13 A Comparative Appraisal of Patent Invalidation Processes in Japan(*1)

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The experience with a dual track invalidation system in Japan involving both the JPO and the district courts demonstrates that both invalidation schemes are complementary and serve to increase the universe of issued patents that are challenged by third parties. The specific differences between the two invalidation options that are outlined in detail in this work indicate that while a patent may be challenged in both venues in the vast majority of cases, there are sound economic and institutional reasons for maintaining (or creating) a patent system with the ability to raise patent validity challenges in both the Patent Office and in the courts.

I Introduction

It is a richly satisfying time to be studying patent reform and patent institutional reform in both the United States and in Japan. In the U.S., we have the U.S. Patent and Trademark Office (USPTO)'s 21st century Strategic Plan proposing various patent reform measures, and the Federal Trade Commission (FTC) recently held extensive hearings on Competition and Patent Law and Policy and produced a detailed report outlining many areas for patent reform. Both efforts conclude that serious consideration must be given to post-grant administrative procedures in the USPTO to challenge issued patents.

In Japan, there are efforts to embark on a pro-patent policy, and we have the creation of a Strategic Program for the Creation, Protection and Exploitation of Intellectual Property with a IP Policy Headquarters which has outlined its set of new initiatives. In addition, after the Kilby decision by the Japanese Supreme Court in April 2000, we now have a dual track invalidation system in Japan – invalidation of patents through invalidation trials in the Japanese Patent Office (JPO) and invalidation by the District Courts through the so-called "abuse of patent right" in cases where patents that are obviously invalid are asserted in litigation.(*2) Finally, we have the merger of oppositions and trials for invalidation in the JPO starting from this year. In short, invalidation procedures in Patent Offices or in the courts are a hot topic and worthy of careful consideration and our best efforts.

In the U.S., scholars and commentators have long complained about the performance of the U.S. Patent & Trademark Office.(*3) Much of this criticism is directed at the quality of the patents that are granted by the Patent Office. It is widely suggested that the Patent Office issues patents that are either "facially" invalid or overbroad when compared to the actual innovation disclosed in the patent application. In other words, the Patent Office cannot accurately determine the scope of information that is already in the public domain or is the subject of other patents, i.e., the relevant prior art, when examining patent applications. This is particularly true in areas such as computer software where the relevant prior art is found, not in other patents, but rather in publications, such as industry software handbooks and open source

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(*2) The term "abuse of patent right" is not similar or related to the patent misuse doctrine in the U.S. This term simply refers to patent invalidation in the courts in Japan. In this context, the term "invalidation" is not used because patent validity is purely a matter for the JPO under Japanese Patent Law. Hence, the Japanese Supreme Court in the Kilby decision chose to refer to patent invalidation by the courts as arising from an abuse of the patent right that required correction by the courts.

(*3) *See, e.g.,* Robert P. Merges, *As Many As Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform,* 14 BERKELEY TECH. L.J. 577 (1999); Mark A. Lemley, *Rational Ignorance at the Patent Office,* 95 NW. L. REV. 4, 1495 (2001); John R. Thomas, *Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties,* 2001 U. ILL. L. REV. 305, 316-22 (2001); Lawrence Lessig, *The Problem with Patents,* Industry Standard, Apr. 23, 1999, *available at* http://www.thestandard.com/article/display/0,1151,4296,00.html; Gregory Aharonian, *Patenting the Internet, Electronic Commerce, Bioinformatics,* at http://www.bustpatents.com/index.html; Carol Pickering, *Patently Absurd,* Business2.com, May 29, 2001 at 28; James Gleick, *Patently Absurd,* N.Y. TIMES MAGAZINE, Mar. 12, 2000, at 44.

software.(*4)

Others note that the Patent Office is being asked to perform miracles since it operates under significant budgetary constraints.(*5) In the patent community, it is well-known that the amount of time spent by the Patent Office in examining a patent application from initial examination to issuance is approximately the same amount of time that an associate attorney may spent in the first week of a patent litigation digging up relevant prior art.(*6) As a result, even doubling the amount of time spent by a typical patent examiner is insignificant compared to the time devoted to studying the prior art when the patent is enforced through litigation, unless the quality of information made available to the patent examiner from third parties is improved.

It is clear that information regarding the relevant prior art with respect to any patent application is most likely to be known only to the patentee and his competitors. Hence, any Patent Office is unlikely to be well informed about the relevant prior art, and therefore, there is an asymmetry between the Patent Office and the patentee's information. Consequently, in many cases, especially those areas with significant non-patent prior art, it is simply not a matter of giving the Patent Office more resources to conduct a more thorough prior art search.(*7) Indeed, the patent examiner may not be aware of where to discover the most relevant prior art, once she has to go beyond traditional patent databases. Based on the foregoing analyses emphasizing the localized nature of relevant technical knowledge, it is not at all surprising that the Patent Office grants invalid or overly broad patents.

Moreover, the social costs of improvidently granted patents are numerous.(*8) They include the following: (a) opportunistic licensing royalties/fees (including cross-licensing) collected from licensors who may rationally settle for a license instead of resorting to protracted litigation; (b) the disincentive to downstream innovation, *i.e.,* the social cost of abandoned research activities by the patentee's competitors who may fear infringement; (c) the cost of wasteful designing-around activities by competitors; (d) the cost of rent-seekers, such as venture capital financiers, who may choose to invest in start-up companies based on bad patents, thereby taking away resources from genuine entrepreneurs; (e) the social cost of supra-competitive pricing, in the absence of non-infringing product substitutes, based on bad patents; and (f) the filing and prosecution costs and the subsequent cost of having the courts fix the Patent Office's oversights.

Without significant empirical research,(*9) it is difficult to quantify meaningfully the magnitude of the total social costs of bad patents. Even the more simple category of estimating unnecessary licensing fees is difficult since the value of a license is dependent on factors such as flat payments, reasonable royalties for direct use and subsequent derivative use of the patented technology, and grant-back clauses.(*10) Nevertheless, momentarily setting aside the diminution in public confidence about the integrity of an administrative system that issues bad patents, in a capitalist economy grounded on efficient uses of resources and strong property rights, improvidently granting extravagant patent rights presents a real concern that is worthy of careful consideration. Moreover, the theoretical approach to eliminating the social costs of bad patents is to set the marginal investment in information gathering by the Patent Office to be equal to the marginal reduction in social cost from granting better patents.

In this work, I focus on understanding how third parties such as the patentees' competitors and other improvers can be brought into the patent process thereby reducing the informational asymmetry between the patentee and the Patent

(*4) The problem of identifying material prior art is particularly difficult in the area of computer software. *See, e.g.,* Julie E. Cohen, *Reverse Engineering and the Rise of Electronic Vigilantism: Intellectual Property Implications of 'Lock-Out' Technologies,* 68 S. CAL. L. REV. 1091 (1995) (noting that "in the field of computers and computer programs, much that qualifies as prior art lies outside the areas in which the PTO has traditionally looked – previously issued patents and previous scholarly publications."). For a good general discussion of the problem, *see* MERGES, MENELL & LEMLEY, INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE, 1045-47 (2d ed. 2000).

(*5) Pickering, *supra* note 3, at 44; Arti K. Rai, *Addressing the Patent Gold Rush: The Role of Deference to PTO Patent Denials,* 2 WASH. U. J.L. & POL'Y 199, 218 (2000) (noting that one straightforward patent reform proposal involves increasing the number and quality of patent examiners).

(*6) Lemley, *supra* note 3, at 1500 (noting that, depending on the art unit, a patent examiner may spend a total of eight to thirty-two hours on a patent application during its two to three year prosecution period).

(*7) Mark Lemley comes to the same conclusion but under a different rationale, *see* Lemley, *supra* note 3, at 1508-11.

(*8) *See, e.g.,* Merges, *supra* note 3, at 595, for a list of the costs of bad patents.

(*9) There is a significant and burgeoning body of empirical work in the patent area. *See, e.g.,* John R. Allison & Mark A. Lemley, *Who's Patenting What? An Empirical Exploration of Patent Prosecution,* 53 VAND. L. REV. 2099 (2000); Jean O. Lanjouw & Mark Schankerman, *Characteristics of Patent Litigation: A Window on Competition,* 32 RAND J. ECON. 129 (2001); Josh Lerner, *Patenting in the Shadow of Competition,* 38 J.L. & ECON. 463 (1995); Kimberly A. Moore, *Judges, Juries, and Patent Cases – An Empirical Peek Inside the Black Box,* 99 MICH. L. REV. 365 (2000).

(*10) Mark Lemley attempts to tackle this issue and estimates the maximum social cost of licensing holdups to be $443 million, and hence, these social costs are smaller than the annual patent prosecution costs. See Lemley, supra note 3 at 1515-19.

Office, and how the patent system can be re-engineered to enable effective third-party challenges to issued patents. In addition, I critically examine the patent invalidation systems in the Japanese Patent Office and the Japanese courts.

Ⅱ Patent Invalidation Processes in the JPO and the Japanese Courts

In this section, I will present a comparative assessment of the patent invalidation procedures adopted by the JPO and the "abuse of patent right" process in the Japanese District Courts. Table I below summarizes the key differences and highlights the similarities as well.

Table I: A Comparison of Patent Invalidation Procedures in the Japanese Patent Office (JPO) and the District Courts in Japan

	Trial for Invalidationin JPO	"Abuse of Patent Right"in District Court
Who Can Raise Invalidation Claims	Anyone and at anytime	Only in a infringement action or declaratory judgment action
Grounds for Invalidation	JPO seen to be better at dealing with patentability standards that are familiar to them	All grounds available
Standard for Invalidation	Basic patentability standards	The invalidation standard may be theoretically higher requiring "obvious invalidity," but practically, the standard may not be very different from the JPO
Cost of Invalidation Process	Relatively low	Significantly higher
Duration for Invalidation Process	About one year	About 15-16 months, but the time period is going down
Evidence Considered	Evidence presented by the parties, but Trial Examiner can uncover their own evidence by conducting own search	What is presented by the parties
Effect of Judgment	Judgment is effective against the public at large, and the scope of protection can be made narrower by issuing newer claims	Judgment binding on the parties only, and narrower claims are not issued by the court
Decision-Maker	3 Trial Examiner panel or 5 Trial Examiner panel	District Court Judge with Technical Assistants
Appeal of Judgment	Can appeal to the High Court	Can appeal to the High Court
Damages	Cannot award damages	Can award damages

There are several points in the comparison table shown above that are worthy of careful consideration and emphasis. The JPO trial for invalidation is relatively low cost process and the Japan Patent Attorneys Association's survey in 2003 reports an average cost of ¥377,534 (about $3,500) on a per claim basis for a trial for invalidation in the JPO with over 75% of those responding to the survey reporting an average fee in the range from ¥360,000 to ¥420,000. One can get some insight into what a patent trial is likely to cost in Japan based on the Civil Litigation Lawyers' Fees Guidelines that are put forth by the Japan Federation of Bar Associations (Nichibenren). They suggest that, if the plaintiff's demand for damages is in the ¥30-300 million range, then the starting fee is [3% + ¥690,000] and the success fee is [6% + ¥1,380,000], which amounts to about $325,000 in lawyers' fees for a successful patent lawsuit involving about $3,000,000 in damages. In sum, the typical cost for a patent trial in Japanese costs can be as much as hundred times more expensive than a trial for invalidation in the JPO.

The JPO trial for invalidation is open to anyone at anytime as compared to a court process which comes about in the context of a infringement trial or declaratory judgment action. With respect to the grounds for challenging an issued patent, there is much greater confidence in the JPO's ability to handle issues related to patentability such as

novelty, lack of inventive step and industrial applicability—matters that are routinely dealt with by patent examiners, as opposed to other invalidation based on prior sales or public use and the like involving forms of evidence different from prior art patents or publications. In addition, the JPO panel is not limited to evidence that is presented to it by the parties as the trial examiners could conduct their own prior art search, if they deem it necessary.

The duration of a typical patent trial in Japan is currently about 15-16 months, but the durations are decreasing are heading towards one year, and hence, these times are comparable to the one year duration for a trial for invalidation in the JPO.

There are also other procedural differences such the effect of the judgment being different in the two cases since the court decision is binding on just the parties whereas patent invalidation in the JPO is effective against the public at large. In addition, the decision maker in the JPO may be a panel of trial examiners instead of a single district court judge. The District Court judge is assisted in his evaluations by a technical assistant who is typically a former trial examiner in the JPO and who has been sent to the courts by the JPO for a period of about three years. This practice does not appear to pose any separation of powers concerns in Japan since the distinction between the public servant versus private attorney in Japan seems to be more important to preserve than any institutional separation between the governmental agencies and the courts. Finally, judgments from both the JPO and the District Court can be appealed to the High Court for appellate review.

There does not appear to be a mechanism in place to prevent repeated filings of trials for invalidation in the JPO by challengers who wish to simply present repeated claims in the hope of successfully invalidating one or more claims in a patent. In the future, it may be worthwhile to consider mechanisms or schemes to create an incentive for a challenger to present all his claims in one trial for invalidation and to avoid repeated challenges based on "new" prior art that is merely cumulative compared to what was presented in an earlier challenge.

Tables II and III summarize the empirical data from having a dual invalidation system in the JPO and the district courts since April 2000 to the present day. We can see that in 69% of all patent lawsuits in district court, invalidity was an issue raised in either the JPO or the district court or in both forums. Of this 69%, only in 7% of the cases, patent invalidation was raised only at the district court. Therefore, in (62/69)%, *i.e.,* in about 90% of all cases involving patent invalidity, a trial for invalidation was initiated in the JPO. In addition, in about 48% of all cases involving patent invalidity claims, the invalidity issues were presented to *both* the JPO and the district court. As noted above, in only about 10% (7/69) of all the cases involving patent invalidity, was the invalidation challenge presented exclusively to the District Court. The data demonstrates that even with the more recent possibility of court invalidation challenges, the trial for invalidation is seen to be reliable and efficient way to challenge patents in Japan.

Table III examines the consistency in outcomes when the same patents are challenged in both the JPO and the District Court over a three year period from April 2000 to November 2003. In the vast majority of cases (about 80%), both the JPO and the District Court are in agreement. In about 19.7% of the cases, the JPO and the District Court reach different outcomes on judgments regarding the validity of the same patent claims. While this difference of judgment and opinion may be significant, both decisions can be appealed to the High Court, and hence, the two outcomes can be reconciled at the appellate level. In addition, this difference of opinion in about 20% of the cases is roughly comparable to the percentage of reversals of the JPO in appeals to the High Court (about 18.2%). In short, the different outcomes in about 20% of the cases is understandable and may be attributable to the structural and institutional differences between the Patent Office and a court in examining the evidence that is presented. This result also suggests that both institutions are acting quite prudently in resolving patent validity issues.

Table II: The Different Categories of Actions taken in 270 District Court Patent Cases with respect to Invalidation Trials in the JPO from April 2000 to November 2002

31 % (84 cases) – Infringement action only in District Court
33% – Invalidation Trial in JPO & "Abuse of Patent Right" claim in District Court
29% – Invalidation Trial only in JPO
7% – "Abuse of Patent Right" only in District Court

Table III: Comparison of 71 JPO and District Court Decisions Regarding Patent Invalidity from April 2000 to November 2003

		District Court	
		Valid	Invalid
JPO	Valid	18	5
	Invalid	9	39

Ⅲ Summary

The experience with a dual track invalidation system in Japan involving both the JPO and the district courts demonstrates that both invalidation schemes are complementary and serve to increase the universe of issued patents that are challenged by third parties. The specific differences between the two invalidation options that are outlined in detail in this work indicate that while a patent may be challenged in both venues in the vast majority of cases, there are sound economic and institutional reasons for maintaining (or creating) a patent system with the ability to raise patent validity challenges in both the Patent Office and in the courts.


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