

Testimony of
Charles E. Phelps

Provost, University of Rochester
On behalf of the Association of American Universities
July 26, 2005

CHARLES E. PHELPS
PROVOST
UNIVERSITY OF ROCHESTER
ON BEHALF OF THE
ASSOCIATION OF AMERICAN UNIVERSITIES
AMERICAN COUNCIL ON EDUCATION
ASSOCIATION OF AMERICAN MEDICAL COLLEGES
COUNCIL ON GOVERNMENTAL RELATIONS
JULY 26, 2005

Chairman Hatch, Ranking Member Leahy, and Members of the Subcommittee:

I am Charles Phelps, Provost at the University of Rochester. In addition to serving as the chief academic officer of this research university, I am a member of the Intellectual Property and Information Technology Committee of the Association of American Universities, and I am currently serving as Chairman of the Patent Reform Working Group of the Association of American Universities, the American Council on Education, the Association of American Medical Colleges, and the Council on Governmental Relations. I appreciate the opportunity to appear before this subcommittee to present the views of these four associations on harmonization of international patent laws and other issues concerning patent reform. Collectively, these associations represent the major research universities and medical colleges that conduct most of the nation's basic research.

The research conducted in our nation's universities expands the frontiers of knowledge and produces discoveries that enhance our national security, strengthen our economic competitiveness, and enrich the lives of our citizens. Basic research has brought about some of the most significant innovations that have strengthened U.S. economic competitiveness. According to Nobel Laureate economist Robert Solow, at least half of the economic growth during the past 50 years has come from innovation that has created new technologies, industries, and jobs. The World Wide Web, Magnetic Resonance Imaging (MRI), and fiber optics all grew out of basic research. University basic research has created an estimated 4,000 spin-off companies that have hired 1.1 million employees and have generated annual world sales of \$232 billion.

Although the principal means by which university research results are disseminated is through peer-reviewed publications, conferences, and other forms of open communication, the nation also benefits substantially from university research through technology transfer processes where

fundamental discoveries are moved into the commercial sector for development into useful products. The landmark 1980 Bayh-Dole Act, which authorized universities and small businesses to retain patent and licensing rights to inventions resulting from federally funded research, has been an extraordinarily successful mechanism for facilitating the transfer of basic discoveries into the commercial sector for development. The patent system is an integral part of this process.

Universities play a critical role in the innovation process and have a strong interest in the means by which the patent system advances this process. We welcome this opportunity to examine the role of harmonization and other reforms to U.S. patent law that will enhance the capacity of that system to support research, development, invention, and innovation in the U.S. and worldwide.

We believe that the fundamental goal of a re-examination of the U.S. patent system should be to identify policy changes that will enhance the capacity of this system to support innovation. Our comments are based on our assessments of how such reform proposals would affect the capacity of universities to carry out their fundamental mission of research and teaching and, as part of that mission, contribute effectively to the innovation process. Our views are also shaped in significant measure by the National Research Council's report, *A Patent System for the 21st Century*. We comment here on key patent reform proposals which have been raised in recent national discussions, many of which are included in HR 2795, the "Patent Reform Act of 2005.

Harmonization: Moving to a First Inventor to File Process

Changing the U.S. patent system from a first to invent to a first inventor to file process, which was recommended by the National Research Council's report, would harmonize U.S. patent law with that of other countries to a significant degree. As both science and commerce become increasingly international, more patent owners will want their patents to apply internationally as well as domestically, and harmonizing the basis for determining application priority would increase the simplicity and reduce the cost of patent filing.

Moving to a first inventor to file process also would add greater clarity to the U.S. patent system by replacing the subjective determination of the first inventor with the objective identification of the first filer. This change would reduce or eliminate the unpredictable and often substantial costs of interferences and litigation associated with determining the first inventor.

The harmonization and clarity brought by a first inventor to file process would provide significant benefits to the U.S. patent system as well as to universities. However, other ramifications of moving to a first inventor to file process raise concerns among some members of the university community about their ability to operate effectively in such a patent system. University inventors typically are faculty members who first publish in academic journals and later consider whether to file for a patent. Before filing a patent application, universities often need time to consider the potential commercial application of a basic research discovery, which may not be obvious at the point of discovery, and to assess the receptivity within the commercial sector to licensing any resultant patent for development. Moreover, the budgetary limitations on non-profit universities often constrain the resources they can devote to rapid filing of fully developed patent applications. All such practices are accommodated in a first to invent system but could be compromised in a first inventor to file system.

If Congress elects to move to a first inventor to file system, we believe it is imperative that U.S. patent law maintain three components of the current U.S. patent system: (1) the opportunity to file provisional applications, (2) the 12-month grace period for publishing articles containing a disclosure of the invention, and (3) the provision of current U.S. patent law requiring an applicant to sign an oath that he or she is an inventor of the claimed invention.

Provisional applications: A first inventor to file process will likely place a higher premium on prompt filing of patent applications than does the current first to invent process. The provisional application procedure of the current U.S. patent code, under which a patent applicant can file a provisional application and obtain an early filing date for the material in the provisional application, can aid in rapid filing and will be particularly important to universities operating in a first inventor to file process.

Grace period: H.R. 2795, introduced by House Judiciary Courts, the Internet and Intellectual Property Chairman Smith and nine additional co-sponsors, provides a 12-month grace period before the effective filing date of an invention, during which the publications or other disclosures made by the inventor, joint inventor or others who obtained the disclosed subject matter from the inventor or joint inventor are not treated as prior art. Such a provision encourages the early disclosure of basic research results by an inventor while permitting him or her to file up to a year later.

However, current US patent law provides a broader grace period covering the publications not only of the inventor but also of others carrying out research in the same area. We believe that such a provision facilitates research collaborations and encourages publication and other forms of disseminating research results in ways that are important within the university community and are consistent with both the operation and objectives of the patent system. A broad grace period has a beneficial effect of separating open and unfettered academic discourse from the patent filing process. Researchers are free to develop and disseminate their research results widely to advance knowledge without foreclosing the opportunity of any one of them, separately and independently of such dissemination, to pursue a patent application. Thus, the broad grace period of current law operating in a first inventor to file system would encourage open communication of research discoveries and preserve a broad opportunity for the filing of patent applications.

We recognize that such a grace period could allow another person to "scoop" an original inventor, drawing on that inventor's publication to help develop and file a patent application before the inventor does. But we believe the benefits to research collaboration and open communication encouraged by a broad grace period override such a problem.

Therefore, we recommend that Congress include the broader 12-month grace period of current law in any patent reform legislation. Moreover, the benefits of a broad grace period should not be limited to the United States: , we urge Congress to request the Administration to seek adoption by other countries of the current U.S. grace period, as recommended in the National Research Council's report. The simplification and consistency that such harmonization would bring would benefit both the United States and other countries, and it would also encourage broad dissemination of new discoveries in the increasingly international conduct of science.

Applicant oath: Current U.S. patent law requires that the individual filing an application, or on whose behalf an application is filed, must sign an oath or declaration asserting the belief that he or she is an inventor of the claimed invention. This requirement is an important procedure underscoring the importance of a government grant of a property right. The same considerations should apply in a first inventor to file system, and we encourage Congress to include in patent reform legislation the requirement for an applicant to sign an oath asserting inventor status.

The associations recognize the benefits of a first inventor to file process and do not oppose a move to such a process. However, given the problems that could be posed for universities operating in a first inventor to file process, it would be important to maintain in any such revised patent system three provisions of current U.S. patent law--provisional applications, a broad 12-month grace period, and the signing of an oath by the applicant.

Post-Grant Opposition Procedure

The associations strongly support the creation of an administrative post-grant opposition procedure. An opposition procedure that is of finite, predictable duration and allows third parties to challenge a patent based on the full array of issues of patentability, utility, and adequacy of the written description and enablement of how to make and use the invention would improve patent quality by providing a relatively low-cost alternative to litigation to establish patent validity.

Such an opposition procedure should require that all persons requesting an opposition identify themselves and the real party in interest, if different. It is fair and appropriate that a patent holder should be able to know the identity of the party opposing the patent, and no useful purpose is served by withholding the identity of the opposer.

A 12-month window, rather than the 9-month period included in H.R. 2795, could benefit smaller entities, which may need more time to identify and respond to patents about which they have concerns. The added three months would still keep the opposition procedure within the framework of a finite, predictable process.

It will be critical, however, for the United States Patent and Trademark Office (U.S. PTO) to receive the resources necessary to implement this additional administrative procedure. Failure to do so could cause significant increases in patent pendency, undermining the considerable benefits that an effective post-grant opposition procedure could bring to the patent system.

CREATE Act

The CREATE Act, which was enacted into law last year, was intended to facilitate research collaboration. We strongly encourage the continuation in any patent reform legislation of the properties of the CREATE Act, including its effective date and legislative history.

Continuation Applications

Continuation applications serve important purposes for universities. Particularly in some research fields such as the life sciences, where the rapid pace of discovery runs ahead of the often unavoidably slow pace of U.S. PTO processing of patent applications, continuation applications are a valuable procedure for updating applications to reflect recent developments. We understand that continuation applications have been abused in the past by some patent applicants who attempt to extend patent applications through continuations until market conditions provide an opportunity for them to have a patent issue and file an infringement suit. However, there is some evidence that the efficacy of "submarining" patents through continuation applications was substantially reduced by the enactment in 1999 of the requirement for publication of most applications after 18 months. In addition, the 1995 change to a 20-year patent term measured from the date of filing rather than a 17-year term from the date of patent grant diminishes the incentives for submarining patents.

If Congress concludes that misuse of continuation applications is an ongoing problem that needs to be addressed, we hope that any legislative proposal to do so would not limit the legitimate use of continuations by universities or any other patent holder.

Prior User Rights

The associations strongly oppose proposals to expand prior user rights such as that contained in HR 2795. As a practical matter, any assertion of prior user rights vitiates the value of patents. We understand the legitimacy of commercial entities choosing to develop products under trade secret procedures as opposed to a public patent process. However, the proposal in H.R. 2795 to expand the prior user rights defense from a demonstration that an invention had been "commercially used" to a claim of "substantial preparations for commercial use" not only significantly weakens the value of patents but introduces an element of subjectivity into the patent system that many patent reform proposals are wisely seeking to eliminate.

Injunctions

The associations believe that injunctions are an important tool in the defense of patent rights. We recognize that there is considerable concern that injunctions are being abused, particularly in certain industry sectors, by some parties exploiting the issuance of injunctions by courts to extract unwarranted settlements from companies. However, the associations oppose statutory changes that would weaken patent rights by reducing the ability to defend those rights through the legitimate use of injunctions.

18-Month Publication

The associations support modifying U.S. patent law to require that all applications be published 18 months after their effective filing date. Currently, patent applications are published after 18 months unless an applicant requests non-publication and is not intending to file in another country that has an 18-month publication rule. As noted earlier, there is some evidence that even the current, limited 18-month publication requirement has reduced the number of submarine

patents. Requiring publication of all patent applications after 18 months may well further discourage any abuse of continuation applications. In addition, requiring the publication of all applications after 18 months will further harmonize U.S. patent law with European and Japanese patent laws. But the strongest reason for requiring publication of all patent applications is its congruity with a fundamental purpose of patent law to encourage disclosure in return for limited proprietary control over one's intellectual property. Such a requirement is fully consistent with the academic mission of full and open communication of research results at the earliest feasible opportunity.

Damages

Concerns have been expressed that under current law, courts are issuing damage judgments providing excessive awards, particularly in the case of component patents. However, since judges have ample discretion under current law to assess the relative value of a patented technology in determining damages, we believe no changes to current law are needed.

Submissions by Third Parties

The associations support proposals to allow preissuance submissions by third parties. Such a provision will promote patent quality and validity by assisting patent examiners to gather all relevant evidence in evaluating patent applications.

Experimental Research Exemption

We believe that Congress should give careful consideration, in consultation with all parties with an interest in the patent system, to inclusion of an experimental research exemption in any patent reform bill that goes forward. Such an exemption should be carefully crafted to promote experimental research, while advancing the goals of the patent system and the larger society it serves, rather than any specific sector of society.

The exemption should at a minimum allow research that specifically examines the nature of a patented invention--to determine whether it functions as claimed, to better understand its operation under various conditions, to discover something unknown about it, or, under appropriate circumstances, to improve upon it. A narrowly crafted exemption for research on the functioning of a patented invention could provide a fuller understanding of a patent without threatening the market for the patent, thereby advancing the fundamental goal of the patent system to promote innovation through a combination of disclosure and proprietary protection. All European Union nations except Austria have such a research exemption; thus, adoption of such an exemption would promote harmonization.

Crafting a research exemption that advances broad societal interests without intruding into the proprietary protections intended by the patent system is a difficult process, but we believe the potential benefits to society of an appropriately developed research exemption that is congruent

with the goals of the patent system warrants thorough examination. We welcome the opportunity to work with Congress and other appropriate parties to carry out such an examination.