or counterpart in the original independent claim.

Here, it is also noted that the DOE should not be applied in a rigid manner, but depending on the genuine intention and purpose for which the patent owner makes claim amendments or observations in individual cases. The Interpretation II of the Supreme People's Court on Several Issues concerning the Application of Law in the Trial of Patent Infringement Dispute Cases (Draft for Public Comments), released on July 31 2014, stipulates, in Rule 16, "where the applicant or patentee makes amendments to the claims and/or specification or observations during the prosecution and affirmation of the patent right, the court should repudiate abandonment of any technical solution(s) due to the amendments or observations if the right owner can prove that the amendments and observations were not adopted by the examiner or had nothing to do with the granting or affirmation of the patent right despite the alleged infringer's allegation that the abandoned technical solution in this scenario should be excluded from the protection scope of the patent right." Attention will be continuously paid upon the application of the DOE.

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## Method of Manufacturing a Multi-layer Metal Pattern

Shichang XU v. Sony (China) Co. Ltd. et al. - Judgment of Infringement upon Patented Process through Comparison between Products (Civil Judgment (2012) Yue Gao Fa Min San Zhong Zi No. 624 by the Guangdong High People's Court on December 19, 2012)

A method patent is different from a product patent in that it protects a dynamic operation process. How to compare between the method used by the defendant and the patented process is a key point when the court tries an infringement case involving a process patent. In this case, by finding the technical feature difference of the products, the court held that the two processes are neither identical nor equivalent and thus the defendant does not infringe upon the plaintiff's patent. This shows a new way for judging infringement upon a process patent.

The patentee, Shichang XU, owns a patent with No. ZL 92100257.2 titled as "Method of Manufacturing a Multi-layer Metal Pattern." The lawsuit was filed based on Claim 1 as follows:

"a method of manufacturing a multi-layer metal pattern, which is implemented by engaging one or more modes that is not in sets, each mold is provided with layered figure processed to required metal pattern and each mold is provided with positioning points corresponding to each other so as to facilitate alignment and superposing of each mold, wherein firstly grinding the non-conductive substrate surface, degreasing for standby, aligning and superposing the molds, printing the color printing ink or metal foil powder in the film, then thermally transferring onto predetermined surface of the non-conductive substrate, and then aligning and superposing the molds again and coloring and degreasing one or more times as needed and then washing away thermal transferred ink or metal foil powder, and then aligning and superposing

the molds again and printing the desired pattern on the electrically conductive ink and then electroforming, i.e. plating metal pattern of the desired thickness, and again degreasing, cleaning, drying, and finally being coated with a transparent resin to protect the metal pattern made."

Shichang Xu accuses that Sony (China) Co.,Ltd. (hereinafter "Sony") manufactures, sales, and offers for sale, Shenzhen Suning Appliance Co.,Ltd. (hereinafter "Suning Appliance") sales, and Wistron Infocomm (Kunshan) Co.,Ltd. (hereinafter "Wistron") manufactures, sales the allegedly infringing products and infringed his patent right.

The focus of this case is whether the accused process falls within the protection scope defined by Claim 1 of the patent.

The second instance court held that: A process would have certain relation to a product; therefore products not having the same nor equivalent technical features shall correspond to different manufacture method. The second instance court made physical destruction of the accused product and found that the product manufactured by the accused method is different from the product manufactured by the patented process.

In detail, the patentee admitted that the accused product has the technical feature of "on the non-conductive substrate (i.e., the surface of the laptop), the metal pattern was formed with metal material of smooth surface by punching." However, according to Claim 1, the product obtained by the patented method has the technical feature of "the surface of the non-conductive substrate has metal pattern of a certain thickness by plating." By Comparison, at least one technical feature is neither identical nor equivalent, so the two products are different from each other. Base on this, the second instance court also made comparison between the manufacture process described in the notarized video submitted by Sony and the patented process. The court finds that at least one technical feature of the accused manufacturing process is different from the patented process of Claim 1, thus the accused manufacture process cannot cover all the technical features of Claim 1.

The patentee further argues that the technical feature "punch" in the accused manufacture method and the technical feature "plating" in patented process are not identical but constitute equivalent. With respect to this, according to Rule 17.2 of the Certain Provisions of the Supreme People's Court on Issues Concerning the Application of Law in the Hearing of Patent Dispute Cases issued by the Supreme People's Court (the SPC), the second instance court holds that the two features should be physical means and electrochemical means respectively, thus the formed patterns are different. This means the technical means and the results thereof are neither identical nor equivalent.

#### Remarks

The second instance court shows a new way for judging infringement upon a patented process. This case is enlightening in that it indicates that products not having the same or equivalent technical features shall correspond to different manufacture method. Thus, in order to determine whether the accused method and patented process are identical or equivalent, it would be useful to see the products first. That is, comparing the product manufactured according to the patented process with the product manufactured by the accused method, and determine whether the latter has different technical feature from the former

Regarding equivalence argued by Shichang Xu, according to Rule 17.2 of the Certain Provisions of the Supreme People's Court on Issues Concerning the Application of Law in the Hearing of Patent Dispute Cases issued by the SPC, an equivalent technical feature refers to the feature achieve substantially the same function, obtain substantially the same effect by substantially the same means as the disclosed technical feature, and a skilled person in the art can easily conceive the technical features without inventive work. In this case, the second instance court believes that, for the metal pattern formed by stamping and sticking and the pattern formed by plating means the means used to obtain are different (physical vs. electrochemistry), and have different effects (two patterns are different in terms of integrity, finish and attachment tightness).

Therefore, the accused manufacture method and the patented process do not constitute as equivalent.

This case reminds us of the limited protection by a process patent. When applying for a patent, the applicant may get maximum protection by submitting both a product claim and the method claim thereof. When the accused product falls within the scope of the claimed product, even if the accused product were made by different method, the infringement would be established. This shows an absolute protection. However, for a method claim, its effectiveness only extends to the product directly obtained by the patented method. Even if the product made by the other party is the same as the product directly obtained by the patented method, it still probably does not infringe the patent because the other party actually uses a method different from the patented process.

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## **Corrugated Pipe Manufacturing Equipment**

Manfred A. A. Lupke v. Weifang Zhongyun Machine Co.,Ltd. et. al. - Allocation of the Burden of Proof (Civil Ruling (2012) Min Shen Zi No. 39 by the Supreme People's Court on December 18, 2012)

Article 64 of the Civil Procedure Law of the People's Republic of China provides that it is the duty of a party to an action to provide evidence in support of his allegations, namely the doctrine of "burden of proof on claimant." According to Article 2.2 of Some Provisions of the Supreme People's Court on Evidence in Civil Procedures, in the event that there is no evidence or the evidence cannot sufficiently support allegations of a party concerned, the party having the burden of proof shall bear the ensuing adverse consequences. The doctrine of "burden of proof on claimant" is the general rule on the allocation of burden of proof. However, according to Article 75 of Some Provisions of the Supreme People's Court on Evidence in Civil *Procedures*, where there is evidence proving that a party concerned refuses to provide without any justifiable reasons the evidence that he actually has, and the opposite party alleges that contents of such evidence are disadvantageous to the evidence holder, such allegation can be construed as justifiable. The controversial focus of the case is on the allocation of burden of proof.

The patentee Manfred A. A. Lupke (hereinafter referred to as "Lupke") owning an invention patent No. ZL95192937.2 brought a lawsuit before the Tianjin Intermediate People's Court against Weifang Zhongyun Machine Co.,Ltd. (hereinafter referred to as "Zhongyun Machine") as the producer of a corrugated pipe manufacturing equipment, and Tianjin Shengxiang Plastic Pipe Industry Co., Ltd. (hereinafter referred to as "Shengxiang Industry") as the user of the equipments, alleging that the corrugated pipe manufacturing equipment produced by Zhongyun Machine has infringed the patent. The alleged infringer Zhongyun Machine was not satisfied with the judgment of the second instance rendered by the Tianjin High Court, requested the Supreme People's Court for

retrial.

In this case, one of the arguments that Zhongyun Machine presented for retrial can be outlined as follows: the technical drawings of the alleged equipment had been provided to Shengxiang Industry, and the equipment had not been produced for many years. Zhongyun Machine did not archive the drawings, so it became impossible to offer the drawings. Therefore, Zhongyun Machine should not bear the ensuing adverse consequences of infringement just because of Shengxiang Industry's refusal to cooperate in the appraisal. As a result, the judgment of the second instance erred in the allocation of burden of proof.

Regarding the controversial focus on the allocation of burden of proof in the judgment of second instance, the Supreme People's Court's opinions are outlined below:

The alleged equipment at issue is of high value and large volume, and actually under the control of Shengxiang Industry, so it is indeed difficult for Lupke to collect evidence by himself. To prove the producer and user's infringement of patent right, Lupke has presented the relevant notarial deed, the photos taken by the court for evidence preservation, the technical experts' evaluation opinions on patent infringement and so on as evidence to the court of the first instance, and has exhausted all possible legal methods to collect evidence, hence fulfilled the duty to provide evidence to a reasonable extent. In order to further find out more facts of the case. Lupke applied for technical appraisal to the court of the first instance. After the court of the first instance entrusted technical experts, the user of the equipment responded that the alleged equipment had been out of operation, no longer in use, and disagreed to disassemble the equipment for the reason that the equipment is too large to disassemble and the down time of the equipment is too long. After Lupke agreed to provide guarantee for the losses caused by cease of production, the Shengxiang Industry still refused to accept expert evaluation without justifiable reasons. Also, in view of the high value of the alleged equipment, it is obviously contrary to common sense that the producer cannot provide the drawings on the grounds that the equipment was

produced years ago. In the event that the patentee had fully fulfilled the burden of proof to the extent of its capacity and the existing evidence sufficed to prove the prima facie case of the infringement, without justifiable reasons, the producer and the user, on the one hand, refused to either provide the drawings of the alleged equipment or to cooperate in the appraisal, causing the appraisal impossible to normally proceed, and on the other hand, failed to provide any other evidence to prove that the alleged equipment differs from the patent at issue and hence does not fall into the extent of protection of the patent. Therefore, the infringers shall bear the ensuing adverse consequences of infringement. It is justifiable for the court of the second instance to presume the establishment of the patentee's allegation according to the provisions of Article 75 of Some Provisions of the Supreme People's Court on Evidence in Civil Procedures. Zhongyun Machine's argument for retrial that the court of the second instance erred in allocate the burden of proof and therefore it should not bear the ensuing adverse consequences is not tenable.

#### Remarks

This case relates to the issue of reasonable allocation of the burden of proof in a patent infringement lawsuit. Among the general rules on evidence, the doctrine of "burden of proof on claimant" is the general rule on allocation of the burden of proof. According to the provisions of Article 75 of Some Provisions of the Supreme People's Court on Evidence in Civil Procedures provides, where there is evidence proving that a party concerned refuses to provide without any justifiable reasons the evidence that he actually has, and the other party alleges that contents of such evidence are disadvantageous to the evidence holder, such allegation can be construed as justifiable, namely, "inversion of burden of proof."

In this case, the Supreme People's Court has considered the application of the above-indicated provisions from the following two aspects:

First, whether the patentee has fulfilled the burden of proof to a reasonable extent. Under the preconditions that the alleged equipment is of high value and large volume, and actually under the control of the user, the Supreme People's Court holds that the patentee has fulfilled the burden of proof to a reasonable extent by presenting the relevant notarial deed, the photos taken by the court for evidence preservation, the technical experts' evaluation opinions on patent infringement and so on as evidence to the court of the first instance, which cover basically all the possible legal methods to collect evidence.

Second, whether the alleged infringer refuses to provide without any justifiable reasons the evidence that it actually holds has been considered. The deposition for evidence preservation for the alleged equipment in the first instance court shows that Shengxiang Industry admitted that the alleged equipment was purchased from Zhongyun Machine. In the court hearing of the first instance, Zhongyun Machine also acknowledged that the alleged equipment was made by the company. The aforesaid facts show that the alleged infringers Zhongyun Company and Shengxiang Industry held the key evidence of the case. However, the reason for refusal to disassemble the equipment given by Shengxiang Industry is not convincing. Even after the patentee agreed to provide guarantee for the losses caused by cease of production to Shengxiang Industry, Shengxiang Industry still refused expert evaluation. Zhongyun Machine's argument that the drawings could not be offered as the equipment had been produced years ago was also considered as obviously contrary to common sense.

The patentee had fully fulfilled the burden of proof to the extent of its capacity, and the existing evidence sufficed to prove the prima facie case of the infringement; meanwhile the alleged infringer refused, without justifiable reasons, to provide evidence, causing the appraisal impossible to normally proceed, let alone proving that the alleged infringing equipment is different from the patent at issue. In view of these facts, the second instance court's retrial was correctly held applying Article 75 of Some Provisions of the Supreme People's Court on Evidence in Civil Procedures.

This case provides a valuable precedent on how to enforce patent right under the circumstances where it is difficult for a

patentee to collect evidence on patent infringement. It also reflects the court's thought process on application of the "inversion of burden of proof" rule under the specific circumstances in the patent infringement proceedings. From the perspective of justifying the application of the inversion of burden of proof, a patentee, as a claimant in a patent infringement lawsuit, shall fulfill the duty to provide evidence to a reasonable extent by exhausting all legal methods to collect evidence, such as providing relevant notarial deed, applying for preservation of evidence, applying for technical appraisal, and providing technical experts' evaluation opinions on patent infringement. The inversion of burden of proof greatly reduces the patentee's risk of failure on burden of proof, and may reverse the patentee's unfavorable situation in enforcing patent right.

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# Retroreflective Article and Method of Making the Retroreflective Article

3M Company v. Zhejing Daoming Investment Co., Ltd. - Patentee's Burden of Proof in Infringement Case Involving Patented Process for Obtaining New Product (Civil Judgment (2011) Hu Gao Min San (Zhi) Zhong Zi No.73 by Shanghai High People's Court on May 2, 2012)

According to Article 61, Paragraph 1 of the *Chinese Patent Law* (2009), a patentee may choose to shift its burden of proof for infringing process to the defendant when the patented process is for obtaining new product. However, to take use of such convenience, the patentee has to satisfy some preconditions. This case illustrates that the patentee have to submit preliminary evidence regarding "new product." Based on this case, this article will discuss all the preconditions for application of Article 61, Paragraph 1 with an overview.

3M Company (hereinafter "3M") owns a Chinese invention patent (No. ZL95193042.7) named as "Retroreflective Article and Method of Making the Retroreflective Article". 3M sued Zhejing Daoming Investment Co., Ltd. (formerly Zehjiang Daoming Reflective Material Co., Ltd., hereinafter "Zhejinag Daoming") for its products infringing Claims 1, 17 and 19 and the manufacture process infringing Claim 10 of its patent.

Claim 10 is the method of making the retroflective article as claimed in the same patent. Regarding the infringement upon Claim 10, the Court requires 3M to provide evidence to prove that its patented process is for obtaining a new product. Since 3M petitions to shift the burden of proof to Zhejiang Daoming. 3M and the Court differs as follows:

3M argues that the No. 15959 Invalidation Decision of the Chinese Patent Review Board (the PRB) rendered on December 27, 2010 maintained the validity of the patent. Such decision has confirmed the novelty and inventiveness of the patent and fulfils the

burden of proof regarding new product. Since Zhejiang Daoming does not furnish proof showing that its manufacture process is different from the patented process, the infringement should be established.

The Court of the first instance held that: to shift the burden of proof, the patentee has to satisfy some preconditions. In this case, the PRB's decision cannot waive the 3M's submission of such evidence. The patentee still needs to prove its product or the manufacture process has not been known by the public prior to the application date of the patent. Since 3M does not provide the evidence regarding its new product, the burden of proof for infringement cannot be shifted to Zhejiang Daoming. 3M should bear the unfavorable consequences of no infringement.

Thus, the Court of the first instance held that the infringement of Zhejiang Daoming based on claim 10 is not established due to lack of evidence. The court of the second instance affirmed.

### Remarks

First, according to Article 61, Paragraph 1, of the *Chinese Patent Law* (2009), where any infringement dispute relates to an invention patent for a manufacture process of a new product, the defendant manufacturing the identical product shall provide proof to show that the process of the product is different from the patented process. Based on this provision, there are two preconditions to the application of this Article: the infringement involves "new product," and the sued infringer manufactured the "identical product."

The first question is what kind of product should be deemed as "new"?

According to Rule 17 of Interpretations of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent issued by the Supreme People's Court (SPC), if the product or the manufacture process thereof has been known to the public, the people's court should not deem such product as new product under Article 61, Paragraph 1 of the Chinese

Patent Law (2009). In view of this, the patentee must establish that the product or the manufacture process thereof has not been known to the public. Common practice tells us the proof of such non-occurrence is difficult to provide as there usually has no evidence left for submission. In light of the foregoing, the difficulty in proof of "new product" is obvious.

In 2012, the SPC's retrial case for Xi'an Qinbang v. Wuxi Longsheng has given more practical opinions. The SPC held that: if the manufacture process brings the resulted product's new structural feature(s) which is/are different from the similar product prior to the application date of the patent, the resulted product should be deemed as new product in Article 57, Paragraph 2 of the Chinese Patent Law (2001).<sup>2</sup>

In Guidelines for Judgment on Patent Infringement issued by the Beijing High People's Court in September, 2013 (hereinafter BHPC's Guideline), opinions are provided regarding "new product" which refers to the product first manufactured and has significant difference in terms of composition, structure, or quality, property and function from the similar products prior to the application date of the patent.

Regarding the "new product," we are of the view that some aspects below may deserve attention:

1. "New product" does not share the same meaning of "novelty" of patentability. With reference to the Article 34, Paragraph 1 for shift of burden of proof and Article 27, Paragraph 1 for patentability of the Agreement On Trade-related Aspects of Intellectual Property Right (TRIPS), both use "new" instead of different words.<sup>3</sup>

Xi'an Oinbang Telecom Material Co., Ltd. v. Wuxi Longsheng Cable Material Co., Ltd., SPC (2012) MinTi Zi No.3 (August 24, 2012).

The *Chinese Patent Law* (2001) applied in this retrial case has been amended in 2008 and Article 57, Paragraph 2 thereof corresponds to the Article 61, Paragraph 1 of the current *Chinese Patent Law* (2009).

<sup>&</sup>lt;sup>3</sup> Article 34, Paragraph 1:...Therefore, Members shall provide, in at least one of the following circumstances, that any identical product when produced without the consent of the parent owner shall, in the absence of

However, in a piece of document from the WIPO in 1986 regarding Article 24 of *Patent Law Treaty* (similar to Article 34, Paragraph 1 of TRIPS <sup>1</sup>), it indicates that "new product" means absolute (worldwide) sense but does not necessarily have the same meaning as the term 'new' in the context of novelty and in particular, the product pending but not yet published patent application should not be deemed as lacking novelty for the purpose of the "reversal of the burden of proof."

2. The comparison standard for novelty may be used as reference in judging "new product." Although, BHPC's Guideline sets forth that the difference between "new product" and the similar products prior to the application date of the patent should be "significant," in the retrial case of *Xi'an Qinbang v. Wuxi Longsheng*, the SPC held that "different" fulfils.

Considering the practicability, it may be easier to take use of the comparison standard regarding the examination of novelty. If the standard for "new product" was set higher than that for "novelty," it would be complicated to judge what kind of "significant difference" should be recognized and it may involve the examination of "inventiveness." However, we are of view that, the application of Article 61, Paragraph 1 of the *Chinese Patent Law* (2009) should not

proof to the contrary, be deemed to have been obtained by the patented process: (a) if the product obtained by the patented process is *new*.... Article 27, Paragraph 1: Patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are *new*, involve an inventive step and are capable of industrial application.

1. Nume Pires de Carrelbo, The TRIPS Paging of Patent Pights, Klauser.

<sup>&</sup>lt;sup>1</sup> Nuno Pires de Carvalho, The TRIPS Regime of Patent Rights, Kluwer Law International, 2005, P386.

<sup>&</sup>lt;sup>2</sup> "It appears that the term 'new' is meant in the absolute (worldwide) sense but does not necessarily have the same meaning as the term 'new' in the context of novelty as a condition of patentability (see paragraph 52). In particular, products which are the subject of pending but not yet published patent applications and which therefore are considered as prior art in respect of subsequent patent applications (see document HL/CE/III/2 Supp. 3), do not seem to be treated as lacking novelty for the purposes of the reversal of the burden of proof.", WIPO document HL/CE/III 2 Supp. 4 of November 27, 1986, from Nuno Pires de Carvalho, The TRIPS Regime of Patent Rights, Kluwer Law International, 2005, P386.

be dependent on the "significance" of difference of the patented product from the similar products or the inventiveness thereof.

3. What kind of evidence could serve as "preliminary evidence"? It is worth noting that the patent's validity in this case had been maintained by the PRB. However, the Court did not waive 3M's burden of proof for submission of "preliminary evidence."

According to the PRB's invalidation Decision No. 15959, it is Zhejiang Daoming filing the invalidation request based on the ground such as inventiveness, lack of clarity. Although novelty is not raised as an argument, a patent should have novelty if it is deemed as inventiveness. We are of the view that the burden to submit such "preliminary evidence" should not be too strict, because it is easier for the defendant to provide rebuttable evidence. Thus, to exclude the PRB from using the "preliminary evidence" in invalidation decision remains for the public's discussion.

In addition, a judge comments in his article (not regarding this case) that, a patentee could submit a Search Report, and the Court may judge based on preponderance of evidence in favor of the patentee. Besides, for a patent involving drug, the patentee could consider submitting the court documents and materials to China Food and Drug Administration for new drug approval.

Second, a patentee should notice the difficulty of proof for manufacture of "identical product" under some circumstances.

In the SPC retrial case of ZHANG Xitian v. Ouyi Pharmaceuticals Co., Ltd. in 2010,<sup>2</sup> the SPC decides that: when deciding whether a process patent is the patent of manufacture process for new product, it should be based on "the product directly obtained by the patented process." "The product directly obtained by the patented process" is the original product obtained by the

<sup>2</sup> ZHANG Xitian v. Ouyi Pharmaceuticals Co., Ltd., et. al., SPC (2009)Min Ti Zi No. 84 (September 9, 2010)

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Jun TAO, The recognition of new product and allocation of burden of proof in infringement case of process patent. Intellectual Property Right Daily, 2013-09-11, Page 008.

patented process and does not include the product obtained by further process of the original product.

In the case of ZHANG Xitian v. Ouvi Pharmaceuticals Co., Ltd., "D-Tartrate of S-(-)-Amlodipine in combination of one DMSO-d6" is the product directly obtained by the process of Claim 1. Although, ZHANG Xitian provides the evidence proving the defendants Amlodipine Maleate manufactured and its tablets S-(-)-Amlodipine as raw material, he cannot submit the evidence that the defendants manufactured "D-Tartrate of S-(-)-Amlodipine in combination of one DMSO-d6" ("D-Tartrate of S-(-)-Amlodipine in combination of one DMSO-d6" is a kind of intermediate for manufacture of S-(-)-Amlodipine). Thus, the SPC rejected Zhang Xitian's petition for his failure to prove the defendants manufactured the identical product with the product directly obtained by the patented process. The burden of proof shall not be shifted to the defendants even if the defendant's process is different from the patented process.

From the retrial case above, we understand that the patentee needs not only to prove the product directly obtained by the patented process is a "new product," but also to prove that the defendant manufactured "identical products" instead of "the product using the identical products." Another article indicates that the case of ZHANG Xitian v. Ouyi Pharmaceuticals Co., Ltd. limited the application of Article 61, Paragraph 1 of the Chinese Patent Law (2009). In accordance with this case, if the product directly obtained by the patented process ("original product") is the intermediate for a drug, it is hard to discover whether the sued infringing product contains the intermediate. Even if it is confirmed by technical analysis that the intermediate is contained, it is still hard to prove that the defendant manufactured the intermediate.

Based on the above, the convenience under Article 61, Paragraph 1 of the *Chinese Patent Law* (2009) is still open for

<sup>&</sup>lt;sup>1</sup> Huaiwen HE, "Extended protection" and reversal of burden of proof in respect of patented process for obtaining new product: comments on the Supreme People's Court's review of Zhang Xian Case, China Patents and Trademarks No.2, 2011, Page 3-10.

observation in practice and the concepts and standard for this provision need to be further clarified. Patentee should not overlook its own burden of proof regarding "new product" and "manufacture of the identical product."

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## Rear Derailleur Bracket

Shimano Inc. v. Ningbo Sunrun Industry & Trade Co., Ltd. - Limitation of Usage Environment Feature on Protection Scope of Claims (Civil Judgment (2012) Min Ti Zi No.1 by the Supreme People's Court on December 11,2012)

The usage environment feature refers to a technical feature for describing the environment or conditions under which an invention is applied. The usage environment feature included in a claim is a part of the essential technical features of the claim, contributes to define the protection scope of the claim, and thus shall be considered when determining the protection scope of the claim.

Shimano Inc. ("Shimano" hereinafter) is the patentee of the invention patent No. *ZL94102612.4* (hereinafter "the '612 Patent"), titled "Rear Derailleur Bracket". The allowed claim 1 of the '612 Patent is as follows:

"1. A bicycle rear derailleur bracket for connecting a rear derailleur (100) to a bicycle frame (50), wherein the rear derailleur is provided with a bracket member (5), a supporting member (4) for supporting a chain guide device (3), and a pair of links (6 and 7) for connecting the bracketing member (4) with the bracket member (5), the bicycle frame is provided with a connection structure (14a) which is formed on a derailleur mounting extension (14) of a rear fork end (51) of the bicycle frame, and the rear derailleur bracket comprises a bracket body (8) which is formed by an approximately L-shaped plate, a first connection structure (8a) which is arranged adjacent one end of the bracket body (8) for connecting the bracket member (5) of the rear derailleur (100) to the bracket body (8), and which is capable of pivoting around a first axis (91), a second connection structure (8b) which is arranged adjacent the other end of the bracket body (8) for connecting the bracket body (8) to the connection structure (14a) of the bicycle frame (50), and a positioning structure (8c) for contacting the derailleur mounting extension (14) to place the rear derailleur

(100) in a predetermined posture relative to the rear fork end (51), the bicycle rear derailleur bracket characterized in that the first connection structure (8a) and the second connection structure (8b) are arranged so that a connection point provided by the first connection structure (8a) is positioned below and rearward of a connection point provided by the second connection structure (8b) when the bracket body (8) is mounted on the rear fork end (51)."

Shimano sued Ningbo Sunrun Industry & Trade Co., Ltd. ("Sunrun" hereinafter) over the dispute that the bicycle rear of types No. RD-HG-30A and RD-HG-40A manufactured and sold by Sunrun infringed the '612 Patent. The court of the first instance ruled that the rear derailleur bracket of the '612 Patent can be mounted on the bicycle frames of other structures, and the allegedly infringing products have not been mounted on bicycles yet, thus it is unclear whether the bicycles intended to mount the allegedly infringing products comprise the essential technical features that "the bicycle frame is provided with a connection structure (14a) formed on a derailleur mounting extension (14) of a rear fork end (51) of the bicycle frame" and whether the manner of mounting the allegedly infringing products to the bicycles is the same as that defined by the claims of the '612 Patent. Therefore, the court of the first instance did not support the argument of Shimano on the infringement of the '612 Patent.

Shimano was not satisfied with the judgment of the court of first instance and appealed to the court of the second instance. The court of the second instance held that the main technical features of the '612 Patent can be categorized to the structural features and the mounting features. The focus of the dispute is whether the allegedly infringing products have the same mounting features as those defined by the asserted patent, that is: "the bicycle frame is provided with a connection structure (14a) formed on a derailleur mounting extension (14) of a rear fork end (51) of the bicycle frame", and "the first connection structure (8a) and the second connection structure (8b) are arranged so that a connection point provided by the first connection structure (8a) is under and behind a connection point provided by the second connection structure (8b) when the bracket

body (8) is mounted on the rear fork end (51)." As Sunrun did not engage in mounting actions, and the allegedly infringing products can also be mounted in other ways than that defined by the '621 Patent, the actions of Sunrun did not infringe Shimano's patent right. The court of the second instance rejected the appeal and affirmed the judgment of the court of the first instance.

Shimano once again was dissatisfied with the judgment of the second instance and applied for a retrial before the Supreme People's Court. The Supreme People's Court appointed the court of the second instance to retry. In this retrial, the court of the second instance continued to held that the main technical features of the '621 Patent are comprised of structural features and mounting features, and although the alleged infringing products include the structural features of the '621 Patent, the alleged actions of Sunrun did not infringe the '621 Patent as Sunrun embodied no actions of mounting the alleged products and Shimano failed to prove that the allegedly infringing products are mounted with the mounting feature as claimed by the '621 Patent. As a result, the court of second instance ruled that the reason for applying the retrial by Shimano was unsound.

However, Shimano was dissatisfied with the judgment of the retrial and applied for a retrial for the second time before the Supreme People's Court. The Supreme People's Court conducted the second retrial and reversed all the judgments. The Supreme People's Court held that the claimed subject matter of the '691 Patent is a bicycle rear derailleur bracket, and claim 1 of the '691 Patent actually defines the specific structures of the rear derailleur and the bicycle frame that are to be connected to the rear derailleur bracket, in addition to the description of the structural features of the rear derailleur bracket itself. The features of the rear derailleur and the bicycle frame that are to be connected to the rear derailleur bracket define the working environment and conditions of the rear derailleur bracket and thus corresponds with the usage environment features providing limitations on the rear derailleur bracket claimed in claim 1. Although the allegedly infringing products have not yet been mounted on the bicycles, the mounting method adopted by Sunrun, that is, directly mounting the allegedly infringing products on the bicycle frames without the rear fork end extension by adding a gasket, is not customary in the industry. Sunrun also failed to prove that it is commercially popular in the market that the allegedly infringing products are mounted on the frames without the rear fork end extension. For these reasons, the Supreme People's Court held that based on the comparison of the technical features, the alleged infringing products are certainly to be used commercially for the bicycle frames as defined by the '621 Patent. Therefore, the Supreme People's Courts found the usage environment features concerning the bicycle frame in the allegedly infringing products, where the allegedly infringing products include both the structural features of the rear derailleur bracket and the usage environment features of the rear derailleur in the asserted claim 1. The Supreme People's Courts ruled that the allegedly infringing products fall within the scope of protection of the claim 1 of the '621 Patent. As a result, the judgments of the courts of first and second instances are reversed.

#### Remarks

According to the principle of universal coverage, a technical solution shall be determined to fall in the protection scope of a patent if the technical solution includes all and each technical features of a claim of the patent. That is to say, all the technical features in the claims of the patent must be taken into account in the infringement determination. However, some technical features, for example, the usage environment feature in this case, generally does not define any specific structure of the product or any specific step of the method as claimed in the claims, and instead, they are mainly used for describing the working environment or conditions of the subject matter claimed by the claims. Therefore, in patent infringement disputes, the allegedly infringing products or methods normally exclude or fail to directly reflect the usage environment feature. Under this circumstance, it is important to determine whether and in what degree do the usage environment feature limits the protection scope of the claims.

Epson v. Mipo is also related to the issue of usage environment

feature. In this case, the asserted patent claims an ink cartridge, defining in the claims both the structure of the ink cartridge and the carriage to which the ink cartridge is mounted, that is, "the carriage is provided with a lever and the lever is formed with a projection." The plaintiff, Seiko Epson Corporate, held that the definition of the carriage is merely the description of the usage environment of the ink cartridge and thus it should be disregarded when comparing the allegedly infringing ink cartridge with claimed ink cartridge of the patent. However, the court ruled that the technical feature of the carriage constitutes an important part of the technical solution of the patent and should be taken into account when determining the scope of protection of the patent. As the allegedly infringing product did not contain the carriage, it did not cover all of the technical features of any of the claims and thus did not infringe the asserted patent right. According to this case, the judge held that the usage environment feature will contribute to define the protection scope of a claim. Where the allegedly infringing technical solution only contains the usage environment feature, it shall be determined as infringing.

In *Shimano v. Sunrun*, the Supreme People's Court touched again the issue of usage environment feature, and set forth in the judgment specifically whether and in what degree the usage environment feature will limit the protection scope of a patent, and how to consider the usage environment feature in infringement determination.

First, regarding the limitation of the usage environment feature on the protection scope of protection patent, the judge of the Supreme People's Court held that all the technical features contained in a claim should be interpreted as indispensable essential technical features of the technical solution of the patent, which contribute to define the protection scope of the patent and thus must be taken into account when determining the protection scope of the patent. The usage environment feature is nevertheless one of the

<sup>&</sup>lt;sup>1</sup> Civil Judgment (2007) *Er Zhong Min Chu Zi* No.527 by Beijing Second Intermediate People's Court http://bjgy.chinacourt.org/paper/detail/2008/01/id/7298.shtml

essential technical features of a claim once written in the claim and thus contributes to define the protection scope of the claim.

Second, regarding the degree of the limitation of the usage environment feature on the protection scope of protection patent, the degree of the limitation specifically refers to whether the claimed subject matter defined by the usage environment feature has to or may be used in the usage environment. The judge of the Supreme People's Court pointed out that the degree of the limitation of the usage environment feature on the protection scope needs to be specifically determined case by case. Generally, the usage environment feature should be interpreted as requiring that the claimed subject matter may be used in the usage environment rather than that the claimed subject matter has to be used in the usage environment. However, if those skilled in the art can clearly and reasonably learn that the claimed subject matter can only be applied to the usage environment after reading the claims and the specifications of the patent, and the patent prosecution history, the usage environment feature should be interpreted such that the claimed subject has to be applied in the specified environment.

Final, regarding how to consider the usage environment feature in infringement determinations, the judge's opinion is that when an allegedly infringing technical solution is compared with a claim of the asserted patent, the technical solution, as long as applicable to the usage environment feature as defined in the claim, the asserted patent shall be determined as containing the usage environment feature, no matter whether or not the technical solution is actually embodied in the environment as defined by the usage environment feature. Apparently, the judge of the Supreme People's Court has given a different opinion in this case from the judge in the earlier *Epson v. Mipo* case.

In short, the judgment of *Shimano v. Sunrun* provided more reasonable opinions about the limitation of the usage environment feature on the protection scope of the claims, and illustrated a guideline for patentee when enforcing the patents with the usage environment feature.

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# Oil-preserving Apparatus for a Bevel Gearset in a Sharpening Mechanism of a Cutting Machine

Zhongquan CAO v. the Patent Reexamination Board - An Invention-creation Should be Evaluated as an Organic Whole (Administrative Judgment (2012) Xing Ti Zi No.7 by the Supreme People's Court on May 3,2012)

A technical solution refers to a collection of technical means that are adopted to solve a technical problem and utilize the laws of nature. Generally, a technical means is embodied by one or more technical features. When an invention-creation, especially inventiveness of a claim, is evaluated, usually a standard three-step method is adopted. However, there is a deviation that an invention-creation is NOT evaluated as an organic whole and a claim is divided as several fragmented parts and the respective parts are evaluated separately. However, such kind of evaluation is inappropriate. In this case, the Supreme People's Court emphasized that an invention-creation should be evaluated as a whole.

In this case, a utility model patent No. ZL 200520014575.5 titled "An Oil-preserving Apparatus for a Bevel Gearset in a Sharpening Mechanism of a Cutting Machine" ("the involved patent" hereinafter) has the following four claims:

- "1. An oil-preserving apparatus for a bevel gearset in a sharpening mechanism of a cutting machine, characterized in that an oil blocking wall (4) is arranged around a bevel gear position (2) and an intermediate gear position (3).
- 2. The oil-preserving apparatus of Claim 1, characterized in that the wall (4) is provided with a gap that enables the intermediate gear inside the wall to engage with a transmitting gear outside the wall.
- 3. The oil-preserving apparatus of Claim 2, characterized in that the wall (4) is integrated with a bevel gear box (8) or a sharpening grinder box(1).

4. The oil-preserving apparatus of Claim 1, characterized in that an arc cover plate (7) is provided on a transmitting gear (5) outside the wall (6)."

According to the description and claims of the patent, the patent is directed toward the problem of oil-preserving lubrication of the gear set in the cutting machine. To solve the problem, an oil blocking wall is arranged around the bevel gear position and the intermediate gear position to preserve the splashing lube around the bevel gear. Furthermore, an arc cover plate is provided on the position of the transmitting gear outside the wall, to prevent the lube inside the wall from being thrown out.

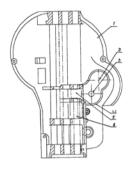
The Patent Reexamination Board made an examination decision No. 13216 for invalidation request on April 14, 2009, wherein it declared that all of the claims of the involved patent are invalid. In the examination decision, the panel held that all of the claims of the involved patent do not possess inventiveness over the disclosure of attachment 5-1 (US3672586).

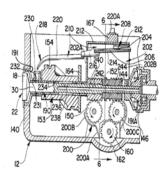
The disclosure in attachment 5-1 relates to lubrication in a lubrication system for a winding machine. In the attachment 5-1, the lubrication system that comprises a slinger 160, gears 146, 150, a shield 200 and aprons 206 is mainly used to obtain lubricant from a sump 162 and to transport the lubricant to the components that require lubrication. A straight forward portion 200A, a cylindrical section 200B, a rearward quadrant 200C of the shield 200 and the aprons 206 are set to serve the above technical functions. In view of this, the shield 200 is provided with an oil inlet to obtain the lubricant from the sump, and the aprons 206 are provided with passageways 204 to receive the lubricant.

That is to say, the involved patent is to keep the lube around the gears so as to prevent the lube from leaking to outside, thereby achieving excellent lubrication of the gears and preventing the fabric from being polluted by the lube. However, the solution of the attachment 5-1 is to effectively transport the lubricant to the components that require lubrication within the winding machine. The shield 200 and the aprons 206 are set to transport the lubricant

outside, rather than to keep the lubricant around the gear set and to keep the lubricant from leaking to outside as in the involved patent.

The left figure below shows an overall structure of the involved patent, while the right figure shows an overall structure of the attachment 5-1.





In the invalidation procedure, the patentee of the involved patent amended the claims by incorporating claim 2 into claim 1 to form a new independent claim 1. The panel adopted the standard three-step method, and held that the differences between the new claim 1 and the solution of attachment 5-1 lie in that: (1) the involved patent is aimed at a sharpening mechanism of a cutting machine, while the application environment of attachment 5-1 is a winding machine; and (2) in the involved patent the intermediate gear is engaged with an external transmitting gear, while in the attachment 5-1 gear 146 is coupled with a drive screw. Then, the panel further alleged that the above differences are all common sense in the art, and thus the new independent claim 1 does not possess inventiveness. In the examination opinions with respect to claim 3 (the original claim 4), the panel held that the aprons 206 are coupled with the straight forward portion 200A, the cylindrical section 200B and the rearward quadrant 200C of the shield 200, and the structure formed by this coupling functions to keep the lubricant around the gears. Therefore, the panel held that the aprons 206 in the attachment 5-1 are technically equivalent to the arc cover plate in claim 3.

In the subsequent procedures of administrative litigation, the courts of the first instance and second instance adopted the opinions set forth by the panel of the PRB.

In the retrial request, the petitioner (the patentee) submitted arguments that the feature in claim 1 of the involved patent, i.e., "an oil blocking wall (4) is arranged around a bevel gear position (2) and an intermediate gear position (3)," functions to keep the lubricant around the bevel gear set, so as to prevent the fabric for cut from being polluted. While in the attachment 5-1 there is a shield 200 that opens up and down, so as to spray the lubricant from the sump at the bottom to the outside of the shield 200, that is, this arrangement has an effect of "transportation", rather than keeping the lubricant inside the shield 200. Moreover, the additional technical feature of the amended claim 3, i.e., "an arc cover plate (7) is provided on a transmitting gear (5) outside the wall (6)," functions to directly keep the lubricant around the transmitting gear. The aprons 206 in the attachment 5-1 function to receive the lubricant sprayed from bottom to top and to transport the lubricant to other components that require lubrication, that is, this arrangement has an effect of "reception."

With respect to the above arguments, the Supreme People's Court held that when evaluate whether an invention-creation possesses inventiveness, not only the technical solution itself of the invention-creation, but also the following factors should be taken into consideration: the technical field that the invention-creation belongs to, the technical problem that the invention-creation solves, and the technical effect that the invention-creation produces. The above factors should be considered as a whole, which means that the aspects of the technical principle, the technical conception, the technical effect, and the like of the invention-creation should be considered comprehensively. Regarding this case, the Supreme People's Court alleged that the solution of the lubrication system disclosed in the attachment 5-1 mainly functions to solve the technical problem of transporting the lubricant effectively, in order to realize lubrication of the internal components in the winding machine, rather than prevent the fabric from being polluted by the splashing lubricant as in the involved patent. Based on the technical solution disclosed in the attachment 5-1, those skilled in the art would have no motivation to improve the features of shield 200 and aprons 206 in the lubrication system, and then apply them into the sharpening mechanism of the cutting machine, so as to solve the technical problem to be solved by the involved patent, i.e., to prevent splashing of the lubricant and keep the lubricant around the bevel gear.

In the above invalidation procedure, the panel failed to take into consideration the substantial difference between the solution of the involved patent and that of the attachment 5-1; rather, the panel tried to adopt some analytical skills to find the "objective" correspondences between the features disclosed in the reference and the features in the claims of the involved patent. From the perspective of the invention concept, it seems that there exist significant differences between the solution of the involved patent and that of the attachment 5-1. However, the panel improperly splits a claim of the involved patent, which should be considered as a whole, into several features so as to "find" the corresponding parts in the reference, thereby reaching the conclusion that the claims of the involved patent do not possess inventiveness. And in the procedures of the first and second instances, the judge also failed to correct this improper practice.

In addition, in the substantive examination procedure, the following situations are often encountered: the examiner splits a claim as a whole into several isolated "technical features" and evaluate each of these features separately, and then seeks to locate the corresponding description for each feature in the references or simply asserts one or more features belong to common sense in the art, regardless of the overall conception of the technical solution.

However, such method of evaluation for a claim is not appropriate. For an invention-creation, first it should be considered as a whole so as to grasp its substance. That is to say, an invention-creation should be evaluated comprehensively based on several aspects, such as the technical field(s) involved by the invention-creation, the technical problem(s) to be solved by the

invention-creation, the technical effect(s) produced by the invention-creation, and the like; that is, the principle and conception of the invention-creation should be taken into consideration, such that the technical solution defined by a claim can be evaluated as an organic whole. The legal professionals, such as the examiners, the judges, the attorneys, etc., should always be reminded that legal analysis tools and skills are to serve for ascertaining the facts, rather than the reverse. Regarding the present case, if the solutions of the involved patent and the attachment 5-1 can be considered comprehensively as a whole by the Patent Reexamination Board and the first and second instances, the large amount of complex analysis used to obtain an improper conclusion would be unnecessary.

In case of overall consideration, a technical solution should be evaluated in a unit of feature. That is, two extreme cases should be avoided: one is to evaluate the technical conception as a whole, and the other is to split a complete claim into several fragmented parts to evaluate the respective part separately. To accomplish this, the followings should be paid attention to: the relationship between the claims and the description; the selection of the most pertinent prior art; and the division of features.

The association between the claims and the description, especially the effect of the description on explanation of the claims, has been discussed substantially before. Here, one should be emphasized is that, due to limitations of the language expressions, when a claim is considered as a whole, the technical solution claimed by that claim should be necessarily interpreted in conjunction with the description. This means one or more terms used in the claims should be interpreted in connection with the contexts in which one or more terms are placed. For example, the terms of "oil-preserving apparatus" and "oil blocking wall" in the present case. The intention to define clearly the protection scope by a claim itself is good, but in the practice the description cannot be ignored and must be memorized, especially in the substantive examination procedure.

Regarding the selection of the most pertinent prior art, an overall invention concept should be considered, based on the

author's understanding. If an overall concept of a prior art is pertinent, then naturally the number of related features being disclosed by the prior art is large. Furthermore, most of the present inventions belong to "improved-type" invention, and usually there will exist prior arts that have the pertinent technical conception. In the current examination practice, it is often the case that the most pertinent prior art for an invention only has the similar technical field, but discloses few of the technical features in the claim to be evaluated, and sometimes even only discloses the contents in the preceding portion. And the examiner would regard most of the features in the claim as distinguishing technical features and then allege that such distinguishing technical features have been disclosed or belong to common sense in the art; however, it is hard to say that this method of evaluation is reasonable.

One of the most common problems in the division of technical features is that the features in one claim are split into several fragmented parts and the respective parts are evaluated separately. Among many precedents, one of the problems is that a feature is punctuated inappropriately and then being held that the punctuated portion is not clear; a further problem arises when the contexts in a claim are not taken into consideration and being held in an isolated way that a certain feature is not supported by the description; even further problem arises where a claim is split into several isolated parts and the similar content for each part is searched in the prior arts respectively, and sometimes a part of them is regarded as common sense in the art if the similar content cannot be found. All of the above cases do not comply with the requirements that an invention-creation should be considered as a whole.

Moreover, in the division of technical features, sometimes the connection relationship and the signal flow should also be taken into consideration, as well as some feature points that are not obvious in the claims. This is because the connection relationship and the signal flow are also technical features that shall not be ignored, especially in the inventions of electrical field. The feature points that are not obvious are usually some terms that can be interpreted in connection with the description and should not be ignored.

In practice, when the claims are drafted, it is necessary that the claims should reflect the substance of the technical solution in a clear and complete way, and the technical features embodying the point should be highlighted. Furthermore, embodiments should be described clearly based on the description and the accompanied drawings. Especially, structural features should be clearly indicated in the drawings and should be described in conjunction with the drawings in a "look-and-say" way. Regarding this case, the substance of the technical solution of the present invention is not obviously reflected in the claims, and the descriptions in the detailed description are not sufficiently clear either. Otherwise, a different result might be obtained in the initial invalidation procedure. In addition, what should be emphasized is that when an attorney encounters with the examiner's opinions that ignore the overall conception of the technical solution, he/she should have the courage to insist his/her arguments so as to obtain a reasonable result by an appropriate communication with the examiner.

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# Direct-Connected Hydraulic Control Apparatus for a Hydraulic Rocker Cutting Machine

Yancheng Zetian Machinery Co., Ltd. v. Yancheng Greater Machinery Co., Ltd. – the Application of Prior Art Defense in Patent Infringement Litigation (Civil Ruling (2012) Min Shen Zi No. 18 by the Supreme People's Court on July 11, 2012)

The principle of prior art defense established in patent infringement litigation means that the scope of protection of a patent right shall not encompass the prior art. The rationale of the principle is that the public have the right to freely practice the prior art known to the public, and no one is entitled to claim the prior art into the scope of an exclusive patent right, or else the public interest will be damaged. In addition to examining the legal validity of the patent right in the patent invalidation procedure, examining an accused infringer's assertion of the prior art defense in the patent infringement litigation is advantageous for timely resolving disputes, reducing litigation exhaustion of the parties, and realizing unification of equity and efficiency. The prior art defense and its difference from determination of novelty judgment or inventiveness in the patent invalidation procedure are articulated in this case, which facilitate the parties' understanding the standards of application of the prior art defense by the courts in China.

The patentee, Yancheng Zetian Machinery Co., Ltd. (hereafter referred to as "Zetian Machinery"), owns a utility model patent No. ZL 200420109343.3, titled "Direct-Connected Hydraulic Control Apparatus for a Hydraulic Rocker Cutting Machine" (hereafter called "the control apparatus"). The independent claim of the utility model patent reads:

"A hydraulic control apparatus for a hydraulic rocker cutting machine, comprising a hydraulic cylinder, a rod piston installed in the hydraulic cylinder, an electromagnetic valve, an oil pump and a relief valve, characterized in further comprising a regulating valve and a flexible shaft, wherein an upper oil chamber channel, a lower oil chamber channel and an unloading channel are provided on the rod piston, a regulating valve chamber, in which the regulating valve is provided, is provided at an upper portion of the unloading channel, the regulating valve is connected to one end of the flexible shaft, a handle is provided on the other end of the flexible shaft, an output of the electromagnetic valve is directly connected to an outer end of the rod piston, the electromagnetic valve is connected to the oil pump via a square flange and a connective pipe, and the relief valve is provided at a side of the square flange."

Zetian Machinery brought a lawsuit against Yancheng Greater Machinery Co., Ltd. (hereafter referred to as "Greater Machinery") for infringing the utility model patent at issue. Greater Machinery argued that the accused product was the same as the F45 hydraulic rocker cutting machine in the prior art, and thus did not infringe the patent right. The Intermediate People's Court of Yancheng city, Jiangsu province (hereafter referred to as "the court of the first instance") held that Greater Machinery failed to provide adequate evidence to prove that the accused product was the prior art and the prior art defense was not justifiable, and upheld the infringement.

Both Zetian Machinery and Greater Machinery refused to accept the judgment of first instance and appealed. The Jiangsu High People's Court (hereafter called "the court of the second instance") found that the prior art defense was justifiable via on-scene investigation and held in favor of Greater Machinery.

Zetian Machinery refused to accept the judgment of second instance and applied for retrial to the Supreme People's Court. As to the prior art defense, the retrial petitioner, Zetian Machinery, argued that the accused product possessed all technical features of the asserted patent, and several technical features such as the electromagnetic valve in the accused product were different from those of the F45 hydraulic rocker cutting machine in the prior art, so the second instance court erred in its judgment.

The Supreme People's Court set forth the following opinions in retrial.

"The rationale of the principle of prior art defense established in patent infringement litigation is that the scope of protection of a patent right shall neither encompass the prior art, nor be obvious or as an equivalent technique with the prior art. In addition to examining the legal validity of the patent right in the patent invalidation procedure, examining an accused infringer's assertion of the prior art defense in the patent infringement litigation is advantageous for timely resolving disputes, reducing litigation exhaustion of the parties, and realizing unification of equity and efficiency. When the prior art defense is examined, it is the accused technical solution. rather than the technical solution of the patent, that is compared with the prior art. The manner of examining the prior art defense is as follows: comparing an asserted patent claim with an accused technical solution, identifying the technical features of the accursed technical solution that are alleged as meeting the limitations of the asserted claim, and determining as to whether the same or equivalent technical features are disclosed in the prior art. Establishment of the prior art defense does not require that the accused technical solution is exactly the same as the prior art, and any technical feature of the accused technical solution that is irrelevant to the claim scope of the patent right shall not be considered when judging whether the prior art defense is justifiable. Whether the accused technical solution is the same as or equivalent to the technical solution of the patent is not necessarily relevant to whether the prior art defense is justifiable. Therefore, even if the accused technical solution is exactly the same as the technical solution of the patent and different from the prior art. it might be found that the prior art defense is justifiable."

In this case, the independent claim of the asserted patent defines the connection mode of the electromagnetic valve, i.e. "an output of the electromagnetic valve is directly connected to an outer end of the rod piston," and does not define the specific structure of the electromagnetic valve. Therefore, the specific structure of the

electromagnetic valve is irrelevant to the scope of protection of the patent right, and hence irrelevant to whether the prior art defense is justifiable. Although the electromagnetic valve disclosed in the F45 hydraulic rocker cutting machine as the prior art comprises three portions, and its specific structure is obviously different from that of the electromagnetic valve in the accused product, however the prior art has already definitely disclosed that the output of the electromagnetic valve is directly connected to the outer end of the rod piston. Accordingly, the Supreme People's Court affirmed that the judgment of the court of the second instance.

The Supreme People's Court further pointed out that,

"In the patent invalidation procedure, the technical solution of the patent is compared with the prior art to examine whether the prior art has already disclosed the technical solution of the patent, i.e. whether the technical solution of the patent possesses novelty and inventiveness as compared with the prior art. However, in the patent infringement litigation, the object of examination of the prior art defense is whether the accused technical solution is the same as or equivalent to the prior art, rather than whether the prior art has already disclosed the technical solution of the patent. Therefore, both their object of examination and legal application are different."

#### Remarks

We will discuss the differences between the prior art defense and invalidation.

First, the difference in legal status. The prior art defense is a defense to an assertion of patent infringement by arguing that an allegedly infringing product falls into the prior art in a specific patent infringement litigation case, the decision of which is merely applied for the specific patent infringement litigation case. However, the invalidation procedure is to judge whether a patent right is valid, and the conclusion of declaring invalidation of a patent right is to fundamentally cancel the patent right - the patent right declared invalid shall be deemed non-existent from the beginning.

Second, the difference in manners of examination. The manner of examining the prior art defense is based on the comparison between an alleged product and the prior art. And the manner of examining the prior art defense is as follows: comparing an asserted patent claim with an accused technical solution. identifying the technical features of the accused technical solution that are alleged as meeting the limitations of the asserted claim, and determining as to whether the same or equivalent technical features are disclosed in the prior art; any technical feature of the accused technical solution that is irrelevant to the claim scope of the patent right shall not be considered when judging whether the prior art defense is justifiable. However, the determination of novelty and inventiveness in the patent invalidation procedure is made by comparing a patent at issue with the prior art and examining as to whether the technical solution of the patent at issue is disclosed by the prior art.

Last, the difference in standards of evaluation. The prior art defense can compare an accused technical solution with one prior technical solution, or an obvious combination of one prior technical solution and common knowledge in the art. However, the determination of novelty or inventiveness in the patent invalidation procedure can compare the patent with one prior technical solution or an obvious combination of one prior technical solution and other prior art and/or common knowledge in the art. Apparently, the requirements of the prior art defense are more stringent.

How to draft claims with the consideration of prior art defense. In order to seek an assured and reliable protection of a patent right for an invention-creation, the patentee shall draft multiple claims in as many levels as possible to progressively define protection scopes. Although the retrial petitioner in this case alleged that the electromagnetic valve in the patented technique was a particular electromagnetic valve, the internal structure and output of which were improved, however the improvements are not recited in the claims. Therefore, although the specific structure of the electromagnetic valve in the accused product is exactly the same as that of the electromagnetic valve in the patented product and

different from the prior art, it is not considered when judging whether the prior art defense is justifiable. If the patentee had further defined the specific structure of the electromagnetic valve in the patented product in dependent claims, it would likely to obtain a totally different outcome.

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# **Shaving Apparatus**

Philips v. Flyco - The First Application of the Principle of Conducting Examinations Ex Officio under Rule 72.2 of the Implementing Regulation of the Chinese Patent Law (2010) (Decision No. 19631 by the Patent Reexamination Board on November 26, 2012 for a request for invalidation)

Rule 72.2 of the *Implementing Regulations of the Chinese Patent Law (2010)* states that "where the person requesting invalidation ("petitioner" hereinafter) withdraws his or her request or where his or her request for invalidation is deemed to have been withdrawn before the Patent Reexamination Board ("PRB" hereinafter) makes a decision, the examination of the request for invalidation is terminated. However, where the PRB has done sufficient examination work to decide whether to invalidate or invalidate in part the patent right, the examination shall not be terminated." This examination decision is regarded as the first application of the principle of conducting examinations *ex officio* under Rule 72.2.

Examination Decision No. 19631, which is related to the validity of patent No. *ZL95190642.9*, titled "Shaving Apparatus", is the first decision that involves the petitioner withdrew the invalidation request and the examination of the request for invalidation was not terminated. This is the PRB's first application of the principle of conducting examinations *ex officio* under Rule 72.2.

Prior to this request for invalidation, the PRB made another examination decision, No. 12676, on the same patent which stated that claim 1 was invalid, but the remaining claims 2-7 were valid. The latest request for invalidation for patent No. ZL95190642.9 was submitted by the petitioner, Shanghai Flyco Electrical Appliance Co., Ltd. ("Flyco" hereinafter), on May 3, 2012. Flyco requested to invalidate claims 2-7, under Article 22, Paragraph 3 of the *Chinese Patent Law* (2001), due to lack of inventiveness. Both parties appeared to the oral hearing which took place on October 17, 2012. During the oral hearing, the patentee, Philips Electronics Appliance

Co., Ltd. ("Philips" hereinafter), stated that claims 2 and 3 should be dismissed and claims 4-7 possessed inventiveness.

It should be noted that the petitioner withdrew its request for invalidation on October 24, 2012, i.e. seven days after the oral hearing.

On November 26, 2012, the PRB issued Examination Decision No. 19631, which invalidated claims 2-3 and kept the validity of the remaining claims 4-7.

#### Remarks

According to the *Guidelines for Patent Examination* (2010), Rule 72.2 follows the principle of disposal by the party concerned which is one of the general principles often used during the invalidation procedure. When the petitioner files the invalidation request, he or she has to state the scope and grounds of the request, and may submit supporting evidence. During the examination procedure, the petitioner may take away some of the scope and grounds of the request, and/or evidence. In the case where both the petitioner and the patentee have expressed to the PRB their willingness to settle, the PRB may give both parties some time to negotiate and would temporarily refrain from making an examination decision. If the petitioner withdraws his or her request for invalidation, the PRB will usually terminate the examination procedure for the invalidation request.

However, the PRB may not terminate the examination procedure when there is a concern related to social justice, public interest, or administrative resources. The principle of conducting examinations *ex officio* of Rule 72.2 allows the PRB to continue the examination procedure if the PRB has done sufficient examination work to reach a decision to invalidate at least a part of the asserted patent.

This case illustrated a guideline for patentees when they are involved in an invalidation procedure. To strive to maintain the validity of the claims, the patentee should carefully determine the stability of the claims based on the grounds and evidence raised by the petitioner, and should avoid voluntarily abandoning any part of the patent right either verbally or by filing an amendment of the claims. In addition, if the patentee is trying to settle with the petitioner, he or she shall notify the PRB panel before the end of the oral hearing of the invalidation procedure.

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# GSM/CDMA Dual-mode Mobile Communication Method

Zhejiang Huali Communication Group Co., Ltd. v. Shenzhen Samsung Kejian Mobile Communication Technology Co., Ltd. - The Application of Judicial Appraisal in Patent Infringement Litigation (Civil Judgment (2009) Zhe Zhi Zhong Zi No.64 by the Zhejiang High People's Court on March 5, 2012)

Appraisal conclusions are professional and technical written evidences provided by appraisal institutes, thus their legality, authenticity, and probative force are usually higher than those of other civil evidences. Especially for patent infringement litigations, the appraisal conclusions are usually one of the essential means to ascertain technical problems, and therefore become an important factor affecting judgment conclusions.

Zhejiang Huali Communication Group Co., Ltd. (hereafter referred to as "Huali Communication") is the sole and exclusive licensee of a licensing contract for exploitation (in which the patentee does not retain any right to exploit its technology) of an invention patent titled "CDMA/GSM dual-mode mobile communication method and communication device thereof" with Patent No. *ZL02101734.4* (hereafter referred to as "the involved patent"). Claim 1 of the involved patent is as follows:

- "A GSM/CDMA dual-mode mobile communication method, characterized in that:
- a main CPU in a main printed circuit board deciding to start a main communication module or an auxiliary communication module, according to a hardware detection determination or a user's menu selection;
- a) the main CPU automatically starting the main communication module in the main printed circuit board if there is no auxiliary communication module;
- b) if the auxiliary communication module is inserted into the device, the main CPU automatically prompting the user to

select a desired communication mode through a keyboard or a specific switch, to start the selected communication module, and the main CPU causing common components and the selected operating module into the selected GSM or CDMA operating mode through a corporation between a power supply switch, an audio switch, an antenna switch and a connector;

c) under a function of a keyboard instruction 'mode selection', the main CPU exchanging data with the main communication module and the auxiliary communication module through the power supply switch, the audio switch, the antenna switch and the connector;

the main CPU exchanges data with the main communication module if the instruction 'mode selection' is a main communication mode; and

the main CPU exchanges data with the auxiliary communication module through the power supply switch, the audio switch, the antenna switch and the connector if the instruction 'mode selection' is an auxiliary communication mode."

Huali Communication sued Shenzhen Samsung Kejian Mobile Communication Technology Co., Ltd. (hereafter referred to as "Samsung Kejian Communication") and DAI Gang (an individual) for manufacturing and selling the infringing mobile phone SCH-W579 before the Hangzhou Intermediate People's Court on April 11, 2007, and requested Samsung Kejian Communication to stop the infringement and pay an economic loss of 50 million Yuan (around USD8 million), and ordered DAI Gang to stop selling the infringing mobile phone.

During the first instance, the Hangzhou Intermediate Court held that the evidences, including patent claims, live demonstration for switching on a physical mobile phone, product description, block diagrams of the radio frequency and the base band of the mobile phone SCH-W579 had clearly demonstrated communication manners of both the involved patent and the mobile phone sued for infringement. Therefore, the court rejected the request by Samsung Kejian Communication for judicial appraisal.

Based on the existing evidence, the Hangzhou Intermediate Court deemed that the technical solution of the mobile phone SCJ-W579 was the same as or equivalent to that of claim 1 and thus falling into the scope of the involved patent right. The Hangzhou Intermediate court held the civil judgment (2007) *Hang Min San Chu Zi* No.108 on December 19, 2008, ordering Samsung Kejian Communication to stop making and selling the infringing mobile phone immediately, ordering DAI Gang to stop selling the infringing mobile phone made by Samsung Kejian Communication immediately, and ordering Samsung Kejian Communication to compensate Huali Communication with an economic loss of 50 million Yuan.

Samsung Kejian Communication was not satisfied with the judgment of the first instance, and appealed to the Zhejiang High People's Court.

During the second instance, Samsung Kejian Communication put forward an application for judicial appraisal to evaluate the technologies related to the involved patent and the product sued for infringement. The second-instance court held that the technical features of claim 1 of the involved patent were not simple operation steps. Interface demonstration of the mobile phone can only determine the operation steps of the mobile phone, while the same operation steps could be implemented by different technical methods. Therefore, it was necessary to reveal the underlying technical solution of the mobile phone SCH-W579 by technical appraisal from professional technical institute, so as to further determine whether the method of the involved patent was implemented.

The second instance court appointed the Shanghai Technology Consulting Service Center to conduct technical appraisal. Based on the appraisal conclusion, the Zhejiang High Court held the civil judgment (2009) *Zhe Zhi Zhong Zi* No.64, concluding that the mobile phone SCH-W579 produced by Samsung Kejian Communication did not adapt the patent method owned by Huali Communication, and thus did not infringe the involved patent right. Therefore, the second instance court reversed the judgment of the

first instance court, and rejected the appeal by Huali Communication.

#### Remarks

Appraisal conclusion plays an important role in patent infringement litigation whose technical solution is very complex, e.g. communication. We will discuss three aspects of appraisal conclusion as follow.

The first aspect is the legal status of appraisal conclusion. Appraisal conclusions *per se* are not official conclusions that can be used to decide a case, but are written opinions made upon evaluation and determination of specific issues. Having the same status and usage effect as all evidences, appraisal conclusions need to be cross-examined by the opposing party and examined by the judge. Therefore, the wording "appraisal conclusions" was amended to "appraisal opinions" in Article 63 of the *Civil Procedure Law of the People's Republic of China* effective as of January 1, 2013 (hereafter referred to as the "Amended Civil Procedure Law").

Nowadays, the appraisal institutes are separated from the judicial system, and become separate specific institutes providing paid judicial appraisal services. The concerned party must pay certain fee and provide related materials for the appraisal. Accordingly, the appraisal opinions are not original firsthand evidence, but evidence generated by appraiser upon evaluation of technology and related materials.

The second aspect is the initiation requirements for the judicial appraisal. Samsung Kejian Communication won the second instance mainly because the second instance court allowed its application for the appraisal, and the appraisal institute appointed by the court offered a conclusion beneficial to Samsung Kejian Communication. Therefore, it can be seen from this case that the judicial appraisal conclusions are crucial evidences influencing outcome of a civil litigation.

In the present judicial practice, usually the court makes the

decision whether to start a judicial appraisal. Taking the present case as an example, the defendant Samsung Kejian Communication raised an application for appraisal during the court hearing, which need to be permitted by the court. In the author's opinion, the above provision not only breaks the balance between the prosecuting party and the defending party, but also departs from the judicial doctrine of "burden of proof on claimant".

It should be noticed that amendment about the initiation requirement for the appraisal procedure was made in Article 76 of the Amended Civil Procedure Law, wherein a party may apply to the court for appraisal. According to this Article, it is a party's right to apply for appraisal, which should be protected by the court.

The third aspect is the judicial examination of the appraisal opinions. In this case, there is only one appraisal opinion, and the court did not conduct strict examination on it. Although Huali Communication questioned the appraisal opinion in the second instance, the second instance court did not accept such a questioning.

In practice, sometimes appraisal opinions *per se* are not credible, or even questionable. In some circumstances, different appraisal institutes provide contrary appraisal opinions. Therefore, the author is of the view that:

(1) It is necessary to conduct strict examination on appraisal opinions. The appraisal opinions cannot be totally adopted just because they relate to specialized knowledge and technology. Considering their crucial role in a case, the appraisal opinions, as

If the people's court deems it necessary to make an expert appraisal for a problem of technical nature while the parties fail to do so, it shall refer the problem to qualified expert for the appraisal."

<sup>&</sup>lt;sup>1</sup> Article 76 of the Civil Procedure Law recites, "The parties may apply to the people's court for an appraisal as regards a technical problem which is important to ascertain the facts. Where one party applies for the appraisal, both of the parties shall confirm a qualified appraiser through negotiation; if they fail to reach an agreement, the appraiser shall be designated by the people's court.

one of many civil evidences, should be examined fully and completely.

(2) The appraiser should appear in court to be questioned. In present practice, the appraisers are not questioned in most cases wherein appraisal opinions are used as evidences. During the trail, the plaintiff and the defendant make argument for their own benefits. The judge makes a judgment as a neutral party, but may lack specialized technical knowledge to understand the appraisal opinion. In this situation, there is no way to interpret the appraisal opinion properly when concerned parties or the judge has any doubt or question about such opinions.

Therefore, the author deems that the appraiser must appear in the court to be questioned for any controversial or doubtful appraisal opinions. The judge should have the right to question the appraiser in or outside the court when there is a problem need to be further explained by the appraiser, even if both parties agree with the appraisal opinions. Only in this way, the reliability of appraisal opinions as effective evidences in civil litigations can be enhanced.

Despite the foregoing, Article 78 of the Amended Civil Procedure Law stipulated that where the appraiser refuses to testify at court, the appraisal opinions shall not be taken as the basis of ascertaining the facts. In addition, an expert assistant system is added in Article 79 that it is possible to question the appraisal opinions and find out the facts in a better way. 2

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<sup>&</sup>lt;sup>1</sup> Article 78 of the Civil Procedure Law recites, "Where the parties have objections to the appraisal opinions or the people's court deems it necessary for the appraiser to appear in court, the appraiser shall give testimonies in court. If the appraiser refuses to give testimonies in court upon notice by the people's court, the appraisal opinions shall not serve as the basis of ascertaining the facts; the party which pays for the appraisal fee may ask for the appraisal fee back."

<sup>&</sup>lt;sup>2</sup> Article 79 of the Civil Procedure Law recites, "The parties may apply to the people's court for calling for an expert in court who can put forward his conclusions about the appraisal opinions made by the appraiser or some technical problems."

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# **Safety Power Socket**

Qianping AO v. Shenzhen DNS Industries Co., Ltd., Philips (China) Investment Co., Ltd. - The Influence of License Contract on Determination of Infringement (Civil ruling (2012) Min Shen Zi No.197 by the Supreme People's Court on December 12,2012)

Article 11 of the *Chinese Patent Law (2001)* generally provides to what extent a patent can be protected under the law and, on the other hand, what actions infringe a patent right. For other issues than those provided in Article 11, the patentee and the licensee shall particularly reach an agreement and expressly record in the contract.

This case relates to invention patent No. ZL 96107072.2 of the patentee, Qianping AO. After issuance of the patent, the patentee issued a license to Shenzhen DNS Industries Co., Ltd. ("DNS Industries" hereinafter), agreeing that DNS Industries can further permit a third party to exploit the patent in a manner of commissioned processing such as OEM or ODM. DNS Industries did not have production capacity, so the patented product had been made by the subsidiary of DNS Industries, Huizhou Hehong Wire and Cable Co. Ltd. ("Huizhou Hehong" hereinafter). Afterwards, Philips (China) Investment Co., Ltd. ("Philips" hereinafter) authorized DNS Industries to be its brand agent to provide production, sale, and after-sale service for sockets with Philips logo. DNS Industries modified the original mold by adding the Philips logo, and permits Huizhou Hehong to produce the sockets by using the modified mold and sold the produced sockets with Philips logo.

Qianping AO sued both Philips and DNS Industries, alleging they infringed its patent. The court of the first instance held both Philips and DNS Industries infringed the patent. However, the court of the second instance held that neither Philips nor DNS Industries infringed the patent. Qianping AO appealed to the Supreme People's Court for a retrial.

In the ruling of the case, the Supreme People's Court stated that the *Chinese Patent Law* only provides the patentee the right to exclude others from exploiting his patent without his authorization, but does not authorizes the patentee the right to exclude the licensee from marking on the patented products, which have been produced under a license, with other vendor's logo. Applying this rule, modifying the original mold by adding the Philips logo and producing the sockets marked with Philips logo by DNS Industries were not actions infringing the patent. The Supreme People's Court also stated that, for the invention or utility model, "make the patented product" means to produce or form a product with all the technical features of a claim of the patent. In the case of commissioned processing of the patented product, if commissioning party requires the commissioned party to produce the patented products by providing the patented technical solution or the patented products are formed based on the commissioning party's technical requirements, it can be determined that the commissioning and the commissioned parties jointly committed the action of "making the patented product." In this case, the technical solution that Huizhou Hehong used to produce the alleged infringing products was completely from DNS Industries. Philips provided Huizhou Hehong with neither technical solution nor technical requirements. Therefore, Philips was not the manufacturer of the patented products under the Chinese Patent Law.

As an intangible property right, intellectual property is significantly different from the basic rights of natural law. It should be clearly bounded by the law. As one kind of intellectual property, patent right should be in such situation. The opinions of the Supreme People's Court have also clearly stated this view.

Article 11, Paragraph 1 of the Chinese Patent Law (2001) reads: "After the grant of the patent right for an invention or utility model, except where otherwise provided for in this Law, no entity or individual may, without the authorization of the patentee, exploit the patent, that is, make, use, offer to sell, sell or import the patented product, or use the patented process, and use, offer to sell, sell or import the product directly obtained by the patented process, for production or business purposes."

According to Article 11 of the Chinese Patent Law (2001),

without authorization and exploitation of patent are the essential elements of patent infringement. If there is no exploitation, no patent infringement exists. If the exploitation is limited in the authorized scope by the patentee, for example, the scope recorded in the license, there is no patent infringement either.

Article 11 of the *Chinese Patent Law (2001)* expressly lists the particular actions of exploiting patent, but does not explicitly provide the particular manner of "the authorization by the patentee." Usually, the patentee would limit actions, region and period of the exploitation in the license. If the licensee exploits the patent in a manner beyond the limitations agreed in the license, the exploitation is without authorization of the patentee and the patent is infringed. In this case, the tort liability and liability for breach of a contract occur; the patentee can pursue the tort liability under the *Chinese Patent Law*, or pursue the liability for breach of a contract under the *Chinese Contract Law*.

As mentioned above, "exploitation of patent" is a premise of infringement. But the actions of "exploitation of patent" are limited to those provided in Article 11 of the *Chinese Patent Law* (2001).

Specific attention shall be pay to two points. First, if the patentee intends to constrain other behaviors than those of "exploitation of patent," the constraints shall be clearly recorded, for example, in the license. If the licensee violates the constraints, the liability for breach of a contract can be pursued under the *Chinese Contract Law*. Second, as to the action "making patented product" among those "exploitation of patent," the role of a relevant party shall be considered in producing or making the products with all the technical features in a claim of the patent.

In this case, DNS Industries obtained license from the patentee, Qianping AO, and commissioned its subsidiary Huizhou Hehong to produce the patented product. DNS Industries provided the patent technology, and Huizhou Hehong produced the socket according to the technology. Since the production of the patented products was authorized by the patentee, the patent was not infringed.

Philips authorized DNS Industries to be its brand agent to provide production, sale, and after-sale service for sockets with Philips logo. According to the identified facts, Philips was not involved in producing or forming the products with all the technical features of a claim of the patent. So, the Supreme People's Court determined Philips was not the manufacturer under the Patent law, and did not infringe the patent.

As for marking on the alleged infringing products with Philips logo by authorization of Philips, it is not an action infringing a patent under the Patent Law. If the patentee intends to restrain such behavior, the restraints shall be expressly recorded in the license.

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# **Smart Farming Machine with Miniature Pedrails**

Shanxi Qinfeng Farming Machinery (Group) Ltd. v. Shanxi Dongming Agricultural Technology Ltd. - The Determination of the Date When a Patent Right is Declared Invalid (Civil Judgment (2012) Min Ti Zi No.110 by the Supreme People's Court on November 20, 2012)

The Chinese Patent Law (2009) stipulates, in Article 47, Paragraph 2, "the decision declaring the patent right invalid shall have no retroactive effect on any judgment or mediation decision of patent infringement which has been pronounced and enforced by the people's court, on any decision concerning the handling of a dispute over patent infringement which has been complied with or compulsorily executed, or any contract of patent license or of assignment of patent right which has been performed prior to the declaration of the patent right invalid; however, the damage caused to other persons in bad faith on the part of the patentee shall be compensated." This judgment illustrated that the date when a patent right is declared invalid shall be the decision date of the patent invalidation proceeding.

The patentee, Shanxi Qinfeng Farming Machinery (Group) Ltd. ("Qinfeng" hereinafter), holds a patent for utility model No. ZL92223888.X ("the '888 Patent" hereinafter) titled "Smart Farming Machine With Miniature Pedrails", and filed a patent infringement lawsuit against the alleged infringer, Shanxi Dongming Agricultural Technology Ltd. ("Dongming" hereinafter) for infringing the '888 Patent.

This infringement lawsuit came to a conclusion after the first and second instances, during which the asserted patent went through two invalidation proceedings. In the latter one of the two invalidation proceedings, the Patent Reexamination Board ("PRB" hereinafter) made Decision No. 14443 declaring validity of claims 2 and 3 of the '888 Patent on Jan. 21, 2010. In the infringement lawsuit, the court for the second instance held the judgment made by

the court for the first instance, that is, confirming that Dongming infringed the '888 Patent of Qinfeng, ordering an injunction and awarding a damage of RMB 150,000 (around 35,000) to Qinfeng. The court for the first instance executed the judgment on March 16, 2011 and issued the Civil Ruling (2011) *Xi Zhi Min Zi* No.38 to complete the execution of the second instance judgment. Due to a delay in the bank procedure, Qinfeng did not receive the awarded damage until March 17, 2011.

Afterward, the PRB made a Decision No. 16225 on Request for Invalidation ("Decision No. 16225" hereinafter), declaring full invalidation of the '888 Patent. The Decision No. 16225 was then upheld in the following administrative lawsuit and came into force in the end. It is to be noted that Decision No. 16225 was made on March 15, 2011, announced to public on March 25, 2011, and delivered to Qinfeng on April 3, 2011. According to Article 47, Paragraph 1 of the *Chinese Patent Law* (2009), any patent right which has been declared invalid shall be deemed to be non-existent from the beginning. Based upon the new fact, Dongming requested the Supreme People's Court for retrial on the ground that Decision No. 16225 should be retroactive on the executed judgment of the infringement lawsuit.

The judgments in the first and second instances of the infringement lawsuit should be repealed in the situation where the asserted patent has been declared fully invalid. The issue is whether Decision No. 16225 is retroactive on the execution of the judgment of the infringement lawsuit. Apparently, it is critical to determine the timing when the judgment of the infringement lawsuit was executed and the timing when the asserted patent was declared invalid in an effort to address the above issue.

Generally, the date when a civil judgment is executed shall be the date when the rulings included in the judgment have been fully executed and the benefits favorable to the concerned party as determined by the judgment have been carried out. In the present case, the court for the first instance has fully completed the execution on March 16, 2011. The awarded damage was received by Qinfeng on the next day only due to the delay in the bank procedure.

Therefore, it is beyond dispute that the execution of the judgment of the infringement lawsuit was completed on March 16, 2011.

Thus, whether Decision No. 16225 is retroactive on the judgment of the infringement lawsuit depends on the timing when the asserted patent was declared fully invalid. In the present case, Decision No. 16225 involved three legal dates: the decision date (March 15, 2011), the announcement date (March 25, 2011), and the delivery date (April 3, 2011). The date when the judgment of the infringement lawsuit was executed falls behind the decision date, but precedes the announcement date and delivery date. If the decision date is regarded as the time when the asserted patent was declared invalid, Decision No. 16225 should be retroactive on the judgment of the infringement lawsuit; otherwise, it should not if either the announcement date or the delivery date is deemed as the time when the asserted patent was declared invalid.

The Supreme People's Court identified the decision date, March 15 2011, as the date when the asserted patent was declared invalid, when the judgment of the infringement litigation had not yet been fully executed. Therefore, the present case would not fall in the scenario without retroactivity as provided by Article 47, Paragraph 2 of the *Chinese Patent Law* (2009). On the merits, the Supreme People's Court reversed the first and second instance judgments and restitute the benefits conferred to Qinfeng.

In this case, the judge of the Supreme People's Court explained the reasons for identify the decision date as the date when the asserted patent was declared invalid, with the following factors to be taken into account while determining the time point of the invalidation declaration: a) this time point should be clearly known to the public; b) this time point should be an ascertained one that would not change with the specific situations of the related parties or other factual factors; and c) this time point should be an earlier legal one so as to increase the likelihood where the invalidation decision may play a retroactive role. Identifying the decision date as the time when the patent right is declared invalid not only meets the requirements for public awareness and ascertainable, but also increases, to some extent, the possibility where the invalidation

decision could play a retroactive role for justice. Therefore, the date when a patent right is declared invalid shall be determined as the decision date when the decision on the invalidation request of the patent is made.

#### Remarks

Article 47 of the *Chinese Patent Law (2009)* provides a general rule that the invalidation decision is retroactive with an exception of no retroactivity on any judgments or mediation decisions of patent infringement, any administrative decisions on a dispute over patent infringement, any license contracts for exploitation of patent, and any assignment contracts of patent right, which have been executed or performed *prior to the declaration of the patent right invalid.* The exception facilitates maintenance of any society order that is already formed and stabilized by compromising the justice of result. This case sets a rule that the timing when a patent right is declared invalid should be determined as the decision date when the decision on the invalidation request of the patent is made, which is an earlier legal time point involved in the invalidation proceeding, resulting in a greater possibility of retroactivity the invalidation decision may have. It is positive in terms of pursuing the justice of result.

In the draft of *Interpretations of the Supreme People's Court on Certain Issues Concerning the Trial of Patent Infringement Disputes* posted by the Supreme People's Court on July 31, 2014, it is provided in Article 35 that "prior to the declaration of the patent right invalid' in Article 47, Paragraph 2 of the *Chinese Patent Law* (2009) means prior to the decision date disclosed by the decision on the invalidation request of patent..." Therefore, we are expecting that the Supreme People's Court will soon stipulate expressly in the judicial interpretation that the date when a patent right is declared invalid, in terms of the retroactivity of the invalidation decision, shall be the decision date of the corresponding invalidation proceeding.

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# **Hepatitis C Inhibitor Compounds**

Boehringer Ingelheim Int. v. the Patent Reexamination Board - Admission of Post-Filing Experimental Data and the Binding Effect of Examination Result in Other Countries (Reexamination Decision No. 48444 by the Patent Reexamination Board on December 18, 2012)

Experimental data is vital to the patentability requirements of inventiveness, support, and enablement for chemical/medical application. During the substantive examination. the applicant may intend to supplement experimental data to support inventiveness after filing, which is called "post-filing experimental data". It is controversial whether post-filing experimental data shall be admitted. This article discusses admission of post-filing experimental data, as well as the binding effect of examination result in other countries based on analysis on an actual case.

This case is regarding a patent application with App. No. 200480013783.1 titled "Hepatitis C Inhibitor Compounds" where claim 1 relates to "a racemate, diastereoisomer, or optical isomer of a compound of formula (I) or a pharmaceutically acceptable salt or ester thereof". The applicant is Boehringer Ingelheim Int. ("Boehringer Ingelheim" hereinafter).

The patent application was rejected during the substantive examination for lack of inventiveness. The examiner holds that there is teaching in D1 regarding the compounds of Claim 1 and it is obvious for a skilled person to obtain the compounds of Claim 1 based on D1.

Not satisfied with the Rejection Decision, Boehringer Ingelheim filed a request for reexamination with the Patent Reexamination Board (PRB), submitted amended claims and comparative experimental data. Moreover, it argues that the patent application had been granted by the EPO.

The PRB issued an Notification of Reexamination and stated

that: (i) the amended Claim 1 still possess no inventive step in view of D1; (ii) the post-filing experimental data should not be admitted because the experimental protocols and the data are not described in the original specification; (iii) the examination result in other countries is not binding on the examination in China.

In response to the Notification of Reexamination, Boehringer Ingelheim made further amendment to limit the compounds of formula (I) into four specific compounds, and highlighted the un-expectable technical effects achieved by the claimed compounds in terms of oral bioavailability etc., which can be supported by the post-filing experimental data.

After review, the PRB rendered the Re-examination Decision, rejecting on the grounds that: (i) the amended claim 1 lacks inventiveness in view of D1; (ii) the post-filing experimental data is still not admitted. Specifically, the PRB emphasized that the post-filing experimental data shall not be admitted unless the post-filing experimental data is used to support the effects that have already been explicitly described in the original specification with corresponding experimental data. In this case, there is no experimental data to support the technical effects described in the original specification. Thus, these described effects should be regarded as "assertive conclusion" and not regarded as real unexpectable technical effect. Meanwhile, the protocols for the post-filing experiment and its data are not described in the original specification.

Based on the above, the PRB upheld the Rejection Decision.

## Remarks

(I) Provision regarding supplementing post-filing experimental data in *Guidelines for Patent Examination* as well as its current development.

Guidelines for Patent Examination (2001 Edition) states that: the following additions are not allowable: (6)the experimental data is added to illustrate the advantageous effects of the invention,

and/or the specific mode for carrying out the invention or embodiment is added to prove that the invention can be carried out in the extent of protection claimed in the claims (however, these supplementary information may be placed into the records of the application, for the examiner's reference to examine novelty, inventiveness and practical applicability). It further provided for the examination of invention applications in the field of chemistry where the applicant shall not be permitted to introduce the post-filing example, especially those involving the protection scope of the application, into the specification, let alone into claims. The supplementary experimental data may be placed into the records of the application, for the examiner's reference to examine novelty, inventiveness, and practical applicability.

Those contents within the parentheses and for the examination of chemical inventions were deleted from the Guidelines for Patent Examination (2006 Edition). The new amendment provided that "whether the description is sufficiently disclosed is judged on the basis of the disclosure contained in the initial description and claims, any embodiment and experimental data submitted after the date of filing shall not be taken into consideration". In other words, it explicitly stated that post-filing experimental data shall not be admitted in the examination of sufficient disclosure. However, it is not clear about the weight of post-filing experimental data in the examination of inventiveness.

Guidelines for Patent Examination (2010 Edition) is consistent with the 2006 Edition, which retains the regulations on post-filing experimental data for the examination of sufficient disclosure, but still does not provide clear provision on the weight of post-filing experimental data in the examination of inventiveness.

We noticed that in December 05, 2013, Chinese President XI Jinping and U.S. President Barack Obama issued the "Joint Fact Sheet on Strengthening U.S.-China Economic Relations," which states that "China affirms that the Chinese Patent Examination Guidelines permit patent applicants to file additional data after filing their patent applications, and that the Guidelines are subject to Article 84 of the Law on Legislation, to ensure that pharmaceutical

inventions receive patent protection. China affirms that this interpretation is currently in effect." This sentence may be interpreted as not only does the post-filing data relates to patent protection, but also the interest and market development of multinational pharmaceutical companies in China. How will the Joint Fact Sheet affect the Chinese patent examination remains as an open question.

## (II)Advice

In this case, the PRB clearly indicates that "the post-filing experimental data shall not be admitted unless the post-filing experimental data is used to support the effects that have already been explicitly described in the original specification with corresponding experimental data." Furthermore, in another famous case decided by the Supreme People's Court (SPC) on August 3, 2012, the SPC held that "when the applicant or patentee intends to submit comparative experimental date for proving the inventiveness of the claimed technical solution in view of the prior art, the data could be admissible with the proviso that the technical effects to be proved shall have already been described in the original application."

With respect to the subject case, the post-filing experimental data cannot be admitted for the reason that the surprising technical effects such as oral bioavailability are not described in the original specification.

As can be seen, an admissible post-filing experimental data must be submitted for the technical effects that have been explicitly described in the specification. Furthermore, there should be some corresponding data relating to the technical effects, avoiding that the described effects may be regarded as "assertive conclusion."

In order to acquire a stable and effective patent right, an applicant in the field of chemistry should make adequate preparation and rational arrangement. When some experimental data has been obtained proving the technical effects of claimed solution, these data should be selectively revealed in the original application. Especially

for the beneficial effects in view of the prior art, it should be noted that both effects and corresponding supporting data should be provided in the original application. However, in some instances such as competitive industry and possible divulging of the invention before the filing date, the applicant may file a first application to take the initiative. In that case, the applicant should conduct preliminary experiments to obtain gross prediction about the technical effects of claimed solution, taking the key factors such as enablement and inventiveness into consideration. Since the preliminary experiments and the technical effects are described in the original specification, the applicant may try to "post-file" sufficient experimental data to support the arguments in case of a challenge during the examination of the application.

In addition, this case also shows that a Chinese patent application is examined in accordance with the *Chinese Patent Law*, the *Implementing Regulations of the Chinese Patent Law*, and the *Guidelines for Patent Examination*. The examination result in other countries would not be binding on the examination in the State Intellectual Property Office. Such result can only be provided for reference.

In summary, an applicant in the field of chemistry should pay more attention to the disclosure of experimental data and the technical effects of claimed solution in the original description, in order to acquire a stable and effective patent right.

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# Pharmaceutical Composition for Use in Diabetes Treatment

Takeda Pharmaceutical Co.,Ltd. v. PRB - Admission of Post-filing Experimental Data for Inventiveness (Administrative Ruling (2012) Zhi Xing Zi No.41 by the Supreme People's Court on September 17, 2012)

In the procedure of granting and confirming a patent right, the paten applicant/patentee may intend to submit supplementary experimental data to prove the patent has inventiveness. Admission of the post-filing experimental data should be reasonable and objective in view of the proper balance between the interests of patentees and the public. This case highlights the premise to admit the post-filing experimental data for determination of inventiveness, i.e. such data should direct to the technical effect described in the original application documents.

The patentee, Takeda Pharmaceutical Co.,Ltd. (hereinafter "Takeda"), owns a invention patent No. ZL96111063.5 titled as "Pharmaceutical Composition for Use in Treatment of Diabetes" (hereinafter "the patent concerned"). Claim 1 was "pharmaceutical composition useful for prophylaxis or treatment of diabetes, diabetic complications, glucose or lipid metabolism disorders, which comprises an insulin sensitivity enhancer selected from pioglitazone or a pharmacologically acceptable salt thereof, and Sulfonylurea as insulin sensitivity enhancers."

Sichuan Haisco Pharmaceutical Co.,Ltd.(hereinafter "Haisco"), Chongqing Institute of pharmaceutical industry Co., Ltd.(hereinafter "Chongqing Institute") filed the invalidation request with the Patent Reexamination Board (PRB) on June 13, 2008 and July 18, 2008, respectively, based on the same grounds. One of the invalidation ground is that Claim 1 lacks inventiveness. In this regard, Takeda submitted counter-evidence 7 to prove that the patent concerned had unexpected technical effect.

The PRB rendered the Invalidation Decision No. 12712 not in favor of Takeda. According to the invalidation decision, it holds Takeda's counter-evidence 7 inadmissible for authenticity and could not prove the inventiveness of claim 1.

Takeda appealed to the Beijing First Intermediate People's Court (the first instance court). Meanwhile, Takeda submitted patent examination file of the patent concerned and its European family patent, arguing the experimental data submitted in the invalidation procedure was admitted in substantive examination both by the State Intellectual Property Office (SIPO) and European Patent Office (EPO).

The first instance court decided that the counter-evidence 7 was not the original lab reports and did not show institutions or individuals of the experiments; since Haisco and Chongqing Institute did not accept the counter-evidence 7, it is legitimate for the PRB not admitting it. The second instance court affirmed.

Takeda appealed to the Supreme People's Court (SPC) for retrial. According to the SPC's ruling, Takeda's counter-evidence 7 described the specific experiment procedure and the clear result, as a unilateral proof of that the combination of pioglitazone and glimepiride has unexpected synergy. However, there is no evidence establishing that the examiner of either the SIPO or the EPO granted the patent because of the admission of the counter-evidence 7. The fact that the counter-evidence 7 existed in the related examination files can only prove that Takeda had submitted these materials in the substantive examination phase. Moreover, the counter-evidence 7 was not original and it did not show which institution or who made the experiments, nor it was notarized. At the same time, the counter-evidence 7 was not accepted by Haisco and Chongqing Institute. Thus, it was not improper for the PRB disallowing the counter-evidence 7.

Furthermore, the SPC holds that: experimental data filed after the date of filing is not contained in the original patent application document. If the technical effect of the patent was determined based on such experimental data, it would be contrary to the first-to-file principle, also violate the essence of the patent system. And it was not fair to the public to grant a patent application on this basis. When the patent applicant or patentee want to submit comparing experimental data to prove the claimed technical solution had inventiveness in respect to the prior art, the premise for admitting the data is that the experimental data should direct to the technical effect described in the original application documents.

To be specific, Takeda provided the counter-evidence 7 to prove the combination of pioglitazone and glimepiride had unexpected hypoglycemic effects compared with the effect when they are used alone or of other combination protocols. However, in the patent specification, there were only experimental results of combination of pioglitazone and voglibose, and combination of pioglitazone and glibenclamide, which claimed better hypoglycemic effect due to combination of insulin sensitivity enhancer and insulin secretion enhancer. It did not mention the effect among different combination protocols of drugs. The technical effect argued by Takeda based on the post-filing experimental data was not described in the original application documents, and awaited verification. Therefore, such experimental data cannot be used as the basis for evaluation of the inventiveness.

For the reasons above, the SPC rejected Takeda's retrial petition.

## Remarks

It has been a hot topic in the field of chemistry and medicine that whether supplementary experimental data submitted after the date of filing should be admitted. Chemistry and medicine are experimental science. For the inventions thereof, it is not possible to prove the inventiveness without experimental data. Sometimes, the applicant/patentee may intend to submit supplementary experimental data after filing to prove inventiveness with respect to the prior art. Admission of the post-filing experimental data should be reasonable and objective in view of the proper balance between the interests of patentees and the public.

First, the authenticity of the experimental data is a precondition. As for the post-filing supplementary experimental data, it should consider the reasons the evidence was formed by, whether it is original or a photocopy, the interests of the parties providing the evidence, etc. For an extraterritorial evidence, the notarization and authentication is important.

In this case, the source of the experimental data submitted by Takeda in invalidation procedure was not indicated, and the document was not notarized or authenticated. Therefore, since the other party did not accept the authenticity, under the Chinese laws, the PRB and the courts could not admit such evidence.

Second, if the counter-evidence 7 were notarized and proved to be true, is it possible the result would be different?

The counter-evidence 7 is post-filing experimental data. Generally, this type of data will not be admitted if it is related to the practical applicability under Article 22, Paragraph 4, enablement under Article 26, Paragraph 3, or support and clarity under Article 26, Paragraph 4 of the *Chinese Patent Law*, for the reason that such data cannot be derived by a skilled person from the prior art.

With respect to the determination of novelty and inventiveness, it may be different. That is to say, comparison experimental data between the patent concerned and the prior art should be allowed for submission to evaluate the inventiveness. However, the comparison experimental data should direct to the effect disclosed in the original patent application documents, or the effect derived from the existing technologies by a person skilled. In this case, the counter-evidence 7 does not satisfy this condition(s).

We can conclude that, according to the first-to-file principle and the essence of disclosure for protection of patent law, even if the authenticity of the counter-evidence 7 can be confirmed, it still cannot be used to prove the technical effect that was neither recorded in the application documents nor derived from the prior art.

In summary, when a patent applicant or patentee wishes to

submit post-filing comparison experimental data to prove the inventiveness, the data should direct to the technical effect described in the original application documents clearly, because this determines whether the data can be accepted and admitted. Therefore, the applicant or patentee shall submit supplementary experimental data with caution. In addition, when drafting a patent, the effect or the desired effect should be fully explained. As for the technical effect or technical solution found after the date of filing, new or divisional application in the form of a method or a use patent can be considered.

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# **Injection Consisting of Adenosine Disodium Triphosphate and Magnesium Chloride**

Shanxi Zhendong Taisheng Pharmaceutical Co., Ltd. et.al. v. Hu Xiaoquan - How to Construe a Close-ended Claim (Civil Judgment (2012) Min Ti Zi No. 10 by the Supreme People's Court on December 20, 2012)

When patent claims are granted a patent right, the public will determine the extent of patent protection in accordance with the relevant regulations and the terms of patent claims, and then decide what business strategy to apply. If a patentee fails to come up with a proper manner of drafting the claims during the patent prosecution for various reasons, and chooses close-ended claim which has a relatively narrow extent of protection, then the granted patent claims, when enforced, cannot cover the desired extent of protection. The highlight of this case is the confirmation that generally a close-ended claim of a chemical composition shall be construed as the composition merely consisting of the indicated components, and including no other components but impurities in a normal amount, while adjuvants do not belong to the impurities.

The patentee, HU Xiaoquan, owns a patent for invention No. ZL 200410024515.1, titled "Process for the Preparation of an Injection of Adenosine Disodium Triphosphate and Magnesium Chloride," wherein claim 2 recites the additional technical features, "a freeze-dried powder injection of adenosine disodium triphosphate and magnesium chloride for injection, consisting of adenosine disodium triphosphate and magnesium chloride at the ratio by weight of 100 mg to 32 mg."

The alleged product, adenosine disodium triphosphate and magnesium chloride for injection, is also an injection in the form of white or off-white freeze-dry lumps or powders. The main components of the freeze-dry powder are adenosine triphosphate disodium salt at a dosage of 100 mg and magnesium chloride at a dosage of 32 mg. However, in the process of the preparation of the

alleged product, arginine and sodium bicarbonate, are added.

Both the Jinan Intermediate People's Court for the first instance and the Shandong High People's Court for the retrial held that the adjuvants in the alleged product are not the main components, and do not affect the composition, the weight ratio of "adenosine triphosphate disodium and magnesium chloride" in the injection. The alleged product has the same features as the patented product, which fell into the scope of protection of the patent at issue, and constitutes infringement. <sup>1</sup>

The alleged infringers, Shanxi Zhendong Taisheng Pharmaceutical Co., Ltd. et.al., filed a request for retrial with the Supreme People's Court, arguing that claim 2 of the patent is a close-ended claim, so the infringement cannot be established as long as the alleged product comprises any other component which is not recited in the claim, regardless of whether other component is an active ingredient.

After hearing the Supreme People's Court considered that the controversial focus of this case is on the extent of protection of a close-ended claim, i.e. claim 2.

The Supreme People's Court held that in order to safeguard the reliance interest of the public in the claim scope of granted patent right, when a patent infringement proceeding involves the extent of protection of a patent, a close-ended claim shall generally be interpreted as not including any component or process step other than those recited in the claim. When drafting the claims, the patentee can choose, according to the specific situations, an appropriate drafting manner among an open-ended mode, a close-ended mode, a close-ended mode for active components, and a partially close-ended mode, to obtain a proper extent of patent protection. The claim of the patent concerned (i.e. claim 2) explicitly employs the transition phrase "consisting of" for a

<sup>&</sup>lt;sup>1</sup> The Supreme People's Court ordered the Higher People's Court of Shandong to retry the case due to the erroneous application of the law in second instance.

closed-ended mode as specified in the *Guidelines for Patent Examination*, therefore, it is a close-ended claim and its claim scope should be determined according to the normal interpretation of a close-ended claim. That is, the freeze-dry powder injection of adenosine disodium triphosphate and magnesium chloride for injection claimed by claim 2 of the patent concerned contains only adenosine disodium triphosphate and magnesium chloride, but no other component, except for impurities in a normal amount. However, adjuvants do not belong to impurities, and an injection containing adjuvants is thus excluded from the scope of claim 2 of the patent concerned.

Based on the above interpretation, the exclusion of the other components is also an inherent feature of a close-ended claim. Compared with claim 2 of the patent concerned, the alleged product further comprises arginine and sodium bicarbonate, and therefore it does not constitute infringement. The Supreme People's Court ultimately reversed the judgments of the first instance and retrial.

### Remarks

First, Rule 6 of *Interpretations of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent* (hereinafter, referred to as "the Interpretation (2009)") interprets the application of the doctrine of prosecution history estoppel in patent infringement dispute cases. To enhance operability, this Interpretations emphasizes on the restrictive amendments or observations actually made by a patent applicant or patentee. The doctrine of prosecution history estoppel applies regardless of 1) whether such amendments or observations are made on the patent applicant or patentee's own initiative or in answer to the examiner's invitation, 2) whether there is any causal legal relationship between such amendments or observations and approval of patent right, or 3) whether such amendments or observations are ultimately accepted by the examiner.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Kong Xiangjun, Wang Yongchang, Li Jian. Certain Issues on the Application of Interpretations of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent [J].

In this case, the applicant of the patent concerned had tried to amend the description and claims to read "the main components consist of adenosine triphosphate disodium and magnesium chloride" in response to the second office action issued by the State Intellectual Property Office during the substantive examination of the patent application. However, the examiner rejected the amendments for "going beyond the scope of disclosure contained in the initial description and claims" and hence violated the provisions under Article 33 of the *Chinese Patent Law*. In the end, the applicant amended the product claims as the approved.

Second, Rule 7 of the Interpretation (2009) stipulates that the all-limitations rule applies to a determination of patent infringement. An accused technical solution will be determined to fall into the scope of protection of a patent claim as long as the accused technical solution contains all the limitations of the claim. It does not matter whether the accused technical solution contains any additional limitation. However, for a closed-ended claim to a composition of matters, if an accused technical solution contains other components than those explicitly recited components of the claim, then the accused technical solution shall be found non-infringing instead of falling into the claim scope by construing the other components as "additional limitation," which does not relate to the finding of an infringement. 1

In this regard, the Beijing High People's Court adds in Guidelines for Determining Patent Infringement issued in year 2013 that: a closed-ended claim to a composition of matters shall be interpreted as containing only the explicitly recited components, with the exception of any additional technical features in an accused technical solution that does not have any substantive influence on the properties, and technical effects of the composition, or as inevitable impurities in a normal amount. In practice, however,

Electronic Intellectual Property, 2012, (2): 80-84.

<sup>&</sup>lt;sup>1</sup> KONG Xiangjun, WANG Yongchang, LI Jian. Certain Issues on the Application of Interpretations of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent [J]. Electronic Intellectual Property, 2012, (2): 80-84.

sometimes it is a tough problem to inquire whether an influence is a "substantial" influence. Moreover, chemistry is an experimental science, and the technical effects need to be verified by providing a large volume of experimental data. It is highly possible that both plaintiff and defendant will provide experimental data in favor of him or herself, which may further complicate the courts to verify the experimental data as evidence.

In this case, the courts of first instance and retrial both held that the adjuvants are not the main components, and the alleged product has all the technical features of the patented product. The courts of first instance and retrial are obviously wrong, as the alleged product having the additional components "arginine and sodium bicarbonate" does not infringe the asserted patent claim in a close-ended mode either literally or under the doctrine of equivalents. Meanwhile, the Supreme People's Court clarified the applicability of the doctrine of equivalents to patent infringement of a close-ended claim, where it indicate that once a patentee chooses a close-ended claim, it means that the patentee has explicitly excluded any component or process step other than those recited in the claim from the scope of patent protection, and it is not justifiable for the patentee to re-claim the surrendered subject matters through the doctrine of equivalents. The doctrine of equivalents shall be applied on a limitation-by-limitation basis rather to the "invention as a whole"

Last, as far as this case is concerned, the drafting of the patent application contains many flaws, and this is the main reason why the asserted patent claim cannot cover the alleged product. If the patentee had recognized the restriction on the extent of protection of a close-ended claim when drafting the patent application, he might avoid using a closed-ended mode, and choose an open-ended claim for a broader scope of protection. In prosecuting the patent application, the patentee had tried to amending the completely close-ended claim to the injection to a closed-ended mode of the main components of the injection. However the amendment was rejected for "going beyond the scope of disclosure contained in the initial description and claims". This defeated the patentee's attempt to expand the claim scope. From this we can learn that it would be

better to make the disclosure of the description enough to leave room for later amendments to claims.

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# Crystalline Monohydrate of Tiotropium Bromide

Boehringer Ingelheim Pharma GmbH & Co.KG v. the Patent Reexamination Board - How to Judge Inventiveness of a Crystalline Compound (Administrative Ruling (2012) Xing Zhi Zi No. 86 by the Supreme People's Court on November 27, 2012)

With reference to inventive step of compound claims, it is stipulated in the Guidelines for Patent Examination that for a compound NOT similar in structure to a known compound, it will be regarded as inventive when it has a certain use or effect where a compound that IS similar in structure to a known compound, it might be regarded as inventive only if it has an unexpected use or effect. As can be seen, it is important to judge whether a compound is structurally similar to a known compound. This case clarifies that in the determination of inventiveness of a crystalline compound. the wording similar compounds" specifically "structurally compounds having the same central part or basic ring, and has nothing to do with comparison between microcrystalline structures. The microcrystalline structure difference shall be considered only if it brings unexpected technical effect.

The petitioner Boehringer Ingelheim Pharma GmbH & Co.KG (hereinafter referred as "BIPG") challenged the validation of the patent No. ZL 01817143.5 titled "Crystalline monohydrate, method for producing the same and the use thereof in the production of a medicament" (hereinafter referred as "The challenged patent") for lacking an inventive step in view of Evidence 5a and Evidence 1. Evidence 5a discloses Tiotropium Bromide X-hydrate. Evidence 1 discloses Tiotropium Bromide crystals.

In the challenged patent, claim 1 seeks protection for "Crystalline Tritropium Bromide Monohydrate of Formula I

characterized by a single monoclinic cell having the following dimensions: a = 18.0774 Å, b = 11.9711 Å, c = 9.93 Pl = Å,  $102.691 \,^{\circ}$ ,  $V = 2096.96 \,^{\circ}$  Å<sup>3</sup>."

To defend against the petitioner, the Patentee provided Counter-evidence 1, the Observation as submitted in response to the first office Action, to prove the unexpected technical effect that "after micronizing, the crystalline Tiotropium Bromide monohydrate of claim 1 produces substantially stable sub-particles under pressure."

The Patent Reexamination Board ("PRB" hereinafter) ascertained that the chemical product of claim 1 and the chemical products of Evidence 5a and Evidence 1 have the same main portion, i.e. Tritropium Bromide. In other words, the chemical products of claim 1, Evidence 5a and Evidence 1 have the same structure of Tiotropium Bromide as their central part. Therefore these three products are structurally similar to each other. For use of a chemical product and its technical effects, it is only generally mentioned in the description of the challenged patent that the claimed pharmaceutically active substance will meet some demanding requirements, but there is no evidence proving such technical effects. Therefore, the product of claim 1 cannot be considered as having any unexpected technical effect over the prior art, such as Evidence 5a or Evidence 1. Thus, claim 1 should be invalidated.

The first and the second instance courts upheld the PRB's view as mentioned above.

The Patentee submitted a request to the Supreme People's Court for retrial, indicating that (1) crystalline Tiotropium Bromide monohydrate of claim 1, Tiotropium Bromide X-hydrate of Evidence 5a, and Tiotropium Bromide crystal of Evidence 1 are not "structurally similar compounds" mentioned in the *Guidelines for Patent Examination*; and (2) the Counter-evidence has proved an unexpected effect, i.e. particle size of the micronized sub-particles remained unchanged under pressure.

Upon hearing, the Supreme People's Court holds that this case focuses on whether the monohydrate crystals of the challenged patent, the anhydrous crystal of Evidence 1 and x-hydrate of Evidence 5a are "structurally similar compounds" stipulated in the *Guidelines for Patent Examination*, and whether an unexpected technical effect is achieved in the challenged patent.

In this regard, the judge ascertained that crystalline compounds have diverse microscopic crystal structures. In a solid state, a certain compound may have different solid crystalline forms based on two or more different molecular arrangement, but not all of the microscopic crystal structures would necessarily lead to prominent substantive features and produce a notable progress. Therefore, crystalline compounds cannot be considered as "not similar in structure with each other" only due to their different microscopic crystal structures. While judging inventiveness of a crystalline compound, its microscopic crystal structure shall be considered in combination with the question whether it brings in unexpected technical effects. Furthermore, the judge ascertained that the crystalline monohydrate as claimed does not have any unexpected technical effect according to the description of the challenged patent.

Based on the above affirmation, the crystalline Tiotropium Bromide monohydrate of claim 1 are similar in structure with the prior art chemical products, and there is no description showing that the crystalline monohydrate as claimed produces an unexpected technical effect over the prior art. Thus, the Supreme People's Court rejected the patentee's request for retrial.

### Remarks

In the field of pharmaceutical chemistry, developments of new pharmaceutical active compounds is always expensive. In contrast, screening new crystalline form of known chemical products is much cost-friendly. Meanwhile, patents of new crystal form do a good job in extending market exclusivity period of patent medicines. Therefore, in order to extend the patent protection period in a different way, patentee of a compound patent often desires to get patent for new crystal form of the known compound.

However, compared with a known pharmaceutically active compound, these crystalline forms generally only differ in their microscopic crystal forms, without significant change in their basic chemical composition. Considering that the crystalline form of a compound would necessarily have "a certain use and effect," if such a crystalline compound was considered as having different structure with the known compound, it should be granted a patent right. This criterion will inevitably result in a flood of crystalline compound patents, thereby discourage people's enthusiasm to invent. This is contrary to the legislative intent of the *Chinese patent law* "to encourage inventions".

In the present case, the Supreme people's Court clarified criteria to judge the inventive step of a crystalline compound invention. A crystalline compound invention should only be considered as inventive if its distinguishing microcrystalline structure results in unexpected technical effect. As can be seen, "unexpected technical effect" is a prerequisite to grant patent to a new crystal form of a known compound.

An active compound may have diverse crystal forms, and one or more of them would necessarily have superior technical effects over others. How to determine whether these superior technical effects are so-called unexpected technical effect? Chapter 4, Part II of the *Guidelines for Patent Examination* has the following stipulations: the unexpected technical effect means that as compared with the prior art, the technical effect of the invention represents a

"qualitative" change, that is, new performance; or represents a "quantitative" change which is unexpected. Such a qualitative or quantitative change cannot be expected or inferred by person skilled in the art in advance. As can be seen, unpredictivity of a technical effect would be critical to determine whether it is unexpected.

Back to the present case, crystalline compound is a compound wherein molecules are spatially arranged in a periodic and repeated way according to certain rules. Therefore, crystal form of a compound necessarily has better thermal stability when compared with its amorphous form. Claim 1 relates to crystalline Tiotropium Bromide monohydrate wherein the crystalline hydrate molecule are arranged periodically and interact with each other with certain forces. Compared with the crystalline hydrate, amorphous hydrate wherein water molecules are arranged irregularly are easier to lose their water. That is to say, the technical effect that "the crystalline monohydrate does not start to dehydrate until the temperature rises to 50  $^{\circ}{\rm C}$  and thus it may be stored for a long-term at room temperature or under even more severe conditions" is foreseeable. Therefore, the above technical effect cannot be considered as an "unexpected" technical effect.

The challenged patent may be maintained valid, if (1) the patentee had documented the effects that "after micronizing, the crystalline Tiotropium Bromide monohydrate produce substantially stable sub-particles under pressure"; and (2) relevant experimental data had been provided to support the above technical effect. As far as the writer's knowledge, there is no necessary correlation between the stability of particle size and the crystal structure of a compound. That is to say, the technical effect of "stable particle size" seems to be unpredictable and cannot be reasonably inferred, and thus can be considered as an unexpected technical effect. Thus, the relevance between technical effects and structural features is an important element to be considered. Therefore, it would be necessary to deeply study the structure-effect relationships.

In the writer's opinion, it is necessary to include and draft several technical effects produced by an invention in a clear, justified, and progressive manner in the description. One or more of these beneficial technical effects might be deemed to be unexpected technical effects in further examination or litigation proceedings when facing inventiveness challenges, so that the applicant will occupy a favorable position.

First of all, description on an unexpected technical effect should be clear and justified. The description should clearly illustrate which particular technical effects are beneficial over the prior art. For this case, "the activity stability of the starting materials under various environmental conditions, the stability during production of the pharmaceutical formulation, and the stability of the final medicament composition" are only generally and ambiguously mentioned in the last paragraph on page 1. This vague and general description is meaningless to prove an unexpected technical effect. In the field of pharmaceutical chemistry, necessary experiment data is usually pre-requisite to verify beneficial effects.

Second, it is better to draft beneficial technical effects in a progressive (pyramidal) manner so as to build a "pool" for unexpected technical effect. The drafter should not only understand the invention extensively as a whole, but also draft related technologies in a progressive way, so as to set up multiple "layers" of protection. For example, the patentee of the challenged patent unerringly further limits "stability during production of the formulation" pharmaceutical to "stability of amorphous configuration and crystal lattice" in paragraph 5, page 2 of the description. Unfortunately, the stability of amorphous configuration and crystal lattice were not considered, since the prior art *Tritropium* Brominate has better crystalline configuration and lattice stability.

In summary, in order to obtain a more stable patent, the patentee should assess all risks that may occur in the future, set forth in the specification a variety of beneficial technical effects, and provide strong support to such effects via adequate experimental data, so as to better safeguard the patent application/right.

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# Thermostable Glucoamylase

Novo Nordisk vs. Longda Co. and Boli Co. - Feasible Way to Define a New Protein Patent and Subsequently Obtained Scope of Protection (Civil Judgments (2012) Jin Gao Min San Zhong Zi No.41 and 42 by the Tianjin High People's Court on October 31, 2013)

With reference to new protein inventions, applicants always define biological sequences by the combination of homology and function, so as to obtain a broader scope of protection. However, considering that the association between the primary structure and the function of a protein is highly unpredictable, thus defined protein claim is always considered as not supported by the description and not conforming to Article 26.4 of the *Chinese Patent Law*. Therefore, discussions in this filed focuses on a proper manner to define a new protein patent and subsequently obtained protection scope. This is the first case for successful enforcement of biological patent in China, which clarifies a feasible definition of new protein patent, i.e. defining homology, origin (species), and function simultaneously. Furthermore, this case provides directions to judgment of future invalidation and infringement cases of new protein patents.

The patentee Novo Nordisk from Denmark possesses an invention patent titled "Thermostable Glucoamylase" with the patent number No. ZL98813338.5 (hereafter referred to as "the involved patent"). In 2001, Novo Nordisk sued Shandong Longda Bioproducts Co., Ltd. (hereafter referred to as "Longda Co.") and Jiangsu Boli Bioproducts Co., Ltd. (hereafter as "Boli Co.") for infringing its patent to the Tianjin Second Intermediate People's Court.

In June of 2011, the above two alleged infringer companies filed a Request for Invalidation to the Patent Reexamination Board (PRB) to invalidate the involved patent, respectively. The patentee amended claims of the involved patent during the invalidation procedure.

Amended claim 6 reads as "an isolated enzyme with glucoamylase activity, which is at least 99% homologous with the full length sequence shown in SEQ ID NO: 7 and has a PI below 3.5 determined by isoelectrical focusing." This is a typical technical solution defined by the combination of homology and function of a polypeptide. However, only two polypeptide, the one as shown in SEO ID NO:7 and the one encoded by SEO ID NO:34, are verified in the embodiments to have glucoamylase activity. Apart from this, there is no experimental data in the description related to the defined homologous polypeptides. Therefore, the PRB held that those skilled in the art cannot determine that all polypeptides defined by homology to specified sequence, e.g. polypeptides from different origins, will all have the alleged function and can achieve the objective of the present invention. In addition, there is no corresponding experimental data in the description. Therefore, the PRB concluded that technical solutions related to homology are not supported by the description.

The amended claim 10 further defines the enzyme as derived from a filamentous fungus of the genus *Talaromyces*, wherein the filamentous fungus is a strain of *Talaromyces emersonii*. The amended claim 11 further defines that the filamentous fungus is *Talaromyces emersonii* CBS 793.97. *T. emersonii* and *Talaromyces emersonii* CBS 793.97 obviously belong to the same species. The PRB held that an active gene with a specific function normally will only has one sequence in organisms of the same species, and its mutant sequences with very high homology will have the same function. Therefore, given that the glucoamylase activity of the enzyme derived from *Talaromyces emersonii* CBS 793.97 is verified in the description, those skilled in the art can foresee that polypeptides derived from *T. emersonii* and having at least 99% sequence homology will have glucoamylase activity.

Therefore, the PRB concluded that claims 10 and 11 can be supported by the description.

In summary, the PRB issued the No.17956 Examination Decision of Request for Invalidation, announcing claim 6 (homology + function) as invalid, and maintaining claim 10

(homology + species of original strain + function) as valid.

The First Instant Court tried the corresponding infringement case based on the above valid claim 10. The patentee submitted an appraisal conclusion made by a judicial appraisal institute agreed by both parties, indicating that the accused infringing product has the same technical feature with claim 10 in aspects of protein sequence and isoelectric point. The patentee further submitted a search report made by the Patent Searching and Consulting Center of the SIPO, indicating that the accused infringing protein cannot originate from other organisms than *T. emersonii*. The accused infringer failed to prove that accused infringing enzyme with the above protein sequence originated from other strains.

Therefore, the First Instant Court held that Longda Co. and Boli Co. did infringe upon Novo Nordisk's patent, and should pay the plaintiff economic lost and other fees, which are more than RMB 2.2 million in total (around USD 350,000).

Longda Co. and Boli Co. unsatisfied with the decision of the first instance and appealed. The Tianjin High People's Court concluded that the facts identified in the first instance are clear and the laws applied are proper, and rejected the request for the appeal and affirmed the judgment of the first instance.

#### Remarks

During the invalidation proceeding of this case, the PRB clarified that a claim merely defined by "function + homology" cannot be supported by the description when experimental data proving function of homologous proteins are not sufficiently provided. More importantly, the PRB clarified that a definition by "function + homology + original species" can be supported by the description, which was affirmed by the court. This fact provides clear and positive teaching to applicants in the biology field who have doubts on how to properly obtain a good scope of protection. Furthermore, as the very first case of successful patent enforcement in the biology field, the detailed procedure of evidence preservation and judicial appraisal and provision of a number of evidences are

essential to the positive result of this case, and of course enlightened other patent owners.

In the prosecution of bio-related invention applications, the U.S. is always considered to have the easiest criteria. However, in the decision of *AbbVie v. Janssen Biotech and Centocor Biologics* made by the United States Court of Appeals for the Federal Circuit on July 1, 2014, the antibody of claim 29 defined by "function + indexes" was invalidated for not disclosing any structural features common to the members of the genus, and lacking sufficient representative embodiments. It is also recited in the decision that functional claim limitations are patentable only if they are linkable to structure. As can be seen, stricter criteria on support issue becomes a new trend worldwide. Under this trend, more attention should be paid to representativeness, numbers and types of embodiments when drafting claims so as to ensure better protection.

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<sup>&</sup>lt;sup>1</sup> United States Court of Appeals for the Federal Circuit: ABBVIE DEUTSCHLAND GMBH & CO. v. JANSSEN BIOTECH, INC., 2013-1338,-1346, decided: July 2, 2014

# **Socket (Ground-Fault Current Interrupters GFCI)**

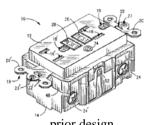
General Protecht Group Co., Ltd. v. Leviton Electronics (Dongguan) Co., Ltd. – The Influence of Functional Features on the Overall Visual Appearance of a Design (Administrative Judgment (2011) Xing Ti Zi No.2 by the Supreme People's Court on October 25, 2012)

Functional features play important role in the determination of identity or similarity between two designs. When judging whether a design is similar to a prior design, functional features should be considered as "having no influence on the overall visual appearance of a design's product," so as to avoid the possible situation of "monopolizing a product's function on the pretext of protecting a product's design."

Patentee, General Protecht Group Co., Ltd. (hereinafter "GP Group") owns a design patent No. *ZL 02351583.X* titled "Socket (Ground-Fault Current Interrupters GFCI)" (hereinafter referred as "the patent concerned") filed on October 30, 2002 and granted on May 14, 2003.

Leviton Electronics (Dongguan) Co., Ltd. (hereinafter "Leviton") submitted a request to the Patent Reexamination Board for the invalidation of the patent concerned based on the reason that this patent is a similar design to a prior one and thus does not comply with Article 23 of the *Chinese Patent Law* (2009).





patent concerned

prior design

As seen from the above, the patent concerned differs from the prior design in two aspects. First, the socket in the present design comprises a T-shaped plughole, an I-shaped plughole, and an arched plughole; while the socket in the prior design comprises two plugholes and an arched plughole. Second. I-shaped three-headed piece provided at both ends of the mounting plate is made of three connected pieces in the present design, i.e., one triangular piece and two polygonal pieces; while in the prior design, the three-headed piece is made of three separated polygonal pieces.

The Patent Reexamination Board issued Decision No. 9268 regarding the invalidation request (hereinafter "No. 9268 decision") on December 20, 2006, in which it is held that: the panel and the mounting plate of a socket will be easily noticed by a user. Therefore, the above distinguishing features significantly influence the overall visual appearance of the socket. It is thus concluded that the patent concerned is valid.

Leviton appealed against the No.9268 Decision and filed an administrative litigation before the Beijing First Intermediate People's Court (hereinafter "court of first instance"). Upon hearing, the court of first instance held that the patent concerned only substitutes I-shaped plughole with T-shaped plughole by adding a further I-shaped hole perpendicular to the original I-shaped plughole and this substitution is only made to one of the three plugholes. Further, as to the mounting plate, the triangular piece and the polygonal piece only differ in the number of sides. These differences

normally will not be noticed by an ordinary user. The patent concerned and the prior design are similar designs. Accordingly, No. 9268 Decision is annulled.

GP Group was dissatisfied with the first instance's judgment and appealed before the Beijing High People's Court (hereinafter referred as "court of second instance"). The court of second instance affirmed the ruling of the court of first instance. The appeal of the GP Group is rejected and the original judgment is sustained.

GP Group was again dissatisfied with the second instance's judgment and filed a retrial request before the Supreme People's Court. The Supreme People's Court held that, both the I-shaped plughole in the prior design and the T-shaped plughole in the patent concerned are designed to comply with current regulations for socket, so as to fulfill the standardization and compatibility requirements of the product. The ornamental characteristics of the socket cannot be improved by changing the shape of the plughole. Therefore, the T-shaped plughole in the present design is a functional feature, which does not affect the overall visual appearance. In addition, the shape and the arrangement of the mounting plates in both designs are very similar, and the minor difference between also does not have influence on the overall visual appearance. Accordingly, the retrial request of the GP Group is rejected and the second instance judgment is sustained.

## Remarks:

When judging whether a design is identical or similar to a prior design, the influence on the overall visual appearance brought by each design feature shall be considered. Since a design is a combination of practical utility and aesthetics, design features will correspondingly have functional and/or ornamental characteristics. However, in the current practice, the Patent Reexamination Board and the people's court rarely make clear distinction between the functional features and the ornamental features. Although it is stipulated in the *Guidelines for Patent Examination* that "a specific shape exclusively determined by the function of a product generally does not notably influence the overall visual appearance", this

stipulation only applies when "a specific shape exclusively determined by the function of a product" is in question, and thus is not applicable in most of the circumstances.

In this case, the Supreme People's Court gives directions as to the role of functional features in the determination of identity or similarity between two designs. First, the Supreme People's Court specifies the meaning of "functional design," i.e. "a design feature completely intended for implementing a specific function rather than improving the overall visual appearance of a product of the design and objectively cannot be used to improve the visual appearance of the design." Second, the legislative intent should be considered when judging the influence of a functional feature on the overall visual appearance. Different from the purpose of legislation for inventions (for encouraging technical innovation), the purpose of legislation for designs is for "encouraging entities to improve the visual appearance of a product." Therefore, when judging whether a design is a similar design to a prior design, functional features should be considered as "having no influence on the overall visual appearance of a product of a design", so as to avoid the possible situation of "monopolizing a function of a product on the pretext of protecting a design of the product."

This case only provides some basic principles for determining whether a feature is a functional feature. Specific judgment standards are still awaited to be discussed.

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## Sticker for Tableware

Arc International v. Yiwu Lan Zhi Yun Glass Handcraft Factory et.al. - Factors for Determine Products of the Same or Similar Categories in Design Patent Infringement (Civil Ruling (2012) Min Shen Zi No. 41 by the Supreme People's Court on May 16, 2012)

In design patent infringement disputes, there is a certain number of copies or imitations across categories. Regarding the problem whether such copy and imitation constitutes infringement, there are different practices among courts. Usually, the question of whether the alleged infringing product and the product incorporating the patent concerned belong to products of identical or similar categories is the prerequisite to whether the alleged infringing product falls into the protection scope of the design patent concerned. Therefore, if the categories of products are neither identical nor similar, a conclusion of non-infringement can be obtained without comparison.

The patentee owns a design patent with patent No. *ZL200430104787.3*, titled "Sticker for Tableware (Lemon)." The alleged infringing product is a glass cup printed with lemon pattern, wherein the lemon pattern is similar to the design patent concerned.

In the first instance, the infringement was ascertained. The second instance court held that purposes of use for sticker and glass cup are different, and the categories for sticker and glass up are neither identical nor similar, thus there was no infringement. The second instance court reversed the first instance's judgment.

The patentee requested retrial before the Supreme People's Court, arguing that the "purpose of use" of a product shall be interpreted as the purpose of use of its appearance in term of visual perception, rather than the technical use or functional use of the product. The patented "sticker for tableware" and the alleged infringing product "glass cup" with identical or similar pattern and color shall belong to products of identical or similar categories.

After the trial, the Supreme People's Court held that the patented product sticker is a product that independently exists and can be sold independently. Although the pattern on the cup is the same as the pattern of the patented "sticker for tableware," it is made from printing ink and cannot individually exist and be separated from the cup. "Sticker for tableware" is used to garnish and decorate tableware, while "cup" is used to store drinks or food. Therefore, the purposes of use of "sticker for tableware" and "cup" are different. Accordingly, the two products neither belong to identical nor similar categories. Therefore, the alleged infringing product does not fall into the protection scope of the design patent concerned.

## Remarks

According to Rule 8 of Interpretations of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent, in judging whether an alleged infringing product falls into the protection scope of the patent concerned, the following aspects shall be considered: (1) whether categories of the alleged infringing product and the product incorporating the patent concerned are identical or similar; and (2) whether the alleged infringing product and the patent concerned in terms of their overall visual effect are identical or similar. Thus, the prerequisite of judging whether the alleged infringing product falls into the protection scope of the patent concerned is whether the alleged infringing product and the product incorporating the patent concerned falls into identical or similar product categories. If the product categories are neither identical nor similar, a conclusion of non-infringement can be reached without comparison.

<sup>&</sup>lt;sup>1</sup> Rule 8 of the Supreme People's Court's Interpretations of Application of Law Concerning Hearing Patent Infringement Disputes provides, where any alleged infringing design, whose category is the same or approximate as that of the product incorporating the design patent, adopts the design that is the same or similar to the granted design, the people's court shall determine that the alleged infringing design falls into protection scope of the design patent right in accordance with the provisions of Article 59, Paragraph 2 of the Chinese Patent Law (2009).

In judging whether categories of products are identical or similar, it shall be based on the products' purposes of use. In determining a product's purpose of use, reference to the brief explanation, international classification may be made for the design and function of the product, as well as other factors such as the sale or actual use of the product. In the present case, the patent concerns sticker for tableware, and the alleged infringing product is glass cup, the purposes of use of the two products are obviously different, and therefore both products do not fall into identical or similar categories.

However, a question remains unsolved. It is a common business practice to transform some designs from one category of products to another. For example, the design content in one label can be directly printed on another product which the label is intended to attach to, or the design of true cars is used for toy cars, etc. In these cases, what measures the patentee shall take in order to protect his/her own legal right to the maximum extent?

Herein, it should be noted, in proceedings for patent validation and patent infringement, requirements for categories of products may be distinct. Article 23, Paragraph 2 of the *Chinese Patent Law* (2009), which was amended on December 27, 2008, provides that "any design for which patent right may be granted shall significantly differ from prior design or combination of prior design features." According to the provisions in Part 4, Chapter 1, Section 6.1 of the *Guidelines for Patent Examination*, the above provisions preclude transformation, i.e. application of the design of one product to another product.<sup>2</sup> In other words, if one design is transformed

<sup>&</sup>lt;sup>1</sup> Rule 9 of the Supreme People's Court's Interpretations of Application of Law Concerning Hearing Patent Infringement Disputes provides, the people's court shall determine whether categories of the products incorporating the design are same or appropriate in accordance with the use of products. In determining the use of products, reference may be made to the brief explanation, international classification for designs and function of the products as well as other factors such as the sale or actual use of the product.

<sup>&</sup>lt;sup>2</sup> The patent concerned significantly does not differ from prior design or the combination of prior design features in the following circumstance: the

from the prior design, then the design will not be granted a patent right. If the above prior design is a valid design patent (hereinafter referred to as "previous patent"), the subject design cannot be granted, but this does not mean that the protection scope of the previous patent covers the subject design. The reason is that, in the judgment of infringement, the prerequisite still lies in judging whether products categories are identical or similar, and if categories of products are neither identical nor similar, non-infringement can be established without comparison. Therefore, the applicant shall reasonably predict the products to which his/her own design may be applied and apply for design patents corresponding to all potential products. while avoiding the situation that a patent/application constitutes the prior design for subsequent applications, causing the subsequent applications not to be granted. Doing so, the design patent can be protected to the maximum extent.

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patent concerned is transformed from the prior design, the design features of the two are identical or only have very slight difference, and there's an inspiration for the specific transformation in the prior design of the product of the same or approximate category.

# Stand

Jiankai LI v. Zengfeng HUANG - The First Application of an Earlier Design in Non-infringement Defense (Civil Judgment (2012) Yue Gao Fa Min San Zhong Zi No. 298 by the Guangdong High People's Court on November 26,2012]

Prior design defense is a very important non-infringement defense system in design patent infringement lawsuits, which allows the People's Court to determine whether an infringement is established simply by determine whether the accused design constitutes similar to the prior design without evaluation of validity of the design patent. This case shows that although a design patent application was submitted before the filling date of the involved patent and published thereafter the filling date (hereinafter referred to as the "earlier design") does not constitute as prior design. It can be used, however, as the basis for a non-infringement defense by referring to the prior design defense rules, thereby substantially expanding the applicable scope of prior design defense.

Jiankai LI has a design patent No. ZL200930081693.1, titled "Stand" (as shown in Figure 1), with the filing date of July 3, 2009 and the issued date of May 12, 2010. On September 19, 2011, Jiankai LI filed a lawsuit to the Jiangmen Intermediate People's Court and alleged that Zefeng HUANG manufactured and sold stand product (as shown in Figure 2) infringing his design patent. Zefeng HUANG argued that the accused product belongs to the prior design and provided an earlier design (as shown in Figure 3) as evidence. The evidence is the design patent No. ZL200830187853.6, titled "Folded Round Table" with the filing date of December 5, 2008 and the publication date of January 27, 2010.

<sup>&</sup>lt;sup>1</sup> In China, patent is divided into invention, utility model and design. Accordingly, prior art defense is applicable in invention patent and utility model patent infringement lawsuits, prior design defense is applicable in design patent infringement lawsuits.







Figure 1

Figure2

Figure 3

The first instance court, after hearing, ruled that the infringement is established and that the prior design defense does not stand.

Zefeng HUANG unsatisfied with the first instance's judgment and appealed to the Guangdong High People's Court, arguing that the accused product belongs to the prior design and does not constitute infringement of the patent concerned.

The second instance court, after hearing, held that the accused product is a stand and the earlier design relates to a folded roundtable. By comparing the accused product with the parts in the earlier design corresponding to the accused product, it can be seen that both are stand consisting of round steel tubes, and are formed by connecting two groups of H-shape brackets, one of which is long and the other is short. In the opening state, it appears as X shape. The shorter H-shape bracket is rotatably connected to a U-shape bracket. The design of the accused stand and the earlier design do not have substantial difference and can be considered as the same design. Hence, the accused product uses the design of the earlier design and does not infringe the patent right of Kaijian LI. Hence, the non-infringement defense should be supported. Therefore, the first instance's judgment is reversed and Kaijina LI's claims Kaijian LI are rejected.

## Remarks

The Chinese Patent Law (2009) stipulates in Article 62 that, in patent infringement dispute, where the accused infringer has evidence to prove the art or design which he implemented belongs

to the prior art or prior design, there is no patent infringement. For design patent infringement, this system is called "prior design defense." The theory of the prior design defense is that, protection for a patent right should not cover any design falling into the scope of public field, otherwise it will harm the public interest. Since China's patent invalidation proceeding and patent infringement lawsuit are separately managed by the Patent Reexamination Board of the SIPO and the People's Courts, respectively. Therefore, when the patentee initiates infringement lawsuit in the People's Court, the accused infringer usually submits to the Patent Reexamination Board an invalidation request for the involved patent. In this case, if the People's Court suspends the case and waits for the final conclusion of the validity of the patent right, it will greatly prolong the litigation procedure, resulting in delayed and pending lawsuits. Prior design defense system is designed to allow the People's Court to determine whether the accused design belongs to the prior design so as to determine whether non-infringement defense stands. Since this system does not involve the validity of the patent right, it can reduce the length and delays of litigation to a large extent. In recent judicial practice, the prior design defense system duly plays its role.

It is noteworthy that, although according to Article 62 of the Chinese Patent Law (2009), the prior design refers only to designs known to the domestic public or abroad before the filing date of the involved patent, the Supreme People's Court has issued a judicial policy document clearly stating that, where the accused infringer alleges to implement a design recited in a conflicting application (referred to as the "earlier design" hereinafter) and thus does not constitute patent infringement. Such allegation can be judged with reference to the examination standard of the prior design defense. However, the conflicting application in the judicial policy document is not the same as the conflicting application defined in Guidelines

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<sup>&</sup>lt;sup>1</sup> For ease of discussion, the following discussions only refers to "prior design defense", but are equally applicable to "prior art defense".

<sup>&</sup>lt;sup>2</sup> "Opinions of the Supreme People's Court on Issues concerning Maximizing the Role of Intellectual Property Right Trials in Boosting the Great Development and Great Prosperity of Socialist Culture and Promoting the Independent and Coordinated Development of Economy", issued on December 16, 2011.

for Patent Examination. 1 The judicial policy document only requires the conflicting application to be associated with the involved patent in terms of time, that is, the conflicting application filed before the filing date of the involved patent and published after the filing date: while the Guidelines for Patent Examination requires that the conflicting application is not only associated with the involved patent in terms of time, but also associated with the involved patent in terms of the content, i.e., the design in the conflicting application and the design in the involved patent should be the same design.<sup>2</sup> In addition, the conflicting application defense mentioned in the judicial policy requires comparing the accused design with the design in the conflicting application, while the Guidelines for Patent Examination requires comparing the design in the conflicting application with the involved patent. Hence, it is more appropriate and accurate to refer to the conflicting application in the judicial policy as "earlier application." The judicial policy essentially expands the prior design defense rules to cases where the accused infringer implements the design in an earlier application. The present case is the very first case in which an earlier application is used as non-infringement defense in a manner similar to the existing design defense and has milestone meaning.

The following points should be noted in applying prior design defense with an earlier application:

First, the accused design should belong to identical or similar design to the earlier application, which is the basis for determination of identicalness or similarity.

<sup>&</sup>lt;sup>1</sup> Determining whether the comparative design constitutes a conflicting application for the patent concerned shall be made in accordance with all the contents of the published comparative design. When comparing the comparative design with the design of the product claimed by the patent concerned, whether the comparative design includes a design identical or substantially identical with the patent concerned shall be decided.

<sup>&</sup>lt;sup>2</sup> A design for which the patent right is granted is not an prior design, and no application is filed by any unit or individual for any identical design with the patent administration department under the State Council before the date of application for patent right and no identical design is recorded in the patent documentations announced after the date of application.

Second, the accused design should be compared with the design in the earlier application alone, and cannot be compared with the combination of a plurality of designs or the combination of a prior design and a common design.

Third, if the accused design is a part of the design of the earlier application, it only needs to compare the part in the earlier application corresponding to the accused design.

Fourth, under the *Chinese Patent Law*, the criteria of determining whether a conflict application can be found is to determine whether two designs are the same or substantially the same. But in the trial practice, the criteria of determining whether the earlier application defense stands is to determine whether the accused design and the design in the earlier application are the same design or have no substantial difference, <sup>1</sup> that is, to be identical or similar.

However, whether an earlier application can be used as basis for non-infringement defense remains controversial. From the point of the law, the *Chinese Patent Law* clearly stipulates the prior design defense rules, the scope of the prior design, and the use of an earlier application as defense lacks a legal basis. From the purpose of the introduction of this defense system, the defense system mainly aims at solving the problem of prolonged infringement dispute resulted from separate jurisdictions over patent rights and patent infringement disputes, while not empowering the People's Court to adjudicate the validity of patents. Thus, the grounds for defenses should be strictly limited. For example, grounds such as lack of support from the description, insufficient disclosure, and lack of inventiveness cannot be used as arguments for non-infringing

<sup>&</sup>lt;sup>1</sup> "Interpretations of the Supreme People's Court on Certain Issues Concerning the Application of Law in the Trial of Patent" stipulates in Rule 14 that if the accused design and the prior design are the same design or of no substantial difference, the People's Court shall determine that the design implemented by the accused infringer belongs to an prior design patent stipulated by Article 62 of the Chinese Patent Law.

defense. From the point of judgment standards, the earlier application defense and prior design defense are identical, and no new standards will be introduced. Thus, the introduction of the earlier application defense has been accepted by the Courts, more and more cases are expected to adopt earlier application defense in the future.

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## Bus

Yancheng Zhongwei Bus Co.,Ltd. v. NEOPLAN Bus GmbH - Inspiration on Usage of Evidence and Application of Grace Period for Non-prejudicial Disclosures (Examination Decision No. 14484 by the Patent Reexamination Board on February 10, 2010)

In patent invalidation or infringement procedures, to prove an uncertain publication date of a prior art or prior design, a plurality of evidences is generally required to form a complete and reliable chain of evidence. Evidence collection and organization usually rely on patent attorneys' understanding of law and practical experiences.

Within a novelty grace period, certain pre-filing disclosures will not cause lose of the novelty of the subsequent patent application. There are rigorous restrictions on such grace period disclosures. It is of vital importance to determine whether a disclosure of an invention-creation before filing can be regarded as a grace period disclosure.

The petitioner for invalidation, Yancheng Zhongwei Bus Co.,Ltd. (hereinafter referred to as the petitioner), requested the Patent Reexamination Board (hereinafter referred to as "PRB") under the SIPO to invalidate a patent for design No. ZL200430088722.4, which was granted to NEOPLAN Bus GmbH (hereinafter referred to as the patentee) and titled "Vehicle." The filing date of the patent is September 23, 2004, and its priority date is September 20, 2004.

The petitioner submitted that the design of the patent had been disclosed in a periodical, *Bus Aktuell*, 2004(9) published in Germany on September 17, 2004 (hereinafter referred to as the *Bus Aktuell*), and thus the patent does not comply with the stipulations of Article 23 of the *Chinese Patent Law* (2001) and shall be invalidated.

The patentee did not acknowledge the authenticity of evidences submitted by the petitioner to prove the publication date of the *Bus* 

Aktuell. Moreover, the patentee asserted the published pictures in the above periodical were taken in a press conference held at a private place of the patentee, during which the patentee had notified the reporters that the exhibits shall not be disclosed to the public without permission of the patentee. Therefore, the patentee asserted that the photographs shown in the periodical is a disclosure made by another person without the consent of the patentee, pertaining to disclosures within grace period as provided for under Article 24 of the Chinese Patent Law (2001). Furthermore, the patentee asserted it is a scale model of a bus that the photographs in the above periodical had shown, instead of the bus itself.

The panel established by the PRB first confirmed that the *Bus Aktuell* is considered to be a publication under Article 23 of the *Chinese Patent Law (2001)*, and its publication date is before the priority date of the patent involved. The panel further held the evidences used to prove the publication date of the *Bus Aktuell* had been notarized and verified, and the authenticity of these evidences can be acknowledged. Among the above evidences, Hoser + Mende KG, a German corporation, provided a letter affixed with the seal of this corporation and an electric data recording of the corporation, which showed the *Bus Aktuell* was delivered to the corporation and then shelved on September 17, 2004. Therefore, it can be affirmed that the *Bus Aktuell* had been disclosed to the public on September 17, 2004.

Regarding the patentee's assertion that the photographs shown in the periodical is a disclosure without the consent of the patentee, the panel held that the counter evidences presented by the patentee were unable to prove the patentee had notified the reporters not to publish the photographs taken at the press conference before September 23, 2004. Contrary, the panel deemed it illogical to ask the reporters attending the press conference for a new bus to keep secret for the bus. Furthermore, the panel held that at the press conference, the patentee used the model of a bus to present the design of the bus, rather than presenting the design of the model itself. Accordingly, the panel affirmed that it is the design of the bus that the periodical had disclosed.

On the above basis, the panel further affirmed the design of the patent involved is similar to the prior design published in the *Bus Aktuell*. That is, a design similar to the design of the patent had been disclosed in publications before the priority date of the patent. Therefore, the present patent is not novel under Article 23 of the *Chinese Patent Law* (2001), and shall be declared invalid.

### Remarks

In this case, a key point is to determine whether the publication date of the periodical provided by the petitioner is earlier than the priority date of the patent. To prove the publication date, the petitioner submitted many evidences, including a document for proving that the Hoser Corporation and the Mende Bookstore merged together to form a new legal entity (Hoser + Mende KG), a document for proving that the merged Hoser + Mende KG engage in book supply service, a computer data recording for proving that the periodical *Bus Aktuell* was delivered to Hoser + Mende KG on September 17, 2004, and a witness for proving that the *Bus Aktuell* was shelved for sale at the Hoser + Mende KG on September 17, 2004. The panel decided that the above evidences were reliable and formed a complete chain of evidence, which proved that the *Bus Aktuell* was disclosed to the public on September 17, 2004.

It should be noted that for this case, the *Chinese Patent Law* (2001) amended on August 25, 2000 shall apply, in which it is provided that prior design of a design patent includes any design that was described in a printed publication in China and abroad, or used in public or otherwise available to the public in China before the effective filing date of the patent. The latest version of the *Chinese Patent Law* has adopted the standard of absolute novelty, which means any design in public use or otherwise

<sup>&</sup>lt;sup>1</sup> Article 23 of the *Chinese Patent Law* amended on August 25, 2000 provides that any design for which patent right may be granted must not be identical with and similar to any design which, before the date of filing, has been publicly disclosed in publications in the country or abroad or has been publicly used in the country, and must not be in conflict with any prior right of any other person.

The latest version of the *Chinese Patent Law* was adopted on December

available to the public abroad before the filing date of a patent also qualifies as prior design to the patent.

Evidences, especially prior art evidences, play a vital role in patent invalidation procedure. In the future, finding prior art or prior design evidences abroad to form a complete and effective chain of evidence will be important means of proof in patent invalidation and infringement cases. Among other things, the authenticity of evidence will significantly affect the evidentiary effect. The notarization and legalization formalities are common and necessary means for supporting the authenticity of any evidence formed abroad. The Patent Examination Guidelines clearly provides that any evidence formed abroad shall be notarized by the notary organs in the country concerned and verified by the Chinese Embassy or Consulate at that country, or shall be subject to any verification formalities provided in a treaty between China and that country. In patent invalidation or infringement cases, the notarization and legalization formalities may be used as a preliminary proof for the authenticity of evidences. If any evidence presented by one party fails to go through the notarization and legalization formalities, the other party would have the opportunity to exclude the evidence by simply pointing this formality defect to the court or the PRB.

However, the notarization and legalization formalities alone may be not enough to persuade the court and the PRB to consider evidence as trustworthy. To corroborate the truth of a matter asserted, a party concerned may gather evidences in various forms and from different sources so as to strengthen the connection between the evidences and the facts to be proved, thereby persuading the court or the PRB to find in his or her favor.

Another key point in this case is to determine whether the photographs in the periodical show the design of a bus. In a patent invalidation procedure, a premise to determine whether two designs of products are similar is that the two products pertain to identical or similar categories. Generally, a bus and a bus model are not considered as products of identical or similar categories. In this case,

however, the model as exhibited at the press conference should not be regarded as a toy model in the shape of a bus, since this model was not intended for sale to toy consumers as a stand-alone product. Conversely, the model concerned in this case should be called as a design prototype that is commonly used in automobile industry for reflecting a design scheme of automobile. Therefore, the model exhibited at the press conference by the patentee shall not be regarded as a toy product. Moreover, since the target readers of the Bus Aktuell are normal consumers in the field of bus, it may be assumed that what the Bus Aktuell had intentionally shown is the design of a new bus, rather than the design of a bus model. Accordingly, it should be affirmed that the Bus Aktuell disclosed the design of the bus.

More broadly, it seems that this decision gives an answer as to whether a patentee's business presentation by means of a model of a product would disclose the design of the product. In commercial promotions, vendors often use models for display, and in most instances, the purpose of doing this is to introduce their new products, rather than introducing the models themselves. Based on the spirit of this decision, even if a commercial presentation merely discloses models without revealing real products, it can be assumed that the real products would be disclosed.

Besides, in this case, attention should also be paid on the determination of grace period for non-prejudicial disclosures. Generally, before the filing date (or the priority date where priority is claimed) of a patent, any disclosure of the patent's invention or design will render the patent not novel. As an exception to this rule, a novelty grace period means a patent does not lose its novelty due to certain disclosures occurred within this period. There are rigorous restrictions on such grace period disclosures. Article 24 of the *Chinese Patent Law (2001)* provides three types of disclosures that can be deemed to be within the grace period. Rule 30 of the

<sup>&</sup>lt;sup>1</sup> Article 24 provides that an invention-creation for which a patent is applied for does not lose its novelty where, within six months before the date of filing, one of the following events occurred: (1) where it was first exhibited at an international exhibition sponsored or recognized by the Chinese Government; (2) where it was first made public at a prescribed

Implementing Regulations of *Chinese Patent Law (2001)* provides specific rules on application of the grace period.<sup>1</sup> In this case, the patentee attempted to request for a novelty grace period based on a notion that the design of the patent was disclosed by a third party without the consent of the patentee. However, the panel did not accept this request, since neither the timing nor the reasons of the request met the requirements for providing a grace period according to associated provisions.

The provisions of grace period differ from country to country. The *Chinese Patent Law* adopts a relatively narrow standard, which allows a six month grace period. Therefore, if an applicant disclosed

academic or technological meeting; (3) where it was disclosed by any person without the consent of the applicant.

<sup>1</sup> Rule 30 provides that: the international exhibition recognized by the Chinese Government referred to in Article 24, subparagraph (1) of the Patent Law means the international exhibition that is registered with or recognized by the International Exhibitions Bureau as stipulated by the International Exhibitions Convention.

The academic or technological meeting referred to in Article 24, subparagraph (2) of the Patent Law means any academic or technological meeting organized by a competent department concerned of the State Council or by a national academic or technological association.

Where any invention-creation for which a patent is applied falls under the provisions of Article 24, subparagraph (1) or (2) of the Patent Law, the applicant shall, when filing the application, make a declaration and, within a time limit of two months from the date of filing, submit certifying documents issued by the entity which organized the international exhibition or academic or technological meeting, stating the fact that the invention-creation was exhibited or published and with the date of its exhibition or publication.

Where any invention-creation for which a patent is applied falls under the provisions of Article 24, subparagraph (3) of the Patent Law, the patent administration department under the State Council may, when it deems necessary, require the applicant to submit the relevant certifying documents within the specified time limit.

Where the applicant fails to make a declaration and submit certifying documents as required in paragraph three of this Rule, or fails to submit certifying documents within the specified time limit as required in paragraph four of this Rule, the provisions of Article 24 of the Patent Law shall not apply to the application.

his invention-creation at an exhibition as provided under Article 24 of the *Chinese Patent Law*, for example ten months before he filed patent applications for the invention-creation both in China and in another country on the same day, it is possible that the application in the other country may be given a grace period, but the application in China cannot enjoy a novelty grace period and thus lacks novelty. In view of this, if an applicant intends to exhibit or publish his invention-creation at an international exhibition or at an academic or technological meeting and then to file a patent application for the identical invention-creation in China at a later time, he shall assure such exhibiting or publishing will not cause lose of the novelty of the subsequent Chinese application. If there is such a possibility, it would be better to file a patent application in advance to claim priority.

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# Children Toothbrush

Zhiming LI v. Wuhan Jinchen Industrial Co.,Ltd. et.al. - Repetitive Litigation Based on the Principle of Double Jeopardy (Civil Judgment (2011) Shan Zhong Fa Min San Chu Zi No.104 by Shantou Intermediate People's Court on September 3, 2012)

Repetitive litigation, as a legal concept, relates to the principle of double jeopardy (non bis in idem). The principle of double jeopardy is an important principle that is commonly involved in the civil legal practice, and is also an important principle in the Chinese legal system in accordance with two basic value goals of civil litigations, i.e., efficiency and justice. The principle originated from a basic legal principle and system about "consumption of litigious right" in the Roman law. The so-called consumption of litigious right refers to the fact that all of the litigious rights would be consumed due to a litigation dependency, and the second litigation dependency is not allowed for the same litigious right or petition right. That is, once a case is in a litigation dependency, a claim cannot be put forward with respect to this case.

Nowadays, this principle is not recorded definitely in the civil procedure law of China, and it is only prescribed in Article 124 (5), "with respect to cases in which a judgment, an order or a settlement has already taken legal effect, but either party brings a suit again, the people's court shall advise that party to file an appeal instead, except when the order of the people's court is one that permits the withdrawal of a suit".

It can be seen from this provision that the principle of double jeopardy should include at least two meanings: (1) the effect of litigation dependency, that is, the plaintiff cannot bring the suit twice, with respect to a case for which a suit has been brought, in the litigation dependency; and (2) res judicata, that is, once a judgment is made, the concerned parties cannot bring a suit with respect to the same case for which the judgment has been made.

The involved case made it clear that one situation should belong to the issue of "repetitive litigation" in patent infringement litigations, that is, if the infringer making the infringing product had borne the infringement liability for infringing the patent right in accordance with a previous effective litigation judgment, the following action should be deemed as a repetitive litigation and should not be tried again in principle, that is, the patentee brings a suit against the maker of the infringing product again for the infringement action of continuing to sell the same object (the same infringing product) caused by other parties.

The patentee of this design, Zhiming LI, holds a design patent No. *ZL03319125.5*, titled "Toothbrush Handle", which was granted and announced on September 17, 2003. On the same day of the announcement, the patentee authorized Guangdong Sugere Daily Chemicals Co., Ltd. ("Sugere Company" hereinafter, the legal representative of this company is Zhiming LI himself) to make and sell the patented product exclusively.

Thereafter, Zhiming LI found out that the children toothbrushes of Jinchen SW-02 sold by many sellers were suspected of infringing his design patent right, and these toothbrushes were produced by one of the defendants of this case, Wuhan Jinchen Industrial Co., Ltd. ("Wuhan Jinchen" hereinafter). With respect to the infringements, Zhiming LI had complained to the administrative agency and subsequently brought suits to the judicial organs.

The determination of whether the involved product falls into the protection scope of the design patent right is relatively simple and non-controversial. However, several time points and concerned parties made this litigation complicated and finally resulted in the problem of "repetitive litigations."

The following are the many time points and facts of this case that should be especially paid attention to:

(1) On September 2008, Zhiming LI complained to the Shantou Intellectual Property Office that the Shantou Wal-Mart infringed his

patent for selling the children toothbrushes of Jinchen SW-02; and on January 9, 2009, Zhiming LI reached a settlement with the Shantou Wal-Mart, in which the Shantou Wal-Mart promised not to sell the children toothbrushes of Jinchen Sw-02 (the administrative procedure).

- (2) On August 2009, Zhiming LI brought a suit to the Guangzhou Intermediate Court, suing Guangzhou Pinbo and Wuhan Jinchen infringed the involved patent for producing and selling the children toothbrushes of Jinchen SW-02. After the first and second instances, an effective judgment was delivered as the final civil judgment No.91 (2011) made by the third civil tribunal of the Guangdong High People's Court. The court found that Wuhan Jinchen infringed the involved patent right, and Wuhan Jinchen was ordered Wuhan Jinchen to stop making, selling, and offering to sell the products infringing the involved patent, and to pay RMB 60,000 (around USD 10,000). This judgment was legally effective on May 13, 2011 (the first litigation).
- (3) On both May 14, 2011 and August 22, 2011, Sugere Company bought five children toothbrushes of Jinchen SW-02 in Shantou Wal-Mart through a notarization. Based on this purchase, Zhiming LI brought a suit to the Shantou Intermediate People's Court on September 27, 2011, suing Shantou Wal-Mart and Wuhan Jinchen infringed the involved design patent right (the present litigation).
- (4) In addition, on December 30, 2008 and November 6, 2009, Wuhan Jinchen requested the Patent Reexamination Board ("PRB" hereinafter) to invalidate the involved design patent twice during the administrative procedure and the previous litigation; however the PRB finally maintained the patent's validity.

In the present litigation, the plaintiff, Zhiming LI, put forward the following claims: 1) ordering Shantou Wal-Mart to stop selling the children toothbrushes of Jinchen SW-02 immediately; 2) ordering Wuhan Jinchen to stop producing and selling the children toothbrushes of Jinchen SW-02; 3) ordering Wuhan Jinchen to destroy the mold for making the infringing products; 4) ordering

Shantou Wal-Mart and Wuhan Jinchen to pay the economic loss of RMB 500,000 (around USD 80,000); and 5) ordering the two defendants (Shantou Wal-Mart and Wuhan Jinchen) to bear all of the costs occurred in the present litigation.

With respect to these claims, Shantou Wal-Mart argued that the sold products were obtained from a legal source, and thus it should not bear the compensation liability; and Wuhan Jinchen refused to appear in the court without presenting any justified reason.

On the basis of the above facts, the Shantou Intermediate Court held that:

- (1) Shantou Wal-Mart should bear the civil liabilities, stop the damage and compensate the loss for its infringement, because (a) Shantou Wal-Mart knew that the producing and selling of the children toothbrushes of Jinchen SW-02 were not licensed by the patentee, and (b) Shantou Wal-Mart had made a settlement with Zhiming LI previously to promise not to sell the involved product, but breached its settlement by selling the infringing product again. Thus the actions of Shantou Wal-Mart did not satisfy as the situation stipulated under Article 70 of the Chinese Patent Law (2009), where any person, who, for production and business purpose, uses, offers to sell or sells a patent infringement product, without knowing that it was made and sold without the authorization of the patentee, shall not be liable to compensate for the damage of the patentee if he can prove that he obtains the product from a legitimate channel. Furthermore, in determination of the specific amount compensation for the patent infringement, since the plaintiff did not provide any evidence to prove his loss or the infringement gains of Shantou Wal-Mart, the amount of compensation was RMB 20,000 (around USD 3.000) on the court's discretion; and
- (2) as for Wuhan Jinchen, because Wuhan Jinchen had borne the compensation liabilities in the final civil judgment (2011) *Yue Gao Fa Min San Zhong Zi* No.91 by the third civil tribunal of the Guangdong High People's Court, the present litigation for Wuhan Jinchen related to the issue of "repetitive litigation," and additionally a second civil ruling (2011) *Shan Zhong Fa Min San*

*Chu Zi* No.104 by the third civil tribunal of the Shantou Intermediate People's Court to reject the appeal.

#### Remarks

According to the principle of double jeopardy, a repetitive litigation initiated with respect to a legally effective judgment, ruling, and settlement based on the same facts and reasons should not be tried twice

As can be seen from the above inductions of the involved case, Wuhan Jinchen, one of the defendants of this case, had borne the compensation liabilities for its infringement and paid Zhiming LI RMB 60,000 (around USD 10,000), and should have stopped the behaviors of making, selling, and offering to sell the products infringing the involved patent according to the effective previous judgment, which was legally effective on May 13, 2011.

That is, the plaintiff had been compensated for the infringement of Wuhan Jinchen. Unless the plaintiff had sufficient evidences to prove that the children toothbrushes sold by the Shantou Wal-Mart on May 14, 2011 were made by means of the continuous infringement behavior of Wuhan Jinchen after the judgment made by the Guangzhou Intermediate Court was effective on May 13, 2011 (this is highly unlikely given the date), the children toothbrushes sold by Shantou Wal-Mart were still produced and made by means of the previous infringement behavior of Wuhan Jinchen (that is, the infringement behavior where the compensation liabilities had been borne according to the judgment from the Guangzhou intermediate court). Obviously, Wuhan Jinchen should not bear compensation liabilities twice for the same infringement, because this would violate the principle of double jeopardy. Therefore, in the judgment from the Shantou Intermediate Court, it was right and reasonable that the request of Zhiming LI for ordering Wuhan Jinchen to stop the infringement and pay the economic loss was related to the issue of "repetitive litigation."

On the other hand, from the perspective of the plaintiff, Zhiming LI, he should provide sufficient evidences to prove that the toothbrushes sold by Shantou Wal-Mart were made additionally after the previous judgment was effective, that is, he should prove that these products were made in a different infringement without being compensated when he decided to list Wuhan Jinchen as one of the defendants for the second time. In this case, the present litigation relates to a new type of infringement, and thus would not be regarded as the same litigation that had been judged, and therefore would not relate to the issue of "repetitive litigation."

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