

# FTC/DOJ HEARINGS ON COMPETITION AND INTELLECTUAL PROPERTY LAW IN THE KNOWLEDGE-BASED ECONOMY

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(Testimony Notes for July 11, 2002 FTC/DOJ Hearings)

## INNOVATION AND STANDARDS FOR PATENTABILITY

The standards for patentability prescribed by the Supreme Court in Graham v. John Deere, U.S. v. Adams, and subsequent Supreme Court cases, and followed by the regional courts of appeals prior to the advent of the Federal Circuit, have not been followed by the Federal Circuit. Rather, the standards for patentability applied by the Federal Circuit have been lowered and made less certain than those prescribed by the Supreme Court and previously followed by the regional courts of appeals.

The regional courts of appeals, following the higher and more certain Supreme Court standards, had found about 2/3 of litigated patents invalid. The Federal Circuit, however, applying its lowered and less certain standards for patentability, has, in recent years, found about 60-65% of litigated patents to be valid, and only about 35-40% to be invalid, notwithstanding that the application acceptance rate in the PTO, corrected for continuing applications, has risen from about 60-70% prior to the Federal Circuit to over 90% in 2000.<sup>1</sup>

A common, perhaps universal, strategy for innovators is to seek patents on their patentable inventions they expect to use commercially so as to preempt competitors or others from obtaining patents on such inventions. To the extent the innovators are successful in getting such patents they prevent their competitors or others from doing so, and enhance their freedom to go forward and commercialize their own work without interference from others' patents.

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<sup>1</sup> These PTO acceptance numbers are reported in the forthcoming paper *Continuing Patent Applications and Performance of the U.S. Patent and Trademark Office – Extended*, by Cecil D. Quillen, Jr., Ogden H. Webster, and Richard Eichmann, to be published in the August 2002 issue of The Federal Circuit Bar Journal, and were set forth in charts included with my March 19, 2002 testimony in these Hearings. For information on acceptance rates at the USPTO for its fiscal years 1993-1998, see Quillen and Webster, *Continuing Patent Applications and Performance of the U.S. Patent Office*, Federal Circuit Bar Journal, Vol. 11, No. 1 (August 2001), pp. 1-21, available from the Public Comments section of the FTC/DOJ IP Hearings Website.

The consequence of the Federal Circuit's lowered and less certain standards is that innovators can no longer rely on the courts to protect them from patent harm. Instead, because of the lowered and less certain standards, innovators must engage in "self help" and themselves file more patent applications than they otherwise would, and bear the additional costs of doing so, in their effort to avoid patent harm by preempting others who might seek to obtain patents that could frustrate their ability to commercialize their innovations.<sup>2</sup>

The effect on application filings has been dramatic. Prior to the Federal Circuit in 1982 total U.S. application filings had been level at about 100,000 per year for several years, of which about 85-90,000 were original applications that did not claim the filing date of an earlier U.S. patent application, and the remainder, about 10-15,000 were continuing applications. The numbers began rising following formation of the Federal Circuit, and by 2000 the total number of application filings had about tripled to nearly 300,000 per year. The number of original applications in 2000 was nearly 230,000.<sup>3</sup>

Over this same period, i.e., from the advent of the Federal Circuit in 1982 to 2000, the acceptance rate at the PTO, corrected for continuing applications, rose from about 60-70% prior to the Federal Circuit to more than 90% in 2000. Because of the increased filings in response to the Federal Circuit's lowered and less certain standards, and the declining rigor of PTO examination, the number of applications allowed and patents granted has grown from about 60,000 per year in 1982, prior to the Federal Circuit, to more than 165,000 in 2000.<sup>4</sup>

This drastic increase in the number of patents granted is the "patent thicket" described by Carl Shapiro and referred to by Chairman Muris in his November 15, 2001 ABA speech.<sup>5</sup> And it is this "patent thicket" through which innovators must "hack their way" in order to commercialize their innovations.

The Federal Circuit's lowered and less certain standards, and the declining rigor of PTO examinations, have caused increased costs for innovators, both increased out-of-pocket costs for more filings, prosecutions, litigations, licensing, etc., and increased cost of capital for innovation investments because of the increased uncertainties. The almost certain result of increased costs for innovators and innovation investments is that we have less innovation and it costs us more.

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<sup>2</sup> The reasoning process that compels innovators to file more preemptive patent applications as a consequence of the lowered standards is depicted in Charts 1 and 2 accompanying my 1992 ABA presentation *Innovation and the United States Patent System Today*, available from the Public Comments section of the website for these FTC/DOJ IP Hearings.

<sup>3</sup> Charts depicting these application filings are included with my March 19, 2002 testimony in these Hearings. The numbers (and charts) are in the forthcoming *Continuing Patent Applications and Performance of the U.S. Patent and Trademark Office – Extended*. See footnote 1.

<sup>4</sup> Charts depicting these application allowances and patent grants are also included with my March 19, 2002 testimony. The numbers (and charts) are also in the forthcoming *Continuing Patent Applications and Performance of the U.S. Patent and Trademark Office – Extended*. See footnote 1.

<sup>5</sup> Chairman Muris' speech is available from the website for these FTC/DOJ IP Hearings.

Restoration of the higher and more certain standards for patentability that existed before the advent of the Federal Circuit so that innovators can once again rely on the courts to protect them from patent harm is the key to undoing the damage caused by the Federal Circuit's lowered and less certain standards for patentability. And the quickest way to do that is to restore appellate jurisdiction in patent infringement cases to the regional courts of appeals, which can be expected to adhere to the higher and more certain standards for patentability prescribed by the Supreme Court and previously followed by them.<sup>6</sup> It would also be useful to abolish entirely the nonstatutory secondary factors as potential indicators of patentability so as to eliminate a major source of uncertainty, and to simplify and reduce the costs of any patent litigation that might occur.

Restoration of appellate jurisdiction in patent infringement cases to the regional courts of appeals would have the additional advantage of returning our patent system to the same self-correcting structure that governs other areas of American law in which neither a regional court of appeals nor the district courts within that region are constrained by stare decisis by a decision of another regional court of appeals, and issues which have been decided by one of the regional courts of appeals can be reconsidered on their merits when they subsequently arise in another region. Eventually, if the regional circuit courts disagree, the Supreme Court can take a case that presents the issue as to which the circuits have split, and resolve the matter confident that all sides of the issue have been debated time and again, and that it will hear the most compelling arguments on both sides of the question, and have a reasonable opportunity for reaching the right result.

A second part of the solution is to insist that the PTO adhere to the restored higher standards for patentability. This will necessarily require abolition of continuing applications (except possibly for divisional applications filed pursuant to a requirement for restriction, but only to the extent required by international treaties). As a consequence patent applicants would no longer be able to avoid final decisions as to the patentability of their applications and restart the examination process all over again by filing a new application claiming benefit of the filing date of an earlier application, and the Patent Office would no longer be unable to rid itself of determined applicants except by allowing their applications, which should enhance the quality of issued patents. Such abolition would have the additional advantage of eliminating the rework that applicants impose on the PTO through continuing applications (about 1/4 of the PTO's current examination workload) and enable the PTO to apply the freed-up examination resources to the more thorough examination of original applications, which should also enhance the quality of issued patents.<sup>7</sup>

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<sup>6</sup> Chester Carlson and the development and commercialization of plain paper xerographic copying were invoked numerous times during the July 10-11, 2002 Hearings on behalf of preserving the current status quo for the patent system. It is worth remembering that the invention, patenting, and commercialization of xerography all took place before the advent of the Federal Circuit and during the era when standards for patentability were high, and appeals from district court decisions in patent infringement cases were heard by the regional courts of appeals. One must wonder whether Mr. Carlson and Haloid could have "hacked their way" through today's "patent thicket."

<sup>7</sup> A comprehensive proposal for restoration and reform of the U.S. patent system is set forth in my paper, *Proposal for the Simplification and Reform of the United States Patent System*, 21 AIPLA Q. J. 189 (1993), available from the Public Comments section of the website for these FTC/DOJ IP Hearings.

## **PATENT DAMAGES AND APPELLATE CORRECTION**

Dr. Vincent E. O'Brien, in his article *Economics and Key Patent Damages Cases*, published in the University of Baltimore Intellectual Property Law Journal<sup>8</sup> and available from the Comments Section of the website for these Hearings, points out that much of Federal Circuit damages law is based on unsound economic principles and frequently results in excessive damages awards. Dr. O'Brien notes that the possibility of excessive damages leads to more litigation than would otherwise be the case, and that would-be innovators may refrain from commercializing their innovations for fear of the possibility of excessive damages, or may even pay license fees under questionable patents to avoid such a possibility.

Because there is no forum in which alternative views can develop free from the constraints of stare decisis, the likelihood for correction of the economically unsound Federal Circuit damages law is quite low.<sup>9</sup> Restoration of appellate jurisdiction in patent cases to the regional courts of appeals, which have more experience in the broader issues of economic policy than the Federal Circuit, would enable the development of patent damages law free of the constraints of stare decisis, which should, in due course, enable the courts, including the Supreme Court, if necessary, to conform patent damages law to sound economic principles.

## **THE PATENT THICKET AND THE PATENT INCENTIVE**

One possible consequence of the thickening of the "patent thicket" because of the lowered and less certain standards for patentability in the courts and the PTO is that an innovator whose invention/innovation is patented will nonetheless find it necessary to bargain away his/her patent rights in order to obtain licenses that might be needed from others in order to commercialize his/her invention/innovation. In such circumstances the inventor/innovator could have no expectation of monopoly profits as a result of a patent on his/her invention, and the patent system would have provided no incentive for the invention/innovation.

This may well be the case in the computer and semiconductor industries, and possibly others characterized by complex products and processes, where extensive field-of-use cross licensing of existing and future patents is common and apparently necessary. Such industries are characterized by "patent races" in which the best one can hope for is a stalemate so that those who might block your innovation will themselves need licenses under your patents. Higher standards, by reducing the numbers of patents available,

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<sup>8</sup> O'Brien, *Economics and Key Patent Damages Cases*, Univ. of Balt. Int. Prop. Law J., Vol. 9, No. 1 (Fall 2000), pp. 1-28.

<sup>9</sup> The only correction of which I am aware occurred when Judge Easterbrook, sitting by designation, refused to follow the Federal Circuit after it reversed him, and reentered his earlier judgment. Grain Processing v. American Maize, 44 USPQ2nd 1782 (DC NInd 1997). The Federal Circuit, in the subsequent appeal, reversed itself and affirmed Judge Easterbrook despite having previously reversed him. Grain Processing v. American Maize, 51 USPQ2nd 1556 (Fed. Cir. 1999).

would reduce the costs the patent system imposes on such industries, although "patent races" to achieve stalemate would almost certainly continue, albeit at reduced costs to those in the race, with the consequence that there should be more innovation in such industries and it would cost us less.

### **INNOVATION AND COMPETITION**

An important question is the relationship between competition and monopoly as stimulants for invention and innovation. "The Free-Market Innovation Machine," a recent book by Professor Baumol of Princeton and NYU, suggests that the main driver of innovation in free-market economies (such as ours) is competition between large firms (oligopolists) driven by the need to at least maintain parity with competitors, that many (perhaps most) of these firms have "routinized" innovation so that it is simply another investment that does not require enhanced returns, and that it is such firms and such innovation competition that is responsible for the remarkable economic growth that characterizes free-market economies. Obviously such innovation does not depend on or require the prospect of a patent monopoly, and would proceed in any event, driven by the need to at least maintain parity with competitors. Otherwise, failure to innovate would result in falling behind and losing the competitive innovation race.<sup>10</sup>

The lowered and less certain standards for patentability imposed by the Federal Circuit have made it necessary for such innovators to seek more patents, and bear the costs of doing so, with the consequence that their innovation costs have been increased. Higher standards, by reducing the numbers of patents available, would reduce the costs our patent system imposes on innovation, which should result in more, and less costly, innovations.

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<sup>10</sup> In this regard, see footnote 4 of my *Proposal for the Simplification and Reform of the United States Patent System*, referred to in footnote 7 of these notes.