Doctrine of Equivalents
– Based on judgements in Japan –

2018・4・18

IP High Court of Japan
Chief Judge　Misao SHIMIZU

1 Doctrine of Equivalents (patent)

- In a patent infringement litigation, even if, within the construction as indicated in the patent claim, there is a part different from the corresponding one in the alleged product etc., and therefore the product etc. cannot be concluded to fall within the technical scope of the patented invention, namely the alleged product etc. does not infringe upon the term of patent claim (literal infringement) , the court finds the alleged product etc. infringes the patent since the different part is equivalent to the constitution expressed in the patent claim through substantial expansion of the construction of the patent claim.
- "Ball Spline Bearing Case" S.C. 3rd Petty Bench Judgement 24 Feb. 1998

S.C. affirmed the DoE for the first time, and provided 5 requirements for applying this doctrine.

2 Ball Spline Bearing Case

Basis of affirmation of infringement under the DoE

"[I]t is extremely difficult to foresee all kinds of infringements which may occur in the future and formulate the scope of the patent claim in the specification, and if another person is able to easily avoid injunction and other exercise of rights by the patent holder by replacing part of the construction as indicated in the patent claim in the specification by the substance or technology which came to be known after the patent application, it will greatly reduce the incentive for invention in the society in general, which is not only against the purposes of Patent Law, i.e. promotion of the development of industry through the protection and encouragement of invention, but would be against social justice and the ideas of fairness."

2 Ball Spline Bearing Case
5 requirements for infringement under the DoE

1. The part which is different from the products is not the essential part of the patented invention
2. The purpose of the patented invention can be achieved by replacing this part with a part in the products and an identical function and effect can be obtained (interchangeability)
3. A person who has an average knowledge in the area of technology where this invention belongs could easily come up with the idea of such replacement at the time of the production of the products (conceivability of the interchange)
4. The products are not identical to the technology in the public domain at the time of the patent application of the patented invention or could have been easily conceived at that time by a person who has an average knowledge in the area of technology where this invention belongs
5. There were no special circumstances such as the fact that the products had been intentionally excluded from the scope of the patent claim in the patent application process

2 Ball Spline Bearing Case

Basis of the 5th requirement of the DoE

If the patent holder had once acknowledged some products not to belong to the technical scope of the patent claim, or in relation to which he had behaved as if he had objectively acknowledged so, the patent holder is not entitled to claim otherwise afterwards, since this is against the doctrine of estoppel.

3 Maxacalcitol Case · IP High Court

- "Maxacalcitol Case" IPHC. Grand Panel Judgement 25 Mar.2016
- The Appellee, who is one of the joint owners of the patent right for an invention titled "intermediates for the synthesis of vitamin D and steroid derivatives and process for preparation thereof", alleged that the manufacturing process for the maxacalcitol preparations sold by the Appellants constitutes infringement of the patent right of the Appellee.
- The starting material and intermediate of the Invention are cis-form vitamin D structures, while that of the Appellant's product are trans-form vitamin D structures that are the geometric isomers of cis-form vitamin D (therefore, it shall be converted to cis-form later), so the Appellant's process does not fulfill the Invention.
- The issues of this case are whether the Appellant's process falls under the technical scope of the Invention as an equivalent thereto, etc.

3 Maxacalcitol Case - IP High Court

- "Maxacalcitol Case" IPHC. Grand Panel Judgement 25 Mar.2016 clearly stated that the patent right holder has the burden of allegation and proof for the 1st to 3rd requirements of DoE, while the alleged infringer has the burden of allegation and proof for the 4th and 5th requirements.

(1st requirement of DoE)

- "The essential part should be found by first understanding the problem to be solved and means for solving the problem of the patented invention and its effect based on the statements in the scope of claims and the description, and then determining the characteristic part which constitutes a unique technical idea that is not seen in prior art in the statements in the scope of claims of the patented invention."

3 Maxacalcitol Case · IP High Court

- "[i] If the degree of contribution of the patented invention is considered to be more than that of prior art, the patented invention is found as a generic concept in relation to part of the statements in the scope of claims, [ii] If the degree of contribution of the patented invention is evaluated as not much more than prior art, the patented invention is found to have almost the same meaning as stated in the scope of claims."
- "[I]f the statement of the problem, which is described as one that prior art could not solve, in the description is objectively insufficient in light of prior art as of the filing date (or the priority date), a characteristic part which constitutes a unique technical idea of the patented invention that is not seen in prior art should be found also in consideration of prior art that is not stated in the description."

3 Maxacalcitol Case · IP High Court

- "[I]n determining the fulfillment of the 1st Requirement, that is, whether a difference from the subject product, etc., is a non-essential part, it is not appropriate to first divide the constituent features stated in the scope of claims into essential parts and non-essential parts and then consider that the DoE is not applicable to all of the constituent features that fall under essential parts, but it is necessary to first determine whether the subject product, etc., commonly has the essential part of the patented invention determined as mentioned above and then consider a difference not to be an essential part if the subject product, etc., is recognized as having said essential part. Even if the subject product, etc., has a difference other than the characteristic part which constitutes a unique technical idea that is not seen in prior art, this fact does not become a reason for denying the fulfillment of 1st Requirement."

3 Maxacalcitol Case · IP High Court

(Features of judgement on 1st requirement of DoE)

- The essential part should be found by first understanding the problem to be solved and means for solving the problem of the patented invention and its effect based on the statements in the scope of claims and the description, and then determining the characteristic part which constitutes a unique technical idea that is not seen in prior art in the statements in the scope of claims of the patented invention.
- However, if the statement of the problem in the description is objectively insufficient, a characteristic part which constitutes a unique technical idea of the patented invention that is not seen in prior art should be found also in consideration of prior art that is not stated in the description.

3 Maxacalcitol Case · IP High Court

(Features of judgement on 1st requirement of DoE)

- The unique technical idea of the invention shall be found according to the degree of contribution of the patented invention, whether it is considered to be more than that of prior art or it is evaluated as not much more than prior art.
- In determining whether a difference from the subject product is a non-essential part, the court did not adopt the method which first divide the constituent features stated in the scope of claims into essential parts and non-essential parts and then consider that the DoE is not applicable to all of the constituent features that fall under essential parts.

3 Maxacalcitol Case · IP High Court

(5th requirement of DoE)

- "[E]ven if there is another structure that is outside the scope of claims, which a person ordinarily skilled in the art can easily conceive of as of the filing date as one that is substantially identical with the structure stated in the scope of claims and the applicant could thus have also easily conceived of said another structure as of the filing date, this fact alone cannot serve as a reason for alleging that the applicant's failure to state said another structure in the scope of claims falls under the 'special circumstances' in the 5th Requirement of the DoE."

3 Maxacalcitol Case · IP High Court

- (One of the reasons for above is that) "in some cases, it is considered to be harsh to require the applicant to prepare the scope of claims that contains all the expected infringements and the description supporting such scope of claims within a limited period of time, taking into account the fact that, under the first-to-file system, applicants are generally required to prepare the scope of claims and the description and file applications within a limited period of time."

3 Maxacalcitol Case · IP High Court

- "[E]ven in such a case, if the applicant is objectively and visibly determined to have indicated another structure that is outside the scope of claims as a replacement for a different part in the structure stated in the scope of claims as of the filing date (for example, where the applicant can be considered to have stated the invention based on said another structure in the description or where the applicant stated the invention based on another structure that is outside the scope of claims in a paper, etc. which he/she published as of the filing date), the applicant's failure to state said another structure in the scope of claims is considered to fall under the 'special circumstances' in the 5th Requirement."

3 Maxacalcitol Case - IP High Court

(Features of judgement on 5th requirement of DoE)

Whether or not DoE is applied to equivalent materials and arts that already existed at the filing date

- Even if there is another structure which a person ordinarily skilled in the art can easily conceive of as of the filing date as one that is substantially identical with the structure stated in the scope of claims, the applicant's failure to state said another structure in the scope of claims does not fall under the 'special circumstances' in the 5th Requirement of the DoE.
- However, if the applicant objectively and visibly determined to have indicated another structure that is outside the scope of claims as a replacement for a different part in the structure stated in the scope of claims as of the filing date , it is considered to fall under the 'special circumstances' in the 5th Requirement.

3 Maxacalcitol Case ・ IP High Court

- IP High Court illustrated 2 concrete examples of the objective and visible indications as follows:

[i] “where the applicant can be considered to have stated the invention based on said another structure in the description”

[ii] “where the applicant stated the invention based on another structure that is outside the scope of claims in a paper, etc. which he/she published as of the filing date”

4 Maxacalcitol Case · Supreme Court

- "Maxacalcitol Case" S.C. 2nd Petty Bench Judgement 24 Mar.2017
- Judgement not on the 1st requirement but on the 5th requirement with regard to the Grand Panel Case

  "[E]ven in a situation where the scope of patent claims written by the patent applicant did not mention the structure for Competing Products or Processes different in part from the structure stated in the scope of claims while the applicant was able to easily conceive the structure for such Competing Products or Processes at the time of filing the application, the mere fact of such omission in the scope of the patent claims does not infer that the Competing Products or Processes were intentionally excluded from the scope of patent claims in the course of filing the application for the patented invention or that there are other particular circumstances"

4 Maxacalcitl Case · Supreme Court

"In some of the situations above, however, a patent description or others written by an applicant may contain a statement to the effect that the patented invention can work even when the structure stated in the scope of claims is replaced with a structure for Competing Products or Processes that are different in part from the structure stated in the scope of claims. In this or any other way, applicants may recognize at the time of filing the patent that the structure for any Competing Products or Processes can substitute for the structure stated in the scope of the patent claims, but intentionally omit statements concerning such Competing Products or Processes in the scope of the patent claim. If the situation explained in the preceding two sentences is objectively and visibly ascertained, third parties aware of the publicly disclosed patent description can understand that Competing Products or Processes are excluded from the scope of the patent claims based on the applicant's intention. This means that the applicant has acted in a way to cause third parties to believe that the Competing Products or Processes do not fall within the technical scope of the patented invention with the applicant's consent."

4 Maxacalcitol Case · Supreme Court

"[I]ntentional exclusion of Competing Products or Processes from the scope of patent claims in the course of filing an application for a patented invention or the existence of other particular circumstances should be ascertained if the applicant is objectively and visibly determined to have indicated his/her intention of omitting statements concerning Competing Products or Processes in the scope of the patent claims in a situation described below, while recognizing that the structure for the Competing Products or Processes could substitute for the structure stated in the scope of the patent claims: the applicant knew the existence of such Competing Products that contain certain parts that are different from the parts in the structure stated in the scope of the patent claims; and the applicant was able to easily conceive the structure for such Competing Products or Processes at the time of filing the application in connection with said differences."

4 Maxacalcitol Case · Supreme Court

(Features of the S.C. judgement)

S.C. denied, in this judgement, the application of the DoE to the structure which could be easily conceived at the time of filing but was omitted in the scope of the patent claim. S.C. did not adopt “easy conception at the time of filing theory”, in which the DoE is applied only for the equivalent materials and arts that already existed at the filing date.

S.C adopted “objective and visible indication theory”, in which the application of the DoE depends on the existence of additional situations; for example, there is an objective and visible indication which shows, although applicants had recognized the structure for any competing products or processes could substitute for the structure stated in the scope of the patent claims, they omitted statements concerning such competing products or processes in the scope of the patent claim.

This S.C. judgement is said to have authorized the Grand Panel judgment of IP High Court, since the basic contexts were similar except for subtle difference of expressions.

4 Maxacalcitol Case · Supreme Court

(Features of the S.C. judgement)

As a concrete example concerning objective and visible indication, this judgement mentioned "a patent description or others". It could be understood that the S.C. did not exclude the publication by paper, which the Grand Panel judgement referred to. However, it is said to be limited to exceptional cases, for example, the case in which it is comparable to the statement in a patent description.

This judgement did not hold whether the DoE was applicable or not when the correction or others had been made in the prosecution history. However, it is said that this judgement has affinity for the theory in which the DoE is not applicable only when particular circumstances are ascertained with detailed consideration (limited interpretation), not for the theory in which the DoE is not applicable without exception (wide interpretation).

～Thank you for your attention～