Washington International Law Journal

Volume 7 | Number 2

3-1-1998

Harmonizing the Japanese Patent Sytem with Its U.S. Counterpart Through Judge-Made Law: Interaction Between Japanese and U.S. Case Law Developments

Toshiko Takenaka
University of Washington School of Law, toshiko@uw.edu

HARMONIZING THE JAPANESE PATENT SYSTEM WITH ITS U.S. COUNTERPART THROUGH JUDGE-MADE LAW: INTERACTION BETWEEN JAPANESE AND U.S. CASE LAW DEVELOPMENTS

Toshiko Takenaka Ph. D.[†]

Abstract: Japanese jurisprudence has been strongly influenced by German jurisprudence, but this trend is changing because more legal professionals including judges, patent attorneys and patent office examiners study at U.S. Law Schools. Some recent Japanese court decisions reflect this strong influence from U.S. jurisprudence. Particularly, the influence is significant in the field of patent claim interpretation, courts' power to review the validity, parallel importation and patent infringement damages. This article concludes that there are few significant differences remaining between the U.S. and Japanese patent laws, and Japanese courts' eagerness to adopt U.S. patent law significantly contributes to harmonizing the remaining differences.

I. INTRODUCTION: INTERACTION BETWEEN JAPANESE AND U.S. JURISPRUDENCE

Since the United States delegate stunned all Paris Convention member states by refusing to negotiate the treaty to harmonize substantive patent law at the World Intellectual Property Organization ("WIPO") Patent Harmonization Treaty Consultative Meeting in May 1995, the focus on harmonization efforts in the international arena has shifted to procedural aspects.[1] Had the U.S. not withdrawn from the negotiations, and had the U.S. executed the proposed treaty,[2] many of the major differences between the U.S. and Japanese patent systems would have been harmonized by now.

Although the United States declined to continue with harmonization efforts through the WIPO forum, the U.S. has been active in moving its trade partners' patent systems in line with its counterparts through bilateral and multilateral negotiations. One such effort resulted in an agreement between

---

[†] Research Assistant Professor University of Washington School of Law. Bachelor of Law, 1981, Seikei University, Tokyo, Japan; LL.M. and Ph.D in Comparative Law, 1990 and 1992, University of Washington School of Law, Seattle, Washington, U.S.A.

[1] Toshiko Takenaka, *Recent Developments on the WIPO Patent Harmonization Treaty Consultative Meeting*, CASRIP NEWSLETTER, Spring 1995, at 9.

[2] WIPO, Records of the Diplomatic Conference for the Conclusion of a Treaty Supplementing the Paris Convention as far as Patents are Concerned, Vol. 1, First Part of the Diplomatic Conference (1991).

the Commissioners of the Japanese Patent Office ("JPO") and the U.S. Patent and Trademark Office ("USPTO").[3]

To fulfill the commitment of actions listed in the agreement, in addition to necessary actions to accommodate all the requirements provided by the World Trade Organization's ("WTO") Agreement on Trade Related Aspects of Intellectual Property Rights ("TRIPs"),[4] the Japanese Patent System was substantially revised.[5] In addition to the statutory changes resulting from these bilateral and multilateral negotiations, recent Japanese case law indicates an eagerness to adopt U.S. jurisprudence which will significantly contribute to harmonization.

Historically, Japanese jurisprudence has been strongly influenced by German jurisprudence.[6] Most of the Japanese judicial system is based on the German system, particularly the German court system and the procedural aspects of German Law.[7] This is particularly true with respect to the Japanese patent system, because many current patent statutes are translations of their German counterparts.[8] Thus, Japanese courts traditionally adopt case law doctrines developed by German courts.[9] This tradition was enhanced when legal scholars and professionals studied law in Germany and brought back the German approach to interpreting and applying patent statutes.[10] Many Japanese intellectual property ("IP") professors at Japanese

---

[3] Yoichiro Yamaguchi & Harold Wegner, Japan Patent Policy: Materials on Japanese Patent Law in the Context of International Trade Issues between the United States and Japan 367 (Unpublished Manuscript Prepared for 594 Japan Patent Policy Summer 1994, Geo. Wash. U.).

[4] Portion of the Agreement Amending the General Agreement on Tariffs and Trade and creating the World Trade Organization, April 15, 1994, 33 INTERNATIONAL LEGAL MATERIALS JOURNAL 1, 83-111 (1994).

[5] Law No. 116 of 1996, Tokkyo Ho Kaisei Horitsu [Law to Revise Patent Law]; Law No. 91 of 1997, Tokkyo Ho Kaisei Horitsu [Law to Revise Patent Law]. A summary of revisions is reported in Japanese Patent Attorneys Association, Concerning Revisions on Patent Law and Utility Model Law (Unpublished Material Prepared for Seminars sponsored by Japanese Patent Attorneys Association, 1996). JPO Also announced a revision on the Administrative Guidelines for Arbitration Proceeding to accommodate the requirements in the JPO and USPTO agreements. See, Toshiko Takenaka, *Proposed Revision in Administrative Guidelines for Arbitration Proceeding*, CASRIP NEWSLETTER, Spring/Summer 1997, at 9.

[6] HIDEO TANAKA, JITTEI HŌGAKU NYŪMON [INTRODUCTION TO THE STUDY OF POSITIVE LAW], 77-79 (1974).

[7] *Id.*

[8] JAPANESE PATENT OFFICE, KOUGYOU SHOYUUKEN SEIDO HYAKUNENN SHI [100 YEAR HISTORY OF INDUSTRIAL PROPERTY SYSTEM] 421 (1984).

[9] TOSHIKO TAKENAKA, INTERPRETING PATENT CLAIMS: THE UNITED STATES, GERMANY AND JAPAN, IIC STUDIES, VOL. 7, at 39-47 (1995).

[10] A list of professors who researched and/or studied at the Max Planck Institute can be found in THEORIEN ZUM RECHT DES GEISTIGEN EINGENTUMS UND WETTBEWERBSRECHTS: FESTSCHRIFT ZUM 70. GEBURSTAG VON PROFESSOR FRIEDRICH-KARL BEIER 9-11 (1996).

Universities are graduates of the Max Planck Institute in Munich.[11] Obviously, their input, as influenced by German patent law doctrines, has significantly influenced Japanese patent law developments.

However, this trend is changing, or at least, is about to change. Nowadays, more legal professionals, including judges, patent attorneys, and patent examiners, study at U.S. law schools in L.L.M. programs and visiting scholar programs rather than German universities. Although the majority of Japanese IP law professors still go to Germany, more and more young legal scholars choose to study in the United States, and spend time learning from U.S. professors and lawyers.

For example, through its visiting scholar program, the University of Washington School of Law regularly receives at least one or two judges from Japanese courts, and one or two officials from the government sector responsible for IP policy development, such as the Ministry of International Trade and Industry and the Japanese Patent Office. These visiting scholars usually spend from several months to one year participating in courses offered at the law school, while concurrently writing significant research theses on patent law and other intellectual property laws. They return to Japan with knowledge of U.S. patent law approaches which influences their decisions on future cases and policy developments.

Another potential source of influence is the on-going bilateral negotiation between the U.S. and Japanese governments.[12] Given that the European countries are intolerant of U.S. suggestions to their already harmonized law, the U.S. has teamed up with Japan and other East Asian countries to increase its bargaining power in negotiations with European countries.[13] These efforts have resulted in major changes to the law of various East Asian countries, bringing them closer to uniformity with U.S. law.[14]

---

[11] The Max Planck Institute was created after World War II. The Max Planck Institute for Foreign and International Patent, Copyright and Competition Law is located in Munich and has extensively contributed to the development of the European Patent Convention, and other IP related laws and regulations for the European Union. A former director, Prof. Beier, was particularly interested in the development of the IP system in Japan and granted a fellowship to a Japanese IP scholar recommended by the industrial property society to research at the Max Planck Institute every year. His contribution was acknowledged by a medal from the former Japanese emperor, Hirohito.

[12] A significant fruit of the negotiation is the Mutual Understanding between the Japanese Patent Office and the United States Patent and Trademark Office (Jan. 20, 1994), *reprinted in* Yamaguchi & Wegner, *supra* note 3.

[13] European countries are reluctant to change because all member countries must agree to revise a provision of European Patent Convention.

[14] *E.g.*, Josh Martin, *Mideast Makes Progress on Patent Enforcement, Journal of Commerce Special, Dubai, United Arab Emirate*, J. COM., Aug. 8. 1996, at, 4A.

U.S. patent owners have also taken a significant role in creating patent law jurisprudence in Japanese courts. They tend to use the same arguments successfully used in American courts to present their cases to Japanese courts. Consequently, the Japanese Patent Office and Japanese courts look to published opinions of their U.S. counterparts. Furthermore, the recently revised Japanese Patent Office guidelines indicate a strong effort to harmonize the examination standards of the JPO with those of the European Patent Office ("EPO") and USPTO counterparts.[15]

Some recent Japanese court decisions also indicate awareness of foreign jurisprudence, particularly of U.S. case law. Such strong U.S. influence can be particularly found in an area strongly criticized by U.S. industry, namely patent claim interpretation and other select issues of patent law.[16] A review of Japanese case law developments in these fields seems to indicate that Japanese judges want to align Japanese patent doctrines with their U.S. counterparts.

Interestingly, some patent infringement cases decided by the United States Court of Appeals for the Federal Circuit indicate that some U.S. judges want to move U.S. patent law closer to Japanese patent law.[17] This poses a fundamental question as to whether there still exists a major difference in the protection given by Japanese and U.S. courts.

II. PATENT CLAIM INTERPRETATION

A. Japanese Courts' Significant Steps Toward Generous Patent Protection

1. Traditional Japanese Case Law: German Influence

Japanese patent claim interpretation reveals the significant influence that German jurisprudence has had on Japanese jurisprudence.[18] Prior to 1959, Japanese case law followed the German three-part theory,[19] giving claims insignificant functionality and using them only as a starting point to

---

[15] JAPANESE PATENT OFFICE, EXAMINATION GUIDELINES FOR PATENT AND UTILITY MODEL IN JAPAN (1997).

[16] *Infra*, Part II A and Part III.

[17] *Infra*, Part IIB.

[18] Takenaka, *supra* note 9, at 39-47.

[19] The three-part theory defined the patent protection scope developed by German courts. Under this doctrine, a German patent was considered to have three types of protection scope: (1) direct subject matter of the invention; (2) evident equivalents; and (3) non-evident equivalent. Claims were understood merely to identify the center of protection scope. The boundary of the protection was decided by the entire disclosure in view of one skilled in the art of the patented invention. For a general discussion, see *id.* at 33.

define the scope of patent protection.[20] After the 1959 enactment of the current patent law, patent claim interpretation theories went through major theoretical reconstruction after being subjected to the influence of U.S. patent law.[21] One significant change prompted by this influence was the adoption of statutory language requiring that the scope of patent protection be decided on the basis of claim language and case law requiring that the "all elements" rule be used to uphold a finding of infringement.[22]

German courts' influence remains significant since Japanese courts continue to use German case law doctrines.[23] For example, in interpreting claim language, Japanese courts continue to use the inventor's recognition theory which was developed and later abandoned by German courts.[24] Like current German courts, Japanese courts' infringement analysis begins with the step of looking into whether the accused device or process uses the principle of the invention to solve the technical object like that of the patented invention. The two-part test to expand the protection scope beyond the literal scope is an exact translation of the German test of equivalents, which is whether one skilled in the art would have replaced the claimed element with the accused element to produce the result of the invention.[25] The first part of the test that focuses on the view of one skilled in the art is now a requirement of the obvious or known substitution (*Chikan Youisei*) test. The second part of the German test of equivalents that focuses on the result has become a substitution of capability (*Chikan Kanousei*) test.[26]

---

[20] *Id.* at 43.

[21] *Id.* at 47-49.

[22] Patent Law, Article 70, Paragraph 1 provides that the technical scope of a patented invention shall be determined on the basis of the statement of the patent claim(s) in the specification attached to the application. The all elements rule was a case law doctrine developed by U.S. courts. To find infringement literally and under the doctrine of equivalents, all elements of the claims must read on the accused device. For a general discussion, see DONALD CHISUM, CHISUM ON PATENTS, § 18.03[4] (1978, Supp. 1998).

[23] Takenaka, *supra* note 9, at 42-47. Further, as will be discussed later, the most recent Supreme Court decision indicates a strong influence from the doctrines developed by German courts for finding infringement under the doctrine of equivalents.

[24] The inventor's recognition theory limits the patent protection to embodiments identified and disclosed by the invention. The application of this theory often results in the protection covering only embodiments expressly discussed in the specification. For a general discussion of the theory, see *id.* at 66-67.

[25] *Id.* at 257.

[26] *Id.*

1. Osaka High Courts Genentech Decision

However, in *Genentech Inc. v. Sumitomo Seiyaku K.K.*,[27] a case significant in that it has effectively changed the case law on the doctrine of equivalents under Japanese patent law, a strong American influence is reflected. The patent in the suit concerned a recombinant human tissue plasminogen activator (t-PA) derived from a non-human host cell. The issued claim included the limitation listing amino acids in the 89th to 527th positions. The accused infringer replaced the 245th amino acid, valine, in the patented t-PA with methionine.[28] Importantly, the list of amino acids was introduced during the prosecution when the examiner rejected the original claims for failing to cite any particular amino acid on the basis of a lack of enablement, in the U.S. sense,[29] or insufficient disclosure to support claims in the Japanese sense.[30] Since all issued claims list the 245th amino acid as valine, it is clear that there is no literal infringement. Consequently, the parties' dispute centered around whether the accused t-PA infringed the claims under the doctrine of equivalents.[31]

In the past, Japanese courts seldom used the term "equivalency" or "equivalent" to uphold a patentee's claim of infringement. However, in *Genentech*, the Osaka High Court clearly uses the term "equivalent" and spells out the test to evaluate equivalency between the claimed element and the substituted element in the accused t-PA, *i.e.* valine and methionine.[32] The unusually lengthy policy discussion on the doctrine of equivalents clearly demonstrates the court's determination to change the direction of Japanese case law.

2. U.S. Influence: Comparison with U.S. Court Decisions

The reasoning adopted by the Osaka High Court indicates a striking similarity with the reasoning developed by U.S. courts to affirm infringement under the doctrine of equivalents. First, by expanding the protection beyond the claim's literal scope, the Osaka High Court adopted a policy justification

---

[27] Genentech Inc. v. Sumitomo Seiyaku K.K.. 1586 HANREI JIHŌ 117 (Osaka High Ct., Mar. 29, 1996). An English translation and comments on the case is reported in Toshiko Takenaka, *New Policy in Interpreting Japanese Patents*, CASRIP NEWSLETTER, Spring/Summer 1996, at 3.

[28] Genentech, 1586 HANREI JIHŌ, at 120.

[29] 35 U.S.C. § 112.

[30] Japanese Patent Law, art. 36, ¶ 4.

[31] Genentech, 1586 HANREI JIHŌ, at 120.

[32] *Id.* at 135.

that was previously developed by U.S. courts. The Osaka High Court reasoned that "because it is impossible to fully describe the structure of an intangible subject in terms of words, [Japanese Patent Law] Article 70 provides courts with the flexibility to decide the [patent's] scope . . . on the basis of the claim language."[33]

The Osaka High Court's justification closely parallels the justification given by the United States Court of Claims, one of the two predecessor courts of the United States Court of Appeals for the Federal Circuit (which has exclusive appellate jurisdiction over cases arising from U.S. patents), in *Autogiro Co. of America v. United States*, a case considered to be fundamental to understand U.S. patent claim interpretation.[34] The Court of Claims explained the impossibility of describing an invention in verbal terms and justified a courts' ability to make reference to claim interpretation aides such as the specification and prosecution history estoppel.[35] This practice has given U.S. courts greater flexibility in the interpretation of claim language. The Osaka High Court's adoption of an interpretation standard allowing claims to be read as if one skilled in the art had read the claim also parallels *Autogiro's* holding; it requires courts to make reference to the general knowledge of one skilled in the art as well as the specification and drawings that accompany the claims.[36]

Second, in *Genentech*, the Osaka High Court classified the elements that establish infringement under the doctrine of equivalents into two types: (1) positive elements, requirements necessary to find the patented invention and the accused embodiment equivalent, including the two part test for equivalency,[37] and (2) negative elements, doctrines that limit infringement under the doctrine of equivalents, including prosecution history estoppel and prior art limitations.[38] This classification parallels the U.S. approach in allocating the burden of proof between the plaintiff and defendant, namely *prima facie* evidence of infringement and rebuttal.[39] In the U.S. approach, the burden of establishing equivalency remains with the patentee in both

---

[33] *Id.* at 125.

[34] Autogiro Co. of America v. United States, 384 F.2d 391 (Ct. Cl. 1967).

[35] *Id.* at 396.

[36] Genentech, 1586 HANREI JIHŌ, at 125-26.

[37] *Id.* at 126. For a discussion of the two-part test, see *supra* note 29.

[38] Genentech, 1586 HANREI JIHŌ, at 126. For a general discussion of prosecution history estoppel and prior art limitation, see CHISUM, *supra* note 22, § 18.05, § 18.03[2][d].

[39] National Presto Industries, Inc. v. West Bend Co., 76 F.3d 1185, 1192 (Fed. Cir. 1996).

stages,[40] which stands in contrast to the German approach wherein the burden shifts to the defendant once the patentee establishes equivalency between the patented invention and the accused embodiment.[41]

The Osaka High Court's discussion of the test to evaluate equivalency demonstrates the strong influence of U.S. case law, particularly of *Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*[42] *Hilton Davis* was decided a half year before *Genentech* and is considered the most significant decision to clarify the doctrine of equivalents test. In effect, the Federal Circuit merged the U.S. test with the German equivalency test, adopting the "known interchangeability" test, in addition to the long existing way-function-result three-part test to determine equivalency.[43]

The importance of the known interchangeability test was further emphasized by the Supreme Court in *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*[44] This case in combination with another Federal Circuit en banc decision, *Markman v. Westview Instruments*[45] (affirmed by the Supreme Court),[46] have become the most significant cases indicating a direction for determining the protection scope of U.S. patents.[47] The Osaka High Court did not hesitate in confirming the legality of the long-adopted German two-part test, evaluating "obviousness of interchangeability" and "capability to interchange two elements," given that *Hilton Davis* essentially made the U.S. test the same as the German test.[48]

The *Genentech* court's equivalency examination also evidences a German influence since the court evaluated the invention with respect to the object of the invention and principle to attain the object necessary to discuss the interchangeable capability and obviousness of the interchangeability.[49] In

---

[40] Wilson Sporting Goods Co. v. David Geoferey & Associates, 904 F.2d 677, (Fed. Cir. 1990), *cert. denied*, 111 S. Ct. 537 (1990).

[41] Moulded Curbstone (Formstein), Judgment of the Federal Supreme Court of Germany, April 29, 1986, 18 IIC 795 (1987). For a general discussion of the comparison of U.S. and German law, see Takenaka, *supra* note 9, at 301.

[42] Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512 (Fed. Cir. 1995).

[43] Toshiko Takenaka, *Doctrine of Equivalents after Hilton Davis: A Comparative Law Analysis*, 22 RUTGERS COMPUTER & TECH. L.J. 479, 491 (1996). In the order remanding the case to the district court, the Federal Circuit combined the three part test with the known interchangeability test and made it perfectly in line with the German counterpart clarified by German Federal Supreme Court. Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 114 F.3d 1161 (Fed. Cir. 1997).

[44] Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 117 S.Ct. 1040 (1997).

[45] Markman v. Westview Instruments, 52 F.3d 967 (Fed. Cir. 1995), *affirmed*, 517 U.S. 370 (1996).

[46] Markman v. Westview Instruments, 517 U.S. 370 (1996).

[47] Takenaka, supra note 43, at 490.

[48] *Id.*

[49] Judgment of Mar. 29, 1996, 1586 HANREI JIHŌ 117, 129 (Osaka High Court). Before examining whether the replacement of methionine with valine would have been obvious to one skilled in the art, the

applying the two-part test, the parties extensively disputed whether the accused t-PA met the second part of the test: whether one skilled in the art would have readily conceived the substitution between the claimed element and the accused element, *i.e.*, valine and methionine.[50] Relying heavily upon expert opinions produced by the patentee, the court concluded that the test was met.[51]

With regard to negative elements, the only issue in the case was whether to apply the prosecution history estoppel.[52] The court rejected the accused infringer's argument that the amendment to introduce a specific list of amino acids during the prosecution prevents the patentee from claiming infringement under the doctrine of equivalents. The court noted that prosecution history estoppel should apply only if the disputed element was introduced during the prosecution to overcome prior art related rejections.

The court's limited application of estoppel parallels that of the majority view in *Hilton Davis*.[53] In *Hilton Davis*, the parties extensively disputed whether prosecution history estoppel should bar the application of the doctrine of equivalents because the disputed term, the lower limit of pH value on which the claim required the patented process to operate, was introduced during prosecution. The prosecution record revealed that the upper limit was introduced to distinguish prior art cited by the examiner, but did not give any clue as to why the lower limit was introduced. The majority of the Federal Circuit refused to apply the estoppel bar, noting that the applicant surrendered pHs above the upper limit but did not do so for those under the lower limit.[54]

The *Hilton Davis* decision was subsequently remanded by the Supreme Court *in Warner-Jenkinson* to reexamine the majority's finding of infringement under the doctrine of equivalents directed to the doctrine's limits regarding prosecution history estoppel.[55] In *Litton System's Inc.*, the Federal Circuit, however, recently endorsed the majority's view with respect to the Supreme Court's ruling and clarified that reasons unrelated to prior art, such as lack of enablement or description requirement, do not in general give rise to an estoppel bar.[56] Thus, the Osaka High Court's holding in *Genentech* is

---

court found that the essence of this invention was to readily produce sufficient amount of t-PA through recombinant DNA technology.

[50] *Id.* at 121-25.

[51] *Id.* at 130.

[52] For a discussion of negative elements, see *supra* note 45.

[53] Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512 (Fed. Cir. 1995).

[54] *Hilton Davis. Chem. Co.*, 62 F.3d at 1525.

[55] *Warner-Jenkinson Co.*, 520 U.S. 17, 117 S.Ct. 1040.

[56] Litton Systems, Inc. v. Honeywell, Inc., 140 F.3d 1449, 46 U.S.P.Q. 2d 1321, 1330 (Fed. Cir. 1998).

perfectly in line with the Federal Circuit's case law regarding prosecution history estoppel.

In the past, Japanese courts have taken a restrictive view that prosecution history estoppel precludes all ranges of equivalency regardless of the reason for the amendment or argument during the prosecution.[57] Whenever an applicant made an amendment or argument with respect to the disputed element, Japanese courts flatly refused to consider infringement under the doctrine of equivalents.[58] Therefore, this limited application by the Osaka High Court is a significant change in Japanese case law, perfectly aligning Japanese claim interpretation with the current case law of the Federal Circuit.

Interestingly, the defendant raised another argument which was discussed in *Hilton Davis*: the doctrine of equivalents should not apply because the accused t-PA was independently developed.[59] The Osaka High Court adopted the same view as the *Hilton Davis* majority, indicating that evidence of the defendant's copying is indirectly relevant since it tends to suggest the interchangeable capability and obvious interchangeability.[60] An argument of independent development is, however, relevant only as a defense to the patentee's assertion of copying.[61]

Finally, although the patentee's argument, in *Genentech*, gave significant weight to the pioneering quality of its invention entitling a relatively broad scope of protection, the Osaka High Court was silent as to whether such a quality is relevant for determining infringement under the doctrine of equivalents.[62] This also parallels the analysis of the *Hilton Davis* majority.[63]

3. *Japanese Supreme Court Decisions*

More recently, in the Ball Spline case, the Supreme Court of Japan affirmed the view taken by the Osaka High Court in *Genentech* in granting

---

[57] Takenaka, *supra* note 9, at 277.

[58] *Id.*

[59] Judgment of Mar. 29, 1996, 1586 HANREI JIHO 117, 125 (Osaka High Ct.).

[60] *Id.* at 134.

[61] *Id.*

[62] In evaluating infringement under the doctrine of equivalents, the Osaka High Court expressed no view with respect to whether the invention was qualified to have a pioneer nature or how such nature affects the range of equivalents.

[63] The majority did not express any view how the pioneer nature of the invention affects the range of equivalents because Hilton Davis's invention was simply an improvement of a conventional process.

generous patent protection.[64] Although lower courts did not use the term "equivalents" to determine infringement,[65] the Supreme Court deliberately restated the reason a finding of infringement can be based on equivalents. The Court justified courts to extend the protection beyond the literal scope because it is impossible for applicants to draft a perfect claim to cover all future embodiments to be developed by competitors.[66]

The Supreme Court of Japan adopted a test for infringement under the doctrine of equivalents which added two more elements to the three *Genentech* elements thereby displaying a German influence.[67] First, the Court added a test to determine whether or not the substituted elements are an essential part of the invention.[68] This test has been widely adopted in European countries, particularly in France and Germany.[69] Second, the Court evaluated the invention with respect to the object of the invention and principle by which the object is attained as a separate positive element.[70] As a result, at least in theory, the resulting protection scope is perfectly in line with its U.S. and German counterparts.

B. U.S. Courts Step Back from Generous Patent Protection

1. The U.S. Supreme Court, Markman *Decision*

In contrast to the Japanese courts' movement toward the U.S. system, some recent Federal circuit decisions in the U.S. indicate a significant step back from generous patent protection, and moves U.S. patent claim interpretation towards the old Japanese claim interpretation practice. First, contrary to the expected increased significance of the role of experts in Japanese claim interpretation in adopting the "one skilled in the art" point of view, the U.S. courts' use of experts in claim

---

[64] Tsubakimoto Seiko Co., Ltd. v. THK Co., Ltd., (Sup. Ct., Feb. 24, 1998) (The original Japanese decision has not yet published), *translated in* Toshiko Takenaka, *The Supreme Court Affirms the Presence of the Doctrine of Equivalents Under Japanese Patent System*, CASRIP NEWSLETTER, Winter 1998, at 12 [hereinafter Takenaka, *Supreme Court Affirms Doctrine of Equivalents*].

[65] Judgment of Feb. 3, 1994, 1991 Gyo-Ne 1627 (Tokyo High Court), *translated in* 26 INT'L REV. INDUS' PROP. & COPYRIGHT L. 683 (1995).

[66] Takenaka, *Supreme Court Affirms Doctrine of Equivalents, supra* note 64.

[67] *Id.*

[68] *Id.*

[69] Jochen Pagenberg, *The Scope of Article 69 European Patent Convention: Should Sub-Combinations be Protected? A Comparative Analysis on the Basis of French and German Law*, 24 IIC 314 (1993).

[70] Takenaka, *Supreme Court Affirms Doctrine of Equivalents, supra* note 64.

interpretation has been substantially limited following the Supreme Court's *Markman* decision.[71] *Markman* held that claim language should be interpreted by judges, not juries.[72] To facilitate this process, a procedure called a *Markman* hearing has been developed to avoid unnecessary jury trials.[73] Since the *Markman* hearings are conducted by parties and judges without jury participation, this practice also moves U.S. claim interpretation closer to its Japanese counterpart in procedural aspects.

Second, U.S. courts have begun to rely heavily on the specification, drawings, and prosecution history of a patent, rather than the general knowledge of one skilled in the art as emphasized by the Osaka High Court in *Genentech*.[74] This may mean that variations obvious to one skilled in the art can be excluded from the literal claim scope, and may result in a narrow claim interpretation parallel to the traditional Japanese practice covering only disclosed embodiments.[75] This type of narrow claim interpretation practice is reinforced by the Federal Circuit's warning in its en-banc *Markman* decision against the use of experts to alter the meaning of a claim.[76] Such limited use of experts resulted from an assumption that experts, who are inventors and patent attorneys, often attempt to give self-serving opinions on the meaning of patent claims which may be influenced by hindsight reconstruction after viewing the accused device.[77] The en banc decision also emphasized the importance of intrinsic evidence which is publicly accessible, including the specification, drawings, and prosecution history.[78] The policy announced in *Markman* was implemented by the Federal Circuit in *Vitronics v.*

---

[71] Markman v. Westview Instruments, 52 F.3d 967 (Fed. Cir. 1995), *affirmed*, 517 U.S. 370 (1996).

[72] For a general discussion of this case, see CHISUM, *supra* note 22, Cumulative Supplement at 44; Kevin King, *Note & Comment: Markman v. Westview Instruments, Inc.: The Jury's Diminishing Role in Patent Law Cases*, 13 GA. ST. U. L. REV. 1127 (1997); Elizabeth J. Norman, *Casenote: Markman v. Westview Instruments, Inc.: The Supreme Court Narrows the Jury's Role in Patent Litigation* , 48 MERCER L. REV. 955 (1997), and Eric C. Harrell, *Casenote: Markman v. Westview Instruments, Inc.*, 23 OHIO N.U.L. REV. 1029, (1997).

[73] Frank M. Gasparo, *Notes & Comment: Markman v. Westview Instruments, Inc. and Its Procedural Shock Wave: The Markman Hearing*, 1997 J.L. & POL'Y 723 (1997).

[74] *See supra* text accompanying note 43.

[75] Toshiko Takenaka, *Increased Significance of Specification for Claim Construction*, CASRIP NEWSLETTER , Fall 1996, at 3.

[76] *Markman*, 52 F.3d 967 at 983.

[77] Bell & Howell Document MGMT. Prods. Co. v. Altek Sys., 132 F.3d 701 (1998).

[78] *Markman*, 52 F.3d at 982-983.

Conceptronic, where claim interpretation aides were classified with respect to their significance in supporting arguments.[79]

2. *Texas Instruments v. Cypress Semiconductor*

One good example of this narrow claim interpretation is *Texas Instruments v. Cypress Semiconductor Corp.*[80] where broadly drafted claims were interpreted to cover only the embodiments disclosed in the specification. The subject matter of this case related to a method for encapsulating a semiconductor device. The parties disputed whether the claim term "conductor" included the defendant's "die pad."[81] A three-judge panel of the Federal Circuit affirmed the finding of the district court and refused to adopt the broad plain meaning of the claim language; instead, the panel gave special meaning to the claim language by making reference to the disclosure in the specification and statements made by the applicant during prosecution.[82]

In the defendant's more advanced integrated circuit ("IC"), the semiconductor device was attached to a lead frame on a die pad, instead of a conductor strip extending from inside the package of the semiconductor device to the outside, as disclosed in the specification.[83] The patentee's argument relied on the broad dictionary meaning of "conductor", as any structure capable of conducting electricity, regardless of the particular structure of such element.[84]

The district court disagreed and held that the term "conductor" covered only constructions that extended from inside the package to the outside and connected the semiconductor device to an external circuit. Based upon this interpretation, the court issued a Judgment as a Matter of Law ("JMOL"), and reversed a jury verdict of infringement.[85] The Federal Circuit agreed with the district court.

The district court's analysis endorsed by the Federal Circuit bears a striking resemblance to the analysis traditionally adopted by Japanese

---

[79] Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576 (Fed. Cir. 1996).

[80] Texas Instruments v. Cypress Semiconductor Corp., 90 F.3d 1558 (Fed. Cir. 1996).

[81] *Id.* at 1564-65.

[82] *Id.* at 1565.

[83] A die pad is a separate member with a square shape from a lead frame. The pad functions to support a semiconductor device. In the embodiment of the specification, a lead functioned to support a device as well as supplying an electrical connection to outside circuits.

[84] Texas Instruments, 90 F.3d at 1564.

[85] *Id.* at 1563.

courts. An example of Japanese courts' traditional narrow claim interpretation is well represented by the Tokyo District Court's analysis in *Fujitsu Ltd. v. Texas Instruments*.[86]

The patented invention in the *Fujitsu* case related to a basic invention for semiconductor technology made by Dr. Kilby.[87] The patent was granted on a divisional application based upon the Japanese patent application, which was subjected to the pre-1959 patent law. The most significant point of this case was that the old law allowed applicants to include only a single claim in the application, and thus the patentee needed to divide her original U.S. applications (which included more than one claim) under a narrow definition of a single invention provided by the old law.[88]

Like the Federal Circuit's *Texas Instruments* case, the claim at issue was very broadly drafted so that it could be interpreted to cover all existing ICs and microcomputers. The specification of the patent disclosed only basic embodiments, bipolar transistors which adopted bulk resistance to provide electrical insulation between electronic elements. The bipolar transistors have long since been replaced with the later developed Metal-Oxide-Semiconductor ("MOS") transistor technologies.

The parties disputed whether a claim term requiring that electronic elements be formed distance-wise spaced apart from each other on a single semiconductor plate be given a broad definition to require any physical distance as the patentee argued.[89] Although the Tokyo District Court admitted that the ordinary meaning of the disputed term meant to require two elements only physically separated, it nevertheless interpreted that the term required that the elements be separated with a distance sufficient to provide bulk resistance, so as to separate the elements electrically from each other as described by the patent specification.[90]

The court also relied on the arguments made by the patentee during prosecution to support its narrow claim interpretation,[91] as is often done

---

[86] Judgment of Aug. 31, 1994, 1510 HANREI JIHÔ 35 (Tokyo District Court); 862 HANREI TAIMUZU 108 (1995). An English summary of this case is reported in Shoichi Okuyama, *Latest Developments in Japanese IP Cases*, 20 AIPPI J. 142 (1995).

[87] 1510 HANREI JIHÔ 35, 35.

[88] *Id.*

[89] *Id.* at 43.

[90] *Id.* at 67-70.

[91] *Id.* at 70-71.

by the Federal Circuit following *Markman*.[92] This narrow claim interpretation resulted in the literal claim scope covering only disclosed embodiments.

3. *U.S. Courts' Limited Application of the Doctrine of Equivalents after* Warner-Jenkinson

Even if the literal language of a claim is relatively narrow, the policy of fairly rewarding inventors' contribution is served as long as courts are willing to extend protection under the doctrine of equivalents. However, the U.S. Supreme Court recently limited the expansion and application of the doctrine of equivalents in *Warner-Jenkinson* by focusing on the importance of the "element-by-element" approach or "all elements rule" in limiting the doctrine of equivalents.[93] Japanese courts have long adopted this limited application of the doctrine of equivalents, except in cases where they have refused to apply the doctrine.[94]

On remand, the Federal Circuit affirmed its holding of equivalency between pH values of the claimed infringer and the patentee, noting that the substitution was known to those of ordinary skill in the art at the time of invention.[95] Recently, the Federal Circuit, in *Hughs Aircraft Co. v. United States*, affirmed the equivalency of claimed elements with recombined elements that are developed to function in the same way to produce the same result after the issuance of the patent in suit.[96] It applied a relaxed all element rule, emphasizing that the nature of the case, involving "a subsequent change in the state of art, such as later developed technology, obfuscated the significance of the limitation at the time of its incorporation into the claim."[97] Further, in *Litton Systems Inc. v. Honeywell, Inc.*, the Federal Circuit confirmed that the Supreme Court's *Warner-Jenkinson* decision resulted in no impact on the scope of subject matter precluded by the prosecution history estoppel.[98] These most recent developments suggest that the test for, and limitation of, equivalency will change very little.

---

[92] *E.g.*, Southwall Tech. Inc. v. Cardinal IG Co., 54 F.3d 1570 (Fed. Cir. 1995); SAGE Prods. v. Devon Indus., 126 F.3d 1420 (Fed. Cir. 1997).

[93] Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 117 S.Ct. 1040 (1997).

[94] Takenaka, *supra* note 9, at 261.

[95] *Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 114 F.3d 1161.

[96] *Hughes Aircraft Co. v. United States*, 140 F.3d 1470, 46 U.S.P.Q.2d 1285 (Fed. Cir. 1998).

[97] *Id.* at 1289.

[98] Litton Systems Inc., 46 U.S.P.Q. 2d , at 1327.

However, *Warner-Jenkinson* can also be read to endorse a more restrictive view of the application of the doctrine of equivalents expressed by panels of the Federal Circuit after the *Hilton Davis* en banc decision. A good example can again be found in *Texas Instruments v. Cypress Semiconductor Corp.*[99] After denying literal infringement on the basis of narrow claim construction, the panel refused to affirm infringement under the doctrine of equivalents, noting that the patentee did not produce evidence and arguments of equivalency on an element-by-element basis.[100]

Particularly with respect to claims utilizing the means-plus-function format, the role of infringement under the doctrine of equivalents is unclear.[101] After *Warner-Jenkinson,* the Federal Circuit may not apply the doctrine of equivalents at all because some believe that Section 112, Paragraph 6 equivalents and the judicially created doctrine of equivalents are redundant.[102]

Additionally, a view expressed in a recent Federal Circuit decision, *Sage Products, Inc. v. Devon Industries, Inc.,*[103] is alarming from a patent owners' point of view. In rejecting the application of the doctrine of equivalents, Judge Rader blamed a patent attorney because the attorney drafted a narrow claim covering only embodiments described specifically in the specification.[104] Unless subtlety of language or complexity of the technology, or a subsequent change in the state of the art, makes it difficult to draft a broad claim covering the accused device, patentees are not entitled to use the doctrine of equivalents to save their poorly drafted claims.[105] This is the opposite of the Japanese Supreme Court's justification in applying the doctrine of equivalents, emphasizing the impossibility of drafting a perfect claim. Further, Judge Rader explained that the claim drafter's intention, as manifested in the claim and specification, binds the patentee's claim of protection.[106] This closely parallels the inventor's recognition theory, adopted by old Japanese case law, in limiting the protection to what is recognized and discussed in the claims and specification.[107]

Following *Warner-Jenkinson,* a number of summary judgment decisions finding non-infringement have been upheld because the Federal Circuit

---

[99] *Texas Instruments,* 90 F.3d 1558.

[100] *Texas Instruments,* 90 F.3d 1966-67.

[101] 35 U.S.C. § 112.

[102] Dawn Equipment Company v. Kentucky Farms Inc., 140 F.3d 1009, 46 U.S.P.Q. 2d 1109 (Fed. Cir. 1998).

[103] Sage Products, Inc. v. Devon Industries, Inc., 126 F.3d 1420 (Fed. Cir. 1997).

[104] *Id.* at 1425.

[105] *Id.*

[106] *Id.* at 1425, n.*.

[107] *See supra* note 24 and accompanying text for a discussion of the inventor's recognition theory.

encouraged district courts to develop a practice to extend the "*Markman* hearing" to examine issues on limiting the application of the doctrine of equivalents (*Markman/Warner-Jenkinson* hearings).[108] The Federal Circuit encouraged courts to rely extensively on prosecution history estoppel and *Wilson Sporting Goods* to deny the application of the doctrine of equivalents.[109] In *Warner-Jenkinson*, the Supreme Court indicated its sympathy with the concerns of patent professionals over the jury's inability to decide complicated patent issues, particularly the doctrine of equivalents, and encouraged the Federal Circuit to develop a procedural remedy to increase a possibility to review jury verdicts and to minimize unnecessary jury trials.[110] Limitations to the application of the doctrine of equivalents are a question of law which must be decided by judges. Thus, a practice to examine these limitations of the doctrine of equivalents, prior to the factual issues that should be decided by juries, would effectively minimize unnecessary jury trials. This practice, however, may result in an increased barrier to claim infringement under the doctrine of equivalents.

While it is still too early to determine the future development of U.S. case law, if a very restrictive view expressed by some panels constitutes the majority of the Federal Circuit, U.S. claim interpretation will definitely move closer to the traditional Japanese approach. This approach will narrow the claim scope to include only those embodiments disclosed in the specification with no or a very limited range of equivalency.

Also, the proposed practice of holding combined *Markman/Warner-Jenkinson* hearings moves U.S. patent litigation closer to its Japanese counterpart in procedural aspects, because Japanese courts traditionally consider these limitations in clarifying the meaning of claim, as well as in evaluating if they should consider the possibility of applying the equivalency doctrine at all. U.S. courts' claim interpretation has been distinguished from Japanese and German interpretation by the U.S.'s distinct two-step analysis consisting of literal infringement and infringement under the doctrine of equivalents.[111] The proposed *Markman/Warner-Jenkinson* hearing will blur the line between the two

---

[108] Toshiko Takenaka, *U.S. Development*, CASRIP NEWSLETTER, Winter 1998, at 4. For a discussion of the limitations that should be examined by district courts, see Paul Michel, *Remarks at Pacific Rim High Technology Protection Practice Updates*, CASRIP SYMPOSIUM PUBLICATION NO 4. (forthcoming 1998).

[109] *E.g.*, Laitram Corp. v. Morehouse Indus., 143 F.3d 1456 (Fed. Cir. 1998); Genry Gallery, Inc. v. Berkline Corp., 134 F.3d 1473 (Fed. Cir. 1998).

[110] *Warner-Jenkinson Co.*, 117 S.Ct. at 1053, fn. 8.

[111] Takenaka, *supra* note 9, at 54.

steps and move U.S. practice significantly closer to the Japanese and German practices.

Finally, the Supreme Court's *Warner-Jenkinson* decision may be interpreted to give less generous protection than that given by Japanese courts, because the Court's holding is not clear as to whether the act giving rise to an estoppel should be limited strictly to amendments overcoming prior art related rejections. Instead, the Court held only that if patentability was the reason for the act, the act would be subject to the estoppel bar.[112]

The question of patentability includes not only those issues surrounding prior art, namely novelty and non-obviousness requirements, but also those unrelated to prior art such as lack of enablement and written description requirements. Therefore the facts such as those presented in *Genentech* may result in a finding of no infringement had the Federal Circuit interpreted "patentability" in *Warner-Jenkinson* literally and applied the prosecution history estoppel bar broadly. In *Litton Systems Inc. v. Honeywell, Inc.*,[113] a case remanded by the Supreme Court after *Warner Jenkinson*, the Federal Circuit made clear its interpretation that the patentability reasons in principle exclude non-prior art related patentability reasons.[114] Thus, the scope of application of prosecution history estoppel is also in line with its Japanese counterpart.

In any event, an interesting contrast has developed between both jurisdictions. One jurisdiction is significantly moving towards the other jurisdiction which, itself, may actually be moving towards the position that the other has traditionally held.

III. OTHER SELECT ISSUES

In other areas of patent law, Japanese court decisions demonstrate a strong influence of U.S. patent jurisprudence. These areas include judicial review of patent validity, parallel importation, and patent infringement damages.

A. Judicial Review of Patent Validity

Historically, Japanese courts have followed the German tradition of refraining from examining the validity of a patent issued by the Patent

---

[112] *Warner-Jenkinson Co.*, 117 S.Ct. at 1051.
[113] *Litton Systems, Inc.*, 46 U.S.P.Q. 2d 1321.
[114] *Id.* at 1329-30.

Office.[115] Japanese courts have been observing such limitations on power because they do not have the power to issue decisions extending to third parties.[116] Further, the courts restrain themselves from invading the powers exclusive to the Japanese Patent Office in deciding the fate of a patent, so as to maintain the separation of jurisdiction between the patent office, an administrative branch, and the courts, the judicial branch.[117] Japanese courts are often frustrated by contradictory arguments advanced by patentees who tend to support a narrow interpretation to maintain patent validity in the invalidation proceeding at the JPO while arguing to support a broad interpretation to cover accused embodiments in infringement litigation. The Japanese courts are also frustrated by the delay of invalidation proceedings at the JPO because the courts cannot declare the patent invalid even if they find that the patent is clearly invalid with respect to the prior art.[118]

To overcome such shortcomings, Japanese courts have developed a practice which allows them to interpret an improperly broad claim, covering prior art, to be limited to only the embodiments disclosed in the text of the patent specification.[119] This practice is exactly the same as that adopted by U.S. courts in the exceptional situation wherein the doctrine of assignor estoppel prevents courts from declaring the patent invalid.[120] Being stripped of the power to declare a patent invalid and to avoid enforcement of an invalid patent against accused device that should be in public domain, U.S. courts adopted the same practice as Japanese courts by narrowly interpreting a claim to find no-infringement regardless of the broad scope granted by the patent office.

However, like U.S. courts, the Tokyo High Court in *Fujitsu Ltd. v. Texas Instruments* did not refrain from examining the validity of patents. The Tokyo High Court examined the validity of the patent in the suit and refused to enforce the patent.[121] It found the patent invalid since it did not meet the requirements of a proper divisional application.[122] After finding the patent invalid, the court refused to enforce the patent, noting that the attempt to

---

[115] Nobuhiro Nakayama, *Tokkyo Shingai Soshō to Kōchi Gijutsu* [*Patent Infringement Litigation and Prior Art*], 98 HŌRITSU KYŌKAI ZASSHI 1115, 1115-16 (1981).

[116] Judgement of Sept. 11, 1958 (Osaka High Ct.), 162 HANREI JIHŌ 23.

[117] Judgement of Oct. 30, 1984 (Osaka High Ct.), 543 HANREI TAIMUZU 263, 266.

[118] Nakayama, *supra* note 115 at 1152.

[119] Takenaka, *supra* note 9, at 211.

[120] *Id.* at 83.

[121] Judgment of Sept. 10, 1997 (Tokyo High Ct., unpublished opinion) A summary is reported in Toshiko Takenaka, *Recent Developments in Japan, TI's Kilby Patent Found Invalid and Unenforceable*, CASRIP NEWSLETTER , Fall 1997, at 7.

[122] Takenaka, *supra* note 121.

enforce an invalid patent is an abuse of right.[123] The court was not afraid to override the power of the JPO, in this instance, because the JPO had already affirmed the appropriateness of the divisional application on basis of the same argument and evidence during the prosecution.[124] The court even mentioned that it had the power to overturn the decision made by the JPO, since the decision had not gone through judicial review.[125] As a result, the court did not even examine whether the claim covered the accused products once they found the patent invalid.

This practice lies in stark contrast to the practice adopted by German courts who only examine the patentability of an accused device outside of the literal claim scope.[126] This is allowed because the device has never been reviewed by the German Patent Office outside of its literal claim language.[127] *Fujitsu* represents an exceptional situation where an invention long believed to be in the public domain was revived as an exclusive right due to a flaw inherent in the imperfect, old patent system. However, it may represent Japanese courts' eagerness to accept U.S. doctrine, even to the point of ignoring a fundamental jurisdictional doctrine adopted long ago from Germany.

B. Parallel Importation

Another area which indicates a strong U.S. influence is parallel importation. The Supreme Court of Japan in *BBS* adopted the implied license theory, developed by U.S. courts, to legalize parallel importation by the defendant who legally bought patented products from the patent owner in another country.[128] Given that the product was originally sold by the patentee, there was no issue as to whether the patent covered the product sold by the defendant. Thus, the only issue in the case was whether the patentee retained an exclusive right on particular products which were first sold outside Japan.[129]

---

[123] *Id.*

[124] *Id.*

[125] *Id.*

[126] Takenaka, *supra* note 9, at 160. The Japanese Supreme Court has also adopted this approach. Judgement of Supreme Court of Japan, February 24, 1998.

[127] Takenaka, *supra* note 9, at 160.

[128] Judgment of July 1, 1997, Case No. Heisei 7 (wo) 1988 (Supreme Court), *translated in* Jinzo Fujino, *Parallel Imports of Patented Goods*, 22 AIPPI J. 163 (1997).

[129] Jinzo Fujino, *supra* note 128, at 163.

The Tokyo District Court adopted a conservative view in denying the international exhaustion theory.[130] Traditionally, the exhaustion theory, a theory to prevent a patent owner from controlling the patented product once the product is placed on a market, applies only domestically. Even if a patented product is sold on the market of one country, the sales does not affect the patentee's right to sell the particular product in another country. If the theory is applied internationally, the sales of the particular product gives the owner the right to resell the product in any other country.[131] By literally applying the language of direct infringement, it denied the defendant's argument to ban double recovery for the patentee's contribution. The Tokyo High Court reversed the district court's decision and denied relief against the defendant.[132] The Tokyo High Court's discussion focused on the trade law policy of guaranteeing the flow of goods in the market and the interests of third parties who receive patented goods after the patent owner's first sales. The court paid very little attention to the interests of the patent owner and the licensees who need to create a distribution system for the patented goods in each country. The Tokyo High Court noted that patentees are guaranteed only one opportunity to secure a reward for the disclosure of their invention.[133] It reasoned that the exhaustion theory must apply to prevent patentees from controlling patented goods after their use of that opportunity. This rule applies regardless of the place where the patentee uses the opportunity, unless regulation or law of the country prevents patentees from receiving the full reward.[134]

The Japanese Supreme Court agreed with the result of the Tokyo High Court but relied on a different justification: the implied license theory.[135] The implied license theory, also known as the "first sale doctrine," was developed by U.S. courts to limit the patentee's rights from extending to products legally put on the market by the patentee.[136] The basic premise of the doctrine is that once goods are placed in the market by the patentee, the patentee can not inhibit the resale of those goods.

---

[130] Saburo Kuwata, *Gaikoku Tokkyo Seihin no Heiko Yunyu ni Yoru Naikoko Tokkyoken no Shingai [Domestic Patent Infringement based on the Parallel Importation of International Patent Goods]*, 1065 JURISUTO 80, citing Judgment of July 22, 1994 (Tokyo Dist. Ct.), 854 HANREI TAIMUZU 84.

[131] *Id.*

[132] Willem A. Hoyng, *A Surprise Decision*, 21 AIPPI J. 26 (1996) (analyzing the Judgment of Mar. 23, 1995, 27 CHIZAISHU (No. 1) 195 (Tokyo High Ct.)).

[133] *Id.*

[134] *Id.*

[135] Jinzo Fujino, *Parallel Imports of Patented Goods, The Supreme Court Talks About its Legality*, 22-4 AIPPI J. 163 (1997), discussing Judgment of July 1. 1997 (Sup. Ct.)

[136] CHISUM, *supra* note 22, § 16.03 [2].

Unlike the Tokyo High Court, the Supreme Court distinguished the effect of sales within and outside of the territory of its jurisdiction.[137] The Court nevertheless affirmed the high court's holding, reasoning that Japanese patent owners create an implied license by putting goods in the market unless they impose a territorial restriction when they sell the products to their buyers.[138] To enforce such a restriction against third parties, a notice of such restriction must be attached to the patented goods.[139] This rule also applies regardless of the presence of corresponding patents in the place of first sales, as long as the first seller holds a Japanese patent right on the products.[140]

The Supreme Court's analysis, focusing on the first seller's authority to license and the restriction on the license, parallels the U.S. courts' analysis in deciding whether to endorse a patentee's attempt to restrict the right of owners for the patented products after the first sale. Such analysis consists of two steps: (1) identification of a restriction to decide the authority of the owner and (2) enforceability of such a restriction.[141]

Mallinckrodts, Inc. v. Medipart, Inc. exemplifies the application of the two step test.[142] The patent in the suit concerned a medical device with a notice to restrict to "a single use only." Hospitals who purchased the devices, however, sent the used devices to the defendant to recondition by replacing some elements of the medical device. Since the presence of the restriction is clear from the notice attached to the device, the parties' dispute involved whether the restriction was enforceable, in light of the precedents that deal with patent misuse.[143] The Federal Circuit, after denying the *per se* illegal analysis urged by the defendant, applied the rule of reason to analyze the restriction and upheld its enforceability. Since the enforceability of a territorial restriction was upheld by U.S. courts, it is clear that U.S. patent owners can prevent buyers from exporting goods to another country.[144]

On the other hand, U.S. case law is not clear about whether this implied license theory applies regardless of the place of the first sale. Under an old Supreme Court case, *Boesch v. Graff*,[145] the Court banned parallel importation where the imported goods were first sold by a party who held a

---

[137] Jinzo Fujino, *supra* note 135, at 167.
[138] *Id.* at 165.
[139] *Id.* at 167.
[140] *Id.*
[141] *Id.* at 167-68.
[142] Mallinckrodts, Inc. v. Medipart, Inc., 976 F.2d 700 (Fed. Cir. 1992).
[143] *Id.* at 708.
[144] CHISUM, *supra* note 22, § 16.03 [2][a][iv].
[145] Boesch v. Graff, 133 U.S. 697, 10 S.Ct. 378 (1890)

prior user's right under German patent law. A recent lower court decision, *Griffin v. Keystone Mushroom Farm, Inc.*,[146] interpreted *Boesch* broadly, holding that no operation under a foreign law has any effect on U.S. patents and banning the parallel importation. Interestingly, the argument advanced by the defendant in *Griffin* is the double recovery theory which the Tokyo High Court adopted to reject the enforcement of the Japanese patent.[147] The *Griffin* court rejected the defendant's argument, noting that the adoption of such an argument would require U.S. courts to look into a foreign law and confirm a full recovery.[148]

In *Sanofi, S.A. v. Med-Tech Veterinarian Products, Inc.*, a more recent lower court decision, the court distinguished *Boesch* as well as *Griffin* in that the owner of the goods purchased them directly from the patentee, rather than from a third party.[149] The *Sanofi* court announced a rule that a first sale gives an implied license to resale and export the products regardless of the place of the first sale unless the patentee clearly imposes a restriction on the transfer of ownership.[150] However, the court still banned the importation, since the plaintiff did not have the authority to give such a license because a sole license had already been granted to a third party to sell the patented products in the United States.[151] Thus, the *Sanofi* court's implied license theory closely parallels the Japanese Supreme Court's analysis.

The Japanese Supreme Court in *BBS* stated that a patentee's subsidiaries and related companies are considered to be the same entity as the patentee.[152] This statement suggests that *BBS* is consistent with *Sanofi* in that the presence of an exclusive licensee, a fully owned subsidiary, would not exclude the patentee's authority to license. Had the exclusive licensee been a third party, the Court would have reached a different conclusion as the *Sanofi* court did. Since both *Griffin* and *Sanofi* are district court decisions, and the *Boesch* case is very old and represents an unusual situation, U.S. case law on the exhaustion theory or the first sale doctrine in an international context remains unclear.[153]

---

[146] Griffin v. Keystone Mushroom Farm, Inc., 453 F. Supp. 1283, 199 U.S.P.Q. 428 (E.D. Pa. 1978)

[147] *Id.* at 1285.

[148] *Id.* at 1286.

[149] Sanofi, S.A. v. Med-Tech Veterinarian Products, Inc., 565 F. Supp. 931 (D. N.J. 1983).

[150] *Id.* at 939.

[151] *Id.*

[152] Fujino, *supra* note 128.

[153] The United States Supreme Court legalized realized the parallel importation of lawfully sold copies of a copyrighted work, by applying the first sale doctrine. The Court's analysis however solely focused on the interpretation of copyright statutes which are unrelated to the provisions in the patent statute. Quality King Distributors v. L'Anza Research International, __ U.S.__, 118 S.Ct. 1125 (1998).

C. *Patent Infringement Damages*

Recent developments in patent infringement damages also demonstrate the Japanese patent system's tendency to move towards the U.S. system. Traditionally, Japanese case law in this area indicates a very strong German influence by providing three types of calculation methods for patent infringement damages.[154] In addition to a calculation method stemming from general tort damages under the Civil Code, lost profits,[155] the patent statute codifies two calculation methods developed by German courts, *i.e.*, infringer's profits[156] and a reasonable royalty.[157] Japanese courts seldom grant damage awards in the form of lost profits.[158] First, the patent statute, Article 102, provides that courts can deduct a surplus from a reasonable royalty if the infringer did not willfully or with gross negligence infringe the patent, thus suggesting that a reasonable royalty is the main tool for calculating infringement damages.[159] Second, it is often very difficult for patentees to establish a causal relationship between infringement and damages. Third, Japanese courts require the patentee's own exploitation of the invention in order to claim damages in the form of lost profits or infringer's profit.[160] Thus, Japanese courts award damages either in the form of infringer's profit or a reasonable royalty in more than ninety percent of all cases where any damage award is granted.[161]

When calculating "reasonable royalty," which constitutes the main portion of Japanese damage awards, Japanese courts rely on publicly available information, particularly royalty rates for licensing government owned patents and industry average royalty rates, to estimate a reasonable royalty.[162] They rarely take into account the patentee's business practices. Such royalty calculations are often insufficient for patentees who chose not to

---

[154] The three types of damage calculations parallel the methods developed by German courts. For a general discussion of the three types of calculation methods under German Law, see GEORG BENKARD, PATENTGESETZ, §T139 Pat G, 1187 (8th. ed. 1988).

[155] MINPŌ [CIVIL CODE], Law No. 89 of 1896, § 709.

[156] Patent Law, art. 102, ¶ 1.

[157] *Id.* ¶ 2.

[158] For a general discussion of Japanese patent infringement damages, see Toru Toyama, *Study with respect to Proper Civil Remedies for Infringements of Intellectual Property*, 1996 IIP BUL. 62 (1996).

[159] Japanese Patent Law, Article 102, Paragraph 3.

[160] NOBUHIRO NAKAYAMA, CHUKAI TOKKYO HŌ [DETAILED EXPLANATION OF PATENT LAW] 865 (2nd. ed. 1990).

[161] *Id.*

[162] The JPO's calculation method and industry standard rates are reported in HATSUMEI KYOKAI, ROYALTY RATES: DATA BOOK FOR TECHNOLOGY LICENSING (1993).

license their patents, and instead attempted to benefit through the market power resulting from the exclusivity of their patents.

Some argue that this system benefits infringers because an infringer does not suffer even if she decides to exploit her invention without any attempt to get a license, paying damages only if her activity is found to be infringing.[163] Responding to this criticism, the Japanese Patent Office recently began reviewing the possibility of revising Article 102.[164] A report published by a committee organized by Japanese Patent Office indicates that Japan wants to become a leading pro-patent system.[165] To attain this goal, the JPO wants to increase the value of patents by increasing damages for infringement. In December, 1997, the JPO announced its proposed revisions of the Japanese Patent Law and solicited the patent community to submit comments.[166] Major aspects of the JPO's proposal included (1) a revision of current damage provisions to make lost profits and/or infringer's profits the main measure of damages; (2) a provision to facilitate patentees ability to establish the amount of damages; and (3) an introduction of a provision for punitive damages; and (4) a revision to increase criminal sanctions for infringement.[167] In essence, the JPO wants to turn its patent infringement damage system into its U.S. counterpart.

The Japanese damage calculation system follows the civil law traditions and has as its goal pure compensation. An award of damages that is greater than compensatory has long been regarded as against the public policy and thus the Japanese Supreme Court has recently refused to enforce foreign judgements that award patent infringement damages representing more than compensatory damages.[168] Facing extensive criticism from the Justice department for introducing significant disharmony with other damage provisions, the JPO gave up most of its proposals to change civil remedies, and introduced a bill mainly increasing criminal sanctions. [169]

---

[163] YOSHIYUKI TAMURA, INTELLECTUAL PROPERTY RIGHTS AND INFRINGEMENT DAMAGES (1993).

[164] Toshiko Takenaka, *The JPO's Review of the Appropriateness of Intellectual Property Damages*, CASRIP NEWSLETTER, Spring/Summer 1997, at 8.

[165] JAPANESE PATENT OFFICE, 21 SEIKI NO CHITEKI ZAISANKEN WO KANGAERU KONDANKAI HOUKOKUSHO [A COMMITTEE FOR PLANING INTELLECTUAL PROPERTY RIGHTS FOR THE 21 CENTURY] (1997).

[166] JAPANESE PATENT OFFICE, TOKKYO HŌ NADO NO ICHIBU O KAISEI SURU HŌRITSUAN YŌKŌ [OUTLINE OF A PROPOSED LAW TO PARTIALLY REVISE PATENT AND OTHER INDUSTRIAL PROPERTY LAWS] (1997) [hereinafter PROPOSAL TO REVISE PATENT LAWS].

[167] *Id.*

[168] Judgment of Supreme Court, July 11, 1997 (unreported opinion).

[169] Japanese Patent Office, Draft of Bill to Revise Part of Patent and Other Industrial Laws.

Interestingly, even in the United States, the practice of awarding damages was not so different from the current Japanese practice before the creation of a special patent court—the United States Court of Appeals for the Federal Circuit. Old case law indicates that courts seldom awarded damages in the form of lost profits, because of the difficulty in establishing the causal relationship between infringement and damages.[170] This is particularly true when the patentee did not exploit his invention or license the invention to another party.[171]

The Federal Circuit significantly reduced this burden by developing case law that used a test to infer causation, the *Panduit* test.[172] The *Panduit* test is named after *Panduit Corp v. Stahlin Bros. Fibre Works, Inc.*, in which the Sixth Circuit identified four factors from which causation may be inferred between the profits the patentee would have made and the infringer's infringing activities.[173] The factors include (1) demand for the patented product, (2) absence of acceptable non-infringing substitutes, (3) the patentee's manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit the patentee would have made.[174] The Federal Circuit adopted the test but clarified that the test is not an exclusive test.[175] This is mainly because the court wants to leave open the possibility for patentees to establish causation even if a patentee fails to establish one of the *Panduit* factors.[176]

The Federal Circuit also established a practice of interpreting uncertainty on the proof of causation against infringers.[177] It also began to award lost profits based on market share even if a non-infringing acceptable substitute exists in the relevant market.[178] Furthermore, recent case law developments extend the coverage of damages to unpatented subject matter

---

[170] For a general discussion on early cases, demonstrating a heavy burden of proof on causation imposed on patentees, see CHISUM, *supra* note 22, F20.03[1][a].

[171] *Bic Laisuer v. Windsurfing: The Federal Circuit Catches the "Big One" and Leaves the Supreme Court on Shore to Dry*, 4 FED. CIR. BAR J. 167 (1994).

[172] Paul Janicke, *Contemporary Issues in Patent Damages*, 42 AM. U. L. REV. 691 (1993); Laura B. Pincus, *The Computation of Damages in Patent Infringement Actions*, 5 HARV. J.L. & TECH. 95 (1991).

[173] Panduit Corp. v. Stahlin Bros. Fibre Works, Inc., 575 F.2d 1152 (6th Cir. 1978).

[174] *Id.*

[175] Bio-Rad Laboratories, Inc. v. Nicolet Instrument Corp., 739 F.2d 604 (Fed. Cir. 1984).

[176] For example, in *State Industries, Inc., infra note* 195, the Federal Circuit granted a recovery of lost profits based on the market share theory even if a patentee fail to establish the second factor, absence of acceptable non-infringing substitutes.

[177] Kaufman Co. v. Lantech, Inc., 926 F.2d 1136 (Fed. Cir. 1991).

[178] State Industries, Inc. v. Mor-Flo Industries, Inc., 883 F.2d 1573 (Fed. Cir. 1989)

sold in connection with patented goods, by removing the limitation of patent claim coverage as long as the "but for" test is met.[179]

The Federal Circuit recently made it clear that the patentee's own exploitation of the invention is not required to claim lost profits. In *King Instruments Corp. v. Perego*, the patent in the suit was granted to a machine which loaded magnetic audio and video tapes into closed cassettes.[180] Since these cassettes were manufactured with only non-magnetic closed tapes connected to two winding hubs, the manufacturer used the loading machine to splice the magnetic tape into the middle of the non-magnetic tape. The district court found that the defendant's tape-loading machine did not infringe King's two patents, but found that the splicer in the reel-changer infringed King's third patent.[181] Since King did not embody the third patent in its competing loading machine, the defendant argued that King was not entitled to recover lost profits.[182]

The majority of a three-judge panel rejected the infringer's argument.[183] Writing for the majority, Judge Rader explained the court's reasons for not requiring the patentee's own exploitation: (1) neither the language nor the history of the patent act gives any indication that a patentee is required to exploit his patented invention as a prerequisite to requesting lost profits damages; and (2) a patentee is entitled to an economic reward through an exclusive right when he fulfills a duty to the public by properly disclosing his invention.[184] Noteworthy among Judge Rader's policy discussions is his endorsement of the patentee's choice to use the exclusivity of patent rights. According to Judge Rader, a patentee can choose not to use his invention while preventing others from using it.[185] Judge Rader also indicates that awarding only a reasonable royalty to patentees who select not to use the invention would result in a compulsory license.[186]

The late Judge Nies, who wrote a lengthy dissenting opinion, disagreed arguing that the patent system encourages commercialization of patented inventions.[187] She also argued that a patent protects a property right, the

---

[179] Toshiko Takenaka, *Patent Infringement After Rite-Hite*, CASRIP NEWSLETTER, Winter 1997, at 4; Karen McDaniel & Gregory Ansems, *Damages in the Post-Rite Hite era: Convoyed Sales Illustrated the Dichotomy in Current Damages law*, 78 J. PATENT OFFICE SOCIETY 461 (1996).

[180] King Instruments Corp. v. Perego, 65 F.3d 941 (Fed. Cir. 1995).

[181] King Instrument Corp. v. Perego, 737 F. Supp. 1227 (D. Mass. 1990).

[182] *King Instruments Corp.*, 65 F.3d at 946.

[183] *Id.* at 946-52.

[184] *Id.* at 949.

[185] *Id.*

[186] *Id.* at 946-51.

[187] *Id.* at 954 (Nies, J., dissenting).

patentee's exclusive market resulting from the exploitation of invention.[188] Without exploitation, there is no market to be protected. Contrary to the JPO's efforts to move their practice toward the Federal Circuit, Judge Nies would require that the patentee who requests damages in the form of lost profits to exploit the patented invention.[189] She also alleged that the increased damages would not deter infringement since patent infringement is a form of strict liability.[190] In short, she would favor a move of the U.S. practice closer to the Japanese practice, or at least a return to the U.S. practice before the creation of the Federal Circuit.

It is difficult to conform Japanese Patent Policy with Judge Rader's view that patentees are guaranteed an exclusive right, and therefore need not exploit their inventions. Japanese Patent Law clearly provides that the law's purpose is to encourage industrial development by protecting and using inventions.[191] Moreover, the term "using" should be read to include not only using information of disclosed inventions, but also to include the exploitation of inventions. Therefore, unlike U.S. patents, Japanese patents grant patentees a right to exclude as well as to use,[192] and provide a compulsory license clause to encourage the commercialization of patented inventions if the prevention of the commercialization is against public interests.[193]

It is also difficult to conform the concept of using damages to deter or punish infringement with a Japanese tort law policy. Under Japanese tort law, damages are awarded to provide pure compensation, and courts do not distinguish breach of contract damages from tort damages.[194] Under the civil law tradition, the decision whether to deter or punish infringement is an exclusive power of the government.[195] An individual's participation in law enforcement is therefore very limited. However, as indicated by the *Fujitsu* decision with regard to Japanese courts' jurisdiction, the courts' as well as the Japanese Patent Office's eagerness to move towards the U.S. system may change the views with regard to the essence of Japanese patent rights and even change the traditional concept of tort law, including the role damages play under such laws.

---

[188] *Id.* at 958 (Nies, J., dissenting).
[189] *Id.* at 958 (Nies, J., dissenting).
[190] *Id.* at 959 (Nies, J., dissenting).
[191] Patent Law, Article 1.
[192] Patent Law, Article 68.
[193] Patent Law, Article 83.
[194] Kunii Kazuo, *Scope of Damages resulting from Breach of Contract*, 4 MINPŌ KŌZA 499 (Eiichi Hoshino et al ed., 1985).
[195] *See generally*, TANAKA, *supra* note 6.

IV. CONCLUSION

Although U.S. withdrawal from the WIPO Patent Treaty negotiations significantly delayed harmonization of the substantive law aspects of patent law in the Paris Union countries, interactions between Japanese and U.S. jurisprudence have significantly contributed to the indirect harmonization of their laws. The similarities between the reasoning adopted by U.S. and Japanese courts clearly indicates that judges' sense of justice, and the balance of equally important, but competing, interests between patentees and competitors, are very similar between the two jurisdictions.

A clear trend indicated by recent Japanese cases indicates the eagerness of Japanese courts to adopt U.S. patent law doctrines and move the Japanese patent system closer to that of the U.S. system. It follows that there are few significant differences remaining between the two jurisdictions which movements by judge-made law cannot overcome. Although bilateral negotiation between the U.S. and Japanese governments continue to contribute to harmonization through statutory revisions, judge-made law will harmonize many aspects, without the need for statutory revisions which tend to be much more susceptible to the interests of domestic industry.