

A Global Patent System: From fantasy to functional

By Nima Veiseh

Summary: The world's patent systems are congested and asymmetrical. As economies across the world grow more closely, patent systems will be required to work in greater harmony. The United States suffers from a flood of new applications each year, and Europe requires an individual patent grant in every country across the European Union. China's political mode is discouraging foreign corporations from feeling protected under their patent system. **The world's industrialized nations must resolve these asymmetries in order to create a global patent system.**

I walk through problems that are characteristic of all industrialized nations, but I use five specific geographic areas to illustrate my points: United States, China, Indian, Japan and Europe.

My conceptualization for the world patent system can be summarized as follows:

- The world must file and maintain a totally digital patent system. This will make searching all the worlds patent systems a trivial task, and it will make international correspondence.
- The United Nations must act as the central patent processing authority. With one worldwide location, conflicts in international patenting can be more easily resolved. Also, limiting international IP repetition will help the world more forward technologically more efficiently.
- The world must move to a "first-inventor-to-file" system. But in this case, all countries must grant a one year grace period after disclosure to file for a patent.
- Contesting patents should be settled by an international court, whose made of judges from all nations.
- A procedure for compulsory licensing must be introduced to help all countries who may be in need of a specific technology, such as a flu vaccine.

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The world's patent systems are congested and asymmetrical. As economies across the world grow more closely, patent systems will be required to work in greater harmony. The United States suffers from a flood of new applications each year, and Europe requires an individual patent grant in every country across the European Union. China's political mode is discouraging foreign corporations from feeling protected under their patent system. **The world's industrialized nations must resolve these asymmetries in order to create a global patent system.**

Although the United States PTO is considered to be the most efficient patent office in the world, it is still a system with many problems.

First, the United States is the only country, among large industrialized nations, to have a policy of granting patents to the "first to invent", and not the first to apply. This can cause many problems. While the time stamp on a patent application is not debatable, the court battle over the first to invent can add years to the application process. The U.S. has a statute in the House of Representatives, the Patent Act of 2005, in order to change the patent system to granting to the first inventor into apply. This will clear up confusion in court proceedings and save man-hours for the USPTO.

It is conversely argued that the small entity inventors, comprised of small inventing firms and independent inventors, will suffer inequities in patent protection. Small entities are said to not have the resources to file as quickly as a larger corporation. Large entities have a fully funded staffs of lawyers dedicated to securing that corporation's patents; these resources are out of the monetary reach of the independent inventor. Large entities, like public corporations, are advantaged in a first-to-file system, because of the monetary disproportion.

The solution to is to have a two-tier system for payment of patent fees.¹⁴ The USPTO is funded by patent processing fees, so lowering all of them would only cripple the monetary resources of the patent office. A two-tier system would continue to charge large entities, like corporations, standard fees that can be afforded today. The bottom-tier charges small entities, like the independent inventor, a fraction of the fees paid by corporations. Thus, the independent inventor does not delay in filling an application, because of a shortage of business interest or money. The independent inventor now can file with the same diligence as a large corporation.

The USPTO already records whether the application is from a small or large entity. Also, corporations file 88.8 percent of patent applications and are the source of the large majority of fees collected by the patent office.¹⁵ Subsidizing the independent inventor would insignificantly impact the monetary resources of the USPTO. Also, if the price of application fees rose for corporations, they may be discouraged from filling unnecessary patent application.

Thus, the implementation of a two-tier patent fee system is trivial. The inventor would not be disadvantaged by the monetary inequities with large corporations, and the first-to-file would make the question of “who invented what first” far more simple.

Second, the United States allows the patent of Software products. This is inconsistent with countries like India, who maintain that any product based on fundamental mathematical principals cannot be patented.

The United States policy toward software patents is also inconsistent. Business transactions and software implementations of such methods are gray areas of patentability. For more consistency, those seeking a software patent should seek the patent for the “application of a mathematical process”. Under this terminology, software patents become protected technologies, as oppose to copyrighted publications (copyright issues may come about with regard to the source code that governs the substance of the software). This makes the granting of a software patent more purposeful and less contentious.

Europe tries to synchronize its multi-national patent system with slow progress.

Although the European Union created a multi-national patent office, patents still need to be granted in every individual country. This means that one patent application in Europe may result in as many as 36 different patent grants.⁴ Each of these individual patents must

be contested in each of the 36 different countries. There is no medium for synchronizing the judicial side of European patent law.

India's patent system grants commercial monopolies, as oppose to promoting the scientific arts.

First, Indian patents are considered the "instruments of monopolies"⁶. Patents in India "prevent all persons other than himself and those whom he authorizes for making, using or vending that is the subject-matter." This means that a patent in India grants total rights to a product to a particular organization: the rights produce and exclude. This has caused problems in the pharmaceutical industry in India

Second, India's system for contesting patents is unique in the world. There exist two separate processes for contesting a patent, before the patent grant and a limited time after the patent grant. If no contest is brought in the district court, then an effective monopoly is granted to the patent holding corporation, granted exclusive rights to produce and profit from that technology.

Third, India lacks a central federal court to contest patents. The contest must first be brought up in the district court where the patent was granted. Then, if the contest is successful, the case moves to a higher federal court. These procedures are not linear. A person may travel to several states contesting a patent, whereas with a federal appeals court, as in the United States, all patents can be brought and tried to a single federal

judge. This simplifies the process of contesting a patent and reduces the resources spent in finding who has the true right to a patent.

China's communist government hinders the progress of its intellectual property system.

First, foreign corporations must endure extensive judicial proceedings in order to protect their intellectual property. The Chinese Patent Reexamination Board (PRB) is charged with regulating patent proceedings.¹¹ If any organization contests the legitimacy of a patent, the respondent has one month to counter the claim against their patent. If the counter is accepted, three to five judge panels on the PRB then evaluate the proceedings.

Often times, foreign corporations lack the clout in the Chinese courts to fairly defend their patents. Chinese corporations may use the PRB to acquire technologies from foreign organizations. Pfizer was granted a Chinese patent on Viagra in 2001. Viagra's revenue increased by about 10% per year until, in 2004, Pfizer lost the Chinese patent in PRB proceedings. As generic pharmaceutical companies started producing Viagra, Pfizer's Viagra revenue dropped 11% with 2004 worldwide sales reduced to \$1.68 billion dollars.¹³ Out of the 24 drugs Pfizer produced, Viagra was one of only four that lost in revenue between 2003 and 2004. This was largely in part to lost intellectual property rights in foreign nations like China.

Japan is notorious for granting superfluous patent protection to technologies that are never used.¹² The Japanese government created the Financial Service Agency in 1998,

in charge of scrutinizing resources that are underused. The jurisdiction of scrutiny was originally real estate and housing loans, but the two-thirds of Japanese patents quickly fell under the FSA's jurisdiction also. This agency promotes the usefulness of patents applied for in Japan, because any application or present patent that does not demonstrate usefulness, is considered obvious and open for public use. The agency's ability to invalidate patent protection should be limited to the determination of official court proceedings. A more enabled patent court system in Japan would help in handling in sorting out these issues in patentability.

However, the presence of such scrutiny will prevent redundant patent applications from being filed.

An effective world patent system can be created, by addressing the above discrepancies between the patent systems of major industrialized nations.

First, all patent applications and proceedings must be conducted via electronic mediums. Time is wasted because patent searches take countless extra hours, because most patents are still in paper form. An electronic database of all patents, capable within today's technologies, greatly slims down the search time process and leaves more manpower for resolving conflicts between applications and existing patents. Also, a standard electronic form for patent processing would make applying for patent protection in foreign nations easier. A logistical problem today is that most foreign patent offices require paper copies of patent applications. This translates into time lost in shipment, and more time to

acquiring patent protection. Encryption for emailed patent applications is equally as secure as mail delivery for patent applications, and takes a fraction of the time. By accelerating communications between international patent offices, companies will be able to seek patent protection more quickly. Also, free international communication will place all countries on the same track as far as the current state of technology is concerned.

Since all countries will be aware of all other countries progress in research, there can be international cooperation in advancing technology as a whole. By providing all patent and protecting technological information through one common resource this would not only benefit the large entities, but also the independent inventor and researcher.

Second, the United Nations must act as a central authority for patent application processing. All applications filed in any country must be filed through the United Nations office for patents. Such an office must be explicitly created by a UN mandate, but the office would maintain protection of patents across the world. With one central database for patents, searching patents belonging to foreign organizations will become a trivial task. Also, industrial efficiency will increase because more than one organization will not seek to do research or inventing that has already been protected, rather they shall further the work already done. Establishing these offices as an extension of the UN is the most feasibly means of starting this worldwide patent authority.

Third, all nations must convert to “first-inventor-to-file” system. This means that the first party to file an application has priority rights to the patent. This greatly simplifies much of patent contest proceedings, because the time stamp on the application will be the main

factor in a judge's decision. As noted above, independent inventors will not be disadvantaged, so long as a two-tier fee system is concurrently implemented. The inventions of small-entities will be better protected because the time stamp on the more easily attained application will make obvious who was the first-to-invent.

Fourth, contesting of patents should be divided into two separate phases. First, after the publication of a patent, some number of months after application, the patent should be subject to public scrutiny. Thus, if an obvious public use or infringement has already been made, the examiner can reject the patent and save time in further processing.

Second, after the grant of the patent, a single legislative body should be entrusted with the powers to settle intellectual property disputes.

A single judicial body in charge of patent disputes would ensure consistency in decisions and regional unanimity, similar to the United States Court of Appeals for the Federal Circuit or the panel of judges used in the Chinese patent dispute system. This judicial body should consist of multiple judges who are trained in the patent arts and law practice, and who can freely examine the validity of a case based on adversarial and expert testimony. This solves the Chinese problem, where one country's judges are invalidating another country's patents. With impartial and international judges on the court, judges will be less politically motivated to side with one country or the other.

The proportion of judges on this international court would be determined by the number of applications filled by members of a particular country. Every country that is a member of the international patent appeals court will be subject to at least one judge appointment.

Fifth, a procedure for compulsory licensing should be introduced. If one country has a patented technology, for a viral vaccine or other essential technology, whose dissemination would help the greater humanity, the entity should be forced to license such a technology. This would promote continual forward progress of technology, and ensure that inventors and scientist are working together to promote humankind. The negotiations are best conducted with the patent owning firm through the patent office to all countries that may require the technology.

Uniform protection and distribution of intellectual property will be a challenge to innovation in the twenty-first century. The United Nations should be the main body to take the challenge, by expanding the powers of the World Intellectual Property Organization by UN resolution. The expanded powers would give WIPO jurisdiction over all international patent proceedings and filings. With most of the worlds major patent offices moving to total digital systems, combining all the libraries is not as impossible as with systems dependent on paper. People in multiple counties will work together to develop the next technologies of humanity. A global patent system will be the catalyst behind this revolution in international cooperation and technological advancement.

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