Testimony of

## **Dean Kamen**

President DEKA Research & Development Corp. April 25, 2005

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Perspectives on Patents

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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, President of DEKA Research & Development Corp., a technology development company based in Manchester, New Hampshire that I founded in 1982. As a holder of more than 100 U.S. patents, I am pleased to speak to you today from the perspective of an inventor.

As a small businessman whose company relies heavily on intellectual property, I feel that maintaining strong patent protection for America's inventors is critical. From my perspective, some of the proposals currently being discussed - such as the weakening of injunctive relief, post-grant opposition, and the elimination of the presumption of patent validity - are extremely concerning.

Specifically, I would offer the following perspectives as the Congress considers how to maintain and 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 ...the useful arts by securing to ...inventors for limited times the exclusive rights to their ...discoveries." As President Abraham Lincoln stated, our patent system "adds fuel of interest to the fire of genius." To work correctly, the patent system must appropriately reward innovation and risk.

2. In exchange for the right to exclude others from practicing the invention for a period of years, the public gains the benefit of the technical knowledge contained in the patent disclosure. 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. To accomplish this, patent applications must be examined effectively by highly qualified examiners, using the best available technology and prior art. Any patent reform must fundamentally focus on ensuring patent quality prior to the issuance of the patent.

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 the increased number of patent applications being filed.

Ending the diversion of patent fees to other parts of the government would certainly help address this underfunding. With the proper funding, I am confident that the Director of the U.S. Patent and Trademark Office, Jonathan Dudas, could find ways to hire, train, retain and reward examiners with the requisite credentials to solve the quality problem at its roots. With state of the art search tools and access to the world's technical literature at their fingertips, along with proper training, supervision and adequate time to do a quality job, many of the real and perceived problems with the patent system should fade away.

5. I fear that some of the patent reform measures currently under discussion are not only unnecessary to address the issues that exist in our patent system today, but have the very real potential to create substantially worse problems. Fundamentally our existing patent system is not broken. It is uncontested that a vast majority of the patents issued by the U.S. Patent and Trademark Office are sound. While we should strive to further improve patent quality, we should not allow the limited number of cases of poorer quality patents to drive changes to the patent system that has served this country well for more than 200 years. Before enacting the most dramatic change to our patent laws in the past 50 years, I would suggest that Congress carefully evaluate whether the various provisions that are being proposed will indeed benefit the economy and support innovation.

6. One of the areas of consideration for patent law reform that gives me particular concern is the weakening of injunctive relief. Particularly troublesome is the elimination of the rebuttable presumption of irreparable harm when seeking a permanent injunction after a patent has been found to be valid and infringed. I believe that reversing the burden of proof to obtain a permanent injunction will have catastrophic consequences in our patent system and is particularly problematic for independent inventors.

? It is a fundamental principle of United States patent law to recognize patents as forms of property (like real property). That is, the holder of a valid patent has a right to exclude others from trespassing on that owner's private property.

? The Constitutional right to exclude others is properly enforced by using the mechanism of a permanent injunction. It is important to note that a permanent injunction can only be granted after a patent is found to be valid and infringed. ? Parties may be less likely to settle disputes if money is the only risk or penalty that party would face for trampling on the valuable property rights of others. Reversing the presumption of irreparable harm, therefore, may discourage parties from settling their disputes, thus prolonging and increasing the costs of litigation.

? Weakening the standard for granting permanent injunctions would be tantamount to adopting compulsory licensing. The United States has fought hard to eliminate these types of compulsory licensing schemes in the international arena through the TRIPS agreement.

7. Finally, to require a patent owner to personally manufacture and sell products covered by his or her patent before being entitled to an injunction would diminish the individual inventor's incentive to invent. Indeed, the individual inventor is seldom in the best position to personally commercialize his or her invention. For example, my company focuses on doing what we do best - creating innovative technology - and then seeks to partner with established corporations in the relevant field to allow them to do what they do best - manufacture, market, and sell these products. This business practice is entirely consistent with the fundamental purpose of patents, to promote the benefits of technology, by getting these innovative products, as quickly and efficiently as possible, into the hands of the people who need them.

## Conclusion

As innovation becomes ever more important to America's global competitiveness, a strong patent system is more important than ever. I strongly urge you to be extremely hesitant to move any legislation that could undermine an enduring component of the economic system that has made America the envy of the world for more than two centuries.

## 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 150 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 almost 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), and the INDEPENDENCE? IBOT? Mobility System, developed for Johnson & Johnson. DEKA also invented 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 and serves as the inventor representative to the Public Patent Advisory Committee (PPAC) of the U.S. Patent and Trademark Office. In May 2005, Dean will be inducted into the National Inventors Hall of Fame.