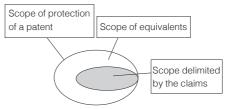
Differences and Similarities of Rules for Claim Construction in Patent Grant, Validity and Infringement Proceedings

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Claim construction is an eternal topic in the field of patent law. Discussion on claim construction has always been concentrated on specific rules for construing claims, in particular how to correctly deal with the relationship between claim construction utilizing the contents of the description and drawings and improper introduction of those contents into the claims. However, there is one issue that should not be ignored, that is, whether the rules for claim construction in patent grant, validity and infringement proceedings shall be the same, or if not, what are the differences therebetween?

I. Meaning of claim construction

Currently, there are two dissimilar views as to what "claim construction" is. One view is that the so-called "claim construction" is the term used to describe the process of determining the true meaning and literal meaning of the claims 1, and a concept existing in every phase of a patent. The U.S. Court of Appeals for the Federal Circuit ruled in Scripps Clinic & Research Foundation v. Genentech, Inc. that "the construction of claims is simply a way of elaborating the normally terse claim language: in order to understand and explain, but not to change, the scope of the claims" 2. The other view is that claim construction is a unique concept in infringement proceedings and a process of determining the scope of protection of a patent. To put the interests of patent holders under reasonable protection, the majority of countries and regions expand the scope of protection of patents beyond their literal meaning by means of the "doctrine of equivalents". Thus, determination of equivalents also falls within the scope of claim construction 3. As shown by a simple drawing, claim construction in the former view refers to the process of delimiting the scope of claims, whereas claim construction in the latter view refers to the process of determining the scope of a patent intended to be covered (namely, the scope delimited by the claims and the scope of equivalents).



This writer agrees with the first view. First, although the concept of "claim construction" originates from the court's determination as to whether the alleged infringing technical solution falls within the scope of protection of the patent, it is not at all a unique concept in infringement proceedings, and claims must be construed as well in the patent grant and invalidation proceedings so as to clarify the meaning and scope of claims and judge the relationship between the claims and the prior art 4. In this sense, construction of the same claims shall be completely identical during the three proceedings so that the public notice function of the claims is served to the maximum extent, and defining the claim construction as "determining the true meaning of the claims" is conducive to unification of the construction of patent claims in the three proceedings. Second, the scope of equivalents cannot be determined departing from the claims and description, but judgment on whether the products constitute equivalents is, to some extent, different from determination of the true meaning of the patent claims in terms of the judging methods and judging purposes. Moreover, the scope of equivalents varies according to the date on which infringement occurs, whereas the true meaning of claims has been determined at the filing date of the patent and will never change with the date on which infringement actually occurs. For these reasons, it will be more reasonable to define claim construction as the process of determining the true meaning of the claims, and claim construction in infringement proceedings is in fact the process of reproducing the scope of claims as determined in the patent grant or validity proceedings.

"The scope of protection of a patent" as specified in Article 59, paragraph one of the Patent Law is the broadest scope of rights granted to a patent owner, which is obtained by expanding the scope of claims based on the doctrine of equivalents. The patent grant proceeding is aimed to clarify the scope delimited by the claims through examining the application documents and communication and interaction between examiners and the applicant. The patent validity proceeding is the process in which the PRB determines, at the request of the invalidation requestor, whether the scope of a granted claim is proper in view of the grounds and evidence presented. Patent infringement judgment is conducted by the judiciary to determine the applicability of the doctrine of equivalents and the scope of equivalents based on the claim construction in an effort to figure out the scope of protection of the patent that a right holder can actually obtain.

II. Necessity and justifiability of differentiating rules for claim construction in different proceedings

Claim construction, either in patent grant and invalidation proceedings or in patent infringement proceeding, is to clarify the ambiguities in the claim and delimit the scope of protection thereof in a justifiable manner. Theoretically, the criteria for interpreting the scope of protection of claims shall be consistent in the patent grant, invalidation and infringement proceedings, in such a manner to best ensure that "the patent holder and the public have the same expectation towards the scope of protection of the patent, thereby protecting the expectable interests of the public".⁵

In practice, however, the rules for claim construction may or are allowed to have some differences on the grounds that the above three proceedings are different in their nature, tasks, and rules on the amendment to patent application documents or patent documents by the right holders. In my opinion, from the perspective of balance of interests, the extent to which the patent application documents can be amended by the party concerned shall be, in general, inversely proportional to the extent of claim construction. The more amendments allowed to be made, the less permissible to construe the claims; and the less amendments allowed to be made, the more permissible to construe the claims.

In the patent grant proceedings, the examiners examine pending patent applications submitted by patent applicants, making sure that the scope of protection of granted patents is clearly defined, the rights are stable as much as possible, and the grant of defective patents shall be prevented. Thus, in the patent grant procedure, the examiners put the emphasis on examination of the claims, and shall define the meaning of the claims under the doctrine of broadest reasonable interpretation. Suppose the examiner finds that some feature of a claim interpreted according to its general meaning has a relatively broad scope that includes the contents already disclosed in the prior art, which renders the whole claim nonnovel, but the feature according to its restrictive definition presented in the description is not under the coverage of the prior art, if the feature is interpreted according to its restrictive definition provided in the description, the claim will be rendered novel. For the sake of granting a stable and clearly defined patent, it is more reasonable to understand the feature in its general meaning, rather than explain the feature according to the contents recited in the description, and issue an Office Action indicating lack of novelty. On the one hand, only in that way can the patent applicants make clarifications or amendments to the features in the patent grant proceedings, thereby avoiding disputes arising therefrom in the subsequent processes. On the other hand, in the patent grant proceedings, the patent applicant can amend the claims nearly in any manner to overcome the defects pointed out by the examiner insofar as the amendments fall within the scope of the documents as originally filed. In doing so, the technical solutions that really contribute to the society can be recited in the claim set by the patent applicant, which is beneficial to maintaining the public notice function of the claims.

In contrast, the judges are faced with granted patents in the patent infringement proceedings, with the task of judging whether the alleged infringing technical solutions fall within the scope of protection of the patent. In the light of the "binary" system of the Chinese patent law, the validity of the patent is judged by the PRB, and the patent shall be presumed valid before the PRB finally declares the patent invalid. ⁶ Pursuant to this basic principle, under the above circumstances, the judge shall and must construe the feature of the claim in its restrictive meaning recited in the description, instead of in its generic meaning, because the patent holder has no opportunity to amend the patent documents in the infringement proceedings. If the claim is not construed on the basis of the contents of the description, it will result in that the patent holder is entitled to the rights that are obviously not in compliance with his contributions to the society, which is certainly unreasonable.

What's really annoying is the patent validity proceedings. In the validity proceedings, the PRB deals with granted patents to judge whether the grant of patent is proper with reference to grounds and evidence submitted by an invalidation requestor. If the grant of a patent does not meet the statutory requirements for patentability, the PRB is responsible for rectifying improper grant through declaring the patent invalid in whole or in part. Since what needs to be determined in the patent validity proceedings is whether the grant of patent is correct, the patent validity proceedings shall in principle follow the same rules for claim construction as those in the patent grant proceedings. However, according to the current laws and regulations, the patent holder is subject to more restrictions on amendments to the claims in the patent validity proceedings than in the patent grant proceedings, and what's more important, the patent holder is not allowed to make such amendments by incorporating the features extracted from the description into the claims. It means that the defects which could have been overcome by amending the claims in the patent grant proceedings cannot be overcome in the patent validity proceedings. If the claim is still construed under the same rules as in the patent grant proceeding, it is likely to be declared invalid so that the errors arising from, for example, drafting defects cannot be remedied. This may be a punishment that is too severe to a tiny error and goes against the aim of encouraging invention-creations. Under the circumstances as mentioned above, suppose the feature is still understood in its general meaning without referring to the relevant content in the description, it will only lead to a conclusion of lack of novelty and render the patent invalid since the contents of the description cannot be incorporated into the claim by way of amendment, which obviously does not match the contributions made by the patent holder to the society. Thus, this writer opines that in the patent validity proceedings, we should not place much emphasis on the examination of the claims and construe the claims under the doctrine of broadest reasonable interpretation as what we do in the patent grant proceedings.

Even so, it is still undeniable that in the patent validity proceedings, the patent holder may still make improvement on the patent and adjust the scope of protection of the patent by amending the patent documents, which is impossible in the patent infringement proceedings; additionally, if the claims are construed in the same way and under the same rules as in the patent infringement proceedings, it is meaningless to have the patent validity proceedings, which is certainly contrary to the original intent of the system design. Thus, the rules for claim construction in the patent validity proceedings should not be the same as those in the patent infringement proceedings, during which the claims are construed to a great extent in order to balance the interests between the patent holder and the public, and shall be at a point somewhat between the patent grant proceedings and the patent infringement proceedings. This same view can be found in the Supreme People's Court's Judgment No. Zhixingzi 53-1/2010 7, in which the Supreme People's Court held that in view of different effects and functions of the patent grant, validity and infringement proceedings, the methods for claim construction in these three proceedings are "strongly consistent with each other and also different from each other to some extent".

Over recent years, a heated discussion on the yardstick and rules for claim construction in the patent grant, validity and infringement proceedings has been triggered in the United States. As of 16 September 2013 when a new inter partes review (IPR) came into effect, the United States Patent Trial and Appeal Board (PTAB) has always construed the claims under the broadest reasonable interpretation (BRI) standard in the IPR procedure, but not under the Phillips standard as used in the patent infringement proceedings. According to the statistics released by the United States Patent and Trademark Office (USPTO), the claims which are declared invalid in the IPR procedure account for about 84% of the totality. There is a common view in the IP circle that such a high invalidation rate is closely associated with the PTAB's use of the BRI standard. As reported on www.ipr.gov.cn on 20 January 2016, the United States Supreme Court accepted the appeal from Cuozzo Speed Technologies against the PTAB's ruling for declaring its patent entitled "speed limit indicator" invalid based on the BRI standard ⁸. Cuozzo Speed Technologies argued in the request for review that "a primary reason for the high cancellation rate is that, although IPR was expressly designed to be a surrogate for litigation, the PTAB does not use the same claim construction standard as federal courts. ……Of course, the broader the interpretation of the claim, the more extensive the array of relevant prior art—and in turn the more likely that the claim will be held invalid in light of that prior art." The result of trial of this case not only has a great influence on patent practice in the United States, but also is of great significance in clarifying the claim construction standards in the patent validity and infringement proceedings in China.

III. Differences and similarities between claim construction rules in different proceedings

As to the differences and similarities between claim construction rules in different proceedings, the writer partially

agrees on the opinions of the Supreme People's Court presented in the Judgment No. Zhixingzi 53-1/2010, that is, the claim construction in the abovementioned three proceedings belongs to textual interpretation and shall abide by the general rules for textual interpretation. The differences between the rules for claim construction prominently lie in the function of the observations made by the party concerned. However, in the present case, the Supreme People's Court collectively called the patent grant proceedings and the patent validity proceedings as "the patent grant and validity proceedings", and generally compared it to the patent infringement proceedings "without further differentiating and discussing whether the rules for claim construction in the patent grant proceedings and in the patent validity proceedings shall be the same and what differences are between them.

To make clearer the differences between the rules for claim construction in the three proceedings, the writer will look into the common circumstances where claim construction is necessary and provide suggestions thereon in the following table 1.

Table 1 Comparison of claim construction rules in patent grant, validity and infringement proceedings

No.	circumstances	grant	validity	infringement	comparison
1	self-coined words having particular meanings in the description	particular meanings in the description	particular meanings in the description	particular meanings in the description	grant=validity= infringement
2	well - known terms or generic concepts having particular meanings in the description	general meaning	particular meanings in the description	particular meanings in the description	validity= infringement
3	functional features	all modes that can realize the function	all modes that can realize the function	embodiments+ equivalents	grant=validity
4	claims have obvious errors	office action on "obvious errors"	the only correct answer	the only correct answer	validity= infringement
5	claims are unclear and cannot be construed by way of clarification	office action on "lack of clarity"	declaring the patent invalid due to "lack of clarity"	incomparable, non-infringement	grant=validity= infringement
6	claims are unclear but can be construed by way of clarification	office action on "lack of clarity"	making interpretation by way of clarification	making interpretation by way of clarification	validity= infringement
7		the features shall be inter- preted according to its general meaning and based on the claims	the features shall be inter- preted according to its general meaning and based on the claims	the features shall be in- terpreted according to its general meaning and based on the claims	grant=validity= infringement
8	product claims delimited by process, use and dosage features	If the process, use and dosage features have no influence on the structure and composition of a product, those features have no limitative function.	If the process, use and dosage features have no influence on the structure and composition of a product, those features have no limitative function.	all the features need to be taken into account (all elements rule)	grant=validity
9	close-ended and open-ended	only including the components clearly recited in the claims	only including the components clearly recited in the claims	only including the com- ponents clearly recited in the claims	grant=validity= infringement

1. The circumstances where the rules for claim construction in the three proceedings are completely the same

The rules for claim construction in the three proceedings shall be completely the same under the circumstances 1, 5, 7 and 9. It is relatively easy to understand under the circumstances 1, 5 and 9. Under the circumstances 7 where the scope of protection of a claim is too broad to be supported by the description, on the one hand, the court for adjudication of infringement disputes has no jurisdiction over the cases relating to patent validity under the current "binary" system design. Although the judge deems that the scope of claims is too broad to be supported by the description, the judge shall still make a judgment based on the claims, but not construe the claims restrictively by using the contents of the description, which actually constitutes substantial amendment to the claims, before the accused infringer files a request for invalidation or the PRB declares the patent invalid. On the other hand, unlike the corrective construction made for obvious errors, it is impossible to make a correct judgment on whether the claims can be supported by the description merely according to the contents of the description. Instead, the judge shall stand in the shoes of those ordinarily skilled in the art to make a judgment based on solid understanding of the prior art. If it is allowed in the patent infringement proceedings to construe the claims restrictively based on the contents of the description in the event of the claims being clear, it will render the existence of the patent validity proceedings meaningless and severely undermine the public notice function of the claims, and meanwhile force the claim construction off the tracks of the "doctrine of compromise" and into the puddle of "central claiming".

2. The circumstances where the rules for claim construction in the patent validity and infringement proceedings are the same, but different from those in the patent grant proceedings

Under the circumstances 2, 4 and 6, in the patent validity proceedings, the claims shall be construed in a way that is the same as the one in the patent infringement proceedings but different from the one in the patent grant proceedings.

It is relatively easy to understand the rules for claim construction in the patent grant and infringement proceedings. For example, under the circumstances 2, if a known feature or generic concept in the claim has a general meaning but is also specifically defined in the description, for the sake of granting a stable and clearly delimited patent, it is required in the patent grant proceedings to understand the feature or

concept based on the claims, understand the known feature or generic concept according to its general meaning and urge the patent applicant to incorporate the specific definition recited in the description or the correct content into the claims, so as to avoid disputes in the subsequent validity or infringement proceedings. In the patent infringement proceedings, the known feature or generic concept must be understood according to its specific meaning recited in the description, in such a way that the interests between the right holder and the public can be better balanced. For another example, under the circumstances 4, where obvious errors are found in the claim, a lack of clarity objection can be raised in the patent grant proceedings to enable a patent applicant to take notice of that error as early as possible and correct the same to the only correct answer, which is conducive to making the granted claims clearly defined. In the patent infringement proceedings, if the sole correct meaning of the known feature or generic concept can be derived from the description, the obvious error in the claim can be corrected by way of construing it according to its sole correct meaning, which is beneficial to protecting the patent effectively. as well as to balancing the interests between the right holder and the public.

What really troubles is the patent validity proceeding. The reason why this writer suggests making clarifying or corrective constructions of the claims with reference to the contents of the description lies in that under the three circumstances, the defects in the claims are mostly caused by careless drafting errors. The contents that can remedy those errors are mostly recited in the description. According to the current provisions in the Guidelines for Patent Examination, the contents of the description cannot be added or supplemented to the claims by way of amendment. For the purpose of putting true invention-creations under protection, it is reasonable to clarify those errors by way of interpreting the claim language. What's more important, the interpretation under the above three circumstances is made to make the defective contents clearer, rather than constitute a substantive change in claim scope.

Maybe someone will compare the circumstances 2, 4, 6 with 7, thereby questioning why it is allowed to interpret the claims according to the contents in the description under the circumstances 2, 4 and 6 in the patent validity proceedings, whereas claim construction is based on the claims, not the contents in the description, under the circumstances 7. This writer holds that, first of all, as emphasized in many cases by

the Supreme People's Court, the technical features delimited in the claims shall be taken as the basis in claim construction so as to avoid inclusion of the content that is not delimited in the claim but only recited in the description into the scope of claims, which may improperly narrow down the scope of claims. Interpretation under the circumstances 2, 4 and 6 is to clarify the claims, rather than make the claim scope narrower. If the contents supported by the description can be included in the claims by way of interpretation under the circumstances 7 where the claims are not supported by the description, it may constitute a substantive change in claim scope. Second, the first issue that must be solved at the time of filing an application is to claim the technical solutions in a direct and concise language, clarify the scope of a patent application and narrow down the scope in a stepwise manner by dependent claims, so as to establish a three-dimensional protective system. Even though, as a protection strategy, it is desired to generalize a scope broader than that supported by the description, it is necessary to recite the contents supported by the description in the form of dependent claims into the claim set in case of "contingencies". An overbroad scope of protection with no dependent claims underpropped can only be deemed as "an over-confident fault", not "a careless error". Moreover, when obtaining a broader scope of protection, a patent applicant shall also be ready to bear the corresponding risk. As a result, under the circumstances 7, it is deemed as unreasonable to construe the claim restrictively based on the contents supported by the description.

Looking closely into the Interpretation on Several Issues Concerning the Application of Law in the Trial of Disputes over Patent Infringement (II) (hereinafter referred to as "the Interpretation (II)") recently released by the Supreme People's Court, a clear signal is sent to the public that a patent holder is urged to pay enough attention to the scope and layout of his rights at the beginning of the filling through strict interpretation of claim language in the patent infringement proceedings. This will be beneficial to the efficient operation of the patent system and enhancement of the level of protection.

3. The circumstances where the rules for claim construction in the patent validity and grant proceedings are the same, but different from those in the patent infringement proceedings

Under the circumstances 3 and 8, the rules for claim construction in the patent validity proceedings shall be the

same as those in the patent grant proceedings, but different from those in the patent infringement proceedings.

The most typical case is with functional features. Pursuant to relevant provisions of the Guidelines for Patent Examination, functional features shall be construed as all the embodiments capable of realizing the function in the patent grant proceeding; whereas in light of the provisions of the recently released Interpretation (II), functional features shall be construed as specific embodiments described in the description and the equivalents thereof in the patent infringement proceedings. Although it has been criticized for the inconsistent rules for claim construction in different proceedings, the writer thinks that such inconsistency is not unacceptable.

First, in most cases, the differences between the rules for claim construction in the above two proceedings remain only at the literal level, and substantive findings shall be the same. During the substantive examination, where there is a claim containing functional features, an examiner needs to examine whether the means-plus-function features can be supported by the description. There may be two circumstances in this regard: one is that the function is accomplished by a particular way recited in the description, and the other is that the accomplishment of the function does not rely on the specific embodiments recited in the description, but any component or structure capable of performing that function can be used in the related technical solution. Under the first circumstances, the examiner shall make sure through examination whether those skilled in the art are clear about the fact that the function can also be accomplished by other alternative manners not mentioned in the description, or whether there are good reasons to doubt that one or more ways included in the functional features cannot solve the technical problem intended to be solved by the invention or achieve the same technical effects. The examining process is regarded as consistent with the process of judging whether there are equivalents to the specific embodiments described in the description and what the equivalents are (if any) in the patent infringement proceedings. If the functional feature is allowable in a claim, it indicates that the functional feature includes not only the specific embodiments recited in the description, but also alternatives capable of realizing the function. If not, the examiner will certainly require the patent applicant to narrow down it to the specific embodiments of the description and alternatives capable of realizing the function, which is completely the same as in the patent infringement proceedings, as shown in Fig. 1 below.

functional features acceptable in the patent grant proceedings

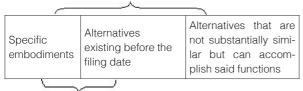


Construction in the patent infringement proceedings: specific embodiments and equivalents

Fig.1: relevant functions can only be accomplished by the embodiments described in the description

Second, even if the findings concerning claim construction by applying the two rules in the two proceedings may be different, it is acceptable for the purpose of guiding the patent applicant to try possible means to use structural features, rather than functional features, for limitation. For instance, under the second circumstances as mentioned above, if, in the patent grant proceedings, the examiner holds that the function can be realized without relying on the specific embodiments recited in the description and any component or structure capable of realizing the function can be used in the technical solution, the functional features will be allowed to be used in the claim. Therefore, the functional feature includes not only the specific embodiments recited in the description and alternatives regarded as equivalents thereof, but also alternative technical means capable of accomplishing the function and not substantially identical with the specific embodiments. The functional feature in the granted claim is very likely to be understood as including the first two types in the patent infringement proceedings (as shown in Fig. 2 below), unless it belongs to "a specific embodiment capable of achieving the function that can be directly and definitely determined only by reading the claims".

functional features acceptable in the patent grant proceedings



Construction in the patent infringement proceedings: specific embodiments and equivalents

Fig.2: the accomplishment of relevant functions does not rely on the embodiments described in the description

Under such circumstances, different rules will ostensibly result in that some rights of the patent holder cannot be protected effectively. The root cause stems from the fact that the patent holder defines the claimed invention by functional features, which is not recommended. Functional features are not recommended, which does not mean that the use thereof will impair the interests of the patent holder. If the patent holder deems that the relevant functions can be realized without relying on the specific embodiments of the description, and functional features would be more proper than structural features, he may enumerate and explain in the description other modes capable of realizing the function, in addition to the specific embodiments. For instance, those alternatives capable of realizing the function, though not completely identical, shall also be sufficiently described in the description as part of the functional features. In this case, it is unlikely to see a part of the solutions is ineligible for protection as shown in Fig. 2. For that reason, different rules to interpret functional features in the grant and infringement proceedings are conducive to guide a patent applicant in better drafting application documents.

As to the reasons why the rule of interpretation in the validity proceedings shall be the same as that in the grant proceedings, not that in the infringement proceedings, the reasons are similar to those under the circumstances 7 and will not be reiterated herein.

IV. Conclusion

All in all, the proceedings involving grant, validity and infringement are different from each other in terms of nature and tasks, the patent holders may amend application documents or patent documents to different extent, and some differences may and are allowed to exist in claim construction during different proceedings. Such differences will not impair the public notice function of claims. To the contrary, construing the claims from both the aspects of administrative examination and judicial protection will finally be advantageous to guiding patent applicants to draft their application documents in the most proper manner so as to put their contributions to the society under protection.

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- ¹ Yan Wenjun. Scope of Protection of Patent. Law Press, p. 30.
- ² Scipps Clinic & Research Foundation v. Genentech, Inc. 927F. 2d 1565, 18 USPQ2d 1001 (Fed. Cir. 1991).
- ³ Xie Wen (2008). Claim Construction, which is a master's thesis from Southwest University of Political Science & Law.
- ⁴ Strictly speaking, it is more accurate to call clarification of the meaning of a claim in the grant and validity proceedings as claim construction. However, the function of claim construction in those two proceedings is substantially the same as that in the infringement proceedings, so it is proper to call them claim construction collectively.
- ⁵ Zhang Peng. Further Discussion on Timing of Interpreting Scope of Protection of Claims. Journal of Examination Practice, Vol. 17, Issue 4.
- ⁶ In light of the views presented in the Supreme People's Court's Judgment No. Minshenzi 1544/2012, the principle mentioned above must be followed unless "uninterpretable ambiguities" renders it impossible to judge whether the alleged infringing technical solution fall within the scope of protection of the patent.
- ⁷ An invention patent No. 00131800.4 was declared entirely invalid in the Invalidation Decision No. WX11291. The first-instance Judgment No. Yizhongxingchuzi 1030/2008 upheld the Invalidation Decision, and the second-instance Judgment No. Gaoxingzhongzi 327/2009 revoked

- the first-instance Judgment and the Invalidation Decision. Upon the request for retrial by the invalidation requestor, the Supreme People's Court decided that the request for retrial shall be overruled.
- ⁸ "Supreme Court Examine PTAB's Claim Construction Standards". Retrieved from www.ipr.gov.cn on 20 January 2016.
- ⁹ In that case, the Supreme People's Court held that the differences between the patent grant and validity proceedings and the patent infringement proceedings "prominently lie in the function of the observations made by the party concerned......In the patent grant and validity proceedings, the observations made by the applicant, under normal circumstances, can only serve as the reference in understanding the description and claims, not a decisive basis. However, in the course of the civil patent infringement proceedings where the scope of protection of claim is required to be interpreted, the scope of protection of the patent shall be construed restrictively according to the observations made by the party concerned as long as the party concerned waives some technical solution by way of making observations in the patent application or grant stage."