Invention International
Q&A: Bruce Lehman, the former head of the U.S. Patent Office, says intellectual property protection is essential for nurturing a knowledge economy in the developing world.

May 9, 2003

The knowledge economy has yet to penetrate many areas of the world. Taking up this cause is Bruce Lehman, who served from 1993 through 1998 as the commissioner of the U.S. Patent and Trademark Office, under President Clinton. After stepping down, he founded the non-profit International Intellectual Property Institute (IIPI) to work with governments, companies and entrepreneurs in developing nations who were failing to use patent, trademark, and copyright laws for their own economic advancement. Lehman visited Technology Review last month and sat down to talk with Editor Bob Buderi and contributing writer Evan I. Schwartz about patents, intellectual property development projects, and their role in fostering economic growth.

TR: Why did you set up the institute?

LEHMAN: If you’re going to develop knowledge-based economies in other countries, and if they’re going to get rich, they have to have effective intellectual property systems. When I left government, I wanted to set up an institution which would help people in developing countries understand how to use these new tools which they’ve been forced to accept as a result of trade negotiations. Doing so would be a win-win situation because it would create constituencies in these countries that would begin to see things our way. So instead of having the tension of us against them all the time, we would move forward together into a more harmonious world.

TR: How is it funded?

LEHMAN: I started out by getting a couple of people in the private sector to give us some seed money. I saw the logos on your Web site and noticed that sponsors include Ford, IBM, Microsoft, Merck, Time Warner, and Bacardi.

LEHMAN: Those are the companies that have contributed. But the idea always was that this should be publicly funded and indeed, that’s also happened. This is a development organization, so it should come from the U.S. Agency for International Development (US AID), global development banks, things like that. We also got money from WIPO (the World Intellectual Property Organization).

TR: How does your mission relate to that of WIPO?
LEHMAN: WIPO is a specialized U.N. agency that deals with the world's intellectual property system. They're unique among UN agencies. They don't get funded from member states, but generate about $200 million in fee revenue by administering the Patent Cooperation Treaty and the Madrid Union [for international trademark cooperation]. WIPO financed some of our first projects, in Egypt and in Jamaica.

TR: What are those projects?

LEHMAN: There's a technology consortium in Cairo that had made digital images of all of the artifacts in the collection of the Egyptian Museum. They called up WIPO and said, "Look, we might want to put these out on the Web. What should we do about it?" And the response was: call the IIPI. And we talked to them and told them, "No, don't do that just quite yet." We sent a copyright lawyer to help them understand that when you create a visual image of something, even though it might be in the public domain, that you can copyright it and that you should license these things.

TR: What about Jamaica?

LEHMAN: Jamaican music accounts for about three percent of the global music business. It's more than $1.2 billion of revenue, but none of that business activity takes place in Jamaica. The music emanates from there, but they do not have the institutions there on the island to get the business done. We made a lot of recommendations to the Ministry of Industry on how to change that.

TR: Bob Marley's music didn't benefit the country economically?

LEHMAN: Island Records [the late Bob Marley's record label] is actually all Jamaicans, but the business is all done in London and the United States. This gets really to the whole point of what we do. The WIPO seminars are all a bunch of the same old people who know one another getting on a plane and going to a seminar. It's all lawyers, and they all just talk about what a patent law looks like and what a trademark law looks like and so on. What these countries really need is to understand is how you use intellectual property rights in a practical business sense to make money and to generate economic activity and economic growth. The publishing revenue alone from Jamaican music is about $300 million a year, and yet not a single penny of that is run through a music publisher on the island. The Jamaican Performing Rights society last year had revenues of about $300,000, all of which came from licensing radio and television stations in Jamaica. They have no reciprocal agreements with ASCAP and BMI (in the U.S.), or with SACEM in France, so they get not a penny from overseas.

TR: So there is this disconnect between these global treaties and what really happens in developing countries.

LEHMAN: You go to the WTO (the World Trade Organization) in Geneva, and you're trying to negotiate a trade treaty and you say, "You guys should respect intellectual property rights!" But these guys are getting completely ripped off, and they're getting none of the rights that really should be flowing through their economy.

TR: What about patents? How can you make invention more indigenous to some of these countries?

LEHMAN: Another project we're setting up is a Bayh-Dole type of system for South Africa.
TR: That's the 1980 law that enables universities to collect licensing revenue from patents resulting from government-funded research.

LEHMAN: Yes. South Africa is typical of a lot of developing countries. It has a highly developed society within a very poor society. Now, in that case, that was more of a racial thing. But it had a very sophisticated R&D operation in the public sector and the academic sector that in the apartheid regime was largely driven by the military industrial complex, which was cut off from the rest of the world. Now, they have to integrate their economy into the world, and they have to try to raise their GDP growth to bring that vast impoverished black population somewhere closer to that of the white population so you don't see the kind of thing that we've seen happen in next door in Zimbabwe. And so we went down there, and we had set up an organization with US AID money for every single university laboratory and government laboratory. Some of them already had activity in this area, but we're ramping that up greatly. The University of Stellenbosch, for example, is working on an AIDS vaccine. We are building high technology transfer offices at all of these institutions in South Africa, and we're also trying to hook them up with their peers in the United States so now they'll be able to get grants from the U.S. National Institutes for Health. All this helps stem the brain drain, which is a big problem in some of these countries.

TR: What other countries are the hot areas?

LEHMAN: In the past year, we were India, in Vietnam, the Philippines, China, and Brazil. We just had a mission in Bulgaria.

TR: Do you see a way to correlate economic well-being with patents, or some kind of measure of intellectual property, across some of these developing countries?

LEHMAN: One of my great frustrations when I was in the Clinton administration was in defending patents, and this is where patents are different from copyrights. It's very easy to identify the contribution of copyright industries to the economy of the United States. When Adobe markets its products, it's marketing its copyright. When Autodesk or Microsoft do, they're selling you a copyright license. So you can ascribe virtually all of the revenue of those companies to copyrights. And the same thing is true of the music companies and movie companies. Publishing companies too—your magazine, for that matter. According to the International Intellectual Property Alliance, the copyright industry accounts for seven percent of the U.S. economy, and it's growing fast. It's hard to have a market economy with no property rights. We already see what uncontrolled distribution of product on the Internet is doing to the record industry. They're going through a tough time right now because they've lost copyright control.

TR: Also, they're not putting out very good music.

LEHMAN: Well, that may be another reason. But on the patent side, it's much more difficult, with a couple of exceptions, obviously, like biotech and pharmaceuticals, where the patent and the product are virtually one and the same. There, it's much more difficult sometimes to truly evaluate the economic impact, but it has long been a part of the U.S. economic culture.

TR: What do you think is going to happen with the globalization and the harmonization of patents?

LEHMAN: Almost any intellectual property or patent expert would agree that we need a global patent system. The problem with that is, how do you achieve that politically? Back during the 1980s, when I
was a Capitol Hill staffer, there was a major effort at patent harmonization that ended up as a complete flop—it went nowhere. Trying to bring all these people together and deal with the first-to-file issue, it was just not going to happen.

TR: The independent inventors were fierce in their opposition.

LEHMAN: Yes, they were incredibly fierce. When I became the head of the Patent Office, I decided that the first-to-file issue was so controversial that we would have a very difficult time getting it through. The political fear was of an order of magnitude beyond what I had imagined. And you have to remember, when you mention the word "patent," the typical Congressperson's eyes glaze over. They're not going to take political heat on something like that.

TR: So how do you get the attention of policy makers on this?

LEHMAN: The problem is that patents are a subject controlled by a priesthood that operates in a world of mystery to anyone other than those who are members of the priesthood—including, in most cases, the front office of companies. A Senator doesn't want to see the patent counsel, he wants to see the CEO. And if the CEO isn't talking to him about it, then it must not be very important.

TR: What are some other key patent globalization issues, other than first-to-file vs. first-to-invent?

LEHMAN: First of all, we're going to set up a single patent examining authority. And this is where I think what current U.S. Patent and Trademark Office director James Rogan is doing is ultimately going to be the solution. First, patent searching, and then examination, has to be privatized. The patent examiner should be more like a defense contractor. The Defense Department doesn't build F-15 or F-18 fighter planes itself. It supervises contractors to make sure that they get the quality that they need. Nothing is more critical to the sovereignty of a country than its defense, and yet a handful of defense contractors supply all of the weapons used in the world, even those that are used against us. So, if you detach the actual examination from government itself, then you can have one or two private entities that really become experts at patent examining, and then everybody in the world can hire them to do the examining.

TR: What kind of companies would do it?

LEHMAN: Well, the patent office put out something called a Request For Information about a year ago, just to find out if there were companies that would be willing to do this, and a bunch of companies came back and said, yes. I think Reed-Elsevier was one. But they ended up not going that route. Instead, they just made a contract with the European Patent Office to perform global searches under the existing Patent Cooperation Treaty because it was easier for now. But privatization is still in the future.

TR: Will a global patenting process change the results—that is, whether certain applications are approved or not?

LEHMAN: Obviously, you can't have harmonization unless you have confidence in the result. Under my watch, we set up teams of examiners for filings in the three big offices—one team from the United States, one from Europe, and one from Japan. We found that, in something like 99 percent of the cases, the result was the same in all three offices. Now, interestingly, they found that the prior art that was cited was not the same, but that really isn't that troubling. The key thing is that the result was the same in all cases.

TR: Do you think that the first-to-file issue will be resolved internationally?

LEHMAN: Maybe it will be eventually. Personally, I think our system of first-to-invent is a more equitable system. But I think we should change to first-to-file because the benefits of internationalization outweigh the advantages of our current system.