

**Testimony
Of
Congressman Michael H. Michaud
Before
The U.S.-China Economic and Security Review
Commission**

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Thank you for having me here today, Mr. Chairman. It is an honor to testify and have an exchange of views with this distinguished group of experts on U.S.-China relations.

Your work has been invaluable to those of us in Congress who are concerned about the economic, political, and security implications of the U.S. relationship with the People's Republic of China. Central to those concerns is the subject of this hearing – R&D in China: China's technological advances in key industries and the changing nature of trade that flows between the two countries.

The importance of these changes is highlighted by last year's report "Next Generation Offshoring: The Globalization of Innovation," released by the Fuqua School of Business at Duke University. The study surveyed 530 companies as to their offshoring activities. It found that corporations – large and small – are rapidly shifting core business functions offshore, including product design, engineering, and research and development. These high-value activities are following manufacturing offshore.

The arithmetic of this change is disturbing. According to the survey, the offshoring of product development increased, from an already large base, by more than 40 percent in the one-year period 2005-2006. The respondents to the survey reported that in the period 2007-2010 they forecast that offshoring of product development would increase 65 percent for R&D and by more than 85 percent for engineering services and product design-projects.

To put this shift in some context, for instance, only three of General Motor's eleven design centers remain in the United States today.

According to the Duke study, more than half of all U.S. companies are offshoring jobs. The big new trends are (1) high knowledge, high-pay work is following manufacturing to offshore sites and (2) small companies are increasingly offshoring their production and innovation activities.

Much of this investment is going to China that, as your prior work has documented – a nation that is making spectacular gains in its R&D capacity. Obviously, foreign investment in China is good for the Chinese economy. Such investment, along with Chinese investment in their own R&D, is enabling the Chinese to develop their own innovations, which, presumably, they will wish to protect against piracy and counterfeiting, both in China and worldwide.

While U.S. investors increasingly depend on their China-based operations for R&D, they also expect patent protections there for their innovations. Otherwise, such investment will become impractical and uneconomic and quickly will go to other nations that respect private patent rights.

Currently, however, U.S. innovators are plagued by Chinese piracy, counterfeiting, and the unauthorized, uncompensated use of their intellectual properties. Without proper safeguards, here and in China, the infringement of patents will worsen as more companies outsource more of their R&D and design work.

The issue of providing such domestic protection, notably the details of U.S. patent laws, is one of the most controversial matters before the 110th Congress. While a bill passed the House in September 2007, patent legislation stalled in the Senate because of the inability of the various interests to find a compromise on key points.

Some variant of the patent legislation considered in the 110th Congress will probably, more likely inevitably, return for consideration next year by the 111th Congress.

In anticipation of that debate, the Congress would benefit greatly from the advice of this Commission on two points: protection of U.S. patents in China and premature publication of U.S. patent applications.

These issues will play a major role in determining whether the U.S. will continue to have a first-rate patent system that nations such as China can aspire to attain or whether we will lower U.S. standards in a misguided effort to harmonize our patent system to the lower levels found in the rest of the world.

As to how to strengthen the protection of U.S. patented innovations in China, the United States has long given substantial attention to the pirating of copyrighted

and trademarked goods such as music and movies; however, the issue of how to deal with violations of patented innovations has received far less notice.

Accordingly, I request that you prepare recommendations for Congress on how it can provide legislation and oversight designed to defend the rights of U.S. patent owners involved in U.S.-China trade. Specifically:

1. What improvements in the monitoring of patent violations in China are appropriate?
2. Should the enforcement of U.S. global patent rights continue to be a responsibility of the Office of the United States Trade Representative, or would the process be more effective if the negotiation of trade rights and the enforcement of such rights were separated?
3. Are changes needed in the Section 337 intellectual property provisions administered by the International Trade Commission?
4. Is the United States making effective use of the WTO dispute process to defend U.S. patent rights in China, as well as globally, and what changes in such policy and practices do you recommend as being appropriate?

The second issue on which I seek advice for my Congressional colleagues and myself concerns the pre-publication of U.S. patent applications. I note that this Commission in its 2005 Annual Report recommended that Congress mandate the USPTO to stop publishing patent applications 18-months from the earliest filing date.

This matter was central to the debate of the patent bill in this Congress. The idea of such pre-publication was first considered in the United States in the 1960s and was enacted into law in the Patent Act of 1999.

As the issue was debated in Congress, it has become clear that while pre-publication before a patent is granted or not granted was an idea that may have been appropriate before the Internet when paper and microfiche was the medium of information distribution, its appropriateness today, in a global economy plagued by piracy and counterfeiting, has not been carefully examined. It probably is an idea whose time has passed.

The big question is why should the United States Government release the most intimate secrets of an inventor's application before the Patent Office decides whether or not it will grant the protections of a patent? Today, the average time for the USPTO to process a patent is 32 months. If the patent application is published 18 months after filing, it is available to pirates, counterfeiters, and competitors for an average period of 14 months before the USPTO acts on it. Moreover, if USPTO does not grant the patent, the inventor loses the ability to

utilize the innovation as a trade secret, because once published the information is in the public domain.

The 1999 Patent Act gave patent applicants an exemption from publication if an applicant when filing agreed not to seek a foreign patent. Some 40,000 U.S. inventors elect that option each year. This option, however, comes at the cost of foregoing global patent protection, a restriction that impedes U.S. inventors' ability to compete in the global economy.

Interestingly, some of the unintended, unanticipated consequences of what many Members believe are caused by the premature publication of patent applications were probably best identified by Yongshun Cheng, former senior judge and Deputy Director of the IP Division of the Beijing High People's Court. In a paper written in Mandarin for the benefit of Chinese patent authorities, Judge Cheng observed that the bill the U.S. Congress was considering was, "*friendlier to the infringers than to the patentees in general as it will make the (U.S.) patent less reliable, easier to be challenged and cheaper to be infringed.*"

In hearings conducted by this Commission in 2006, you received testimony that the Japanese patent office had discovered that people in China were accessing by computer published Japanese patent applications an average of 18,000 hits per day. Almost assuredly, the same thing is happening at the USPTO, although the Patent Office does not keep similar records.

Stronger U.S. patent laws, including protecting the secrets of inventors until they have a patent or not revealing the contents of rejected patents, are vital for U.S. innovation and job creation.

These issues, moreover, go beyond putting U.S. inventors at a commercial disadvantage in global competition. There are also national security implications.

The 1999 Patent Act included a security carve out that gives the Patent Office authority to keep secret those patent applications and granted patents it deems vital to national security. Yet, several examples have emerged where applications concerning technologies the U.S. bans for export are being fully published at the 18-month point and are available on the Internet.

It seems contradictory to ban the export of vital national security technologies and then reveal on the Internet all an inventor's insights and best mode to produce the innovation.

Thus, I request the Commission to advise Congress on the appropriateness of the 18-month publication rule as it now exists and identify what changes in current laws and practices, if any, are appropriate. Specifically, it would be of great assistance if your examination could address the following questions:

1. What are the economic/competitive implications of pre-publication to U.S. inventors and to the creation and retention of U.S. jobs?
2. What are the national security implications of the pre-publication of patent applications for technologies that are denied export licenses?
3. Some other nations publish abstracts of patent applications at the 18-month point, leaving out virtually all technical data. What are such practices in other nations and how appropriate are those practices for the United States?
4. What are the current inter-agency security classification practices of U.S. technologies between the Patent Office and the export licensing functions at the Departments of Commerce, State and Defense, NSA, and CIA, and are changes required?
5. Japan and Europe publish patent applications at 18-months after filing. If the U.S. does not publish an application for national security reasons, will the Europeans and Japanese honor that decision and not publish as well? If not, what changes of U.S. law may be needed?

The answers to these questions will figure greatly when Congress next considers U.S. patent laws.

Let me be clear – the patent legislation that passed the House was very complex. Controversial provisions such as damages, post grant review, first to file, etc. were contentious issues on the floor. Fixing 18 month publication alone is not the answer; we need to look at a comprehensive solution. I look forward to working with you on that solution.

Again, I thank this Commission for its work and many contributions in helping Congress understand these key issues in the rapidly evolving U.S.-China relationship.

I look forward to your comments and questions.