THE CASE FOR A STRONG PATENT SYSTEM

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INTRODUCTION

Today, as we are zapping our way into the information age, intellectual property and its protection have become essential to the well-being of our people. It is extraoromary then that the Clinton Administration has given away to foreign governments and multinational corporations intellectual property protection relied upon by American inventors and investors. Whatever the motive behind the fundamental changes being made in our patent laws, our people are the losers.

The attack on United States patent rights started under the cover of the recent additions to the General Agreement on Tariffs and Trade ("GATT").¹ Known as the Uruguay Round, it required that each member country have a *minimum* patent term of twenty years measured from the filing date of the application.² In response, Congress passed implementing legislation³ to ensure that the laws of the United States conformed to these new requirements.

Buried deeply in the implementing legislation was a provision that changed the patent term from seventeen years from the granting of a natent to a maximum of twenty years from the *filing* of the application.⁴ This provision was not well publicized until July 1994, when the Office of the United States Trade Representative reluctantly gave our office a draft copy of this legislation. The resulting public and congressional furor over this provision forced the Senate and House Subcommittees on Intellectual Property to hold hearings on this issue.⁵ The result was a

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^{1.} Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, Apr. 15, 1994, 33 I.L.M. 1143.

^{2.} Annex 1C, Agreement on Trade-Related Aspects of Intellectual Property Rights, art. 33, *id.* at 1210.

^{3.} Uruguay Round Agreements Act, Pub. L. No. 103-465, 1994 U.S.C.C.A.N. (108 Stat.) 4809 [hereinafter GATT Implementing Legislation].

^{4.} Id. § 532(a)(1), 108 Stat. at 4984 (to be codified at 35 U.S.C. § 154(a)(2)).

^{5.} GATT and Intellectual Property: Joint Hearings Before the Subcomm. on Intellectual Property and Judicial Administration of the House Comm. on the Judiciary and the Subcomm. on Patents, Copyrights, and Temarks of the Senate Comm. on the Judiciary, 103d Cong., 2d Sess. (1994).

"Rube Goldberg" fix to stop the term clock for up to five years for delays caused by specific administrative or court appeals.⁶ While this compromise was better than what was originally drafted, it did not fully guarantee a fixed patent term by statute. Unlike other pieces of the GATT implementing legislation, the intellectual property provisions never had a full and public markup. The GATT bill was submitted on "Fast Track" and no amendments were allowed.⁷ Therefore, those who opposed this one specific provision had to vote against the entire trade bill. Most were not willing to defeat GATT because of this single provision.

The negative effects are not hard to predict. If the effective shortening of American patent terms goes into effect on June 8, 1995, as provided by the GATT implementing law,⁸ private research and development funds will dwindle as shorter patent terms and weaker patents result in reduced royalties from new inventions. Business startups that are predicated upon innovative patents will be especially adversely affected. Universities that license the benefits of their research and technology transfers from our federal laboratories will also be hurt. The only beneficiaries will be foreign and multinational corporations who will pay reduced royalties to America's inventors and investors.⁹

I. TWENTY YEARS FROM FILING TERM

The concept of a fixed and guaranteed patent term has existed for over 200 years. Since 1790, America has had a patent term measured from its *grant* date which guaranteed a fixed period of at least fourteen years of protection after the patent was granted.¹⁰ Congress later added a provision for extending the term for another seven years.¹¹ Partly because extensions were so common, the law was changed in 1861 so the patent term was seventeen years from grant.¹² Conversely, the weaker

^{6.} GATT Implementing Legislation, supra note 3, § 532(a)(1), 108 Stat. at 4984 (to be codified at 35 U.S.C. § 154(b)).

^{7.} H.R. Res. 564, 103d Cong., 2d Sess. (1994).

^{8.} See Patent Office Official Says Final Rules to Implement TRIPs to be Issued by May, Int'l Trade Rep. (BNA), Mar. 15, 1995, at 515 (quoting Richard C. Wilder, attorneyadviser of the PTO's Office of Legislative and International Affairs).

^{9.} See ROBERT RINES & SKIP KALTENHUESER, UNCORKING THE GENIE BOTTLE (forthcoming 1995).

^{10.} Act of Apr. 40, 1790, ch. 7, 1 Stat. 109, 110 § 1 (repealed 1793).

^{11.} Act of July 4, 1836, ch. 357, 5 Stat. 117, 124-25 § 18.

^{12.} Act of Mar. 2, 1861, ch. 88, 12 Stat. 246, 249 § 16.

European and Japanese patent systems have a twenty-year term measured from the *filing* date.

Starting the clock at filing has always been a bad idea. When the term starts at the filing date, any delays in the application process will detract from its length and therefore its economic value. For example, in 1961 Texas Instruments filed the basic patent in Japan for the integrated circuit, known as the "Kilby patent" after its inventor, Jack Kilby.¹³ The Japanese Patent Office ("JPO") required that the application be divided into fourteen separate parts of which twelve were ultimately rejected. The first patent was granted in 1977, approximately seventeen years after it was filed. It thus expired just a few years after it was granted.¹⁴

There may be a significant time delay between filing and grant both here and abroad. According to a General Accounting Office ("GAO") report, on average it takes five to six years from the filing date to get a patent issued in Japan.¹⁵ Similarly, although the United States Patent and Trademark Office ("PTO") claims an average pendency of only nineteen months,¹⁶ these pendency statistics are misleading. Revolutionary patents in areas such as biotechnology, which often require a relatively long examination process, are averaged with the ninety percent of patents which are relatively incremental or inconsequential. This simple averaging itself skews the statistics. An inventor who files a revolutionary and complicated patent that takes years for the PTO to process should not be in the same category as one who files a relatively simple and inconsequential application that is quickly processed.

But even more damaging to the credibility of the PTO's use of statistics is that the claimed nineteen-month average is based on the most recent continuation date, and not the original or ancestral filing date. For example, consider a patent application originally filed in 1980. Continuations are applied for in 1982 and 1984, and then the patent issues in

^{13.} See Leslie Helm, Chip Manufacturer is Denied Patent by Japanese Court; Computers: Ruling that Fujitsu Chips Don't Infringe on Texas Instruments' Patent May Ignite Trade Concerns, L.A. TIMES, Sept. 1, 1994, at D2.

^{14.} See David P. Hamilton, Texas Instruments' Loss in Patent Case Sets Up Extended Battle With Fujitsu, WALL ST ... Sale 1, 1994, at B8.

^{15.} See Intellectual Property Bacher, U.S. Companies' Comparative Patent Experiences in Japan, Europe, and the United States: Hearings Before the Subcomm. on Int'l Trade of the Senate Comm. on Finance, 103d Cong., 1st Sess. (1993) (statement of Alan I. Mendelowitz, Director, International Trade, Finance, and Competitiveness Issues, General Government Division, UNITED STATES GENERAL ACCOUNTING OFFICE, No. GAO/T-GGD-93-36, July 22, 1993) [hereinafter Mendelowitz]. h.

^{16.} Id.

1985. The patent office uses the 1982 and 1984 refilings as two additional applications. Thus, a process that effectively took six years is counted as three applications averaging two years each. The PTO uses these metrics to overrate their efficiency and the quantity of applications processed.

The PTO has not issued official pendency figures based on when original patent applications were filed, so we can only use reported experiences. Using pendency figures of thirty patents from a recent 1994 Patent Gazette, the average pendency period is seven years.¹⁷ A letter from BIO, a biotechnology industry group, suggests that many of their member company patents take an average of ten years to issue.¹⁸ Starting the clock from filing would be a financial disaster for many of these patent holders.

In 1953, Phillips Petroleum applied for a patent on Crystalline Polypropylene, a plastic used for beverage containers.¹⁹ Because of delays caused by court proceedings and interferences (which are solely under the control of the PTO), the patent issued to Phillips in 1983.²⁰ According to Allen Richmond, the company's Manager of Patent and Licensing, Phillips so far has collected \$300 million in royalties.²¹ This return on investment would not have been possible if the United States had a twenty-year-from-filing term, because the patent would have expired in 1976.

Changing to a term based upon filing date will damage the value of our patents in other significant ways. The American system is based on awarding broad protection to the rightful creator and encouraging and providing a means to make the strongest possible application that can be defended against infringers. United States public policy regards patents not as trophies, but as a means for the creation of new industries and jobs. When an inventor files a patent, he often continues to perfect his invention. As new improvements are made, the applicant can file continuations-in-part which will strengthen his technology and provide a better defense should competitors challenge or infringe on his patent. In

^{17.} PAT. & TRADEMARK OFF. OFFICIAL GAZETTE (Aug. 9, 1994).

^{18.} Letter from Carl B. Feldbaum, President, and Charles E. Ludlam, Vice President for Gov't Rel., *Biotechnology Industry Organization (BIO)*, to Mickey Kantor, U.S. Trade Representative (June 27, 1994) (on file with the *Harvard Journal of Law & Technology*).

^{19.} See Phillips Patent, PLATT'S OILGRAM NEWS, Mar. 17, 1983, at 5.

^{20.} See Phillips Finally Wins Its Patent, CHEMICAL WK., Mar. 23, 1983, at 13.

^{21.} Interview with Allen Richmond, Manager of Patent and Licensing for Phillips Petroleum, in Washington, D.C. (Feb. 10, 1995).

some cases, the patent examiner may require a divisional application in which the inventor must refile and break his original application into two or more separate parts. The PTO supports these refilings because they are a good revenue generator and inflate their productivity numbers.

The above procedures encourage solid applications and may be required by the PTO but will significantly detract from the patent's life with a term based upon the filing date. However, the above actions do not detract from the patent's life with a seventeen-year term from grant. Under a term based upon filing date, the inventor will be at the mercy of the patent examiner and will take any protection offered by the examiner in order to prevent unnecessary delays in the patent issuing process. The end result will be weaker applications that will be more susceptible to infringement. Independent inventors, who are often the backbone of new companies, will be especially vulnerable against large multinational corporations who can afford to mount continuing legal challenges.

II. SUBMARINE PATENTS AND THOSE MALICIOUS INVENTORS

Proponents of the twenty-year-from-filing patent term, such as the Intellectual Property Owners ("IPO"), a patent lobbying group of large multinational corporations, claim this change eliminates so-called "submarine patents." These are patents that have issued after a significant delay in the PTO. It has been conceded that there are only a few "submarine patents."²² The reasons for the delays have never been fully analyzed. However, it is clear that an administrative organization like the PTO has many delays inherent in its operations. Patent examiners have discretion in generating restriction requirements which necessitate the filing of divisional applications and cause significant delays. Clerks lose file histories. Applicants have a right to appeal unjust decisions and to file continuing applications. All of these proceedings have evolved since the original patent system was started in 1790.

Those who profit from cutting down patent terms charge that the inventors cause the delays. Clearly, this is erroneous because the PTO,

^{22.} See Joint Hearings of the House Judiciary Subcomm. on Intellectual Property and Judicial Administration and the Senate Subcomm. on Patents, Copyrights, and Trademarks, 103d Cong., 2d Sess. (1994) (statement of Robert E. Muir on behalf of the National Association of Manufacturers).

a powerful government entity, has the ability to control its own operations. It drafts its own rules,²³ and it publishes its own procedures.²⁴

Also, it is not in the interest of the majority of applicants to intentionally delay the issuance of their patents. Most inventors want their patents issued as quickly as possible to protect themselves against copiers and to attract venture capital. A patent pending on a device offers no protection. Many, if not most, license agreements provide that no royalties would be payable if a patent is not issued within two to three years, and few, if any, such agreements call for royalties payable until after the patent is issued.

Gerald Mossinghoff, former United States Commissioner of Patents under President Reagan, was not aware of any submarine patents.²⁵ According to the testimony on August 12, 1994, Bruce Lehman, United States Commissioner of Patents, stated that from 1971 to 1993 there were 627 cases out of approximately 2.3 million patents issued (or 0.027%) where the patent pendency has exceeded twenty years.²⁶ Commissioner Lehman implied that these were filed by malicious persons interested in elongating their patent term. Examination of these allegedly submarine patent cases by Donald Banner, former Commissioner of Patents under President Carter, reveals that 257 of these are owned by the U.S. government and their issuance was probably delayed because of secrecy orders. The remaining 370 applications may have been held up for reasons other than intentional delays by the applicant such as interferences and secrecy orders imposed on the applicant.²⁷ A letter received from the IPO cites a few examples of alleged abuses, primarily by a Jerome Lemelson who had a patent in process for over thirty years.²⁸ Obviously, the IPO has not stated his side of the story. Why did it take the PTO so long to process his patent application? Even if abuses do occur, what has

^{23. 37} C.F.R. §§ 1-150 (1994).

^{24.} PAT. & TRADEMARK OFF., U.S. DEP'T OF COM., MANUAL OF PATENT EXAMINING PROCEDURES (5th ed., 16th rev., 1994).

^{25.} See Hamilton, supra note 14. See generally Hearings before the Subcomm. on Intellectual Property and Judicial Administration of the House Comm. on the Judiciary, 103d Cong., 2d Sess. (1994) (statement of Bruce Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks) [hereinafter Lehman]; Hearings before the Subcomm. on Intellectual Property and Judicial Administration of the House Comm. on the Judiciary, 103d Cong., 2d Sess. (1994) (statement of Gerald Mossinghoff, former Commissioner of Patents).

^{26.} Lehman, supra note 25.

^{27.} Telephone Interview with Donald Banner, former Commissioner of Patents (Mar. 20, 1995).

^{28.} See First to File vs. First to Invent on Patent, DAILY YOMIURI, Feb. 1, 1994, at 9.

been presented is anecdotal and should not be the basis of undermining an entire institution that has made the United States the world's technological leader.

When explaining how submarine patents occur, Commissioner Lehman stated that when an inventor receives a Notice of Allowance from the PTO, informing him the patent will soon issue, the inventor then refiles, and thus prevents his patent from issuing.²⁹ The PTO could easily prevent this abuse by declining to accept such a continuing application. These reforms to control abuses can be made administratively without having to reduce the seventeen-year patent term.

III. EIGHTEEN MONTH PUBLICATION

Reducing the length and certainty of the term is only the first wave of the attack on patent rights. Under the American system, patent applications are kept confidential until the patent is issued. This protects the applicant from competitors, particularly large corporations who can afford a battery of attorneys to challenge the application or flood the patent office with incremental patents to diminish the value of the original patent, as is often done in Japan.³⁰ Now there is serious consideration being given to publicizing the application eighteen months after filing—whether the patent is issued or not.³¹

This is obviously an invitation for thievery. Setting an arbitrary eighteen-month publication date will have the unintended consequence of causing inventors to abandon the patent system and revert to a system of trade secrets. Today, because the application is kept confidential, the applicant can still keep his idea a trade secret if his patent application is rejected.

^{29.} Lehman, supra note 25.

^{30.} Mendelowitz, supra note 15.

^{31.} See, e.g., Bruce Rubenstein, Novell's Mother of All Prior Art Suits Nears Court Date: Billings Will Be Either a Billionaire or Broke, CORPORATE LEGAL TIMES, July 1994, at 17; Patent Office Wants Authority to Print Pending Applications, FED. TECH. REP., Sept. 1, 1994, at 3.

IV. PRIOR USER RIGHTS

Prior user rights give the person who uses an idea, but either never developed it or keps it a trade secret, the right to infringe another's patent. While there is nothing illegal about trade secrets, having a patent allows the owner to prevent infringement. Weakening our patent system to allow for prior user rights not only encourages trade secrets and stifles the dissemination of technology, but devalues the property of the one who has gone to the trouble and expense of obtaining the patent and disclosing it to the public.³²

V. BENEFITS OF STRINGENT PROTECTION

It's not just money. It's our future and it always has been. Americans have always placed a high value on this unique form of property rights. A system to protect intellectual property was even written into our Constitution.³³ This should be no surprise considering that Benjamin Franklin, Thomas Jefferson, and so many of our nation's founding fathers were, after all, technologists. They recognized that for our vast and underdeveloped country to grow and for its citizens to prosper, our nation needed both technology and freedom.³⁴

Our opportunity was to be limited on the by our imagination. The product of our intellect, however, would be protected by law. America's strong patent laws have served to encourage investment and technological research that has kept our country in the forefront of human progress.³⁵ All of this was accomplished because Americans were creating, or at least utilizing, the best technology from steam engines and reapers to microprocessors.

32. See Patent User Rights: Hearings before the Subcomm. on Intellectual Property and Judiciary Administration of the House Comm. on the Judiciary, 103d Cong., 2d Sess. (1994) (statements of Teri Willey, Associate Director, Purdue Research Foundation, and Arnold Newman, President, Synexus Corporation).

33. U.S. CONST. art. I, § 8 ("The Congress shall have Power to . . . promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"). See generally BRUCE W. BUGBEE, GENESIS OF AMERICAN PATENT AND COPYRIGHT LAW 152 (1967).

34. See Herbert Hovenkamp, Technology, Politics, and Regulated Monopoly: An American Historical Perspective, 62 TEX. L. REV. 1263 (1984).

35. See Lawrence M. Sung, Comment, Intellectual Property Protection or Protectionism? Declaratory Judgment Use by Patent Owners Against Prospective Infringers, 42 AM, U. L. REV. 239, 244 (1992).

Themas Edison's invention of the electric light bulb not only provided an alternative to gas and oil lamps, but spawned an entire utility industry. His motion picture and phonograph patents created a vast entertainment industry. The transistor, integrated circuit, and microprocessor made possible a multi-billion dollar electronics industry. Millions of Americans owe their jobs and prosperity to industries created by America's innovators. The competitiveness of our country is tied to our ability to take the lead technologically.

Today, for example, while other countries are trailing in biotechnology development, America's biotechnology companies are in the forefront of this historic leap.³⁶ Biotechnology is, after all, an American creation, financed by private American capital and brought to market by Americans. The German government tried to develop a biotechnology industry but failed, turning instead to American technology.³⁷ Given the German result and similar experiences in the rest of Europe and Japan, government subsidization of industry startups has had dubious success.

Many argue that in this fast-moving technological age where product life cycles may be a matter of months or a few years, the traditional patent system is obsolete.³⁸ Nothing could be further from the truth. Patents are designed to cover broad inventions such as the transistor, integrated circuit, microprocessor, and magnetic resonance imaging. While all of these and other revolutionary inventions continue to be improved, the basic patented concepts behind them are still crucial. The tremendous explosion in the sheer amount of information available to an ever-increasing number of people suggests the creation of even more breakthrough technology.

While pharmaceutical and biotechnological innovations may take years and billions of dollars to develop, once they are on the market it is relatively inexpensive for competitors to copy these products. Fortunately, our patent system acts as a strong shield protecting America's innovators from this theft, thus maintaining the incentive for the investment of venture capital in research and development. So it should be no surprise that there are both domestic and international forces at work to weaken America's patent system.

^{36.} See Joan C. Hamilton, Biotech: America's Dream Machine, BUS. WK., Mar. 2, 1992, at 6.

^{37.} See David G. Scalise & David Nugent, Patenting Living Matter in the European Community: Diriment of the Draft Directive, 16 FORDHAM INT'L L.J. 990 (1993).

^{38.} See, e.g., DENNIS UNKOVIC, THE TRADE SECRETS HANDBOOK (1985).

If these efforts are successful, United States patent holders, our technology creators, and their financiers will be robbed of billions of dollars in royalties by those who use technology. Huge foreign corporations will be off the hook for the licensing revenue they would owe Americans under current law. The end result will be American technology being used against us, for free, just as the incentive for future investment in domestic technology creation is reduced.

VI. PATENT HARMONIZATION

The stated goals of patent harmonization are to strengthen the intellectual property laws of other nations, and to make it possible for one patent application to be valid worldwide.³⁹ Who could oppose that? In theory it is laudable. In practice, patent harmonization has become a Trojan herse that is being used to whittle down America's strong patent system so it conforms to the weaker Japanese and European systems.

Yes, uniformity of law throughout the world has a ring to it. However, harmonization is being paid for by decreasing our guaranteed patent term. Uniformity merely for its own sake and without any quantitative benefit to Americans does not make any sense.⁴⁰ If the objective is to have a uniform worldwide patent system, other nations should adopt the stronger United States model.

Unfortunately, the Clinton Administration and world leaders view patent harmonization and patent laws as just another bargaining chip in trade negotiations. Just as United States trade negotiators would not consider trading away constitutional freedoms such as free speech, neither should they trade away intellectual property rights. According to testimony before the Senate Subcommittee on International Trade by the GAO, the laws and cultures of the Japanese and American patent systems are widely different.⁴¹ "In the U.S. the focus of the patent system is to protect the individual patentee[s] and provide them with exclusive rights to their inventions. By contrast, many experts contend the focus for the Japanese patent systems is to promote industrial development by

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^{39.} See W. John Moore, Reinventing Patents, NAT'L J., Mar. 20, 1993, at 694.

^{40.} See Letter from Gabriel P. Katona, law firm of Schweitzer Cornman & Gross, to Steven M. Shore, President. The Alliance for American Innovation (Feb. 1, 1995) (on file with the Harvard Journal of Law & Technology).

^{41.} Mendelowitz, supra note 15.

disseminating technology."⁴² Intellectual property in the United States is indeed that, property, whereas in Japan, it is just another piece of the government's industrial policy subject to political whims.

This same report states that United States companies that do file patents in Japan have expressed a high degree of dissatisfaction with the Japanese patent system.⁴³ These problems include lack of enforcement, relatively long delays in issuance, the narrower scope of patent protection granted, the cost, and the difficulty of obtaining patent protection for pioneering inventions. There is nothing to suggest these conditions will improve if the United States weakens its own patent system. The two cultures are so widely different that it would be too much to expect that superficial legislation and trade agreements will improve the Japanese patent system for foreigners who expect the same protection in Japan they now receive in the United States. By the time Americans understand the problem, it may be too late.

CONCLUSION

On January 4, 1995, the Dole-Rohrabacher bill⁴⁴ was introduced to restore the patent term to the longer of seventeen years from grant or twenty years from filing. This guarantees patent holders seventeen years of protection, the right of Americans before GATT, and what we still have under transitional arrangements until June 8, 1995. Furthermore, the Dole-Rohrabacher bill complies with GATT.

As the United States fully enters into both the information age and global markets, harmonizing our patent system with those like Japan would be a fundamental mistake. The PTO is failing in its mission to protect the interests of our country and the rights of our people. It is time for Commissioner Lehman to abandon the practice of international patent policy appeasement and act to protect the value of American intellectual property.

^{42.} *Id.* 43. *Id.*

^{44.} H.R. 359, 104th Cong., 1st Sess. (1995); S. 284, 104th Cong., 1st Sess. (1995) (introduced Jan. 26, 1995).

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