The global patent system is currently in a state of crisis. This crisis is a result of the following factors: the increasing complexity of inventions; the explosion of patent and non-patent prior art; the expansion of patentable subject matter; the globalization of the patent system; the cost of multinational filing; the disproportionately low level of patent filings from nationals of developing compared with developed countries, and the accelerating number of applications in many patent offices.

Quality examination of patent applications today is a complex and expensive process. The world’s largest patent office, the USPTO, exemplifies these facts. Operations of the USPTO require the services of over 9,000 employees (full time and contract employees), and a budget of over US$1.3 billion. Examination of many applications, for example in the fast growing area of biotechnology, would be impossible without the use of extremely powerful computers capable of comparing an applicant’s claims with DNA sequence data bases containing megabits of data. And, the ability to compare the prior art with the claims in the application requires a level of expertise found only among Ph.D. level scientists. Many applications require the searching of libraries of non-patent publications, which are expensive to access and search.

Thus, the ability to effectively examine the most far-reaching and technologically sophisticated patent applications is beyond the practical reach of many small patent offices. Actual practice in many of those offices is simply to review the search results of one of the world’s large patent offices without the capability of performing an independent examination. Many countries, which have de jure examination systems, have de facto registration systems. This means that extremely powerful property rights are granted in their territories with minimal scrutiny and raises a question of fairness for their citizens who will be required to respect those rights under penalty of law.
In addition to the inadequacy of examination capability in many countries – particularly developing countries – the global patent system clearly is not providing equitable access for inventors from poorer countries. The real benefit to the exclusive rights granted by a patent is to be able to license an invention in the most lucrative of the world’s markets. To be effectively rewarded for his creativity, an applicant from a small national market must obtain patent protection in large and wealthy jurisdictions such as the United States, the member states of the European Patent Convention and Japan. The costs of filing and prosecuting patents in these big markets are simply beyond the reach of a large majority of the nationals of developing countries. This imbalance operates as an effective trade barrier to developing countries’ participation in the most economically significant and profitable sectors of the global economy. This unintentional trade barrier harms rich countries as well because they are unable to receive efficiently the transfer of technology from much of the world. New ideas which might enrich the lives of their consumers remain undeveloped until inventors with access to the global system patent the ideas.

The results of the two phenomena described above distinctly prejudice developing countries. Developing countries adhering to the TRIPS Agreement must provide developed country patent applicants extremely powerful economic rights with less scrutiny than in those applicants’ home countries. At the same time, their own creators are shut out of the most lucrative of the world’s markets for innovation. This imbalance prevents the growth of a global constituency for strong intellectual property rights, seriously prejudices U.S. efforts to obtain compliance with TRIPS and increases the likelihood of calls for a roll-back on TRIPS of the kind which surfaced recently in Doha.

WIPO can play an important role in addressing this inequity while, at the same time, providing to all the world’s inventors a more efficient and less expensive patent system.

There are two pillars to the solution of the problem. The first pillar is to utilize the PCT to provide independent examination capability to countries that choose to utilize it. The second is to create a source of funding for multinational patent prosecution by inventors in developing countries.¹

WIPO should create, under the administration of the PCT, a “virtual” search and examining authority. This could be done by inviting existing patent offices and the private sector to provide search and examination services to WIPO. There are a number of high quality patent offices in smaller developed countries, which could provide such services. These offices could specialize

¹ Last year the U.S. tabled a proposal for reform of the PCT at a meeting of the Committee on Reform of the PCT held in Geneva, May 21-25, 2001. The United States proposal called for a two-stage reform of the PCT. The first stage of reform would eliminate the arbitrary limitations contained in the current treaty which require applicants to designate the states for which application is made and eliminates the requirement that the applicant be a national of a PCT member state. Applicants could file directly from anywhere in the world. The U.S. proposal also would give the applicant the right to request international stage searches in multiple jurisdictions. The distinction between searches and examinations would be eliminated, with each “search” encompassing a complete “examination”, the results of which would be made available to all contracting PCT states. The 2001 U.S. proposal envisions a second stage to be implemented after several years which would eliminate the distinction between national and international applications. National examination authorities would be replaced by “regional” examination authorities. The proposal contained in this document would accelerate the process contained in the U.S. proposal and provide for a single, global examining authority under the auspices of the WIPO rather than regional examining authorities.
in particular classes of technology so as to avoid duplicative effort. Developing countries with significant scientific capabilities could join the system by providing examination services in areas of national competence, such as mining, agriculture science or computer science. This way no single country would be required to bear the burden of training and employing extremely large numbers of technically sophisticated examiners. The contributions of national patent offices could be supplemented by the services of private sector companies which could be invited to submit bids to provide world-class examination services in particular areas. Under the auspices of WIPO, global collections of patent and non-patent prior art could be assembled and made available electronically to the examiners wherever located in the world. Uniform examination standards could be developed and quality monitored by a centralized staff of experts assembled by WIPO. The use of electronic filing would enable the most effective deployment of automated search technologies to make the examiners’ tasks easier. This approach builds on the U.S. proposal to strengthen the PCT which was put forward at last year’s WIPO General Assembly.

The new search and examining authority would exist in parallel with current search authorities under the PCT. It would be up to individual countries to decide whether to utilize the WIPO search authority as their national examining authority, and up to individual applicants to designate WIPO as their choice as a searching authority under the international stage of the PCT. If the new authority provided quality services and timely searches and examinations, it would probably become the international search authority of choice for the most frequent users of the PCT system. Proliferation of duplicative searches and examinations would cease, and the resulting costs savings could be divided between patent applicants and national patent offices which would use the saved revenue to provide advice and services to national inventors, particularly those in the small and medium sized business sector.

The second pillar of a more efficient and equitable global patent system is to provide patent prosecution services to under-funded nationals of developing countries. WIPO could take the initiative of setting up a revolving fund which could be used to finance the costs of PCT applications by developing country nationals. WIPO could supply a portion of the capital by diverting part of PCT fee revenue into the fund. It also could seek capitalization of the fund from national governments, the private equity markets, or international development banks. Upon capitalization the fund would be replenished by allocation of a portion of licensing or royalty revenue received by patent applicants who successfully commercialize their innovations.

The reforms described above would leave national patent offices free – as they so chose – to provide technical advice and services to their own innovation communities. Particular attention could be given to the commercialization potential of research performed in government funded laboratories and academic institutions. SMEs could be educated about the benefits of the patent system and assisted in effective global exploitation of their innovations. With the resources freed

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2 This envisions widespread adoption of the Bayh-Dole model in use in the United States since enactment of the landmark legislation bearing the two Senators’ names in 1982. The Bayh-Dole Act is credited with spurring significant commercialization of publicly funded research resulting in a significant boost to economic growth in the United States. In developing countries, most research currently takes place in government laboratories and universities. Private sector research capabilities are non-existent or limited. By adopting the U.S. model, developing countries would accelerate a private sector technology capability.
up under the new system, national industrial property offices could provide training and assistance in the marketing and licensing of inventions, and in how to obtain capital investment and joint venture partners.

*The result would be a more efficient and equitable global patent system with an increasing number of stakeholders in all parts of the world, and greater universal respect intellectual property rights.*