

DEPARTMENT OF INTELLECTUAL
PROPERTY
MINISTRY OF COMMERCE



OMPI

ORGANISATION MONDIALE
DE LA **PROPRIÉTÉ**
INTELLECTUELLE

Regional Seminar on the Effective Implementation and Use of Several Patent-Related Flexibilities

***Topic 2: The Multilateral Legal Framework of Patents and
the International Agenda***

**Bangkok, Thailand
March 29 to 31, 2011**



**The Multilateral Legal Framework of
Patents and the International Agenda**
Regional Seminar on Patent-Related
Flexibilities

Bangkok
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Outline

- The international patent system today and some of the challenges it faces
- What the patent system is meant to achieve and its changing role
- WIPO (and other) efforts to get there
 - Legal
 - Practical
- Some trends

The international legal framework today

WIPO (choice à la carte)

Paris Convention, 173 MS (few substantive obligations);
specialized agreements (Art. 19 Paris):

- PCT (1970, 142 CS); IPC (1971, 61 CS); Budapest Treaty (1977, 73 CS); PLT (2000, 27 CP)

WTO (one single menu), 153 M

TRIPS Agreement

- Comprehensive agreement
- Minimum standards; enforcement of IPRs; WTO dispute settlement procedures

Regional agreements (e.g. EPO, EAPO, ARIPO, OAPI, GCC)

Bilateral agreements (trade agreements and others)

Some views on the patent system

- „Lincoln said that the Patent Office adds the flame of interest to the light of creativity. And that is why we need to improve the effectiveness of our Patent Office.“

Jay Inslee

- Patents and innovation are a critical component of IBM's high-value business strategy

Samsung and IBM recently announcing cross-licensing agreement

- „In the electronics industry, patents are of no value whatsoever in spurring research and development.“

Vice-president of Intel Corporation, Business Week, 11 May 1981.

The international patent system today

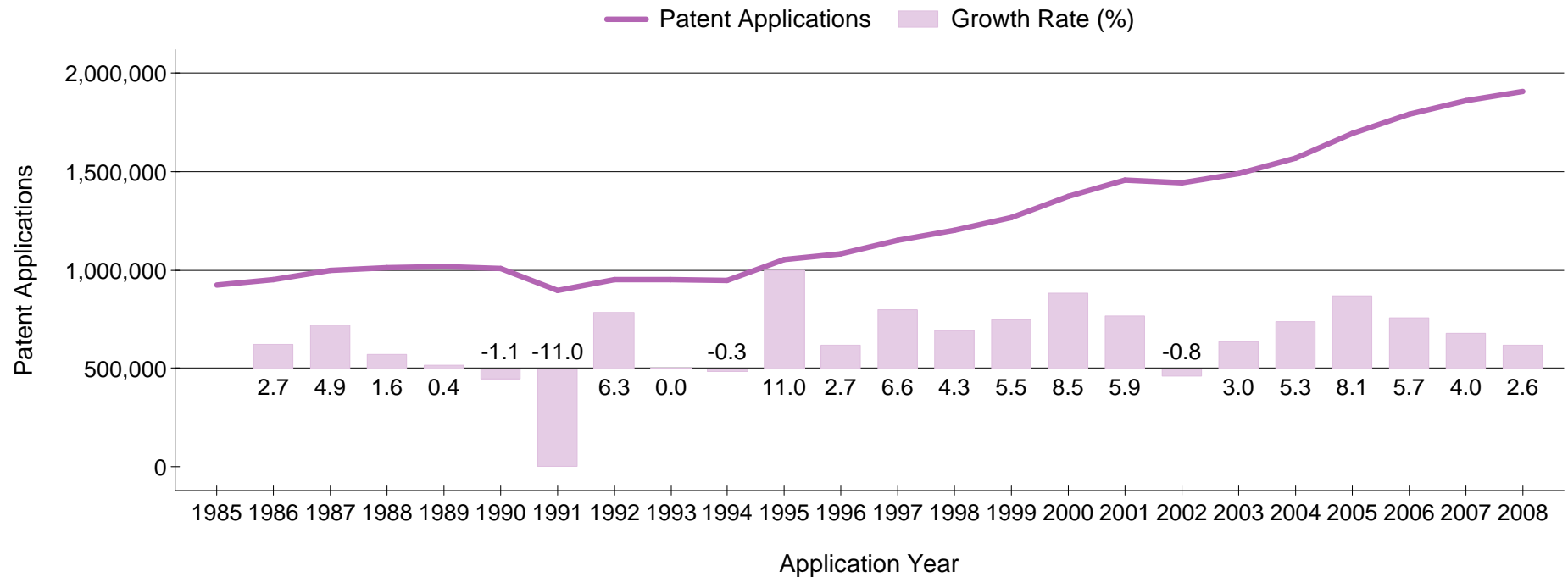
- Present situation:
 - claims for more innovation and dissemination of technologies (for development and wealth), but also criticism (as to increasing number of “monopoly” rights; doubtful patents)
 - multilateral approach in difficulty (e.g. harmonization)
 - constant search for balance
- To simplify, challenges today are twofold:
 - intrinsic to the patent system and
 - external to, but related to, the patent system

Challenges internal to the patent system

- Economic challenge: success and expansion of demand, in particular, in knowledge creation (need for protection); workload issues, backlogs
- Geographical challenge:
 - Important increase from several countries in Asia (China, Japan, Republic of Korea)
 - internationalization of technology production: e.g. international co-authorship of scientific articles increased 3 times compared to 1985
This has impact on prior art, access to documents and the multiplicity of languages
- Legal aspects:
 - inadequate protection (too weak or too strong protection); adequacy of patent system for all areas?
 - enhance validity and quality

The international patent system today

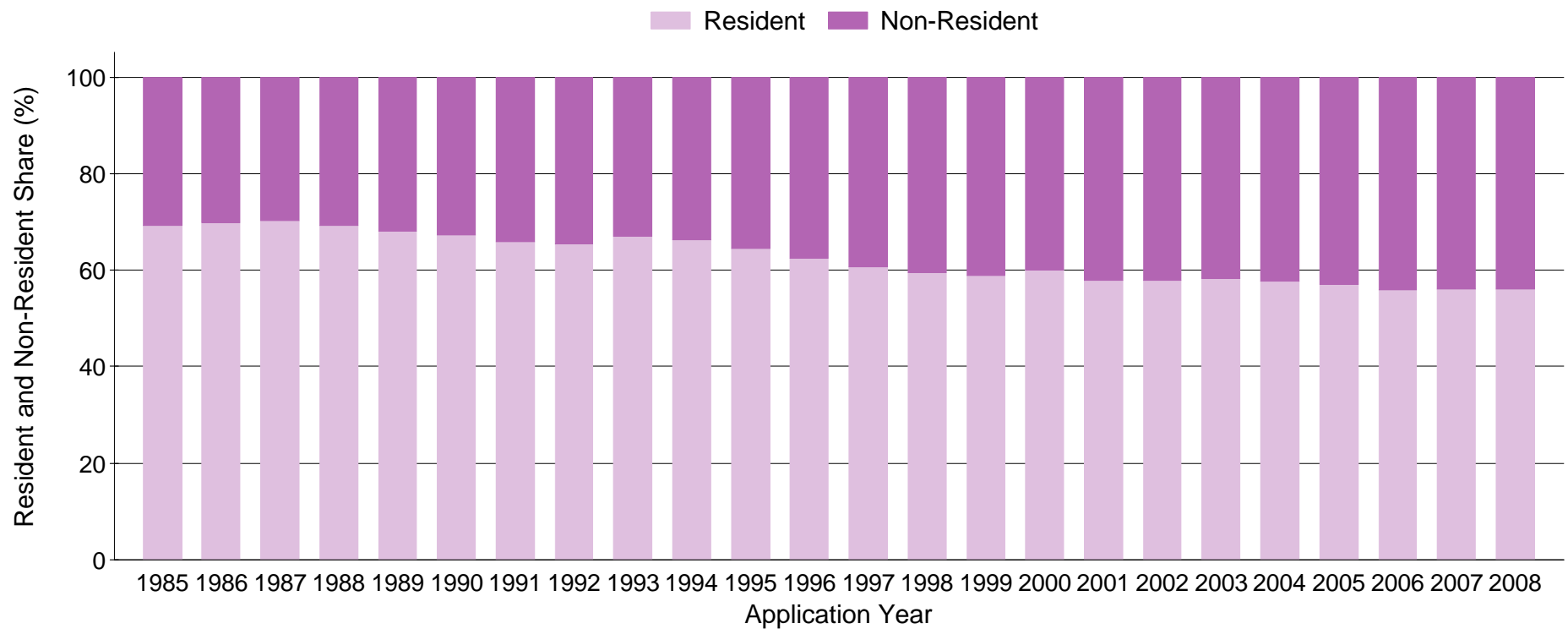
Patent Applications Worldwide



In 2008, approximately 1.91 million patent applications were filed across the globe, representing a 2.6% increase over 2007

Source: WIPO Statistics Database, June 2010

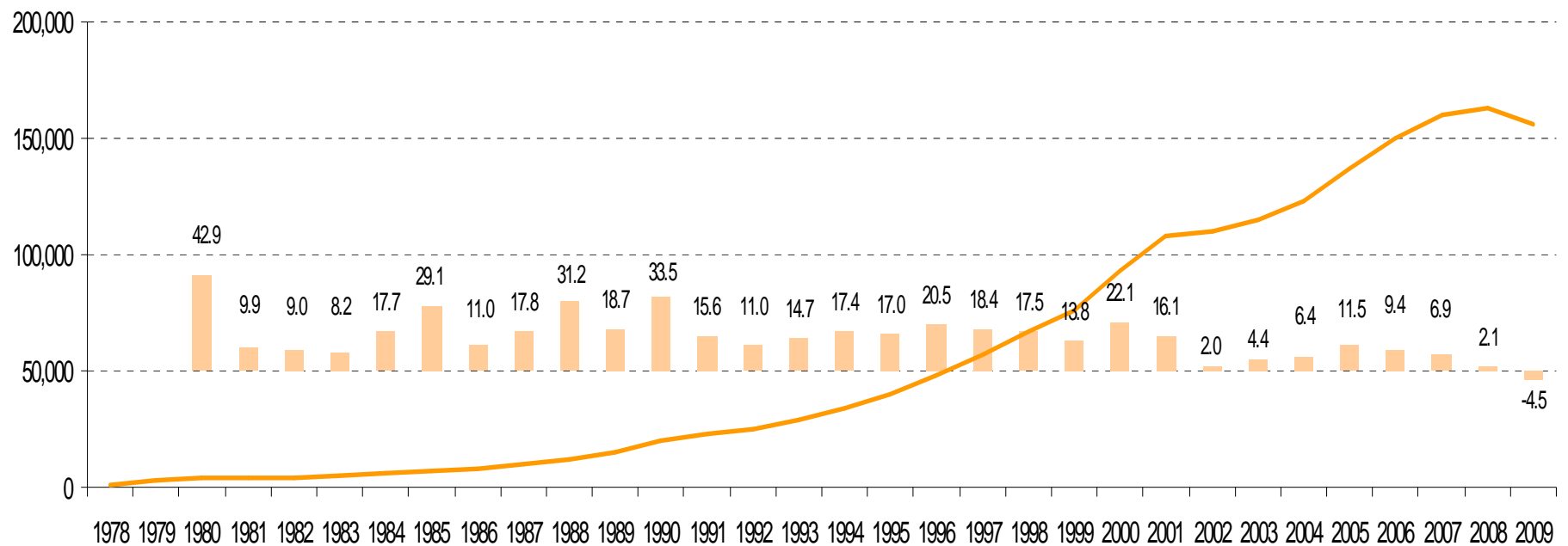
Patent Applications Worldwide: residents v non-residents



Source: WIPO Statistics Database, June 2010

Trends in PCT Applications: 1978 - 2009

In 2009, an estimated 155,900 PCT applications were filed worldwide, representing a 4.5% decrease compared to 2008.



Source: WIPO Statistics Database

Annual Growth (in %)

PCT Applications

Figure 1.1: Trends in PCT Applications, 1978 - 2009

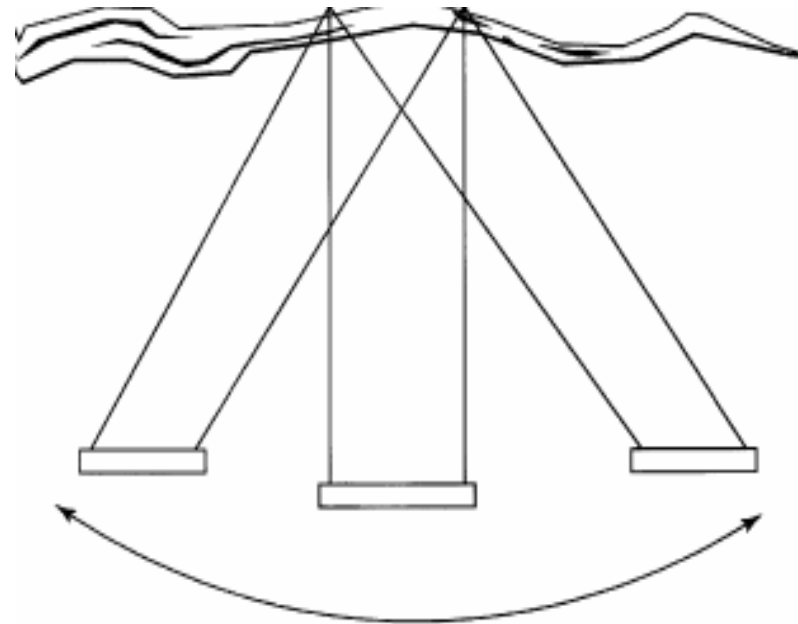
External challenges: the broader policy arena

- Political: patent policy recognized as integral part of national trade, development, public health, science and research policies:
 - global challenges and questions about the social and economic impact of patents (particularly in the area of public health, climate change, biotechnology, food security); different levels of development
 - increasing number of international fora; increased participation of civil society
 - pace of multilateralism
- New technologies and new economic reality: Internet and biotechnology; software; nanotechnology. Transition to knowledge-based economy. Prior art
- Interface with other issues, e.g. competition, standards
- Other business-models, e.g. open innovation models

Method of swinging on a swing

Abstract

A method of swing on a swing is disclosed, in which a user positioned on a standard swing suspended by two chains from a substantially horizontal tree branch induces side to side motion by pulling alternately on one chain and then the other.



Abstract

A method of styling hair to cover partial baldness using only the hair on a person's head. The hair styling require dividing a person's hair into three sections and carefully folding one section over another.



FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5

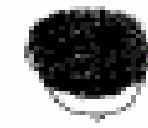


FIG. 6

Objective of the patent system

- Back to basics:
 - The essential principles of patent law and policy
 - What is the system for?
 - How to make it work to achieve those goals?
- The system, based on private rights, should effectively serve the public interest (both right holders and society) by contributing to innovation and diffusion of knowledge
- Fundamental features
 - Credible
 - timely grant and improved quality/validity of patents
 - Functional
 - rational use of resources
 - improved access to patent system, including access to patent information (costs)
 - Acceptable
 - accommodate different economic and social conditions and interests, without foreclosing further development

IP and Development: UK Study

“...prerequisite for sustainable development in any country is the development of an **indigenous scientific and technological capacity**. This is necessary to allow countries to develop their own process of technological innovation, and to enable them to absorb effectively technologies developed abroad...[..]...There are many other factors that contribute to what are often known as “national systems of innovation”. ..[..]...If intellectual property rights are to benefit developing countries, that benefit will **need to come through promoting invention and technological innovation**, and thereby enhancing growth.”

*UK Commission on Intellectual Property Rights, Integrating Intellectual Property Rights and Development Policy (2002)

The changing role of the patent system

From

- Protection and
- Exclusion

to

- Instrument serving innovation and technology diffusion
- Inclusiveness and cooperation
- Respect for diversity at various levels

Main developments at WIPO: cooperation, respect for diversity, instrument

- Legal framework
 - Reform of the Patent Cooperation Treaty (PCT)
 - Patent Law Treaty (PLT)
 - Standing Committee on the Law of Patents (SCP)
- Practical projects
 - Infrastructure
 - Technology diffusion
- Policy issues
 - Global challenges
- Development Agenda

PCT Trends

- More countries: 142
- More applications: 4,5% decrease in 2009, but 4,8% increase in 2010
- More ISAs: 17
- A definite trend towards increased worksharing based on international phase work
 - As proposed in Roadmap, consistent with vision of PCT founders
 - E.g. PPH-PCT
 - Etc.

Some PCT Challenges

- Trying to keep PCT from being politicized like other parts of WIPO's work
- Building trust between patent offices, so duplicative international phase and national phase processing can be reduced
- Quality of international work products
- Language issues
 - supplementary search and PatentScope™ tools
- Developing countries (“how can we realistically benefit from PCT?”)
 - Top 15 countries responsible for 92.1% of IAs published in 2009
 - Top 32 countries filed 96% of IAs in 2009
 - The other 4% of filings are spread across 110 countries

The Future of the PCT

- Higher quality PCT searches and examinations
 - via ISA/IPEA quality management efforts and increased emphasis on means for evaluating quality, 3rd party submissions, top-up searches, etc.
- PPH/PCT and its ramifications (and other incentives for applicants to resolve as much as possible within the international phase)
- More uniformity in application of PCT due to removal of incompatibilities with national law
- Continued focus on practical-level developments to enhance the PCT user experience (for example, PatentScope™ enhancements, etc.) and the PCT infrastructure as a platform for practical worksharing and accessing of relevant information
- Collaborative international search and examination

Patent Law Treaty (PLT)

- Concluded June 1, 2000
- Harmonizes and simplifies formal requirements for national and regional patent applications and patents. Excludes expressly substantive requirements of patentability
- Advantages: predictable, uniform and simple procedures for applications, reduction of costs
- Entered into force April 28, 2005, 27 Contracting Parties as of March 2011
- PLT Assembly: model international form and incorporation by reference of PCT changes

SCP: history

No agreement on the SCP work program; deadlock from 2006 - 2008

Proposal I (Developed countries)

- definition of prior art
- grace period
- novelty and inventive step

Proposal II (Group of Friends of Development)

- patentable subject matter
- exclusions from patentable subject matter
- exceptions to patent rights
- anti-competitive practices
- disclosure of origin, prior informed consent and benefit sharing
- effective mechanisms to challenge validity of patents
- sufficiency of disclosure of the invention
- transfer of technology
- safeguarding of public interest flexibility
- alternative models to promote innovation

SCP: current status

- Agenda SCP/15 included:
 - Study on exclusions, exceptions and limitations by external experts
 - Proposal by the Delegation of Brazil on exceptions and limitations to patent rights
- Decisions of SCP/15:
 - **future work will include** issues: exceptions and limitations to patent rights; quality of patents, including opposition systems; patents and health; client-patent advisor privilege; and transfer of technology
 - four topics will be included in the non-exhaustive list: impact of the patent system on developing countries and LDCs, patents and food security, strategic use of patents in business and enhancing IT infrastructure for patent processing
 - the agenda of the SCP/16 will include an item on the coordination mechanism of the SCP on the implementation of the Development Agenda Recommendations

IP Infrastructure

- Infrastructure Modernization
 - This program is intended to develop and strengthen national and regional IP offices through provision of modernization services
- International Classifications and the WIPO IP Standards.
 - These activities are intended to develop the Classifications as well as the WIPO IP Standards as common tools for facilitating the interchange and diffusion of IP information on global infrastructure
- The Global Information Services
 - This area aims to provide services on IP information search and retrieval from databases created within the global IP infrastructure and supporting services to IP Offices and the public including:
 - Access to Specialized Patent Databases;
 - Innovation Technology Support Centers (“TISCs” project);
 - Patent Landscaping project;
 - Digitization of national IP documents for dissemination through IP databases;
 - Patent Register Databases for Identifying patents in the public domain.

Patents and Technology Diffusion

- The patent system is generally understood to facilitate technology diffusion and investment; for some, it is even a prerequisite for technology transfer and investment abroad
- It does that mainly via
 - patent information and
 - by using patents as an instrument to assist technology transfer
- Several countries have in the past relied on the patent system as a tool in developing the national economy and this assisted it in promoting FDI and transfer of technology (e.g. Japan, Republic of Korea)
- Other countries also show a correlation:
 - India: FDI growth followed the patent reform in 1990s
 - Brazil: FDI growth followed the introduction of a new industrial property law in 1996 (US\$ 4.4 billion in 1995 to US\$ 32.8 billion in 2000)

University – industry collaboration

- Business is changing from closed research and development to more collaborative research with outside partners for competitive advantages
- Universities and research institutions are increasingly important partners, as they offer
 - Knowledge/technology creation
 - Adding-value through innovation
 - Skilled human resources
- Role of universities in economic development
 - Knowledge publication (research results etc.)
 - Types of cooperation: Technology licensing, spin-off companies, collaborative research, contract research, technology development, etc.
 - Increasing interest in cooperating with industry
- Benefits for both universities and industry

University – industry collaboration (ctd)

- To achieve a fruitful collaboration and technology transfer, universities need to manage IP and patents, in particular
- Patents are important for universities because
 - trade secrets are not sufficient
 - publication leads to public domain
 - Inventions of universities are often basic inventions and need improvements
 - universities can often not exploit inventions themselves, but have to license
- Partners from the private sector will request the existence of patent rights

Global Challenges

- Conference on IP and Public Policy Issues in July 2009 addressed issues relating to the interface of intellectual property with other areas of public policy, notably health, the environment, climate change and food security
 - July 11 and 12, 2011: Conference on Innovation and Climate Change: Stimulating Innovation, Accelerating Technology Transfer & Diffusion, Enabling Global Solutions
- Access to medicines
 - WIPO, WHO, WTO jointly organized a symposium at the technical level on Access to Medicines: Pricing and Procurement Practices (July 16, 2010)
 - WIPO Symposium on the Evolution of the Regulatory Framework of Test Data – from the Property of the Intellect to the Intellect of Property (February 8, 2010)

WIPO Development Agenda

- All previously mentioned activities are now linked to the Development Agenda, the last session of the CDIP, November 22 to 26, 2010. Present seminar was also mandated by the CDIP
- Process started in 2004 (proposal from Brazil and Argentina, supported by some other developing countries).
- Finally, 45 recommendations discussed (19 ready for implementation, 26 to specify implementation)
- Project approach for the 26, partly individual, partly thematic approach
- CDIP adopted several projects, namely, the Project on Intellectual Property and Competition Policy, the Project on Intellectual Property, Information and Communication Technologies (ICTs) and the Digital Divide and Access to Knowledge, parts of the Project on Intellectual Property and the Public Domain and the Project on Developing Tools for Access to Patent Information
- Coordination Mechanisms
- 7th session of the CDIP: from May 2 to 6, 2011

Outlook

- Today's economic growth is being led to a large extent by innovation in knowledge creation. Important driving factor
- There is no indication that patenting activity will decrease in the future; but more efforts for better quality patents
- Have to come back to consider patent system as a mechanism for innovation and dissemination of knowledge
- Patents can be part of a more global growth and development strategy, but in different ways in various countries
 - Not necessarily more legal convergence: recognize various agendas and development concerns. Trust-building.
 - Global challenges and patents more and more important
 - More importance given to infrastructure
 - More emphasis on management and use of patents (post-grant phase)
 - New forms of cooperation (networked innovation; regional cooperation)

Thank you

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