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Standard of Proof for Patent Invalidation in the U.S. and Japan

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I. Introduction

Under § 282 of the U.S. Patent Act of 1952, “[a] patent shall be presumed valid” and “[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.”¹ The U.S. courts have interpreted this statute as meaning that “a defendant seeking to overcome this presumption must persuade the factfinder of its invalidity defense by clear and convincing evidence.”²

In June 2011, the U.S. Supreme Court confirmed this statutory interpretation and the standard of proof in Microsoft Corp. v. i4i Limited Partnership, et al.³ Particularly, the Court held that even when an invalidity defense rests on evidence that was never considered by the United States Patent and Trademark Office (PTO) in the examination process, § 282 requires an invalidity defense to be proven by clear and convincing evidence rather than by a preponderance of the evidence and “[t]hat burden is constant and never changes”⁴. At the beginning of the decision, Judge Sotomayor explained the background of this heightened standard of proof, pointing out that the PTO is assigned by Congress with the task of examining patent applications under the Patent Clause of the U.S. Constitution, Art. I, § 8, cl. 8, and that PTO examiners make various factual

³ Id.
determinations in evaluating whether statutory conditions such as patentable subject matter, novelty, and nonobvious have been met.\textsuperscript{5} It is mentioned that § 282 codified the existing presumption of validity of patents based on a fundamental proposition that a government agency such as the PTO was presumed to do its job.\textsuperscript{6}

There also is criticism that “the heightened standard of proof essentially causes juries to abdicate their role in reviewing invalidity claims raised in infringement actions,”\textsuperscript{7} given that the patent system urges inventors to disclose new technologies to the public. An issued patent grants a powerful exclusive right to the patentee and the right holder can bring a civil action for infringement. The stability of patents is essential to make the patent system function and to keep the loss of litigation cost to a minimum. Furthermore, if a large number of patents were invalidated in infringement suits, inventors would lose their motivation to develop inventions and obtain patents. Patentees would also be reluctant to enforce their patent rights. Therefore, the heightened standard of proof, clear and convincing evidence, contributes to the foreseeability and credibility of the patent system in the U.S.

Compared to the U.S. patent system, there is no heightened standard of proof

\textsuperscript{5} Id. at 2242.
\textsuperscript{6} Id. at 2243 (citing American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350 (C.A.Fed.1984)).
\textsuperscript{7} Id. at 2252.
required for patent invalidation in infringement suits in Japanese courts and the invalidation rate is high. When the courts examine a patents’ validity, they find the patent rights invalid in 74% of cases.\(^8\) In Japan, patentees’ win rate in infringement cases in district court is only 20% or less.\(^9\)

Historically, in the Japanese patent system, only the Japan Patent Office (JPO) was able to invalidate a patent through its appeal or opposition procedure until the Japanese Supreme Court changed the procedure in the *Kilby* case\(^10\) in 2000. There, the Court decided that a patentee could not enforce a patent when it is clearly invalid because the enforcement is deemed to be an abuse of the right. Following the *Kilby* case, the Patent Act Art. 104-3 was enacted in 2004 codifying that “where, in litigation concerning the infringement of a patent right or an exclusive license, the said patent is recognized as one that should be invalidated by [JPO’s] trial for patent invalidation, the rights of the patentee or exclusive licensee may not be exercised against the adverse party.”\(^11\) Unlike the *Kilby* decision, however, this provision enables courts to invalidate

\(^8\) http://www.jpo.go.jp/torikumi/ibento/text/pdf/h23_jitsumusya_txt/08.pdf (Shinpan no gaiyou (seido unyou hen) Japan Patent Office)

\(^9\) *Id.*

\(^10\) See, Saikō Saibansho [Sup.Ct.] Apr. 11, 2000, Hei 10 (o) no. 364, SAIKO SAIBANSHO MINJI HANREISHŪ [MINSHŪ] 1368 (Japan).

\(^11\) TOKKYOHŌ [Patent Law], Law No. 121 of 1959, art. 104-3 (Nihon hōrei gaikokugo yaku dēta bēsu shisutemu), http://www.japaneselawtranslation.go.jp/law/detail/?ft=1&re=01&dn=1&co=01&x=0&y=0&ky=%E7%89%B9%E8%A8%B1%E6%B3%95&page=11 (Japan).
patents in infringement suits irrespective of the invalidity’s clearness. After more than a decade from Kilby, behind the backdrop of the high invalidation rate of issued patents, there are concerns among patent applicants whether the courts should have had the same power to invalidate patents as the JPO has. Some practitioners insist that a court can invalidated patents under the Patent Act Art. 104-3 only when it should “clearly” be invalidated.\(^\text{12}\)

In this article, I will discuss the need to raise the standard for patent invalidation in Japanese infringement cases making a comparison between the U.S. patent system and Japanese patent system focusing on the standard of proof. After comparing the standard of proof in general civil procedure (Chapter II), the standard of proof for invalidation in patent infringement suit (Chapter III) including the history of case law and statutes, and the standard of proof for invalidation in the appeal procedures in patent offices (Chapter IV) in both the U.S. and Japan, I will introduce statistics regarding patent invalidation in both jurisdictions (Chapter V). Then, I will make a comparative analysis (Chapter VI) based on the discussion from Chapter II through Chapter V and leading to a conclusion (Chapter VII) that in order to promote future growth by leveraging innovation, inventors

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and applicants should be incentivized by increasing patent credibility and making enforceability foreseeable by implementing clear and convincing standards in the Japanese patent system.

II. Standard of Proof in Civil Procedure

A. Standard of Proof in the U.S. Civil Procedure

To win a case, a party has to produce a certain threshold amount of evidence needed to satisfy the standard of proof to meet the burden of persuasion.\(^\text{13}\) The U.S. Supreme Court defines the standard of proof as “the degree of certainty by which the factfinder must be persuaded of a factual conclusion to find in favor of the party bearing the burden of persuasion”\(^\text{14}\) or “how difficult it will be for the party bearing the burden of persuasion to convince the jury of the facts in its favor.”\(^\text{15}\)

The familiar three standards are (1) preponderance of the evidence, (2) clear and convincing evidence, and (3) beyond a reasonable doubt. These standards are no more than their plain meanings, although a “preponderance” is understood as “more than fifty present,” and the clear and convincing standard lies somewhere between a preponderance


\(^\text{14}\) Microsoft Corp. v. i4i Limited Partnership, et al., 131 S.Ct. 2238, 2245 n.4 (2011) (referring to Addington v. Texas, 441 U.S. 418 (1979)).

\(^\text{15}\) Id.
and “beyond a reasonable doubt.” Among these three standards, preponderance of the evidence is used in most civil cases and clear and convincing is used in some particular cases such as child custody. The standard of beyond a reasonable doubt is used in criminal cases.

B. Standard of Proof in Japanese Civil Procedure

Compared to the standard of proof in the U.S., the Japanese system is simpler and there is no dual standard in civil litigation. That is, in Japan, (1) beyond a reasonable doubt standard is used in criminal cases and (2) the high probability standard is used in civil cases. The high probability standard is considered to be a higher standard than the preponderance of evidence standard in the U.S. and there is a discussion within the Japanese legal community that the preponderance of the evidence standard is more suitable than the high probability standard. One of the reasons for supporting the preponderance of the evidence standard is that both parties in civil procedure should be

16 JOHN J. COUND, supra, note 13, at 992-993.
17 Ōta Shōzo, Hōtekiyō to jijitsunintē, 80 Kagaku 633, 635(2010).
18 Id. at 635-636.
20 Tamura Yōko, Minji soshō niokeru shōmēdoron saikou, 327, 328 Ritsumēkan hōgaku 517, 546 (2009).
treated equally.\textsuperscript{21}

Tamura proposes that the Japanese civil court should use a preponderance of the evidence standard in principle and should use the higher standards for exceptional cases in which the standard of proof should be higher based on political perspective. She also mentions that such exceptional cases should be stipulated in statutes in order to retain legal stability and foreseeability.\textsuperscript{22} Tamura proposes that providing a rule stipulating some presumption is one way to make the standard of proof higher in an exceptional case.\textsuperscript{23} This idea is similar to 35 U.S.C. § 282 that stipulates the presumption of validity for a patent and makes the standard of proof for patent invalidation higher.

III. Standard of Proof for Invalidation in Patent Infringement Suit

A. Clear and Convincing Standard in the U.S.

1. 35 U.S.C. § 282

35 U.S.C. § 282 stipulates that “A patent shall be presumed valid. … The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.” This rule has been well established under common law even before the

\textsuperscript{21} Id.
\textsuperscript{22} Id. at 545-546.
\textsuperscript{23} Id.
legislation of this provision in 1952. It was originally stipulated simply as, “[a] patent shall be presumed valid. The burden of establishing invalidity of a patent shall rest on the party asserting it” before the amendments of 1965. § 282 provides the rules on presumption of validity and defenses and has been amended several times. However, the sentence stipulating presumption of validity has been changed little by comparison with the original expression and the current one. The standard of proof based on the presumption of validity is not described in the statute but the courts historically held a consistent opinion that the presumption of validity in § 282 cannot be overcome without clear and convincing evidence.

In American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350 (C.A.Fed.1984), Judge Rich, a principal drafter of 1952 Patent Act, touched upon the background of this provision. He explained that the presumption of validity is originally created by the courts and was “a part of the judge-made body of patent law when the Patent Act of 1952 was written”24 and the legislation in 1952 was a simple statutory declaration codifying the accumulation of previous case law. Judge Rich also introduced a comment of a principal author of the act, P.J. Federico, which explained “[t]hat a patent is presumed valid was the law prior to the new statute, but it was not expressed in the old

statute. The statement of the presumption in the statute should give it greater dignity and effectiveness”25 and that “Section 282 puts into the statute the presumption of validity for the benefit of those cynical judges who now say the presumption is the other way around.”26

As was explained in Mr. Federico’s comment, judges seems to have had freely expressed the notion of the presumption of validity in their own words. According to *American Hoist*, the legislation was made in order to unify such various expressions and the background policy of the presumption was the fundamental premise that “a government agency such as the then Patent Office was presumed to do its job.”27

2. Cases involving Clear and Convincing Evidence

In *Microsoft v. i4i* in 2011, the U.S. Supreme Court reconfirmed the heightened standard for proving invalidity in a patent infringement suit.28 The U.S. Supreme Court traced the history of the clear and convincing standard citing the following leading cases.

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25 *Id.* at 1359.
26 *Id.*
27 *Id.*
a)  *Radio Corp. of America v. Radio Engineering Laboratories (1934)*

The presumption of patent validity was legislated in § 282 in 1952. However, “by the time Congress enacted § 282 and declared that a patent is “presumed valid,”’ the presumption of patent validity had long been a fixture of the common law.”29 The authoritative precedent is *Radio Corp. of America.*30

The patented inventions in this case are a feed-back circuit and an oscillator which were invented by De Forest and assigned to Radio Corp. of America (RCA). Before this decision was made by the U.S. Supreme Court, there was a series of cases relevant to this case in New York and Delaware. These cases involved four parties and the main issue was which party’s invention was created first, specifically, whether the first inventor is De Forest or Armstrong who assigned his invention to Radio Engineering Laboratories. After several courts’ decision, the U.S. Supreme Court finally concluded that the plaintiff, RCA’s “explanations, even if not wholly convincing, are not so manifestly inadequate as to lead [the U.S. Supreme Court] to say that the conception of the oscillator as a generator of radio frequencies has been proven in any clear or certain way to have been developed and applied by Armstrong before it was born in De Forest's

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29 Microsoft Corp. v. i4i Limited Partnership, et al., 131 S.Ct. 2238, 2246 (2011).
In short, the U.S. Supreme Court’s decision in *Radio Corp. of America* was led by judging the defendant’s claim was not supported in a clear or certain way. Before leading to this judgment, the Court cited a number of precedents which had admitted presumption of validity using various expressions such as “every reasonable doubt should be resolved against him,”32 and “the presumption of the validity of the patent is such that the defense of invention by another must be established by the clearest proof perhaps beyond reasonable doubt.”33 The Court defined presumption of validity as “a presumption not to be overthrown except by clear and cogent evidence.”34 It is notable that the Court emphasized the requirement of clearness for proving a patent’s invalidity by repeating the expressions “clear and cogent,”35 “clear and satisfactory,”36 “clear conviction,”37 “clear enough,”38 and “clear or certain,”39 or the like.

Importantly, by referring to the precedents, the Court in RCA interpreted the clear and convincing standard as “not defining a standard in terms of scientific accuracy

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31 *Id.* at 933.
32 Coffin v. Ogden, 18 Wall. 120, 124, 21 L.Ed. 821 (1873).
35 *Id.* at 929
36 *Id.* at 931
37 *Id.* at 931
38 *Id.* at 932
39 *Id.*
or literal precision, but were offering counsel and suggestion to guide the course of judgment.” ⁴⁰ Thus, from this explanation, the clear and convincing standard in examining a patent’s invalidity can be understood as an instruction or guidance for a factfinder to set his or her attitude toward the relevant patent. The notion of the standard reminds a factfinder of an infringer’s heavy burden of persuasion which “fails unless his evidence has more than a dubious preponderance.” ⁴¹


Fifty years after *Radio Corp. of America* ⁴² in 1984, the Federal Circuit confirmed the heightened standard of proof in *American Hoist* ⁴³ for the first time since its foundation in 1982. In *American Hoist*, Judge Rich gave the answer to the question whether the burden of proof shifts to the patentee or the standard of proof changes when the evidence has not been considered by the PTO. He stated that “§ 282 creates a presumption that a patent is valid and imposes the burden of proving invalidity on the attacker. That burden is constant and never changes and is to convince the court of

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⁴⁰ Id. at 931
⁴¹ Id.
⁴² Id.
invalidity by clear evidence.”

This was a case in which plaintiff, American Hoist & Derrick Co., sued defendant, Sowa & Sons Inc., claiming infringement of plaintiff’s patent regarding shackle. The contrast between the district court’s decision and the Federal Circuit’s is noteworthy. In short, the district court decided the plaintiff’s patent was invalid because it was obvious in light of relevant prior art which was not investigated by the PTO. The Federal Circuit reversed the decision. It mentioned that the presumption of validity stipulated in § 282 disappears because the PTO did not possess all relevant prior art and “the court is not entitled to rely upon the patent office[’s] expertise.” Moreover, the district court instructed the jury as follows:

If you find the prior art references which defendant has cited are no more pertinent than the art utilized by the examiner when examining the Shahan patent[,] then defendant has the burden of establishing obviousness by “clear and convincing evidence.” If, on the other hand, you find any of the prior art references which defendant has cited are more pertinent than the art utilized by the examiner when examining the Shahan patent, then that presumption of validity disappears as to that issue of obviousness and the plaintiff has the

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44 Id. at 1360.
45 Id. at 1354 (citing the district court’s statement).
burden of proof by a preponderance of the evidence.\textsuperscript{46}

This jury instruction meant if the jury adopted the prior art found by the PTO, the jury should examine by the clear and convincing evidence standard but if the jury adopted the prior art newly found by the defendant, the standard should be the preponderance of the evidence standard. Consequently, the district court found the plaintiff’s patent invalid under the preponderance of the evidence standard.

On the other hand, the Federal Circuit found this jury instruction erroneous. The Federal Circuit decided the standard of proof was clear and convincing evidence and had never been changed. In his decision, Judge Rich described the PTO as “a qualified government agency presumed to have properly done its job, which includes one or more examiners who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art and whose duty it is to issue only valid patents.”\textsuperscript{47} At the same time, he also mentioned that if prior art or other evidence was not considered by the PTO, the new evidence eliminated or reduced the element of deference to the PTO and discharged a defendant’s burden although it was “neither shifting nor lightning it or changing the standard of proof.”\textsuperscript{48}

\textsuperscript{46} Id. at 1358 (citing the district court’s statement).
\textsuperscript{47} Id. at 1359.
\textsuperscript{48} Id. at 1360.
c) **KSR International Co. v. Teleflex Inc. (2007)**

*KSR*\(^{49}\) is well known as a case in which the U.S. Supreme Court denies the Federal Circuit’s sole reliance on its teaching, suggestion, or motivation (TSM) test, but the U.S. Supreme Court also slightly and vaguely touched the presumption of validity issue. In *KSR*, the Court cited a relevant prior art which had not been cited during patent examination in the PTO and the Court used the prior art as a basis of denying Telflex’s patent’s nonobviousness.

Specifically, it said that “We need not reach the question whether the failure to disclose [the new prior art] during the prosecution of Engelgau voids the presumption of validity given to issued patents, for claim 4 is obvious despite the presumption. We nevertheless think it appropriate to note that the rationale underlying the presumption—that the PTO, in its expertise, has approved the claim—seems much diminished here.” Based on this language, Microsoft raised the question of the standard of proof again with the U.S. Supreme Court in *Microsoft v. i4i*.\(^{50}\)

\(^{50}\) Microsoft Corp. v. i4i Limited Partnership, et al., 131 S.Ct. 2238 (2011).
d) **Microsoft v. i4i (2011)**

The fact in this case is similar to *American Hoist* \(^{51}\) and the parties discussed whether the clear and convincing standard was applied even if a prior art had not been considered by the PTO. Specifically, respondent i4i has a patent which claims a method for editing computer documents and sued Microsoft for patent infringement. Responding to this claim, petitioner Microsoft argued the patent was invalid because the claimed invention had been sold as a software program named S4 more than a year before filing the patent application. But the problem was the software source code had been destroyed years before the commencement of litigation.

Boldly, Microsoft proposed a similar jury instruction made at the district court of *American Hoist* \(^{52}\) which was subsequently denied by the Federal Circuit. It requested the jury instruction as follows:

Microsoft's burden of proving invalidity and unenforceability is by clear and convincing evidence. However, Microsoft's burden of proof with regard to its defense of invalidity based on prior art that the examiner did not review during the prosecution of the patent-in-suit is by preponderance of the evidence.\(^{53}\)

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\(^{52}\) Id.

\(^{53}\) Microsoft Corp. v. i4i Limited Partnership, et al., 131 S.Ct. 2238, 2244 (2011).
In other words, Microsoft insisted that a defendant in an infringement action need only persuade the jury of an invalidity defense by a preponderance of the evidence when a relevant prior art was not considered by the PTO relying on the above stated the U.S. Supreme Court opinion in KSR. Contrary to American Hoist’s district court, however, the district court in this case rejected this idea and instructed the jury that Microsoft should prove the patent’s invalidity by clear and convincing evidence regardless of any relevant evidence considered by the PTO or not. Based on the instruction, the jury found the patent valid and Microsoft’s willful infringement. Thereafter, the Federal Circuit affirmed.

The U.S. Supreme Court acknowledged there is no description about standard of proof in § 282 but it confirmed clear and convincing standard based on the assumption that a term has common law meaning where Congress uses a common-law term in a statute.\(^{54}\) The Court traced back the history of presumption of validity with a clear and convincing standard referring to RCA, American Hoist and several other cases. It confirmed that the common law meaning of “presumed valid” in § 282 when it was legislated in 1952 was a validity which imposed a heavy burden of persuasion on a defendant raising an invalidity, requiring proof of the defense by clear and convincing

\(^{54}\) Id. at 2245.
evidence.\textsuperscript{55}

However, answering Microsoft’s argument that the standard of proof should be lowered when new evidence had not been considered by the PTO, the U.S. Supreme Court also explained that “if the PTO did not have all material facts before it, its considered judgment may lose significant force”\textsuperscript{56} and “the jury may be instructed to consider that it has heard evidence that the PTO had no opportunity to evaluate before granting the patent” though the defendant’s standard of proof must still be a clear and convincing standard.

The Court also introduced the policy argument between Microsoft with its \textit{amici} and i4i with its \textit{amici}. That is, Microsoft argued that the clear and convincing standard dampened innovation by protecting bad patents from invalidity challenges and it expressed concerns about the PTO's resources and procedures. On the other hand, i4i rebutted that “the heightened standard of proof properly limits the circumstances in which a lay jury overturns the considered judgment of an expert agency”\textsuperscript{57} and it is “the incentives for inventors to disclose their innovations to the public in exchange for patent protection.”\textsuperscript{58}

\textsuperscript{55} \textit{Id.} at 2246.
\textsuperscript{56} \textit{Id.} at 2251.
\textsuperscript{57} \textit{Id.} at 2252.
\textsuperscript{58} \textit{Id.}
B. Invalidity defense in Japanese infringement suit

1. Theories of invalidity defense before Kilby (-2000)

The Japanese Supreme Court repeatedly decided that courts cannot judge patents’ validity reasoning that an issued patent exists as long as the JPO does not declare its invalidity with its trial decision.\(^{59}\) Thus, until the Japanese Supreme Court changed the case law in Kilby in 2000, courts did not judge patents’ invalidity in infringement suits. This practice was established against the backdrop of a premise that authorities of the JPO and courts should be divided and JPO shall be in charge of patent rights’ validity and courts shall be in charge of the judgment regarding infringement.\(^{60,61}\) That is, it was thought to be appropriate that trial examiners in the JPO, who have expertise, to make a decision for patent invalidity.

The Japanese Patent Act Art. 168 (2) stipulates that “the court may, if it considers it necessary, suspend the court proceedings until [JPO’s] trial decision becomes final and binding.” Based on this provision, a court used to urge a defendant of infringement suit to request for JPO’s invalidation trial without judging a patent’s validity.

\(^{59}\) Takabe Makiko, Mukōriyū ga sonzai surukotoga akirakana tokkyoken ni motozuku sasitometou no seikyū to kenri no ranyō, Saikōsaibansho hanrē kaisetsu minji hen heisei 12 nendo jyō 418, 426-427, 456 (2003).

\(^{60}\) Id. at 427

\(^{61}\) Koike, supra note 11, at 265.
invalidity and suspend the litigation during the pending invalidation trial. However, this practice causes chronic litigation and a delay of dispute resolution because of the break of infringement suit during the pending trial in the JPO. Therefore, academics have proposed various theories which enable courts to prevent patentees from enforcing their rights when the patents were clearly invalid. Also, lower courts have sometimes ruled in similar way of these theories.

Among such theories, typical ones are (i) narrow interpretation theory, (ii) free technology counter claim theory, (iii) impossibility of defining technical scope theory, (iv) patent misuse theory, and (v) clear invalidation theory. First, narrow interpretation theory is the idea that a court can limit an invention’s technical scope when it lacks novelty. Second, free technology counter claim theory is the notion that if an alleged infringing device is publicly known at the time of filing, a patent cannot be enforced against the device because a patent right should be granted to an invention which exceeds the technological standard at the time of filing. Third, impossibility of defining technical scope theory is the idea that, if a patent lacks novelty, a court cannot judge how a patent’s claim should be amended and cannot help dismissing the complaint for infringement suit, although the patentee can amend the patent’s claim through the JPO’s trial for correction. Fourth, the patent misuse theory is one that enforcement based on a patent right which
lacks novelty is not permitted because such enforcement is deemed to be patent misuse.

The last one, which had not been adopted in real cases but proposed by some academics before *Kilby*, is clear invalidation theory. It is the theory that a patent should be invalid when it has some significant and clear defect. Nobuhito Nakayama wrote that, though the conditions for admitting the invalidity defense are controversial, the defense to invalid a patent should be admitted only when it was clearly invalid because there would be cases in which courts and the JPO’s trial panel would make different decisions if there was no such limitation.62 He also mentioned that the examination on invalidation was delicate from a technological viewpoint and it was heavily burdensome for district courts which did not have technical expertise to examine, for instance, whether a patent fulfilled the inventive step requirement.63 As examples when patents can be judged clearly invalid, Nakayama illustrated insufficient disclosure, misappropriated application, double patent, and a violation of a treaty.

2. Supreme Court’s decision in *Kilby* (2000)

As described above, the invalidation defense had not been accepted in Japanese infringement suits. In *Kilby*, however, the Japanese Supreme Court changed its case

62 NOBUHIRO NAKAYAMA, KOGYŌ SHOYUKENHŌ JYŌ TOKKYOHŌ 417-421 (Kōbundō, 2nd ed. 2000).
63 Id at 418-419.
law. The Kilby case was a declaratory judgment case in which the plaintiff, Fujitsu, asked the declaratory judgment that confirms the plaintiff was not infringing a patent of the defendant, Texas Instruments Inc., after the defendant insisted that a semiconductor device which the plaintiff manufactured belongs to the technical scope of the defendant’s invention. The invention was originally made by Nobel Prize winner Jack Kilby so this case is called the “Kilby patent case” named after the inventor’s name.

In its decision, the Supreme Court listed two grounds for finding the patent clearly invalid. First, although the patent application for the invention was a divisional application, the application did not satisfy the requirements for a divisional application and should have been refused under the Patent Act Art. 39 (1) as the double patent of the former parent patent application. Second, the invention in the application should have been refused under Patent Act Art. 29 (2) because the invention was substantially the same invention as the parent patent application’s invention which had been refused because it was obvious in light of publicly known invention.

Based on these reasons, the Court decided that it is inappropriate to enforce a patent seeking injunction or damage when the patent was clearly invalid and the JPO’s invalidation trial’s decision of the patent’s invalidation could be anticipated for sure. The

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Saikō Saibansho [Sup.Ct.] Apr. 11, 2000, Hei 10 (o) no. 364, SAIKO SAIBANSHO MINJI HANREISHŪ [MINSHU] 1368 (Japan).
Court also mentioned its decision of invalidation effected only the parties in the case and the patent was not invalidated in relation to the whole public because the Patent Act stipulated that a patent should have been invalidated by trial examiners in the JPO who had technical expertise when it had a reason for invalidation.65

The Court gave three reasons for its decision that a court could prevent a patent from enforcement when it was clearly invalid. First, if a patentee seeks an injunction or damage by enforcing a patent, which clearly includes a ground for invalidation, it unduly provides the patentee’s benefit and the defendant’s prejudice. Thus, that practice is contrary to the principle of equity. Second, dispute should be resolved as soon as possible and through an individual procedure. Thus it goes against the judicial economy if a defendant cannot defend himself by claiming that a plaintiff’s patent has a ground for invalidation until the JPO’s trial decision is made. Third, the Patent Act Art.168(2)66 cannot be read as it directs a court to suspend litigation procedure even when a patent clearly has a ground for invalidation and a decision for invalidation by the JPO is

65 TOKKOYOHO [Patent Law], Law No. 121 of 1959, art. 125, art. 178-6 (Nihon horei gaikokugo yaku deta beshu shisutemu), http://www.japaneselawtranslation.go.jp/law/detail/?ft=1&re=01&dn=1&co=01&x=0&y=0&ky=%E7%89%B9%E8%A8%B1%E6%B3%95&page=11 (Japan).
66 TOKKOYOHO [Patent Law], Law No. 121 of 1959, art. 168(2) (Nihon horei gaikokugo yaku deta beshu shisutemu), http://www.japaneselawtranslation.go.jp/law/detail/?ft=1&re=01&dn=1&co=01&x=0&y=0&ky=%E7%89%B9%E8%A8%B1%E6%B3%95&page=11 (Japan) (This provision stipulates that “Where an action is instituted or a motion for order of provisional seizure or order of provisional disposition is filed, the court may, if it considers it necessary, suspend the court proceedings until the trial decision becomes final and binding.”).
anticipated for sure.

For the above mentioned reasons, the Court stated that a court in a patent infringement case can judge whether or not a patent has a ground for invalidation or not even before the JPO’s decision for invalidation is made. It also ruled that when a court found a patent clearly invalid the patent right’s enforcement seeking an injunction or damage cannot be permitted without some particular circumstances because it is deemed to be a patent misuse. Therefore, it overruled the Court’s previous case law.

With regard to the “clearness requirement” in this decision, Makiko Takabe, who was a judicial research official of in the Kilby case, commented that the clearness requirement was necessary to keep the balance between the parties in a patent infringement suit because the patentee’s disadvantage would be too much if the clearness was not required and a patent was found to be unenforceable without an administrative authority’s judgment. 67 She pointed out that the clearness requirement was indispensable in order to prevent a variance between a court’s decision and the JPO’s decision and sustain legal stability. 68 Furthermore, she mentioned that the degree of conviction shall be higher when a court finds a patent clearly invalid than when it finds mere invalidity. 69

67 Takabe, Supra note 52, at 441.
68 Id. 441-442.
69 Id. 442.
This comment can be understood to mean that the clearness requirement in *Kilby* intended to make a higher standard of proof for patent invalidation just like the clear and convincing standard in a U.S. invalidation suit.

3. **Legislative Discussion on “Clearness” (2002-2004)**

Since *Kilby*, the court came to admit a defendant’s claim that a patentee’s right was clearly invalid and unenforceable. Subsequently, discussion toward legislation was raised in the government. The discussion was promoted by the Japanese pro-patent policy under the Koizumi administration. The Japanese government launched the Basic Law on Intellectual Property in 2002 and has developed the annual Strategy for Promoting Intellectual Property since 2003, which lists a concrete action plan for promoting the creation, protection, and utilization of intellectual property (IP). One of the purposes of the Strategy is the reform of IP litigation system. In the IP litigation committee in the Task Force on Judicial Reform was held from 2002 to 2004, the legislation of an invalidation defense in a patent infringement suit was discussed as one of the issues to enhance the IP litigation system in Japan.\(^70\)

The committee, which consisted of representatives from industry, government, government grants, and judges, worked together to address various issues related to IP litigation. The committee’s efforts led to the enactment of several important laws, including the Basic Law on Intellectual Property (2002), which established a framework for the enforcement of IP rights. The annual Strategy for Promoting Intellectual Property (2003 onwards) outlined concrete measures to enhance the protection and utilization of intellectual property, including improvements to the legal framework for IP disputes.

\(^70\) [http://www.kantei.go.jp/jp/sangi/sihou/kentoukai/11titeki.html](http://www.kantei.go.jp/jp/sangi/sihou/kentoukai/11titeki.html) (Shushō kantei chiteki zaissen soshō kentō kai)
academics, and the bar, discussed whether a court in an infringement suit can judge a patent’s invalidity only when the ground for invalidation is clear or it can judge regardless of the clearness of invalidation.\textsuperscript{71} It is interesting that members’ opinions were controversial. On one hand, members from industry and the bar claimed that the clearness was not needed. A member from industry also stated that the requirement of an invalidity’s clearness must be removed from the new provision in order to resolve a dispute through one proceedings of infringement suit without the JPO’s invalidation trial and to save litigation cost. Another member mentioned that instead of the JPO the courts should be responsible in an infringement suit for all kinds of invalidity claims and the requirement of clearness was unnecessary because the requirement was subjective and unforeseeable.

On the other hand a legal scholar and a judge claimed that the requirement of clearness were necessary. Nobuhiro Nakayama, an honorary professor of the University of Tokyo, explained that, ideally, all patent validity should be examined through the JPO’s invalidation procedure but it was not realistic since the JPO’s resources are limited. Thus, he stated that the requirement of clearness was necessary for a judgment in an infringement suit and also the JPO’s trial should examine cases which needed delicate

\textsuperscript{71} http://www.kantei.go.jp/jp/singi/sihou/kentoukai/titeki/dai9/9gijiroku.html (Shushō kantei chiteki zaisan soshō kentō kai dai 9 kai gijiroku)
judgment because he had some concern about the courts’ ability to investigate detailed patentability issues.

Moreover, the current Chief Judge in the Intellectual Property High Court, Judge Iimura, supported the necessity of invalidity’s clearness in the new provision and mentioned that a defendant’s burden should be made heavier in claiming invalidity by requiring the clearness so as to provide proper protection for a good invention. He explained that because it was the usual practice to write a patent claim as broad as possible and a patented claim sometimes included a small defect. He said that it was too strict that a patent of a good invention was judged as being unenforceable based on a small defect when he raised a suit against a copier. And he argued that, in such a case, a patentee should be granted an opportunity to amend the claim in the JPO by staying the litigation. In addition, he mentioned that dispute resolution through one process was not always the best way and even though the idea of “clearness” or “clear” was vague, vagueness was not always problematic.


After the discussion among the stake holders, the industry’s opinion was eventually adopted and the Patent Act Art. 104-3, which enable a court in an infringement
suit to invalidate a patent regardless of the invalidity’s clearness, was enacted in 2004 in order to establish a more effective dispute resolution system. It reads:

Where, in litigation concerning the infringement of a patent right or an exclusive license, the said patent is recognized as one that should be invalidated by [the JPO’s] trial for patent invalidation, the rights of the patentee or exclusive licensee may not be exercised against the adverse party.72

In Japan, the number of patent infringement suits has not exceed the number in the U.S. It is decreasing in the ten years since Kilby and the legislation of Art. 103-4.

Since the Kilby case, when courts discuss patents’ validity, they find the patent rights invalid in 74% of the cases.73 This data is discussed in more detail in Chapter V.

IV. Standard of Proof for Invalidation in the Appeal Procedures in Patent Offices

   A. Standard of Proof in Reexamination in the PTO

      Both in the U.S. and Japan, there are ways to invalidate patents through the appeal or trial procedures in the Patent Offices. The PTOs amended its appeal procedures

72 TOKKYOHÔ [Patent Law], Law No. 121 of 1959, art. 104-3 (Nihon hôrei gaikokugo yaku dêta bêsu shisutemu), http://www.japaneselawtranslation.go.jp/law/detail/?ft=1&re=01&dn=1&co=01&x=0&y=0&ky=%E7%89%B9%E8%A8%B1%E6%B3%95&page=11 (Japan).
73 Japan Patent Office, Supra note 7.
in September 2011 through the America Invents Act (AIA). Under AIA, the PTO has three kinds of appeal procedures, (1) *ex parte* reexamination, (2) post grant review, (3) *inter partes* review. To be brief, the invalidity of a patent is proven by the preponderance of the evidence standard. Thus, in contrast to the clear and convincing standard in an infringement suit, the standard of proof is lower in the patent invalidation procedures in the PTO. With regard to the standard of proof in the reexamination procedure, the Manual of Patent Examining Procedure (MPEP) instructs that a prima facie case of unpatentability is established under the preponderance of evidence standard.\(^74\) In addition, 35 U.S.C. § 316(e)\(^75\) and § 326(e)\(^76\) stipulates that “the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.”

In addition to the appeal procedure, the standard of proof in the patent examination procedure is also preponderance of the evidence. There are a few sections in

\(^74\) Manual of Patent Examining Procedure 2280, Information Material to Patentability in Reexamination Proceeding - 2200 Citation of Prior Art and Ex Parte Reexamination of Patents, http://www.uspto.gov/web/offices/pac/mpep/documents/2200_2280.htm (“A prima facie case of unpatentability of a claim pending in a reexamination proceeding is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.”).

\(^75\) 35 U.S.C. §316 (2002) (Conduct of inter partes review...)(e) EVIDENTIARY STANDARDS.—In an inter partes review instituted under this chapter, the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.).

\(^76\) 35 U.S.C. §326 (2012) (Conduct of post-grant review...)(e) EVIDENTIARY STANDARDS.—In a post-grant review instituted under this chapter, the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.).
the MPEP which gives the standard. The MPEP 706’s explanation is especially understandable. It states as follows:

An application should not be allowed, unless and until issues pertinent to patentability have been raised and resolved in the course of examination and prosecution, since otherwise the resultant patent would not justify the statutory presumption of validity (35 U.S.C. 282), nor would it “strictly adhere” to the requirements laid down by Congress in the 1952 Act as interpreted by the U.S. Supreme Court. The standard to be applied in all cases is the “preponderance of the evidence” test. In other words, an examiner should reject a claim if, in view of the prior art and evidence of record, it is more likely than not that the claim is unpatentable.

Put it all together, in the U.S., the standard of proof for proving patents’ invalidity varies from litigation in the court to the procedures in the PTO. In other words, examiners or appeal procedures’ parties can refuse or invalidate patents by a preponderance of the evidence standard but defendants in infringement suits must prove the invalidation by clear and convincing evidence. Therefore, the range of presumption of

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validity under §282 is limited to the litigation and patent examination. Prosecution through the PTO is outside of this range.

B. Standard of Proof in Invalidation Procedure in the JPO

In Japan, though we cannot find any instruction about the standard of proof in the JPO’s Trial Examination Procedure Manual, there are a few instructions for the standard of proof to examine patent application in the Examination Guidelines for Patent and Utility Model.\(^\text{79}\) For instance, in the context of an examination for the novelty requirement, it explains that when an examiner has a reasonable doubt that the claimed inventions would be identical with cited inventions, the examiner shall send a notice of refusal.\(^\text{80}\) In essence, the Guidelines instruct that if an examiner has a fairly reasonable doubt, the examiner can establish prima facie case and notify an applicant of the reason for refusal. Subsequently, when the examiner cannot dispel his or her suspicion even after receiving the applicant’s suspicion, the examiner can decide to refuse of the patent application. Thus, this standard of proof in the Japanese patent examination is likely to be

\(^{79}\) http://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/1312-002_e.htm (Examination Guidelines for Patent and Utility Model in Japan)

\(^{80}\) http://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/Guidelines/2_2.pdf.( Examination Guidelines for Patent and Utility Model in Japan, Chapter 2 Novelty and Inventive Step, 1.5.5.(“the examiners shall send a notice of the reasons for refusal for the lack of novelty when they have a reasonable doubt that the products in the claimed inventions and cited inventions are prima facie identical”).)
similar to a preponderance of the evidence standard in the PTO or at least the expression in the Japanese Examination Guidelines is lower than clear and convincing evidence in the U.S. infringement case.

V. Statistics of Patent Invalidation

As described above, the standards of proof for patent invalidation in the U.S. and Japan have different histories and different levels. In the U.S. courts, the standard is clear and convincing evidence and in Japanese court infringement suits, they can invalidate patents without clearness of a ground for invalidation. To consider the influence of the standards to practices in both jurisdictions, some statistics are shown below.

A. Winning rate in the U.S.

Although the standards of proof in the courts and the PTO are different in the U.S., some people may discuss that the influence of the clear and convincing evidence is vague because it is a mere broad guidance to factfinders. However, data shows that the patentees’ winning rate in infringement suits and reexamination procedures are different and patentees have a higher chance to win in the courts (See, Table 1 and Table 2). It is likely that the clear and convincing standard is well functioning in the U.S. courts. That is,
although it is a broad instruction to judges or the jury, it seems that the standard of proof somehow causes them to decide a patent’s validity more carefully and respectfully.

<table>
<thead>
<tr>
<th>Patente’s win rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jury trial</td>
</tr>
<tr>
<td>Bench trial</td>
</tr>
</tbody>
</table>

Table 1: Patentee’s win rate in trials  

<table>
<thead>
<tr>
<th></th>
<th>Ex Parte</th>
<th>Inter Partes</th>
</tr>
</thead>
<tbody>
<tr>
<td>All claims confirmed</td>
<td>23%</td>
<td>11%</td>
</tr>
<tr>
<td>All claims cancelled</td>
<td>11%</td>
<td>44%</td>
</tr>
<tr>
<td>Claims changes</td>
<td>66%</td>
<td>45%</td>
</tr>
</tbody>
</table>

Table 2: Results of *Ex Parte* and *Inter Partes* reexamination

B. Invalidation rate in Japan

As above pointed out, when Japanese district courts discuss patents’ validity, they find the patent rights invalid in 74% of cases. The win rate of patentees in infringement cases at district courts is only 20% or less (See, Table 3). This number is

much less than above described winning rate in the U.S., over 65%. Furthermore, the data in Table 1 shows the number of infringement cases in Japan is decreasing. It is likely that patentees are getting afraid of their patents’ being invalidated in infringement suits and hesitate to enforce their patent rights.

<table>
<thead>
<tr>
<th>year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>patentee lost</td>
<td>71 ( (79%) )</td>
<td>55 ( (84%) )</td>
<td>58 ( (83%) )</td>
<td>52 ( (80%) )</td>
<td>35 ( (88%) )</td>
<td>35 ( (70%) )</td>
<td>28 ( (76%) )</td>
<td>28 ( (76%) )</td>
<td>29 ( (81%) )</td>
</tr>
<tr>
<td>patentee partly won</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>patentee won</td>
<td>19 ( (21%) )</td>
<td>9 ( (14%) )</td>
<td>12 ( (17%) )</td>
<td>11 ( (20%) )</td>
<td>5 ( (12%) )</td>
<td>10 ( (20%) )</td>
<td>8 ( (22%) )</td>
<td>5 ( (14%) )</td>
<td>3 ( (8%) )</td>
</tr>
</tbody>
</table>

**Table 3: Results of patent infringement cases in Japanese district courts**  

At the same time, the number of patent applications filed with the JPO has been decreasing since 2006 (See, Table 4). It cannot be concluded that the decrease of patent application is caused by Article 103-4 because the number of patent application is mostly influenced by the economic climate and investment for research and development area. However, considering the decrease is not happening in other countries, applicants all over the world are more reluctant to file patent applications and obtain patent rights in Japan than before and it is likely that some incentives to have patent rights in Japan is needed to

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84 Id.
attract them. Stability of issued patents can be one of the incentives for international applicants.

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Applications</td>
<td>413,092</td>
<td>423,081</td>
<td>427,078</td>
<td>408,674</td>
<td>396,291</td>
<td>391,002</td>
<td>348,596</td>
<td>344,598</td>
</tr>
</tbody>
</table>

Table 4: Number of patent applications filed with the JPO

With regard to the JPO’s trial for patent invalidation procedure (See, Table 5), claim confirmation rate is around 40% and higher than that in the U.S. (23% in Ex Parte reexamination and 11% in Inter Partes reexamination). Also, it is higher than that in infringement cases in Japan (26%). It cannot be concluded that JPO’s trial procedure is more generous than the reexamination procedures in the U.S. or the infringement suits in Japan because it depends on a patented claim scope’s broadness. However, at least, patents cannot be invalidated easily in the JPO’s trial procedure.

According to the statistics of the JPO, there is a variance between Japanese district courts’ decision and the JPO trial panel’s decision even when the same evidence and prior art is evaluated. Among 54 cases from 2005 to 2009 where the same evidence

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was discussed, the decisions in the district courts and the JPO led to different conclusion in 10 cases (See, Table 6). This is 19% of the cases. Although Takabe, who was a judicial research official in the Kilby case, expected the clearness requirement was to be indispensable in order to prevent variance between a court’s decision and the JPO’s decision and sustain legal stability,\textsuperscript{86} there is actually variance between both entities’ decisions. One of the reasons for this variance is likely to be the lack of a clearness requirement in the Patent Act Art.104-3.

<table>
<thead>
<tr>
<th></th>
<th>All claims confirmed</th>
<th>All or part of claims cancelled</th>
<th>Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>92 (30%)</td>
<td>182 (59%)</td>
<td>36 (12%)</td>
</tr>
<tr>
<td>2009</td>
<td>123 (43%)</td>
<td>123 (43%)</td>
<td>37 (13%)</td>
</tr>
<tr>
<td>2010</td>
<td>129 (51%)</td>
<td>102 (40%)</td>
<td>23 (9%)</td>
</tr>
</tbody>
</table>

Table 5: Results of the trial for patent invalidation in JPO \textsuperscript{87}

<table>
<thead>
<tr>
<th>Decision in infringement suit: valid</th>
<th>JPO decision: valid</th>
<th>JPO decision: invalid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision in infringement suit: valid</td>
<td>3 (6%)</td>
<td>3 (6%)</td>
</tr>
<tr>
<td>Decision in infringement suit: invalid</td>
<td>7 (13%)</td>
<td>41 (76%)</td>
</tr>
</tbody>
</table>

Table 6: Decisions of district courts and JPO where evidences are same \textsuperscript{88}

\textsuperscript{86} Takabe, \textit{Supra} note 52, at 441-442.
\textsuperscript{87} See, Japan Patent Office, \textit{supra} note 73.
\textsuperscript{88} http://www.jpo.go.jp/shiryou/toushin/shingikai/pdf/tokkyo_shiryou028/01.pdf (Sangyō közō shingikai chiteki zaisann seisaku bukai dai 28 kai tokkyo seido shō iinkai haihu siryō, tokkyo no yükösei handan nitsuiteno “daburu torakku” noarikata nituite)
VI. Comparative Analysis

A. Purpose of Clear and Convincing Evidence Standard

As the U.S. Supreme Court in *RCA* interpreted, the purpose of the notion of the clear and convincing standard is “not defining a standard in terms of scientific accuracy or literal precision, but were offering counsel and suggestion to guide the course of judgment.”89 That is, the clear and convincing evidence is not an accurate yardstick but an instruction which makes factfinders more carefully investigate evidence and consider before concluding a patent is invalid. As this instruction is relatively vague, it is unlikely to be easy for a judge or jury to separate the heightened clear and convincing standard and the lower preponderance of the evidence standard. Similar concern was raised in the legislative discussion for Patent Act 103-4 in Japan. As above mentioned, an opinion in the Japanese legislation committee pointed out that the requirement of clearness was subjective and vague so the requirement would make a result of infringement suit unforeseeable.

Nevertheless, why have the courts or Congress in the U.S. consistently supported the heightened standard of proof? One of the reasons, which was common and explained

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by Judge Rich in *American Hoist*, is that the presumption of validity should be respected because a patent is issued by the PTO, “a qualified government agency presumed to have properly done its job, which includes one or more examiners who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art and whose duty it is to issue only valid patents.”\(^90\)

However, the presumption of validity and the clear and convincing evidence standard are not considered in the PTO’s appeal procedure but only in courts. Even though the PTO’s reexamination or *inter partes* review procedure is to examine issued patents by the PTO, the evidence is evaluated by the preponderance of the evidence standard instead of the clear and convincing standard. Considering the difference between the heightened standard of proof in an infringement suit and the preponderance of the evidence standard in the PTO’s appeal procedure, the clear and convincing standard is likely to be established based on not only the presumed validity of the PTO examiner’s decision, but also the difficulty for the courts to evaluate invalidity. Especially in the U.S. patent litigation which includes the jury as a factfinder in addition to judges, it seems to be harder for them to conduct the same technical evaluation of an invention as the PTO examiner does because the factfinders possibly don’t have necessary knowledge to

evaluate a patent’s invalidity.

Factfinders in patent infringement suit are required to understand two kinds of technical background, namely, legal background on patent law and scientific background on an invention. First, they should understand the legal requirements for patentability which an invention shall be satisfied with. To evaluate patent eligibility\textsuperscript{91}, novelty\textsuperscript{92}, nonobviousness\textsuperscript{93}, or the written description requirement\textsuperscript{94} does not seem easily understandable even for judges because they are not only focusing on patent litigation but also dealing with various kinds of litigations other than patent litigation.

Second, factfinders need scientific knowledge to understand a background, mechanism, necessity, and advantage of an invention and difficulty to create the invention. Most of the judges are not likely to have a technical or scientific background. Also, every jury does not always have a background in technology or science and even if a jury has some scientific expertise, an invention’s technical field is possibly different from the field which the jury is familiar with. Even in the PTO, an examiner covers only a small technological area and he or she examines only the patent applications which belong to the small area since nowadays the technology or science has been

\textsuperscript{91} 35 U.S.C. 101 (1952).
\textsuperscript{92} 35 U.S.C. 102 (2002).
\textsuperscript{94} 35 U.S.C. 112 (1975).
segmentalized and it is more difficult even for a patent examiner to understand inventions in unfamiliar technical fields.

Similar concern is also raised against Japanese patent litigation. Koike points out that it is a heavily burdensome task for a court in an infringement suit to evaluate nonobviousness rather than novelty even though courts recently have some experts or advisers with whom they can consult.  

He also wrote a patent litigation lawyer without scientific background usually ask for an advice from a patent attorney with technical knowledge when they consider nonobviousness evaluating plural prior arts.

In sum, although the clear and convincing standard doesn’t provide scientific accuracy or literal precision, it seems to be practically required for a court to use heightened standard of proof to evaluate a patent’s invalidity more properly considering the factfinders’ limited resource and the PTO’s expertise.

**B. Policy Implication behind Heightened Standard**

The cases in the U.S. teach us that the clear and convincing evidence is maintained even when new relevant evidence which is not considered by the PTO, is

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95 Yutaka Koike, Tokkyo hou 104 jyo no 3 no seitei ni itaru haikei to sono unyou ni tsuite, 34 nihon kogyosyooyuukennhougakkai nenpou. 263, 263-265 (2010).
96 Koike, *supra* note 11, at 263-265.
provided by a defendant in an infringement suit. At the same time courts have held a consistent opinion that the new evidence eliminate or reduce the element of deference to the PTO and discharge a defendant’s burden although “neither shifting nor lightning it or changing the standard of proof.”97 Again, this is likely to mean that the courts apply heightened standard of proof not only because the PTO has expertise but also because factfinders have difficulty examining the patentability and should be more careful in the examination.

In addition to the reasons mentioned above, there must be some policy implication in the courts’ persistent of the clear and convincing evidence. In Microsoft v. i4i,98 the parties and their amici argued about this. Microsoft insisted that the clear and convincing standard helped bad patents survive invalidity challenges and hinder innovation. On the other hand, i4i refuted that “the heightened standard of proof is an essential component of the patent ‘bargain’”99 and “the incentives for inventors to disclose their innovations to the public in exchange for patent protection.” Comparing both opinions, i4i’s opinion seems more trustworthy because Microsoft, in fact, earns

98 Microsoft Corp. v. i4i Limited Partnership, et al., 131 S.Ct. 2238, 2243 (2011).
huge amount of revenue from patent transaction\textsuperscript{100} these days and the company files a large number of patent applications.\textsuperscript{101} Microsoft itself must need stability of its own patents by clear and convincing evidence though, just as every patent holder, even if it wants to decrease the standard of proof for invalidating other companies’ patents.

As i4i justified, the clear and convincing standard lessens patent holders’ concern by giving some caution to courts in infringement suits and making patents more stable than being invalidated by a preponderance of evidence standard. That incentivizes inventors, patent applicants, and patent holders and eventually contributes to promoting innovation.


The benefit of a stable and predictable patent system is required by patent users. It is natural that patent holders don’t want their patents to be invalidated and we can also presume the need from patent users when considering current situation in Japan. As observed in Chapter III. B. 4, in Japan, the patentee’s winning rate in an infringement suit


is very low, the number of infringement suits is smaller, and the number of patent applications filed with the JPO is decreasing. These facts suggest that users don’t regard Japan as a suitable place to enforce patent rights after encountering the low winning rate. Comparing this situation with the U.S. patent system, the U.S. patent system which protect patented inventions by a clear and convincing evidence standard is likely to be more attractive than the Japanese patent system even though there are concerns about non practical entities or bad patents in the U.S.

When Patent Act Art.104-3 was discussed and legislated under the government’s strategy to promote intellectual properties, the purpose was to make the patent litigation system more effective and flexible. However, on the contrary, the patent holders seem to be intimidated as a result of the legislation. The Japanese patent system needs reform to enhance its stability and patent’s enforceability. Thus, for strengthening the Japanese patent system, we need to discuss once again whether heightened standard for proving patent invalidation is needed in Patent Act Art. 104-3, which is applied in the U.S. patent litigation system and is also consistent to the decision in the Kilby case.

However, even if such amendment is possible, it is uncertain that merely adding a clearness requirement in the Patent Act Art. 104-3 works well because, as pointed out in legislation discussion of Art. 104-3, there is criticism that a clearness requirement is
subjective and vague. Regarding this issue, I would make two proposals. First, as Tamura proposed, that presumption should be stipulated in order to sustain legal stability where the standard of proof is heightened upon a request of policy, the Japanese Patent Act should reinforce its stability by legislating a presumption of validity for issued patents as a basis of a heightened standard of proof just like 35 U.S.C. 282 in the U.S. patent law.

Second, I would propose to limit the types of grounds for patent invalidation in infringement cases. Several options have been proposed by scholars and lawyers with regard to limiting courts’ ability to invalidate patents in infringement cases. Among these options, considering courts’ limited resource to make technological evaluation on complicated inventions as discussed above, removing the inventive step or nonobviousness issues from grounds for invalidation under Act 104-3 is a possible option, which is also consistent with what users are seeking. It is time for the Japanese government to more innovatively and proactively discuss how to improve its patent system’s stability and how to incentivize inventors and applicants including enhancement

102 Tamura, supra note 23.
104 See, Koike, supra note 11, at 274-275 (pointing out that it is burdensome for a court to judge inventive step and it is relatively easy to judge novelty). See also, Nihon Benrishikai Kinki Shibu, supra note 12, at 83 (insisting that a court should be more careful in judging inventive step).
D. Harmonization of Patent System

Lastly, applying clear and convincing evidence in the Japanese patent system is also beneficial from the perspective of the patent system’s harmonization between the U.S. and Japan. These days, more and more users obtain a patent worldwide and enforce the patent in several jurisdictions in parallel. Thus, it is required by global patent holders that major jurisdictions harmonize their patent litigation system as close by as possible.

To adopt heightened standard of proof in the Japanese patent litigation system is also beneficial in this regard.

VII. Conclusion

After comparing the history of the standard of proof for a patent’s invalidity in the U.S. and the legislative history of the Japanese Patent Act Art.104-3, requirement of clear and convincing evidence seems to have a large effect on the stability and patent system’s reliability for patent holders and other stakeholders.

The U.S. Supreme Court’s decision in Microsoft v. i4i has encouraged the patent holders to enforce their patents and inventors to make innovation. The Japanese
patent system can learn from this decision and should review the validity of its legislation in Art.104-3 from the perspective of whether the provision needs to be added a clear and convincing standard of proof and, as a basis of the heightened standard, whether presumption of a patents’ validity is required in the Japanese Patent Act.