

Statement of

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Committee on the Judiciary
United States House of Representatives**

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Mr. Chairman, Members of the Committee, thank you for the opportunity to be here today at this important hearing. I am Dean Kamen, the President of DEKA Research & Development Corp., a technology development company based in Manchester, New Hampshire that I founded in 1982. Having been awarded more than 130 U.S. patents, I am pleased to speak to you today from the perspective of an inventor.

As a businessman whose small company relies heavily on intellectual property, I feel that maintaining strong patent protection for America's inventors, and thus stimulating American innovation, is more critical now than ever. Some of the provisions in H.R. 1260, the Patent Reform Act of 2009 – including the reduction of damages awarded to a patent holder whose patent has been found infringed and the various expansions of post-grant review – are very troubling. These provisions, as well as other provisions of H.R. 1260, have the very real potential of undermining innovation, weakening the U.S. economy, and driving more jobs overseas.

I read with great interest President Obama's recent comments to the National Academy of Sciences regarding the importance of research and development and the key role of innovation in securing the economic future of the United States. I was very pleased to see President Obama's efforts to increase innovation by fostering the next generation of scientists and engineers, an effort that I have been involved with for nearly twenty years through FIRST (For Inspiration and Recognition of Science and Technology, www.usfirst.org). As President Obama said, stimulating innovation is critical, but cannot be driven by Government investment alone. We must incentivize American companies to invest even more in research and development in light of our current economic situation. I am convinced that this can only be accomplished with a strong patent system.

I would like to offer the following specific observations as the Congress considers how to maintain and, hopefully, improve our country's patent system:

1. The purpose of the patent system in the United States, as set forth in Article 1, Section 8, Clause 8 of the Constitution, is to "promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive rights to their respective writings and discoveries."
2. The public is benefited in many ways by this bargain. Most obviously, the right to exclude others from practicing the invention for a period of years is a powerful incentive that encourages the significant and high risk investment of money and time necessary to create innovations. The public also benefits because, in disclosing their ideas and inventions contained in the patent disclosures, patent holders are advancing the state of the art and setting the bar over which all competitive inventors are encouraged to leap, thus providing the public with access to an ever greater number of alternative solutions to important problems. Finally, the public also gains when the technology enters the public domain at the end of the patent term.

3. A strong patent system, at its core, must ensure that the U.S. Patent and Trademark Office issues patents of the highest possible quality. Any patent reform aimed at improving the current system must fundamentally focus on: 1) improving patent quality prior to issuance and 2) reducing the duration of patent application pendency at the U.S. Patent and Trademark Office. To accomplish this, patent applications must be examined effectively by highly qualified examiners, using the best available technology and prior art. If we focus on finding more productive ways to improve the quality of patents and ensure that the U.S. Patent and Trademark Office has the resources that it needs to issue patents of the highest possible quality, many of the real and perceived problems with the patent system would fade away.
4. It is my understanding that one reason this examination process is in need of improvement is because funding for the U.S. Patent and Trademark Office has not kept up with its needs. Permanently ending the diversion of patent fees to other parts of the government and considering the expansion of the U.S. Patent and Trademark Office's authority to set its own fees would certainly help address this underfunding and allow for better strategic planning. With the proper funding, I am confident that the new Director of the U.S. Patent and Trademark Office could find ways to hire, train, retain and reward examiners with the requisite credentials to ensure high quality patents.
5. One of the areas under consideration for patent law reform of particular concern is the provision on damages, which would lower the value of patents and substantially reduce the damages that an infringer would be obligated to pay to the holder of a valid patent. This would not only significantly undermine the incentive that patents have traditionally afforded inventors but, by lessening the penalty for infringement, it would encourage more aggressive behavior by potential infringers thereby potentially increasing the opportunity for mischief and the burden of lawsuits.
6. I was somewhat encouraged to learn that the Senate has reached a compromise on the damages provision which does not alter the standard for calculating damages, but provides some additional guidance to judges in these cases. In my view this may be a reasonable compromise, but anything that went beyond this to alter the standards for calculating damages could have serious consequences for our patent system and our economy.
7. The second area of concern includes the provisions which would expand the opportunities to challenge a patent after it has been granted by the U.S. Patent and Trademark Office. In my opinion, these provisions seem to be focusing on the wrong problem. We should focus our attention and resources on ensuring that patents, when granted, are of the highest quality, as discussed above. Rather, the expansion of post-grant reviews proposed by H.R. 1260 would add uncertainty to the value and validity of patents (in some instances many years after those patents were granted), create further disincentives for patent holders and investors, and may open the system up abuse by potential infringers. Expanding post-grant reviews could also create additional costs and time delays in enforcing patents that would be difficult for many individual inventors and small and start-up companies, in particular, to handle.

8. Moreover, I am concerned that adding new administrative duties to the U.S. Patent and Trademark Office could dangerously overburden an already stressed system. As discussed above, any efforts to improve our patent system should begin with providing the U.S. Patent and Trademark Office with the resources it needs to handle its current challenges, not burdening it with new duties. In my opinion, the U.S. Patent and Trademark Office simply is not equipped at the current time to handle the new demands that the expansion of post-grant review would place on it.
9. While I question the need for adding additional opportunities to challenge patents after they are granted, let me offer a few suggestions to improve the post-grant review provision in H.R. 1260 to ensure that the system remains balanced and innovators are not unfairly disadvantaged. First, I would recommend striking the section eliminating the presumption of validity. A bedrock principle of our patent system has been the presumption of validity of patents once issued. Removing this presumption turns the patent system on its head and adds significant uncertainty that will be particularly troubling to individual inventors and small and start-up companies. Second, if additional post-grant challenges are going to be made available, the threshold for entering into a challenge should be higher than that contained in H.R. 1260. Unless the threshold is increased, patent holders likely will be subject to harassment and endless challenges that could significantly limit their ability to develop and make use of their inventions. Likewise, the number of challenges should be limited to prevent abuse.
10. An additional area of concern, primarily for individual inventors and small and start-up companies, is the change from a first-to-invent system to a first-inventor-to-file system. There is concern that changing to a first-inventor-to-file system would create a rush to the patent office that would result in an increase in the number of poorly thought-out, lower quality patent applications. Because inventors would need to file on every invention as soon as possible, there is less time to evolve and test the technology, and file on those ideas that are truly worthy of a patent. This emphasis on quickly filing patents rather than on developing inventions could unfairly disadvantage individual inventors, small and start-up companies, and universities, who may have smaller budgets and less access to patent professionals. It also could add to the current burdens of the U.S. Patent and Trademark Office. Moreover, if the change from a first-to-invent system to a first-inventor-to-file system is adopted, there are a number of potential issues with the timing and consistency of the proposed transition that should be addressed carefully before implementation.
11. It is important to recognize that some significant changes to the patent system have been made through the courts recently, such as the e-Bay decision on injunctive relief and the Seagate decision on willful infringement. It may be wise to allow these new legal decisions to play out in the courts prior to any legislative action that would cause further significant changes to the patent system.

Conclusion

I believe that it is important to reflect on how very much our national economic situation has changed since this debate on patent reform began several years ago. Our country has come to recognize, more than ever, the critical importance of innovation, and our government leaders are focusing now, as perhaps never before, on stimulating our economy. I believe that Article I, Section 8, Clause 8 of the United States Constitution is, in fact, the original and hopefully most enduring stimulus measure ever devised. The patent system was created with the singular goal of providing powerful incentives to induce inventors to invest their time, reputations and resources in creating new and better ways to deal with our collective problems. That principle was reconfirmed by President Abraham Lincoln with his famous observation that the patent system “adds the fuel of interest to the fire of genius.” Now, more than ever, we need both fuel and genius to be added to every sector of our economy.

It is perhaps fortuitous, in light of our current economic situation, that we have a very timely opportunity to truly address reform of our patent system. In doing so, it is critical to remember that for more than two hundred years, the patent system has been an essential and fundamental cause of our intellectual and economic wealth, not, as some suggest, an inappropriate and unnecessary cost to our country. What we need now are reforms that will strengthen and streamline, not weaken or add uncertainty to, one of the greatest wealth producing provisions of the American economic system.

Biography of Dean Kamen

Dean Kamen is an inventor, an entrepreneur and a tireless advocate for science and technology. His roles as inventor and advocate are intertwined – his own passion for technology and its practical uses has driven his personal determination to spread the word about technology's virtues and by so doing to change the culture of the United States. His vast knowledge of the physical sciences, combined with his ability to integrate the fundamental laws of physics with the most modern technologies, has led to the development of breakthrough processes and products.

As an inventor, he holds more than 400 U.S. and foreign patents, many of them for innovative medical devices that have expanded the frontiers of health care worldwide. While still a college undergraduate, he invented the first wearable infusion pump, which rapidly gained acceptance from such diverse medical specialties as chemotherapy, neonatology and endocrinology. In 1976, Dean founded AutoSyringe, Inc. to manufacture and market these pumps, then continued to develop a number of other infusion device, including the first wearable insulin pump for diabetics. At age 30, Dean sold Autosyringe Inc. to Baxter Healthcare Corp. and founded DEKA Research & Development Corporation. At DEKA, a team of more than 200 people, many of them scientists and engineers, develop internally generated projects, as well as provide research and development for major corporate clients. Some of DEKA's projects have included the HomeChoice™ dialysis machine, developed for Baxter (Design News' 1993 Medical Product of the Year), the INDEPENDENCETM IBOT™ Mobility System, developed for Johnson & Johnson, and the Segway® Human Transporter.

A decade ago Dean founded FIRST (For Inspiration and Recognition of Science and Technology), and ever since has remained its driving force. The goal of FIRST is to motivate the next generation of young people to want to learn about science and technology. Many leaders of American industry, education and government help to support FIRST in this crusade. Currently, the FIRST Robotics Competition and the FIRST Lego League impact over 70,000 young people annually. Please see www.usfirst.org for more information on FIRST. Dean has received significant public recognition for his crusade on behalf of science and engineering. He was, for example, labeled by Smithsonian Magazine "the Pied Piper of Technology" and profiled by the New York Times as "A New Kind of Hero for American Youth".

Dean has also been honored to receive a number of awards for his work, including the Kilby Award; the Heinz Award in Technology, the Economy and Employment; and the National Medal of Technology. Dean has been elected as a member of the National Academy of Engineering of the National Academies; served as the inventor representative to the Public Patent Advisory Committee (PPAC) of the U.S. Patent and Trademark Office; and is an inductee of the National Inventors Hall of Fame.