

Chinese Patent Claim Drafting Revisited

——Considerations from Judicial Interpretations (II)

Carefully drafted claims are essential for any patent protection because the claims directly set the scope and boundaries of the patent exclusive rights. When a drafted claim is subjected to legal interpretation and strict scrutiny in a patent litigation, the standards and process for delineating patent claims have been gradually clarified in China.

On March 22, 2016, the Supreme People's Court promulgated Interpretations (II) by the Supreme People's Court on Some Issues Concerning the Application of Laws to the Trial of Patent Infringement Disputes ("Judicial Interpretations (II)"), which stands as the most authoritative synthesis of, among others, claim construction doctrine. Not only put to rest various controversies, Judicial Interpretations (II) have also provided guidance on how claims would be construed and how infringement would be determined.

Taking the guidance into account, this short article, from an experienced patent attorney's perspective, discusses practical considerations and strategies in drafting a Chinese patent application.

Relevant claim construction provisions of *Judicial Interpretations (II)*

Judicial Interpretations (II) became effective on April 1, 2016 with thirty-one (31) Articles. The following contents are specifically involved.

(i) determination of protection scope if there exists an ambiguity between claims and the specification.

In accordance with Article 4 of *Judicial Interpretations (II)*, where there exists an ambiguity between the claims and the specification, if a person of ordinary skill in the art would reach only one possible understanding by reading the claims, specification and accompanying drawings, a people's court shall make a finding in accordance with such an understanding.

However, in a scenario where a claim is clear from its plain meaning, but is inconsistent with the specification, *Judicial Interpretations (II)* becomes silent in this respect. Nevertheless, in *Xi'an Qinbang Telecommunication Material Co., Ltd. v. Wuxi Longsheng Cable Material, etc.*^[i], the Supreme People's Court held in the retrial that in a case where a person of ordinary skill in the art would clearly determine the meaning of a relevant term in claims but the specification teaches to the contrary, the understanding of the artisan in the context of the claims shall prevail. Failure to do so, the Court went on, would provide the patentee an opportunity in an infringement judicial proceeding to make another interpretation of claims which differ from the readings in the public.

(ii) sources of evidence for claim construction

In accordance with Article 6 of *Judicial Interpretations (II)*, a people's court, during claim construction, may consider a divisional or parent application of the patent in dispute, as well as their file history, effective judgments or rulings on patent validity. The above file history of a patent includes the written materials submitted by the

patent applicant or patentee during patent examination, re-examination and invalidation proceedings, and office actions, meeting minutes, oral hearing transcripts, effective patent re-examination decisions and effective patent invalidation decisions made by the patent administrative department of the State of Council and its Patent Reexamination Board etc.

(iii) interpretation of a closed-ended transitional phrase

In accordance with Article 7(1) of *Judicial Interpretations (II)*, where an allegedly infringing technical solution has additional technical features besides all technical features recited in a closed-ended "consisting of" claim of a composition, the allegedly infringing technical solution does not fall within the protection scope of the patent right, unless the additional technical features are inevitable impurities of a normal amount.

As construed, the transitional phrase "consisting of" excludes any element, step, or ingredient not specified in the claim. For example, in *Shanxi Zhendong Taisheng Pharmaceutical Co., Ltd. v. Shandong Trier Marketing Planning Co., Ltd etc.*^[ii], the Supreme People's Court reaffirmed such a construction. In this case, the accused infringing drug contained auxiliary materials in addition to the active ingredients recited in a patent claim using "consisting of" transitional phrase. The Court held that the protection scope of the closed-ended claim shall be determined in accordance with a general interpretation on such claim, which has been defined as closing the claim to the inclusion of materials other than those recited except for impurities ordinarily associated therewith. For this case, the Court ruled as auxiliary materials do not belong to impurities, the drug with auxiliary materials does not fall within the scope of the claim in dispute.

Additionally, for the purpose of promoting and protecting the industry of traditional Chinese

medicine and in consideration of the particularity of traditional Chinese medicine, Article 7(2) of *Judicial Interpretations (II)* stipulates that the above construction is not applicable to the claims on traditional Chinese medicine composition.

(iv) construction of claims with functional features

In accordance with Article 8 of *Judicial Interpretations (II)*, a claim may define a feature in terms of its function or effect with respect to the structure, composition, steps, conditions or their inter-relationship, unless persons skilled in the art, after reading the claim only, can directly and clearly ascertain the specific embodiments that realize such function or effect.

Compared with technical feature as described in the specification and accompanying drawings which are essential to realizing the function or effect referred by the preceding paragraph, if the corresponding technical feature of the allegedly infringing technical solution uses substantially the same means to realize the same function and achieve the same effect, and if the feature of the allegedly infringing technical solution can be envisaged by a person skilled in the art without inventive efforts at the time the alleged infringing act occurs, a people's court shall find that such corresponding technical feature is identical or equivalent to the functional feature.

(v) recitation of use environment

In accordance with Article 9 of *Judicial Interpretations (II)*, where an allegedly infringing technical solution cannot be adapted for use in the environment as defined by environmental features in the claim(s), the allegedly infringing technical solution does not fall within the protection scope of the patent.

(vi) construction of a product-by-process claim

In accordance with Article 10 of *Judicial Interpretations (II)*, regarding a technical feature in a claim where a product is defined by a manufacture process, a people's court shall define the protection scope of the product according to the production process of the product and the equivalent process, and shall not elevate to define the protection scope of the product according to the product *per se*.

(vii) construction of the sequential order of technical steps in a method claim

In accordance with Article 11 of *Judicial Interpretations (II)*, where the sequential order of technical steps is not clearly stated in a method claim, but a person skilled in the art would directly and unambiguously ascertain that the steps should be implemented in a certain order by reading the claims, specification and accompanying drawings, the certain order limits the protection scope of the patent.

As a specific case, in *OBE-Factory WengMa Hurt v.*

Baum Geithner Co., Ltd.^[iii], where the claims in dispute did not recite the sequence of four steps, the Supreme People's Court held that the recited four steps, in light of the specification, shall be successively performed in the order of feeding, cutting, stamping and punching, and accordingly, under such a claim construction, the claim inherently requires an order-of-steps, *i.e.*, being given limiting effect when additional factors collaborate that result.

(viii) recited terms to bar the doctrine of equivalents

In accordance with Article 12 of *Judicial Interpretations (II)*, where a claim recites numerical characteristics such as "at least", "no more than" etc. to define a numerical feature, and a person having ordinary skill in the art after reading the claims, specification and accompanying drawings would think that the patented technical solution particularly emphasizes the limiting effect of the terms on the technical feature, said numerical feature cannot define the protection scope by application to the doctrine of equivalents.

Considerations and strategies in drafting a Chinese patent application

As described, the relevant claim construction provisions in *Judicial Interpretations (II)* provide guidance on how claims would be construed and how infringement would be determined. Taking these into consideration, I would suggest the following "do's and don'ts" in drafting a Chinese patent application.

(i) be consistent

Article 4 of *Judicial Interpretations (II)*, *supra*, provides a solution in claim construction when there exists an ambiguity between claims and the specification. To avoid the ambiguity, claims should always be drafted consistently, in consistent with other claims and with the specification.

More, when drafting claims, one shall use a clear language, use generic terms and avoid using complicated compound sentences. If it is difficult to find proper terms, and non-generic terms are used, one shall provide definite definitions in the specification so as to guarantee the consistency of definitions in the claims and specification.

(ii) watch out for estoppel from divisional or other related applications

Under the doctrine of prosecution history estoppel, patent applicants who amend their claims or make arguments to interpret the claims during the course of patent prosecution assume a significant risk: namely, the risk that a people's court will later construe the changes as concessions that should be read to limit patent scope. This *Judicial Interpretations (II)*, in Article 6,

have allowed a people's court to construe claims from a divisional relationship with the patent in dispute, as well as their file history, effective judgments or rulings on patent validity, which may also give rise to prosecution history estoppel from a divisional or other related applications.

Accordingly, when drafting claims and when responding to office correspondences, one shall fully consider other patent documents having a divisional relationship therewith, the disclosing mode in their file history, etc. so that the technical terms and technical meanings among the corresponding elements of these cases can keep consistent with one another for fear that in the judgment of an infringement lawsuit, those skilled in the art would have understandings which are different from the real meanings in the present patent.

(iii) focus on the objective of infringement by avoiding the closed-ended transitional phrase, if possible

As Article 7 of *Judicial Interpretations (II)* specifies, a closed-ended claim language such as "consisting of" excludes any element, step, or ingredient not recited in the claim. As in *Shanxi Zhendong Taisheng Pharmaceutical Co., Ltd. v. Shandong Trier Marketing Planning Co., Ltd etc.*, the patentee's claim does not allow to cover a drug having auxiliary materials.

Accordingly, in order to draft a claim targeting infringement, one shall firstly consider the way of drafting open-ended claims. For example, although a technical disclosure provided by the inventor describes an example only consisting of A and B, after fully communicating with the inventor, one fully excavates e.g. components C and D in addition to the components A and B. One drafts an open-ended claim "comprising A and B", and additionally drafts a closed-ended claim "consisting of A and B". Furthermore, one describes the above component C or D in addition to the components A and B, etc. in the specification. Nevertheless, if determining a closed-ended technical solution only consisting of A and B upon the full communication, one shall also describe it to be a closed-ended claim.

Accordingly, in the practical operations, one shall attach importance to the difference between closed-ended claims and open-ended claims and make a careful deliberation in combination with specific technical solutions, and shall not blindly select an open-ended or closed-ended expression way.

(iv) avoid invocation of functional claim language

As Article 8 of *Judicial Interpretations (II)* defines what functional features are, earlier *Judicial Interpretations on Patent Infringement* has directed a people's court to construe the functional features based on specific embodiments disclosed in the specification and

their equivalents.

Functional claim language is increasing being used by practitioners to capture the metes and bounds of an invention, however, using functional claim language carries some risks. Sometimes using functional language in a claim limitation is unavoidable. Accordingly, one, as an applicant or patent attorney, shall avoid using functional claim language to draft a claim and should understand how functional features would be interpreted by reviewing authorities, such as the patent office or courts, and the possible consequences of using them in a claim. If functional features are used, the specification must adequately describe the structure, material or acts to perform the function.

(v) pay attention to the recitation of use environment in a claim

Chinese courts are very clear that in determining patent infringement, every recited element in claims must be found at the accused infringing product/method. This principle also applies to a recited use environment in which the accused infringer must practice the claimed invention. See Article 9 of *Judicial Interpretations (II)*.

With respect to an invention, if it exists replying on a special use environment, it is certainly unblamable to specify the use environment in the claims. However, if it only involves that said invention can be applied in some special environment and defines the use environment, it will subject the protection scope of said invention to restrictions to which should not have been subjected. Accordingly, one, as an applicant or patent attorney, shall avoid reciting the use environment in claims as far as possible unless the disclosure of said environment is necessary for the realization of the invention.

(vi) understand the pros and cons of a product-by-process claim

A product-by-process claim defines a product in terms of the method used to manufacture the same. Despite the limitation, the patent office determines the patentability solely based on the product itself. That is, if the product in the product-by-process claim is the same as or obvious from a prior art product, the claim is unpatentable even though the prior art product was made by a different process.

With regard to infringement, *Judicial Interpretations (II)*, in Article 10, make clear that the accused infringing product has in fact been produced by the recited process steps or their equivalents.

Accordingly, it is best to avoid a product-by-process format unless the invention cannot be distinguished from a prior art product in terms of composition and/or structure except by reference to the process by which the product is made.

(vii) *give effect to the order of steps in a method claim*

The steps of a method claim are always set forth in some logical order, although the sequence of the steps is not being claimed unless the sequence is expressly stated. Quite often, the steps must be performed chronologically, which, as Article 11 of *Judicial Interpretations (II)* points out, can be inherently implied from the specification from the perspective of one skilled in the art.

Accordingly, where steps, or some of them, must be performed in sequence, one after the other, the sequence should be described in the claims. Otherwise, the steps should be set out in any logical order in which they should be performed, but with no sequence precisely stated, and broad statements regarding the order of steps should be provided in the specification.

(viii) *avoid the recitation of certain terms such as "at least", "no more than"*

First of all, as mentioned above, in accordance with Article 12 of *Judicial Interpretations (II)*, where a claim adopts wordings such as "at least", "no more than" etc. to define a numerical feature, and a person having ordinary skill in the art after reading the claims, specification and enforceable intellectual property.

accompanying drawings would think that the patented technical solution particularly emphasizes the limiting effect of the wordings on the technical feature, the right holder shall not assert that a different technical feature is an equivalent feature.

Accordingly, one should avoid using wordings such as "at least", "no more than" etc. when drafting claims. If a feature expressing a range such as a numerical value, etc. needs to be defined, one can use means of expression such as "above", "below", "within", "outside", "to", "-", etc. Therefore, in the infringement lawsuit, the possibility of the application of the doctrine of equivalents will not certainly be lost.

Conclusion

To sum, *Judicial Interpretations (II)* provide certain guidance on the protection scope of a claim and introduces some new interpretation rules. Taking the guidance into account, we discuss practical considerations and strategies in drafting a Chinese patent application. More, retaining qualified and experienced Chinese patent attorneys to guide any application through the Chinese patent prosecution should be also considered. A carefully drafted patent application would create highly valuable and

[i] Judgment No. 3 Civil by the Supreme People's Court (2012).

[ii] Judgment No. 10 Civil by the Supreme People's Court (2012).

[iii] Civil ruling paper No. 980 by the Supreme People's Court (2008).

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Should you need more detailed information, please contact the author of this article:

Yongkang ZHANG: partner, lawyer, patent attorney: ltbj@lungtin.com



Yongkang ZHANG

(Partner, Senior Patent Attorney, Attorney at Law)

Mr. Zhang is a senior patent attorney and attorney at Law at Lung Tin, where he focuses on patent matters, primarily on patent application preparation and prosecution in the fields of pharmacy, chemistry, biotechnologies and new materials, as well as on patent reexamination, invalidation and litigation.