

Report on the “Judicial Symposium on Intellectual Property/ TOKYO 2018” (First Day)

- Comparison on “Patent Validity in Patent Infringement Lawsuit” based on Mock Trials conducted by Five Countries -

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Part 1 Introduction

When a patentee files a patent infringement lawsuit to demand compensation for the damage and to seek an injunction against the act of producing, the alleged infringer is to challenge whether the alleged products fall within the technical scope of the patented invention and the validity of the patent.

In Japan, there are no procedures available for the court to invalidate a patent, but the judgement of the Supreme Court rendered on the “Kilby” case (1998 (O) 364, Judgement of the Third Petty Bench of the Supreme Court of April 11, 2000, *Minshu* Vol. 54, No. 4, at 1368) and the amendment of the Patent Act by Act No. 120 of 2004 in response to this judgement (introduction of Article 104-3 of the Patent Act) have made it possible for the court in charge of the patent infringement litigation (infringement court) to limit a patentee’s exercise of patent right when the court finds that the said patent should be invalidated. This judge-

ment of the Supreme Court on the “Kilby” case instructed that the infringement court may make a judgement on patent validity from the perspective of prioritizing the principle of equity, ensuring one-time dispute resolution, and accelerating patent infringement procedure. According to recent statistics, approximately 73% of patent rights claimed in patent infringement litigations concluded by final judgements, were challenged in terms of their validity.¹

On the other hand, in Germany, France, the U.K. and the U.S., major measures available for alleged infringers to challenge patent validity after the lapse of the period for raising an objection to grant are as follows.²

In consideration of these differences in systems of respective countries,³ on the first day of the Judicial Symposium on Intellectual Property / TOKYO 2018 (2018 JSIP), the mock trial and panel discussion were held regarding how the infringement courts of the five countries make judgements on the validity of a

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patent in patent infringement litigation.

This report shows the results and their interpretations obtained from the mock trials at the 2018 JSIP.⁴ Please be noted that opinions in this report are personal views of the authors.

Part 2 Case of the Mock Trial

1. Summary

Pony Corp. (“P”) holds a patent right for an invention relating to a piston compressor (“Patent Right” and “Patent”).

Donkey Corp. (“D”) started to produce and sell piston compressor Y (“Product Y”) and piston compressor X (“Product X”) successively after the registration establishing the Patent Right. Since then, Product X has become the main product of D⁵.

P asserts that Products X and Y both fall within the technical scope of the Patented Invention.

However, D refuted [i] that Product Y does not fall within the technical scope of the Patented Invention although Product X does fall within it, and also refuted [ii] that Patent should be invalidated because the Patented Invention lacks an inventive step (obviousness) based on the invention pertaining to Patent Gazette 34085 (Gazette 085, Main Cited Invention) and the invention pertaining to Patent Gazette 63165 (Gazette 165, Sub Cited Invention).

P filed the infringement lawsuit against D, in which P seeks an injunction against the act of producing and selling Products X and Y and a payment of damages.

2. Patented Invention

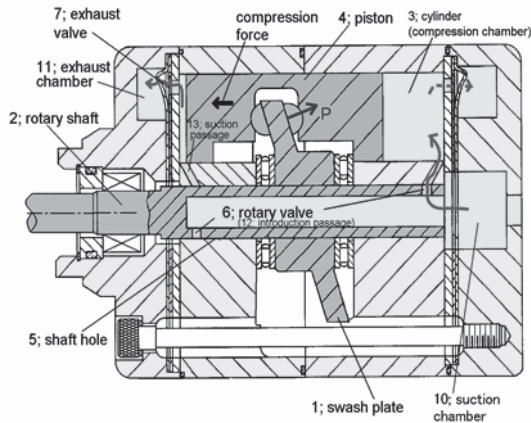
(1) Claim No.1

- A: A piston compressor,
- B: which has rotary valves (6), has rotary shafts (2) that are integrated with said rotary valves (6) and has a shaft hole (5) that accommodates said rotary valves (6) in a rotatable manner,
- C: which causes pistons (4) to make reciprocal motions through swash plates (1) in accordance with the rotation of said rotary shafts (2),
- D: said shaft hole (5) has, on the inner peripheral surface, the inlets of suction passages (13) to intake refrigerant into compression chambers (3),
- E: said rotary valves (6) have, on the outer peripheral surfaces, the outlets of introduction passages (12) that intermittently communicate with the inlets of said suction passages (13) in accordance with the rotation of said rotary shafts (2),
- F: the inner peripheral surface of said shaft hole (5) directly supports the outer peripheral surfaces of said rotary valves (6) and the clearance between them is set as less than 20 μ m.

(2) Corrected Claim or Dependent Claim

The claim can be corrected during the litigation procedure. In the country in which claim correction is unrealistic in this procedure, a dependent claim (Claim No.2) can be set beforehand. While correcting the claim or setting the dependent claim, each country is only allowed to add the following underlined elements to the abovementioned Element E.

[Drawing of the Patented Invention]



E': said rotary valves (6) have, on the outer peripheral surfaces, the outlets of introduction passages (12) that intermittently communicate with the inlets of said suction passages (13) in accordance with the rotation of said rotary shafts (2), the outer peripheral surfaces of said rotary valves (6) are cylindrically-shaped, except for the outlets of said introduction passages (12).

(3) Description and Drawings

Paragraphs [0003] to [0005] of the description state as follows: In a rotary valve compressor, the compression reaction force generates moment (M) which may cause the tilt of the rotary shaft (2), and the tilt of the rotary shaft (2) make the clearance broader between the inner peripheral surface of the shaft hole (5) and the outer peripheral surfaces of the rotary valves (6), which causes problem of leakage of refrigerant; In the conventional rotary valve compressor, rolling bearings were used to hold the rotary shaft (2) firmly to mitigate the expansion, but rolling bearings were obstacles for cost reduction of compressors because they were expensive and assembly proce-

dures became complex by using them; Inventors found that the clearance being set as less than $20\mu\text{m}$ mitigates the expansion of the clearance drastically without using rolling bearings.

Additionally, the "Drawing of the Patented Invention" is shown as description of one of the embodiments. In all drawings to describe embodiments, the outer peripheral surfaces of rotary valves (6) are being cylindrically-shaped except for the outlets of introduction passages (12).

(4) Prosecution History

Initial claim did not mention "the clearance between them is set as less than $20\mu\text{m}$," therefore, there was no limitation on the width of the clearance between the inner peripheral surface of the shaft hole (5) and the outer peripheral surfaces of the rotary valves (6).

In the application process, P received a notice of reasons for refusal from the Patent Office examiner, pointing that the invention for which a patent is sought is not explained in the description since the description only shows an invention in which clearance is being set as less than $20\mu\text{m}$.

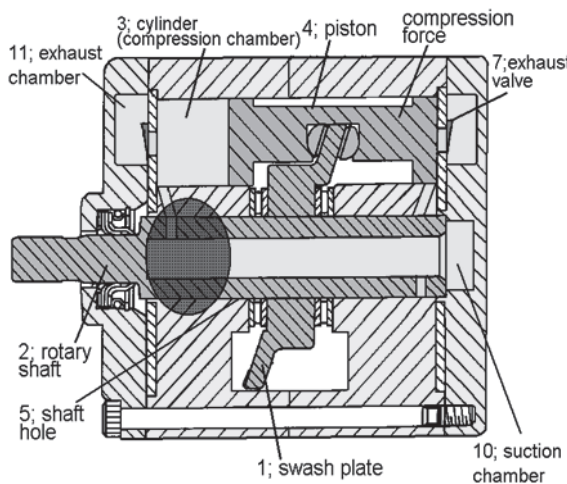
Therefore, P amended the scope of the claim, wherein P added "the clearance between them is set as less than $20\mu\text{m}$." P also submitted a written opinion (Written Opinion). Written Opinion stated "Reason for refusal indicated by the examiner should have been resolved because of the amendment in which the element 'the clearance between them is set as less than $20\mu\text{m}$ ' was added. The tilt of a rotary shaft (2) could be prevented if all clearance was being set as less than $20\mu\text{m}$, between the inner peripheral surface of the shaft hole (5) and the outer

peripheral surfaces of the rotary valves (6).”

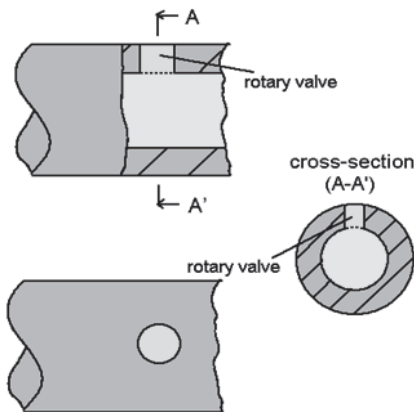
3. Products X and Y

In Product X, the outer peripheral surface of the rotary valve is cylindrically-shaped.

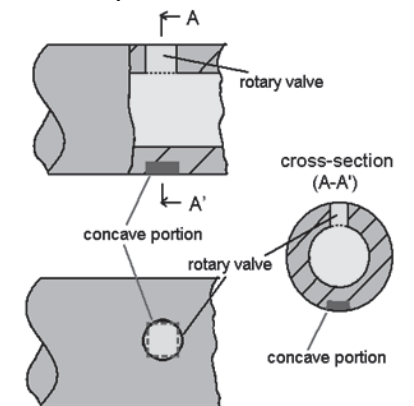
[Overall Structure of D's Product]



[Shaded part above in Product X]



[Shaded part above in Product Y]



In Product Y, the outer peripheral surface of the rotary valve has concave portions, which high-pressure gas is introduced into, although most of it is cylindrically-shaped.

All other components fall within the technical scope of the Patented Invention.

4. Main Cited Invention Described in Gazette 085

Apart from the Patented Invention (a rotary valve compressor), the Main Cited Invention corresponds to a reed valve compressor. Therefore, the Patented Invention and the Main Cited Invention have a difference derived from the fact that the Patented Invention is a rotary valve compressor and the Main Cited Invention is a reed valve compressor. However, the Main Cited Invention has the rest of the structures of the Patented Invention. In one embodiment, the outer peripheral surface of the rotary shaft (2) has a concave portion (8).

The description of Gazette 085 contains the following statements for the purpose of resolving the same problem as that of the Patented Invention: The invention described in Gazette 085 adopts a system, in which a concave portion (8) is formed on the outer peripheral surface of the rotary shaft (2) and high-pressure gas is introduced into the concave portion (8) (paragraph [0007]); In the invention, the moment (M), which is generated on the rotary shaft (2), is offset by the opposite force (F) applied to the rotary shaft (2) by the high-pressure gas, and therefore, the rotary shaft (2) is not firmly pressed against the shaft hole (5) without using rolling bearings (paragraph [0008]), which results in mitigation of the expansion of the clearance; It is preferable that the width of the clearance is adjusted, for

example, being less than $20\mu\text{m}$, between the inner peripheral surface of the shaft hole (5) and the outer peripheral surfaces of the rotary shaft (2) (paragraph [0058]); For example, as disclosed in Patent Gazette 63165 (Gazette 165), in a compressor in which rotary valves are provided on the parts corresponding to the rotary shaft, this invention can be applied to these rotary valves (paragraph [0049]).

5. Sub Cited Invention Described in Gazette 165

Although the Sub Cited Invention uses rolling bearings (9), it corresponds to a rotary valve compressor as with the Patented Invention. Therefore, the Sub Cited Invention has all structures pertaining to the difference between the Patented Invention and the Main Cited Invention. In one embodiment, the outer peripheral surfaces of rotary valves (6) are cylindrically-shaped, and the inner peripheral surface of a shaft hole (5) supports the outer peripheral surface of rotary shaft (2) through rolling bearings (9).

Part 3 Results of the Mock Trial

The results of the mock trial are as follows. The conclusions are almost the same, but it is interesting that the processes leading to the conclusions differ. The mock trial by the five countries is outlined and explained below, while taking into consideration opinions presented in panel discussions etc..⁶






It should be noted that the mock trial and the following explanations are based on the case and only show part of the practices in respective countries.

1. Japan

(1) Mock Trial⁷

(A) The Second Date for Oral Arguments⁸ - Suspension of Court Proceedings -

In the Japanese mock trial, the defendant first requested the suspension of the court proceedings (JA 168(2)), alleging that the defendant has filed a patent invalidation trial with the same content as the defense of invalidity. However, the plaintiff offered opposition on the

Product X						
Original Claim	Within the scope	—	—	Within the scope	Within the scope	Claim 1
	Invalid	(Invalid)	—	Invalid	(Valid)	
Corrected Claim	Within the scope	Within the scope	Within the scope	Within the scope	Within the scope	Claim 2
	Valid	(Valid)	Valid	Valid	(Valid)	
Conclusion	Infringed	Infringed	Infringed	Infringed	Infringed/ Infringed	Conclusion
Product Y						
Original Claim	Within the scope	—	—	Within the scope	Within the scope	Claim 1
	Invalid	(Invalid)	—	Invalid	(Valid)	
Corrected Claim	(Out of the scope)	Out of the scope	Out of the scope	Out of the scope	Out of the scope	Claim 2
	—	—	Valid	Valid	(Valid)	
Conclusion	Not infringed	Not infringed	Not infringed	Not infringed	Infringed/ Not infringed	Conclusion

grounds that the suspension is against a requirement for speedy trials and that the specialized division of courts has jurisdiction over patent case, and accordingly has expertise comparable to that of the Japan Patent Office (JPO). The court itself presented its opinion that court proceedings have seldom been suspended in practice, and that the court has sufficient expert knowledge from full-time judicial research officials and part-time technical advisers and is fully capable of making a judgement on patent validity. The court also stated that consistent judgements on the invalidation trial and the defense of invalidity is expected to be resolved by the IP High Court. In the end, the defendant agreed on the continuation of the court proceedings. Therefore, the court decided to continue the court proceedings without suspension.

(B) The Fifth Date for Oral Arguments - Explanatory Session -

On the fifth date for oral arguments, an explanatory session was held without the involvement of technical advisers. Both parties made presentations by dividing the themes, namely, [i] whether Product Y satisfies Element F, [ii] whether the defense of invalidity on the grounds of the lack of an inventive step based on Gazette 085 and Gazette 165 stands, and [iii] whether the re-defense of claim correction pertaining to Product X⁹ stands. After the presentations, judges and a judicial research official actively exchanged questions and answers.

(C) The Sixth Date for Oral Arguments - Interlocutory Judgement -

Generally, patent infringement litigation adopts the two-phase proceedings system, under which the issue of infringe-

ment (the claim satisfaction issue, the patent validity issue, and other defense) and the issue of damage are examined separately. After having the parties present their assertions and evidence sufficiently on the issue of infringement, the court presents a conviction thereon. If the court is convinced of the infringement, it goes on to the proceedings on the issue of damage and at the same time, confirms intentions of the parties as to whether they seek a settlement. However, in the mock trial, the defendant demanded an opportunity to present additional assertions and evidence on the issue of infringement as necessary even after the court's presentation of its conviction, while the plaintiff sought an interlocutory judgement. Therefore, the court rendered the interlocutory judgement and explained the summary of the grounds therefor.¹⁰

Regarding [i] whether Product Y satisfies Element F, the court found that "the clearance" of Element F does not necessarily mean all the clearance because of the statement in the scope of claims (the wording of Element F is "the clearance," not "all the clearance") and the statement in the description (the tilt of the rotary shaft can be prevented even if there are outlets of introduction passages on the outer peripheral surfaces of the rotary valves). Furthermore, the court found that the Written Opinion, from its context, shall not be regarded as intentionally excluding configurations other than "those where all the clearance between the inner peripheral surface of the shaft hole and the outer peripheral surfaces of the rotary valves is less than 20 μ m." As a concave portion on the outer peripheral surfaces of the rotary valves of Product Y has only one opening of the

same size as the outlets of the introduction passages on the opposite side of those outlets, it can easily be understood by a person skilled in the art that the same effect as the Patented Invention, i.e., to prevent the tilt of the rotary shaft, can be obtained. In conclusion, the court determined that Product Y satisfies Element F.

Next, regarding [ii] whether the defense of invalidity on the grounds of the lack of an inventive step stands, the court determined that the defense of invalidity stands by ruling that Gazette 085, which describes the Main Cited Invention, clearly indicates Gazette 165, which describes the Sub Cited Invention, and states that a concave portion can be provided on the outer peripheral surfaces of rotary valves of a rotary valve compressor, and therefore that motivation can be found for applying the rotary valve compressor of the Sub Cited Invention instead of a reed valve compressor of the Main Cited Invention.

Additionally, regarding [iii] whether the re-defense of claim correction pertaining to Product X stands, the court found that the claim correction (“Correction”) created a new difference “the outer peripheral surfaces of the rotary valves are cylindrically-shaped except for the outlets of the introduction passages in the Corrected Invention, while there is a concave portion on the outer peripheral surface of the rotary shaft in the Main Cited Invention”. The abovementioned statement in Gazette 085 does not suggest the application of the rotary valves without a concave portion of the Sub Cited Invention instead of the rotary shaft with a concave portion of the Main Cited Invention and no motivation can otherwise be found for applying the Sub Cited

Invention to the Main Cited Invention. Accordingly, the court determined that the Correction can resolve the grounds for invalidation. Furthermore, the court found that the Correction was requested in a legitimate manner and that the Product X falls within the technical scope of the corrected claim, and concluded that the re-defense of claim correction pertaining to Product X stands.

As outlined above, the court determined that Product Y satisfies Element F and falls within the technical scope of the Patented Invention, but that the Patent should be invalidated by a patent invalidation trial and re-defense of correction has not been asserted. In conclusion, the court ruled that Product Y does not infringe the Patent Right. On the other hand, regarding Product X, the court found that there is no dispute between the parties that it falls within the technical scope of the Patented Invention, and that the Patent should be invalidated by a patent invalidation trial but re-defense of correction stands. The court concluded that Product X infringes the Patent Right and decided to go on to the proceedings on the issue of damage.

(2) Explanations

(A) Judgement on Patent Invalidity by the Court

There are two approaches to challenge patent validity in Japan; [i] to file an invalidation trial before the JPO (JA 123) and [ii] to assert a defense of patent invalidity before the infringement court (JA 104-3). Alleged infringer often uses both when infringement lawsuit is filed. A system to examine the validity of a patent both before the infringement court and before the JPO is called a double-track system. Invalidation trials may be



filed without limit unless on the basis of the same facts and evidence (JA 167), which has caused various problems such as that patentees have to win both in the invalidation trial and in the infringement lawsuit, and that judgements may differ between the infringement court and the JPO.

The amendment of the Patent Act by Act No. 63 of 2011 newly established Article 104-4, which provides that even when a JPO ruling that the patent is to be invalidated has become final and binding after an infringement court judgement becomes final and binding, the patent invalidity is not permitted to be asserted in a retrial against the final judgement of the infringement lawsuit. Furthermore, the IP High Court has jurisdiction both over revocation lawsuits against the JPO trial decisions and appellate cases of infringement litigation (JA 178(1); Code of Civil Procedure of Japan 6(3)), and it is

expected that the same panel at the IP High Court would make consistent judgements as long as it is possible. In addition to that, practical efforts have been made by petitioners to assert same grounds of invalidation and present same evidence for an invalidation trial and infringement lawsuit. It can be said that the disadvantage of the double-track system has thus been removed considerably.

(B) Suspension of Court Proceedings

Art. 168 para. (2) of the Patent Act provides that the infringement court may suspend court proceedings, if it finds necessary, until the JPO decision on the invalidation trial becomes final and binding. Therefore, before the rendering of the judgement of the Supreme Court on the “Kilby” case, the infringement court controlled the litigation in some cases by suspending court proceedings and waiting for the results of the JPO invalidation tri-

als.¹¹ However, it took a certain amount of time until JPO decisions became final and binding, and suspension of court proceedings resulted in prolonging patent infringement litigation. The judgement of the Supreme Court rendered on the “Kilby” case and newly established Article 104-3 of the Patent Act have made it possible for the infringement court to reject a patentee’s claim when the patent is found to be invalidated. Therefore, suspension of court proceedings has been seldom used in practice since then.¹²

(C) Claim Construction

The technical scope of a patented invention must be determined based upon the statements in the scope of claims attached to the application (JA 70(1)). The primary reference material for claim construction is the statement in the scope of claims, and terms used therein are to be interpreted in a general sense understood by persons skilled in the art unless otherwise defined in the description.

The meanings of terms used in the scope of claims are to be interpreted in consideration of the statements in the description and drawings attached to the application (JA 70(2)). When a term used therein could be interpreted in several ways, its exact meaning should be determined in consideration of the detailed explanation of the invention contained in the description.

Furthermore, when a patentee clearly admitted that the relevant configuration does not fall within the technical scope of the patented invention, for example a patentee intentionally excluded a specific configuration from the scope of claims in the process of submitting a written opinion against the reason for refusal, an assertion which contradicts to these made

by the patentee in the infringement lawsuit may be dismissed under the doctrine of estoppel.

(D) Method to Determine an Inventive Step

According to 2016 (Gyo-Ke) 10182 and 10184, Judgement of the Special Division of the IP High Court of April 13, 2018 (website of the IP High Court of Japan), whether an inventive step (JA 29(2)) is found should be determined by first determining the patented invention to be sought based on the scope of claims, then comparing it with a cited invention (JA 29(1)) to find common features and differences, and if there is any difference, by making a judgement whether a person skilled in the art could have easily conceived of the invention in question having said differences based on the technical standards as of the time of filing the application or priority date.

Regarding whether the patented invention could have been easily conceived of by applying a sub cited invention described in a publication (JA 29(1)(iii)) to the main cited invention, a judgement should be made [i] by examining whether there is any motivation to apply the sub cited invention to the main cited invention, which reaches the patented invention, and [ii] in consideration of the existence or non-existence of any factors inhibiting the application or any unpredictable significant effects.

The existence or non-existence of any motivation mentioned in [i] above is to be judged by comprehensively taking into account suggestions contained in the main cited invention or the sub cited invention, the relevance of technical fields of those inventions and commonal-

ity in problems, actions and functions, etc. between the two inventions.

(E) Re-defense of Claim Correction

Against a defense of patent invalidity based on Article 104-3 of the Patent Act, a patentee can assert a re-defense of claim correction on the grounds that the grounds for invalidation asserted in the defense of patent invalidity are resolved by the correction.¹³

It was a common understanding on a practical level that a re-defense of claim correction needs to fulfill the requirements that [i] (a trial for) correction has been filed in a legitimate manner before the JPO, [ii] the ground for invalidation is resolved by the correction and [iii] the alleged product falls within the scope of the corrected patent claim.¹⁴ The reason why [i] filing (a trial for) correction before the JPO is required whereas a request for invalidation trial before the JPO is not required for asserting a defense of patent invalidity is that it is not appropriate to permit the exercise of patent right under an unstable and uncertain situation from the perspective of finalizing the content of the correction.¹⁵ However, after the amendment of the Patent Act by Act No. 63 of 2011 which newly provides for the period limitation for filing (a trial for) correction before the JPO, it becomes difficult to require a filing (a trial for) correction in all cases before the JPO.¹⁶ Regarding the Sheet Cutter Case (Note 13), where it was legally impossible to file (a trial for) correction before the JPO to resolve the grounds for invalidation asserted in the defense of patent invalidity, the Supreme Court ruled that a filing (a trial for) correction before the JPO is not required in order to assert a re-defense of claim

correction under the relevant circumstances. However, what circumstances make it unnecessary to file (a trial for) correction before the JPO and whether any alternative requirements are to be imposed in addition to the presentation of the corrected claim in such cases are left to be discussed later.

(F) Introduction of Expert Knowledge - Judicial Research Officials and Technical Advisers

Judicial research officials consisting of former JPO examiners and patent attorneys are deployed as full-time court officials to the IP High Court and the IP Right Divisions of the Tokyo and Osaka District Courts that handle patent infringement lawsuits (Code of Civil Procedure of Japan 92-8).

In some cases of patent infringement lawsuits, explanatory sessions are held on the final date for the preparatory proceedings or oral arguments on the infringement issue. At an explanatory session, both parties make presentations within an assigned time of around 30 to 60 minutes concerning the points at issue for which the infringement court requested explanations, by explaining technical matters such as the details of the invention, prior arts, and the common technical knowledge at the time of filing the application, and asserting the correspondence between the patented invention and alleged product.

An explanatory session is generally attended by around three technical advisors (Code of Civil Procedure of Japan 92-2), who are selected from among professors, researchers of public organizations and private companies, and patent attorneys, etc. engaging in research on cutting-edge science and technology,

after hearing opinions of the parties. Through questions and answers exchanged between attending technical advisors and the parties following the parties' presentations, the court obtains expert knowledge.

2. Germany

(1) Mock Trial¹⁷

(A) Preparatory Proceedings

In patent infringement lawsuit in Germany, preparatory proceedings are undertaken in writing ahead of oral arguments. As a premise, in the preparatory proceedings, which were omitted in the mock trial, whether Product Y satisfies Element F was challenged and the defendant brought an action for declaration of nullity of the Patent before the Federal Patent Court (DE 81) and requested the suspension of the court proceedings (Code of Civil Procedure of Germany 148).

(B) Date for Oral Arguments

Oral arguments were held in the German mock trial. At the beginning, the judge presented a provisional conviction on the patent infringement issue in response to the preparatory procedures in writing. Specifically, the judge first stated that the issue is how to interpret the meaning of the term "directly support" in Element F in relation to "the clearance." Then, the judge pointed out that it is hard

to consider that the Patented Invention excludes the rotary shaft (2) with a concave portion based on the statement in the description and that there is the possibility that the Patented Invention may be invalidated. The judge encouraged the parties to discuss these points.

Regarding the point of whether Product Y satisfies Element F, the plaintiff asserted that the rotary shaft (2) can be stabilized only with a small clearance less than $20\mu\text{m}$ and that Product Y also has the same function, while the defendant asserted that the Patented Invention literally prescribes that the clearance is less than $20\mu\text{m}$. In response to the judge's request for discussing the suspension of the court proceedings, the defendant asserted that the Patented Invention lacks an inventive step based on the invention described in Gazette 085.

The judge questioned the validity of the Patent and asked the plaintiff if the plaintiff agreed with the suspension of the court proceedings. The plaintiff sought a judgement by the infringement court. The plaintiff highlighted the difference in functions of the Main Cited Invention and the Sub Cited Invention and asserted that grounds for invalidation based on the lack of an inventive step are not applicable to the Patent. However, the judge presented a conviction that it is obvious that Gazette 085 contains the relevant suggestion.



Accordingly, the plaintiff stated that it would be important to halt the sale, etc. of Product X and expressed the limitation of the scope of claims in order to avoid the grounds for invalidation. The defendant also asserted the invalidity of the patent related to the Corrected Invention and demanded an opportunity to present further objections by alleging that the plaintiff's counter-defense of claim correction on the date for oral arguments was so surprising. On the other hand, the plaintiff asked for a speedy judgement as the patent is a time-limited monopoly.

(C) Judgement

The judge rendered a judgement to the effect that Product X infringes the Patent Right and Product Y does not. The judge found that Product Y does not fall within the scope of claims as a result of a counter-defense of claim correction, and did not make a judgement on the infringement of the original claim. In the meantime, the judge found no need to suspend the court proceedings with regard to Product X. As grounds therefor, the judge pointed out that the court proceedings may be suspended only when the Federal Patent Court is expected to revoke the Patent, and that the Main Cited Invention adopts the concave portion (8) in the rotary shaft (2), so making the peripheral surface of the rotary shaft (2) cylindrically-shaped contradicts this and no motivation can be found therefor, due to which sufficient probability for revocation cannot be found. Concrete calculation of the amount of damage was left for the following procedures.

(2) Explanations

(A) Judgement on Patent Invalidity by the Court

In Germany, Bifurcation system is adopted. Patent validity is judged not by the Regional Court (infringement court) but by the Federal Patent Court. However, in a case where the defendant brings an action for declaration of nullity before the Federal Patent Court and then demands the suspension of the court proceedings, the infringement court examines the validity of the patent to the extent of determining whether or not to suspend the court proceedings before making a final judgement. The infringement court conducts such examination when having been convinced that the alleged product falls within the technical scope of the claim. When the infringement court has not become convinced about that, the plaintiff's filing is dismissed without examination on patent invalidity.

What should be proved in such examination is the forecast of the nullity action, not the validity of the patent itself. The defendant is required to prove a high probability that the patent nullity action will be accepted. It is preferable to assert the invalidity based on new prior art which leads to the lack of novelty of the patent. This is [i] because if the suspension of infringement court proceedings causes a delay in judgement by one to two years, this may result in denying the patentee's time-limited monopoly and [ii] because the validity of the patent has already been approved by the authorized agency (the German Patent Office or the European Patent Office).

This examination of the patent validity by the infringement court will also expeditiously prevent the patentee from interpreting the patent claim broadly

when asserting the infringement and narrowly when countering the defense of invalidity.

(B) Preparatory Proceedings in Writing and Oral Arguments

In patent infringement litigation in Germany, documents are exchanged prior to the date for oral arguments and preparations are made thoroughly (Front loaded proceedings). The court decides the deadline for submitting those documents and assertions made thereafter may be rejected. New assertions before the second instance are accepted only when it is reasonably found that they could not be made in the first instance.

After the preparatory proceedings in writing, one to three-hour (main) oral arguments are held. In oral arguments, the judge first presents a provisional conviction and narrows down points at issue, and then oral arguments among the parties are held. Oral arguments are held intensively and are seldom held again by newly designating a date to give the parties time to prepare.

(C) Claim Construction

In Germany, claim construction is based on the idea of function-oriented design, that is a functional approach to seek how each element contributes for the embodying of the invention on the premise of the statement in the description. In the mock trial as well, Element F was interpreted based on the statement in the description from the standpoint of how to stabilize the rotary shaft (2).

(D) Counter-defense of Claim Correction

In Germany, demarcation is clear between the infringement court and the Federal Patent Court. Therefore, counter-

defense of claim correction is considered to be an assertion to limit the scope of the patent, instead of urging a patentee to correct the claim itself. A patentee can assert such counter-defense until the conclusion of oral arguments. In the mock trial, counter-defense of claim correction was asserted on the date for oral arguments, but it is generally done during the preparatory stage. When it is likely to take a long time to examine the requirements of correction, the satisfaction of the corrected claim and the validity of the patent related to the corrected invention, a counter-defense of claim correction may be dismissed as it delays the court procedures.

(E) Introduction of Expert Knowledge

Judges obtain technical knowledge required for the case based on documents submitted by the parties. Therefore, the parties need to prepare documents explaining required technical knowledge in an easy-to-understand manner. When judges find such explanations insufficient, they may appoint experts *ex officio*.

(F) Discrepancy in Judgements on the Patent Validity between the Infringement Court and the Federal Patent Court

The Federal Patent Court interprets patent claims independently from the infringement court, and there are cases where a judgement made by the Federal Patent Court on the patent invalidity differs from a judgement made by the infringement court concerning the forecast of the nullity action upon deciding whether or not to suspend the court proceedings.

In a case where the Federal Patent Court has decided to invalidate a patent

while infringement court proceedings is in progress and that ruling becomes final and binding, the infringement litigation is dismissed. Even before the ruling becomes final and binding, the litigation proceedings are suspended in practice.

There may be a case where the infringement court considers that the Federal Patent Court would find the validity of the patent in nullity action and has rendered a judgement to order injunction, etc. without suspending the proceedings, but the Federal Patent Court later determines that the patent is invalid. However, such a case is considered to be rare. To enforce the judgement to order injunction, etc. before it becomes final and binding, the patentee needs to provide a bank security in an amount set by the court to secure the defendant. If the enforcement of the judgement is found to be unjustified, the patentee is to bear that responsibility. Furthermore, the infringement court can also suspend the enforcement in respect to a written indication of patent invalidity which is provided before the oral hearing in the nullity matter by the Federal Patent Court. Even if a judgement of patent infringement litigation has become final and binding, the alleged infringer may file a request for retrial after declaration of nullity by the Patent Court, but such a case is rare.

3. France

(1) Mock Trial¹⁸

(A) Preparatory Proceedings

In patent infringement lawsuit in France, pleadings are exchanged in a procedure prior to the oral hearing. Assertions in the following oral hearing are limited to the extent asserted in the pleadings. In the mock trial, at the beginning, the plaintiff briefly explained the

assertions and procedures made by the parties prior to the oral hearing. Prior to the oral hearing, the plaintiff asserted the infringement of the Patent Right by Products X and Y and sought injunction and compensation of damage, while the defendant argued that Product Y is out of the scope of claims and asserted that the Patented Invention lacks an inventive step and the Patent should be invalidated. Furthermore, the defendant filed a counterclaim for nullification. In response, the plaintiff took a procedure to limit the claims before the French Patent Office, and asserted that Product Y still falls within the scope of limited claims, while the defendant argued that Product Y is outside the scope of limited claims and maintained the assertion of the patent invalidity.

(B) Oral Hearing

An oral hearing was held in the mock trial. In the oral hearing, the parties first presented assertions and objections concerning the validity of the Corrected Patent. The defendant gave a demonstration using a model highlighting the commonality between a rotary valve and a reed valve and asserted that the invention described in Gazette 085 prevents the tilt by diminishing the clearance as well as using concave portion (8) and that a rotary valve whose outer peripheral surface is cylindrically-shaped had been well-known. Against this, the plaintiff argued that the invention described in Gazette 085 is a reed valve compressor and is not the closest prior art. The plaintiff also argued as follows: in the invention described in Gazette 165, the outer peripheral surface is cylindrically-shaped with no concave portions; in the invention described in Gazette 085, persons



skilled in the art do not know whether the concave portion (8) can be removed or not because it is filled with gas; therefore, they cannot apply the invention described in Gazette 085 to the invention described in Gazette 165.

Following this, with regard to the point of whether Product Y falls within the technical scope of the Corrected Invention, the plaintiff asserted that concerning Element F, it does not prescribe as “all clearance” and concerning Element E’, the concave portion in Product Y is smaller than the concave portion (8) described in Gazette 085 and Product Y has a technical effect to prevent the tilt of the rotary shaft with a very small clearance, and that therefore Product Y falls within the scope of corrected claims. The defendant argued that it is not permissible for the plaintiff to emphasize the significance of the clearance in discussing the claim satisfaction issue and to discount it in discussing the invalidation issue (Angora cat phenomenon), and asserted in consideration of the prosecution history that it is evident that the clearance at the concave portion in Product Y is wider than $20\mu\text{m}$.

(C) Judgement

The judge first pointed out that persons skilled in the art would not consider the cited invention described in Gazette 085 as the closest prior art, and then

found that it is not evident that persons skilled in the art who regard the cited invention described in Gazette 165 as the starting point would apply the technology described in Gazette 085 to the invention in Gazette 165 and therefore that the Corrected Invention has an inventive step and the Patent is valid.

The judge found that there are no disputes between the parties regarding the fact that Product X falls within the technical scope of corrected claims. As the grounds to find that Product Y does not fall within the technical scope of corrected claims, the judge mentioned [i] that the “clearance” in Element F is construed to mean “all clearance” in consideration of the prosecution history, but Product Y that has the concave portions does not satisfy this, and [ii] that Element E’ prescribes that the rotary valves are cylindrically-shaped, but Product Y that has the concave portions does not satisfy this.

(2) Explanations

(A) Judgement on Patent Invalidity by the Court

The French Patent Office examines the novelty requirement and, other than that, it examines requirements for formality etc., then registers establishment of a patent right (FR L612-12). When the invention lacks an inventive step, the

patent is revoked by a judgement of the court (FR L613-25).

(B) Order of Judgements on Claim Satisfaction and Patent Invalidity

In patent Infringement lawsuit in France, the validity of the patent due to lack of an inventive step is always examined first and then the examination on claim satisfaction is made as far as the alleged infringer files a counterclaim for nullification, This order is not required by law but is based on the idea that the scope of claims should be evaluated first in consideration of prior arts and then the issue on claim satisfaction should be examined.

(C) Method to Determine an Inventive Step

In the French mock trial, it was questioned which of the multiple cited inventions is the prior art closest to the Patented Invention. This is for evaluating an inventive step through determining the objective problem resolved by the Patented Invention. Judges may select the closest prior art at their discretion without being restricted by the parties' assertions.

(D) Procedures of Claim Correction

When the invalidity of a patent is asserted during patent infringement lawsuit, the patentee can practically avoid the grounds for invalidation by filing a request to limit the claims before the French Patent Office or the European Patent Office. In a case where a request for a claim limitation is filed before the French Patent Office, around one to three months are required for the procedures, and the infringement court extends the litigation procedures accordingly. It is theoretically possible to maintain the original claims and to conditionally limit

the claims. However, French judges prefer deciding on the infringement issue based on a patent right that is actually valid, and patentees are generally requested by judges to limit the claims before the Patent Office. After a judgement in the first instance determines the invalidity of a patent, the patentee may also file a request for a claim limitation before the Patent Office even if the second instance procedures are initiated.

4. The U.K.

(1) Mock Trial¹⁹

(A) Procedures prior to Trial

In patent infringement lawsuit in UK, pleadings, a case management conference, and disclosure, etc. are conducted prior to a trial. During these procedures, which were omitted in the mock trial, the claim satisfaction by Product Y was disputed, and the defendant asserted that the Patent is invalid and filed a counterclaim for revocation of the Patent. In response, the plaintiff put forward a corrected claim as a fall-back. However, the defendant challenged whether Product Y satisfies the corrected claims and argued the validity of the patent for the Corrected Invention. Whether Product X falls within the technical scope of the Patented Invention and the Corrected Invention was not disputed.

(B) Trial

In the mock trial, regarding the lack of an inventive step in the Patented Invention and the Corrected Invention, an expert report by Dr. Nag was submitted and he was examined as an expert witness. In particular, a counter examination by the plaintiff was conducted, questioning the eligibility of Dr. Nag as an expert witness, whether a person skilled in the art can understand the significance of the



clearance between the shaft hole (5) and the rotary shaft (2) from Gazette 085, whether a person skilled in the art can understand its functions separate from the concave portion (8), and the like.

Then, the final arguments were held. The defendant asserted that Product Y does not satisfy Element F nor Element E' based on normal interpretation as well as from the perspective of the three requirements of the doctrine of equivalents indicated in the judgement of the Supreme Court on the Actavis case (Actavis UK Limited and others v. Eli Lilly and Company, [2017] UKSC48), and also in consideration of the prosecution history. The defendant further asserted that the Patented Invention and the Corrected Invention both lack an inventive step as testified by Dr. Nag. Against this, the plaintiff made the final arguments on the validity of the patent in particular, asserting that the testimony of Dr. Nag was based on hindsight, that the Patented Invention has an inventive step as the statement of paragraph [0049] in Gazette 085 is only a general statement, and that the Corrected Invention has an inventive step as the concave portion (8) is significant in the invention described in Gazette 085 while the clearance stated in paragraph [0058] is merely an addition.

(C) Judgement

Regarding the point of whether Product Y satisfies the claims of the Patented Invention, the judge found as follows: in Product Y, high-pressure gas is introduced into the concave portion and the inner peripheral surface of the shaft hole does not contact the outer peripheral surfaces of the rotary valves; and, based on normal interpretation of the claims, in Product Y, wherein the inner peripheral surface of the shaft hole does not contact the outer peripheral surfaces of the rotary valves, it cannot be said that the former directly supports the latter. Accordingly, the judge concluded that Product Y does not satisfy Element F. However, the judge found [i] that Product Y prevents the tilt of the rotary shaft by making the clearance less than $20\mu\text{m}$ and therefore achieves the same result in substantially the same way as the Patented Invention; [ii] that it was evident for persons skilled in the art as of the priority date that a clearance of the rotary shaft (2) being mostly $20\mu\text{m}$ as in the case of Product Y can prevent the tilt of the rotary shaft; and [iii] that the Patented Invention contains no statement to exclude additional support such as high-pressure gas or the concave portion, and strict compliance with the literal wording of the claim is not an essential requirement of the Patented Invention. In conclusion, the judge admit-

ted the infringement of Product Y under the doctrine of equivalents.

Next, the judge found that the Patented Invention lacks an inventive step as the invention described in Gazette 085 can also be applied to a rotary valve compressor, but that the Corrected Invention has an inventive step as the concave portions are indispensable for the invention in Gazette 085.

The judge further determined that neither literal infringement nor infringement under the doctrine of equivalents is found for Product Y in relation to the Corrected Invention. On the other hand, Product X was found to infringe the patent right for the Corrected Invention.

After rendering the judgement as above, the judge commenced the procedure in the Form of order hearing. In this procedure, the defendant requested the suspension of the execution of the injunction order for two months as the defendant would like to change the design of Product X. The judge suspended the execution of the injunction order for two months on the conditions of the payment of the cash collateral for that period. Furthermore, it was decided to examine the concrete amount of damage in another trial.

(2) Explanations

(A) Judgement on Patent Invalidity by the Court

An alleged infringer may assert a defense of patent invalidity and file a counterclaim to seek revocation of the patent before the infringement court, and may also bring proceedings for revocation of the patent before the Patent Office. However, when the proceedings of the infringement court have proceeded (when the defense of invalidity has already been

asserted), an alleged infringer needs to obtain permission of the infringement court to bring proceedings for revocation of the patent before the Patent Office, and even if the proceedings of the infringement court are delayed, the Patent Office practically suspends its proceedings for revocation of the patent (UK 72-7 and 74-7). In this manner, judgements on patent invalidation are integrally made by the infringement court with the aim of [i] avoiding contradicting judgements and [ii] preventing waste in time and money due to duplicated procedures, and because [iii] appeals against judgements of the Patent Office are filed with the court and the Patent Office does not need to bother to make judgements on patent validity, and [iv] the infringement court makes judgements on patent invalidity, in addition to patent infringement, and this prevents patentees from asserting claims broadly for the infringement issue and narrowly for the invalidity issue and thus is beneficial also for alleged infringers.

(B) Case Management Hearing

In patent infringement litigation in the U.K., a case management hearing is held to discuss how to proceed with the procedures up to a trial based on documents submitted by the parties. More concretely, evidence is disclosed, the patentee's intention to request a correction of the claims and the details thereof are confirmed, and witnesses to be examined in the trial are decided. It depends on the case, but a hearing generally finishes in around 30 to 60 minutes.

The court of first instance for patent infringement lawsuit in the U.K. is the Patent Court or the Intellectual Property Enterprise Court (IPEC). Actions to seek compensation less than 500,000 pounds

are handled by the IPEC. In a case management hearing, a judge of the IPEC evaluates whether the point at issue is significant from the perspective of judicial economy (cost/benefit test) and leads the litigation by narrowing down the issues. In the meantime, the Patent Court has introduced the shorter trial scheme and manages litigation in a cost-conscious manner.

(C) Claim Construction

In the U.K., scopes of claims have been evaluated based on normal interpretation, but due to the introduction of the doctrine of equivalents by the judgement of the Supreme Court on the Actavis case, scopes may be evaluated more broadly than before. The mock trial showed an example of evaluating the scope of a claim based on the norm introduced by said Supreme Court judgement, i.e., in accordance with the three-staged test: [i] whether Defendant Products achieve the same result in substantially the same way as the Patented Invention; [ii] whether it would be obvious to the persons skilled in the art at the priority date (knowing that the Defendant Products achieves the same result) that it does so in substantially the same way as the Patented Invention; and [iii] whether strict compliance with the literal wording of the claim was an essential requirement of the Patented Invention.

The judgement of the Supreme Court on the Actavis case also refers to the standards for taking into account the prosecution history. Specifically, a patentee's statements in the prosecution history may be taken into account in interpreting claims when the point at issue is truly unclear if one confines oneself to the specification and claims of the

patent, and the contents of the file unambiguously resolve the point, or it would be contrary to the public interest for the contents of the file to be ignored, for example, if a patentee has expressly said during prosecution that his claim does not have the broader scope which he later claims in infringement proceedings.

(D) Correction Procedures

In the U.K., not only the Patent Office but also the court may permit a correction of a patent specification (UK 75), and a patentee is generally permitted to put forward a corrected claim as a fallback, while maintaining the validity of the original claim, as same in the normal court procedures. This saves the trouble of conducting an examination again based on a corrected claim and achieves the settlement of a dispute at one time. In order to avoid excessively complicating a trial, usually, alternative claims are narrowed down to one or the original claim is abandoned and corrected claims are narrowed down to two before the trial.

(E) Introduction of Expert Knowledge

Expert witnesses play core roles in patent infringement lawsuit in the U.K. They are considered to be important upon making a judgement on the validity of a patent, in particular. Traditionally, judges were supposed to evaluate scopes of claims, but the introduction of the doctrine of equivalents by the judgement of the Supreme Court on the Actavis case has increased the importance of expert witnesses also in the evaluation of scopes of claims.

(F) Form of Order Hearing

In patent infringement litigation in the U.K., the procedure in the form of

order hearing is undertaken after a judgment is made concerning whether the defendant's product infringes a patent right. In that procedure, a hearing is held on such issues as the amount of compensation, whether or not to order injunction or the need of a temporary suspension, declaration of the patent validity, declaration of a patent right infringement, bearing of court costs, and the permission of filing an appeal. The amounts of compensation are agreed in most cases, but in a case where an agreement is not reached, the amount of damage is evaluated in another trial.

5. The U.S.

(1) Mock Trial²⁰

(A) Establishment of Claim No.2

As it is unrealistic to assert counter-defense of claim correction in patent infringement lawsuit, the U.S. mock trial was based on the premise that a patent has contained a claim for the Corrected Invention (Claim No.2) in addition to a claim for the Patented Invention (Claim No.1) from registration of its establishment.

In the U.S. mock trial, whether Product Y satisfies Element F was argued, and at the initial stage, the validity of the patent pertaining to Claims No.1 and No.2 was challenged.

(B) Stay of Court Proceedings

The defendant asserted a lack of an inventive step as the grounds for invalidation of the Patent and raised a defense of invalidity. The defendant also filed a request for Inter partes review (IPR) with the Patent Office and then, submitted a request to the court, seeking the stay of court proceedings until a decision of the IPR is made, for the purpose of avoiding

contradicting judgements and reducing costs. However, the plaintiff objected. The judge dismissed the request for the stay on the grounds that the discovery procedures have been progressing, the trial date has already been determined, and the defendant's request for an IPR was submitted too late.

(C) Markman Hearing

In the mock trial, the Markman hearing was held for the court to determine the claim interpretation. During the Markman hearing, the meaning of the terms "directly support" in Element F of Claim No.1 and "cylindrically-shaped" in Element E' of Claim No.2 was argued.

Regarding the term "directly support" in Element F, the plaintiff asserted that the claim should be interpreted in plain and ordinary meaning. Against this, the defendant argued that the term should be interpreted to mean "support without reliance on any other means." The judge pointed out that the wording of the claim cannot be construed to impose such a limitation, but the defendant explained that the description specifies the use of a clearance of 20 μ m without using rolling bearings and that it should be interpreted that the rotary shaft (2) is not supported by anything.

Regarding the term "cylindrically-shaped" in Element E', the plaintiff asserted that the claim contains no wording to mean that the rotary valves (6) are completely cylindrically-shaped, and that the Written Opinion made during the prosecution history referred to the clearance, not to the shape of the rotary valves, and should not be taken into account. On these grounds, the plaintiff asserted that the term should be interpreted as "tubular shape with a circular cross-section". The



defendant argued that it is evident from the wording of the claim that the term should be interpreted to mean “a perfectly cylindrical shape” and that this interpretation is reasonable also from the prosecution history during which the shape of the rotary valves (6) was limited. Additionally, the defendant submitted the declaration by the expert witness (Dr. Asaji). However, the judge pointed out that the declaration contains not a few dubious points.

The judge ruled that the declaration by the expert witness cannot be adopted because it is extrinsic evidence and its grounds are not clear, and concluded that the term “directly support” in Element F should be interpreted in plain and ordinary meaning and the meaning of the term cannot be found to be limited during the prosecution history so that it cannot be interpreted to mean “support without reliance on any other means”. On the other hand, the judge ruled that the shape of the rotary valves (6) is limited in consideration of the prosecution history and that the term “cylindrically-shaped” in Element E’ should be interpreted to mean “cylindrically-shaped throughout the whole area.”

(D) Bench Trial

In the mock trial, a trial by the judge (bench trial) was held on the premise that

two months have elapsed since the Markman hearing.

The defendant first reported that the Patent Trial and Appeal Board (PTAB) determined in the IPR proceedings that patents pertaining to Claims No.1 and No.2 are both valid. The judge asked if the defendant would assert any grounds for invalidation other than those argued in the IPR and the defendant answered “No.” Therefore, it was decided that the patent validity would not be disputed in this infringement litigation.

The judge declared that only the claim satisfaction issue concerning Product Y would be examined in the trial, and the defendant’s expert witness (Dr. Asaji) received the direct examination from the defendant and the counter examination from the plaintiff with regard to the point of whether Product Y satisfies Element F and Element E’. During the direct examination, the judge pointed out that Dr. Asaji is examined as an expert witness and the examination is not for proving the fact. Additionally, regarding a question on the significance of the rotary valves (6) in the plaintiff’s counter examination, the judge mentioned that the claim interpretation procedures had already been completed at the Markman hearing.

Then, the final oral arguments of both parties followed. The plaintiff asserted that the focus should be placed

on the difference between the rotary valves (6) and the rotary shaft (2), while the defendant argued that as Product Y has concave portions, it is evident that the clearance is partially 20 μ m or wider.

(E) Judgement

The judge determined that Product X infringes the patent rights for the inventions in question and that Product Y infringes the patent right pertaining to Claim No.1 but does not infringe the patent right pertaining to Claim No.2. The judge ordered the parties to present their opinions concerning damage and other reliefs within 10 days.

(2) Explanations

(A) Judgement on Patent Invalidity by the Court and IPR

In the United States, the amendment of the Patent Act (AIA) in 2011 has expanded the review system by the Patent Office. Alleged infringers have come to have more options for challenging patent validity, among which the IPR proceedings are most frequently utilized.

The IPR proceedings do not require heavy discovery procedures, and the examination period from the date of a notice for the commencement to the date of the final decision is basically limited to no longer than 18 months (US 316(a)(11)), which is shorter than that required by district courts. Therefore, an IPR is a cheaper and faster alternative for alleged infringers than to challenge patent validity before the court. Additionally, the IPR proceedings only deal with the issue of patent validity and therefore cause no substantial disadvantage to alleged infringers. As a patent is generally presumed to be valid (US 282(a)), an alleged infringer challenging patent valid-

ity before a district court needs to overcome that presumption by presenting clear and convincing evidence, but the IPR proceedings are undertaken at the Patent Office, where the presumption of validity does not work, and it suffices to prove the invalidity of a patent with the preponderance of evidence (US 316(e)). Due to this difference in standards of proof,²¹ it can be said that patents are invalidated more easily through the IPR proceedings than through infringement litigation.

(B) Stay of Court Proceedings

It has often become the case that an alleged infringer files a request for an IPR with the Patent Office within one year after receiving a complaint for patent infringement litigation (US 315(b)) and then requests the court for the stay of the court proceeding until the final decision of the IPR is made. Whether or not to admit the request for stay of court proceedings is up to extensive discretion of judges and the request may be dismissed on the grounds of a risk of delaying the court proceedings. Standards for admitting stay of court proceedings may differ by its venue, but examples of factors to be taken into consideration include [i] to what extent the discovery procedures have progressed, [ii] whether the trial date has been determined, [iii] whether waiting for the IPR decision helps the arrangement of issues to be disputed in the trial and facilitates the discovery procedures and the trial, and [iv] whether the stay would cause any excessive damage to the counterparty or any clear strategic advantages or disadvantages for either of the parties. Apart from the German infringement court, the infringement court in the U.S. does not directly

make a judgement on the possibility of invalidation of a patent when deciding whether or not to stay court proceedings.²²

(C) Markman Hearing

After the rendering of the judgement of the Supreme Court on the Markman case (*Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996)), in patent infringement litigation in the U.S., judges first decide the claim construction in the Markman hearing and the jury compares the scope of claims and alleged product to make a judgement on claim satisfaction and also makes a judgement on patent validity through such means as referring to documents of prior arts.

As indicated in the Phillips standard, claims are interpreted in plain and customary meaning, i.e., as interpreted by persons skilled in the art as of the day of filing the patent application. When interpreting the wording of a claim in dispute, the wording itself, statement in the description, and prosecution history are first taken into account as intrinsic evidence. If the meaning of the claim is still unclear, experts' testimonies, dictionaries, learned treatises, etc. are used as extrinsic evidence (Note 21; the CAFC judgement on the Phillips case). Claim construction by judges is reviewed *de novo* at the court of second instance, and the fact finding part in claim construction is examined as to whether or not the relevant judgement by the district court judges is clearly erroneous (*Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 574 U.S. (2015)).

(D) Judgement in the IPR and Infringement Court Proceedings

When the validity or invalidity of a

patent is determined in the IPR proceedings while the infringement litigation is pending (US 318(a)), the infringement court is to proceed with the court proceedings in accordance with the IPR conclusion.

When the final written decision on the validity of a patent is issued by PTAB in IPR proceedings (US 318(a)), an alleged infringer who requested the IPR is not permitted to assert the invalidity of the patent based on any ground that he/she raised or reasonably could have raised during that IPR, under the doctrine of estoppel (US 315(e)(2)). Therefore, it becomes impossible for such alleged infringer to make an assertion in the infringement litigation based not only on the grounds for invalidation that he/she actually raised in the IPR proceedings but also on prior arts that he/she could have submitted. Nevertheless, as grounds for invalidation that can be asserted in the IPR proceedings are limited to the lack of novelty and the lack of non-obviousness (inventive step) on the basis of prior art consisting of patents or printed publication (US 311(b)), even after the issuance of the final written decision in the IPR proceedings, an alleged infringer may challenge the validity of the patent on the grounds of the lack of novelty or non-obviousness based on a public use invention, or the failure to the patentability (US 101), or the description requirements (US 112). The scope of prior arts subject to the doctrine of estoppel is controversial. Some broadly construe the coverage of the doctrine of estoppel, insisting that alleged infringers may not cite all documents of prior arts that could have been raised during the IPR as grounds for invalidation (*SAS Institute, Inc. v. Complementsoft, LLC.*, 825 F.3d 1341

(Fed. Cir. 2016)), while others construe the coverage narrowly.

(E) Counter-defense of claim correction

In patent infringement litigation in the U.S., correction of claims is not permitted except for the case of correcting evident errors in formality. A patentee may not assert a claim correction as a means to counter-defense for invalidity.

In principle, a patentee can correct claims only once in the IPR proceedings (US 316(d)), but the correction of a claim does not affect the rights of a person who has been using the object pertaining to the corrected claim prior to the issuance of the certificate for the correction (Intervening rights; US 318(c) and 252). Accordingly, in the U.S., whether or not to correct a patent claim should be considered carefully, as the compensation may not necessarily be ensured whereas the claim correction results in the limitation of the scope of the patent right. It is also important for a patentee to strive to obtain patents for dependent claims sufficiently from the beginning in preparation for a possibility that patent invalidity may be asserted in the future in patent infringement lawsuit. In the mock trial, the Patent was judged to be valid in the IPR proceedings, and this point was not argued.

(F) Introduction of Expert Knowledge

In the patent infringement litigation in the U.S., expert witnesses are very important. In the Markman hearing (claim construction), intrinsic evidence is first examined, but expert witnesses play a role in helping judges and the parties ascertain the understanding of persons skilled in the art as of the time of filing

the patent application. In the trial stage, expert witnesses occupies much more important role in determining whether alleged product satisfies the claims, as well as in finding the details of prior documents, differences, technical standards of persons skilled in the art, etc.

(G) Consistent Judgement at the CAFC

In the U.S., district courts make judgements on defenses of patent invalidity in patent infringement lawsuit, while the PTAB also examines the validity of patents in the IPR proceedings or other procedures. Accordingly, there may be cases where contradicting judgements are made for the validity of the same patent. Any appeals against judgements rendered in patent infringement lawsuit and the IPR proceedings are filed with the CAFC, but it is considered unavoidable that judgements at the CAFC may not be consisted in some cases as standards of proof for judging patent validity differ between district courts and the PTAB (*Novartis AG v. Noven Pharmaceuticals Inc.*, 853 F.3d 1289 (Fed. Cir. 2017)). However, in reality, judgements are unlikely to be contradicting between district courts and the PTAB because a request for an IPR cannot be made after the lapse of one year after receiving a complaint for patent infringement litigation (US 315(b)).

The IPR proceedings may be repeated several times, but even if a defendant who has once lost in an infringement litigation requests an IPR on the same patent, such request is unlikely to be accepted (*General Plastic Industrial Co. Ltd. v. Canon Kabushiki Kaisha*, (PTAB Sept. 6, 2017)).



Part 4 Conclusion

The infringement courts of the five countries adopt various approaches under different legal systems concerning the issue of patent validity in patent infringement lawsuit, but have been striving to perform duties reasonably with the aim of realizing the principle of equity, one-time dispute resolution, and acceleration of patent infringement litigation. We believe that this symposium has provided us with lots of suggestions for concretely improving procedures for patent infringement litigation in Japan.

It was also significant that we could obtain the latest information in western countries concerning the old and new issue of patent validity in patent infringement lawsuit.

We would like to extend our gratitude for presenters who demonstrated the mock trial in a realistic manner and provided us with useful knowledge.

(Notes)

- ¹ See http://www.ip.courts.go.jp/eng/vcms_1f/2018_E_sintoukei_H26-29.pdf.
- ² When citing provisions of the Patent Act of respective countries, the simple expressions “JA (Japan)”, “DE (Germany)”, “FR (France)”, “UK (the U.K.)”, and “US (the U.S.)” may be used.
- ³ Alleged infringer may request the Patent Office for re-examination during the period for raising

99, etc.). Additionally, in European countries where the Agreement on a Unified Patent Court is effectuated from now on, actions for revocation of patents shall be brought before the central division of the UPC and counter-claims for revocation of patents may be brought before the local and regional divisions of the UPC (Agreement on a Unified Patent Court 32 and 33).

- ⁴ Materials used in the mock trial, etc. (the case, screened slides, interlocutory judgement of Japan, etc.) are available on the website of the IP High Court:
http://www.ip.courts.go.jp/eng/documents/thesis/2018JSIP_summarize_01/index.html
- ⁵ The piston compressor of the Patented Invention can be used as a refrigerant compressor for an automobile air conditioning system.
- ⁶ For the comparison and examination of the results of the mock trial, basic data and diverse opinions and advice were provided by Patent attorney Kazuhiro Matsuda (Japan), Attorney at law Schüssler Langeheine (Germany), Attorney at law Simon Ayrton (U.K.), Attorney at law Kenichi Hattori (U.S.), Attorney at law Trevor Hill (U.S.), and Judges Masaki Sugiura, Sumiko Sekine, Ayako Morioka, Aya Takahashi, Daisuke Kumagai and Hiromitsu Magira (IP High Court of Japan).
- ⁷ Regarding Japanese presenters, see a separate report (Makiko Takabe, “Summary of the ‘Judicial Symposium on Intellectual Property / TOKYO 2018’” page 67 of this magazine)
- ⁸ The Japanese mock trial was based on the premise that the issues and evidence were arranged in the date of oral arguments (see Code of Civil Procedure of Japan 164). However, generally in patent infringement lawsuit, a case is referred to preparatory proceedings (Same Code 168) for arranging issues and evidence after the first date of oral arguments. Trial models of patent infringement lawsuit in Tokyo District Court and Osaka District Court are publicized. Refer to <http://www.ip.courts.go.jp/eng/info/index.html>

- ⁹ The Japanese mock trial was based on the premise that the plaintiff has decided not to assert re-defense of claim correction pertaining to Product Y in response to discussions held during the procedures to arrange issues.
- ¹⁰ The interlocutory judgement of Japan is publicized (see Note 4).
- ¹¹ “Explanation of the Act which amends the Court Act etc. 2004 Amendment (revised version)” edited by Abe, Ikubo & Katayama (Japan Institute of Invention and Innovation), p.10
- ¹² “Explication of the Practice on Patent Related Litigation, 3rd edition” authored by Makiko TAKABE (Kinzai), p.235 - p.236
- ¹³ 2016 (Ju) 632, Judgement of the Second Petty Bench of the Supreme Court of July 10, 2017, Minshu Vol. 71, No. 6, at 861 (Judgement of the Supreme Court on the Sheet Cutter Case)
- ¹⁴ Judgement of the IP High Court of August 25, 2009, Hanrei Times No.1319, at 246
- ¹⁵ Abovementioned reference No.12, TAKABE p. 210
- ¹⁶ Judgement of the IP High Court of September 17, 2014, Hanrei Jiho No. 2247, at 103; Judgement of the IP High Court of March 14, 2017 (2016 (Ne) 10100), website of the IP High Court of Japan
- ¹⁷ In the German mock trial, Presiding Judge Peter Meier-Beck (German Federal Supreme Court) acted as a judge and Attorney at law Christof Augenstein and Christopher Weber (Kather Augenstein) acted as representatives.
- ¹⁸ In the French mock trial, Attorney at law Denis Monégier du Sorbier (Hoyng ROKH Monegier) acted as a judge and Attorney at law Sabine Agé and Amandine Métier (Véron & Associés) acted as representatives.
- ¹⁹ In the UK mock trial, Presiding Judge Richard Hacon (Intellectual Property Enterprise Court) acted as a judge and Attorney at law Alex Wilson and Zoë Butler (Powell Gilbert LLP) acted as representatives.
- ²⁰ In the US mock trial, Judge Richard Linn (United States Court of Appeals for the Federal Circuit) acted as a judge and Attorney at law Maxwell A. Fox (Jones Day) and Ryan S. Goldstein (Quinn Emanuel Urquhart & Sullivan LLP) acted as representatives.
- ²¹ In review procedures requested before November 13, 2018, also due to the difference in standards for claim construction, patents were invalidated more easily through the IPR proceedings than through infringement litigation. In other words, in infringement litigation, claims were interpreted in an ordinary and customary meaning (the Phillips standard; Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc)), while the IPR adopted the broadest reasonable interpretation and claims could be interpreted in a broader sense. However, after the amendment of 37 CFR Part 42 enforced on that day, the Phillips standard came to be adopted in review procedures requested on that day onward, and the difference in standards for claim construction was eliminated.
- ²² IPR is instituted only in a case where there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition (US 314(a)).