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Date of the judgement

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1998.02.24

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Case Number

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1994(O)1083

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Title

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Judgment on the case where products of another person was found to be within the technical scope of the patented invention for being identical in construction as indicated in the scope of claim in the patent specification

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Result

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Judgment of the Third Petty Bench, quashed and remanded

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Court of the Second Instance

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Tokyo High Court, Judgment of February 3, 1994

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Summary of the judgement

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Even if, within the construction as indicated in the claim in the patent specification, there is a part which is different from the products which are produced by another person or the manner adopted by this person, if this part is not the essential part of the patented invention and the purpose of the patented invention can be achieved by replacing this part with a part in the other person's product and an identical function and effect can be obtained if 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 said products, if 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 easily conceived by this person at that time, and if there were no special circumstances such as the fact that those products had been intentionally excluded from the scope of the patent claim in the patent application process, such

products should be regarded as identical with the construction as indicated in the scope of patent claim and fall within the scope of the technological scope of the patented invention.

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References

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Article 70, para.1 of the Patent Law

The technological scope of the patented invention shall be determined on the basis of the scope of the patent claim indicated in the patent specification attached to the patent application.

Subchapter 2, Chapter 4, Infringement

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Main text of the judgement

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The original Judgment is quashed.  
The case shall be reversed to Tokyo High Court.

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Reasons

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On the grounds of appeal by the representative of the appellant, Yohei Kinoshita

1. The present case involves a claim of damage by the appellee against the appellant for the infringement of a patent. Outline the facts ascertained by the original instance court is as follows:

1) The appellee holds a patent on an invention which is called 'Infinite Sliding Spline Shaft Bearing' (application April 24, 1971, publication of application, July 7, 1978, patent registration May 30, 1980; Patent No. 999139) (hereinafter, 'the Invention').

2) The scope of the patented claim as indicated in the specification in the patent application of the invention in the present case (hereinafter, 'the Specification') is as follows:

An 'Infinite Sliding Spline Shaft Bearing' (hereinafer, 'Component E'), which is characterized by a cylinder with a U-shaped cross section loaded ball guiding ditch for tork conveyance and non-loaded ball guiding ditch which is slightly deeper for tork conveyance in the direction of the shaft alternately formed on the inside wall (hereinafter, 'Component A'), a holder which has

a thin part and thick part coinciding with these ditches, a penetrating hall between these parts, and an infinite railed ditch from which balls can move smoothly to the unloaded ball ditch formed in the thick part (hereinafter, 'Component B'), and spline shaft which has multiple protuberances formed in the direction of the shaft which coincide with the multiple indented parts formed by the balls held between the holder and the cylinder (hereinafter, 'Component C'), to be put together (hereinafter, 'Component D').

3) The appellant has produced and marketed the products in the itemized list attached to the original judgment (those with more than 50 micron difference in level between unloaded ball guiding ditch 5 and cylinder part 7 (circumferential part 7), hereinafter. 'Products of the Appellant') as a business between January 1983 to October 1988.

2. In the present case, the appellee claims that the Products of the Appellant fully coincided with or are similar to the components of the Invention and therefore, fall within the technological scope of the Invention. The original instance court ruled as follows and acknowledged the claim for damages of the appellee for the infringement of the patent.

1) The Products of the appellant coincide with components C, D, and E of the Invention.

2) Concerning Component A, whereas in Component A, it is 'U-shaped in cross section' and 'a ditch in the circumferential direction', the Products of the Appellant differ in that they have 'semi-circle cross section' and 'cylinder part 7'.

3) Concerning Component B, the holder in the Invention is a single unit and the holder itself has the function of guiding balls for infinite circulation, maintenance of balls at the time of removal of the spline shaft, and forming the ditch to guide the protuberant part of the shaft, this function is realised in the Products of the Appellant by coordination of the top of the protuberant part between loaded ball guiding ditches in the external cylinder, plate shaped component 11, and return cap 31, and therefore, the composition is different.

4) However, the Products of the Appellant are no different from the Invention in the technological task to be solved, the technological ideas which serve as its basis, and the effect achieved by the constructions based upon the ideas. Concerning the structure of the holder in Component B, the replaceability of the Invention and the Products of the Appellant and, the easiness of replacement at the time of the patent application can be acknowledged. Furthermore, no specific technological significance can be found in the difference between 'U-shaped in cross

section' and 'a ditch in the circumferential direction' in Component A and 'semi-circle cross section' and 'cylinder part 7' in the Products of the Appellant. Therefore, it is appropriate to acknowledge that the Products of the Appellant fall within the technical scope of the Invention.

3. However, the above ruling of the original instance cannot be justified on the following grounds:

1) In determining whether the product which a person produces or the means which this person uses in producing the product (hereinafter, 'the products') fall within the technical scope of the patented invention in an patent infringement action, the technical scope of the patented invention must be determined on the basis of the scope of the patent claim indicated in the patent specification attached to the patent application (Article 70, para.1 of the Patent Law). If there is a part different from the products in the construction as indicated in the scope of the patent claims, the products cannot be regarded as falling within the technical scope of the patented invention. However, even if, within the construction as indicated in the claim in the patent specification, there is a part which is different from the products, if (a) this part is not the essential part of the patented invention, (b) 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, (c) 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, (d) 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, and (e) 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, the products should be regarded as identical with the construction as indicated in the scope of the patent claim and fall within the scope of the technical scope of the patented invention. This is because (1) it 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) Taking this into account, the substantive value of the patented invention

extends to the technology which a third party can easily conceive as substantially the same from the construction as indicated in the scope of patent claim in the specification, and third parties should be expected to foresee this. (3) On the other hand, concerning those technologies which were in the public domain or which a person who has an average knowledge in the area of technology where this invention belongs can easily conceive at the time of the patent application, since no one could have obtained a patent (Article 29, Patent Law), such technologies cannot be found to be within the scope of the technical scope of the patented invention. (4) Furthermore, technology which the patent holder had once acknowledged 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, e.g. by intentionally excluding the technology from the scope of patent claim in the patent application process, the patent holder is not entitled to claim otherwise afterwards, since this is against the doctrine of estoppel.

2) In the present case, the original instance court found that parts of components A and B in the scope of patent claim in the specification do not coincide with the Products of the Appellant, but nevertheless, ruled that the Products of the Appellant fall within the technological scope of the Invention on the ground that in the construction of the holder in Component B, there is a possibility of replacement and easiness of replacement between the Invention and the Products of the Appellant. However, the original instance court also found that (1) an infinite sliding spline shaft bearing which comprises an external cylinder, spline shaft, and a holder was a technology in the public domain before the patent application of the Invention, and a spline shaft which has multiple protuberances formed in the direction of the shaft which coincide with the multiple indented parts formed by the balls held between the holder and the cylinder (Component C) is a normal construction of a shaft for a ball spline shaft bearing, and (2) (i) while the holder in the Invention is a single unit and the holder itself has the function of guiding balls for the infinite circulation, maintenance of balls at the time of removal of the spline shaft, and forming of the ditch to guide the protuberant part of the shaft (Component B), the holder of the Products of the Appellant which is of a divided structure comprising three plate shaped components 11 and 2 return cap 31 realises the above-mentioned function of the holder in the Invention by coordination of these components, (ii) the holder of the Products of the Appellant of a divided structure comprising three plate shaped components 11 and 2 return cap 31 has been indicated in the specification of the infinite sliding spline shaft bearing of US Patent No.3360308 ball which had been distributed before the patent application of the Invention, (iii) while in order to hold the balls by a holder with a divided structure, creating a protuberant part is technically required, such a construction was shown in the specification of US Patent No.3398999 ball spline which is a same publication as above. According to the above, creating

a protuberant part between the holder with a divided structure and the loaded ball guiding ditches in the external cylinder was already indicated in the ball spline shaft bearing in the public domain before the patent application of the Invention.

In addition, according to the findings of the original instance court, the Products of the Appellant are common with the Invention in that it circulates the balls in circumferential direction and that it has adopted a multi-row angular type structure in which the protuberant part of the spline shaft is sandwiched from the side by the balls in the loaded ball guiding ditch for conveying tork (components A and C). However, judging from the fact ascertained by the original instance court that there is an entry in the Patent Gazette of Japan 1969 No.2361, the Patent Gazette of the Federal Republic of Germany No.1450060, and specification of the US Patent No.3494148 of the circulation of the balls in circumferential direction and a multi-row angular type structure, it can be surmised that the application of these technologies to ball spline bearings was in the public domain before the patent application of the Invention.

If the technology of ball spline bearing with the circulation of the balls in circumferential direction and a multi-row angular type structure was in the public domain before the patent application of the Invention, since, according to the findings of the original instance court, the construction of the holder does not basically differ by the structure of the contact of the balls, the Products of the Appellant are those which have merely combined ball spline bearing with the circulation of the balls in circumferential direction and a multi-row angular type structure which was in the public domain and a holder with a divided structure which was also in the public domain. If this combination could be easily conceived by a person who has an average knowledge in the area of technology where this invention belongs, the Products of the Appellant could have been easily conceived from the technology in the public domain before the patent application of the Invention, and therefore, cannot be regarded as identical to the composition as indicated in the scope of the claim in the specification in the Invention and fall within the technological scope of the Invention.

In the present case, as mentioned above, there are parts in the construction as indicated in the patent claim in the specification which are different from the Products of the Appellant. However, the original instance court merely examined whether these parts and the construction of the Products of the Appellants could be replaced or easily replaced, but failed to examine the relationship between the Products of the Appellant and the technology in the public domain at the time of the patent application for the Invention, and directly reached the conclusion that the Products of the Appellant were identical to the composition as indicated in the scope of the claim in the specification in the Invention and fall within the technological scope of the Invention. The above ruling of the original instance court cannot but be regarded as an error in the interpretation and application of the Patent Law, even without examining the

appropriateness of its ruling on the other requirements such as the possibility of replacement and the easiness of replacement.

4. Thus, the judgment of the original instance court has errors in the interpretation and application of laws and ordinances as well as insufficiency of examination and reasoning, and it is evident that these affect the conclusion of the judgment.

The argument of the Appellant is with grounds, and the judgment of the original instance court cannot but be quashed. In the present case, it is necessary to further examine the points indicated above, and for this purpose, the case is reversed to the original instance court.

Therefore, the justices unanimously rule as the main text of the judgment.

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Presiding judge

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Justice OZAKI Yukinobu

Justice SONOBE Itsuo

Justice CHIKUSA Hideo

Justice MOTOHARA Toshibumi

Justice KANATANI Toshihiro

(Translated by Sir Ernest Satow Chair of Japanese Law, University College, University of London)