



**World Trade Organization Regional Workshop,
Hong Kong, November 11 to 13, 2014**

*Intellectual Property and its Role in the Generation and
Diffusion of Green Technologies*

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World Trade Organization Regional Workshop, Hong Kong, November 11 to 13, 2014
Intellectual Property and its Role in the Generation and Diffusion of Green Technologies

SESSION IV

SESSION IV: PRACTICAL TOOLS FOR PROMOTING TECHNOLOGY IN
CLIMATE CHANGE ADAPTATION AND MITIGATION

WIPO GREEN – RELEVANT WIPO PRODUCTS AND SERVICES

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MITIGATION – WIPO GREEN**



- WIPO GREEN is a matchmaking platform designed to accelerate the development and dissemination of green technologies to combat environmental challenges. It includes two components: a free Database and a Network.
- Users can access the WIPO GREEN Database to make available their green technologies for licensing or partnership agreements; enter their technology needs; search for technologies and needs. They can access the WIPO GREEN Network to obtain advice and services to assist transactions; connect with experts worldwide from industry, universities, governments, IGOs and NGOs.

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WIPO GREEN Database

The WIPO GREEN database allows you to search green technology products, services and intellectual property assets, as well as post an announcement of a need. Anyone with a green technology can apply to add their technology to the database and the searches are open to all.

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WIPO GREEN Network

The WIPO GREEN network helps facilitate commercial relationships and transactions by connecting green technology providers and seekers, and acts as a gateway to a range of useful services.

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Joining WIPO GREEN

- How can I become a partner? If you are interested in becoming a partner, please contact us with details of your proposed contribution, together with an acceptance of the WIPO GREEN Charter.
- How can I become a user? Simply register online and accept the WIPO GREEN Terms and Conditions. Once you have done this, you will be able to upload technologies, submit announcements of need, and list your services in the Roster of Service Providers.
- <https://webaccess.wipo.int/green/>

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WIPO's Practical Tools to Promote Climate Change
Adaptation and Mitigation Technologies

- WIPO Treaties – PCT
- Patent Information – Patentscope, IPC Green Inventory, Patent Landscape Reports, ARDI, ASPI
- Technology Innovation and Support Centers
- Global Challenges Reports
- Case Studies
- Capacity Building Programs Related to Innovation Promotion and Knowledge Transfer
- Alternative Dispute Resolution
- WIPO Academy

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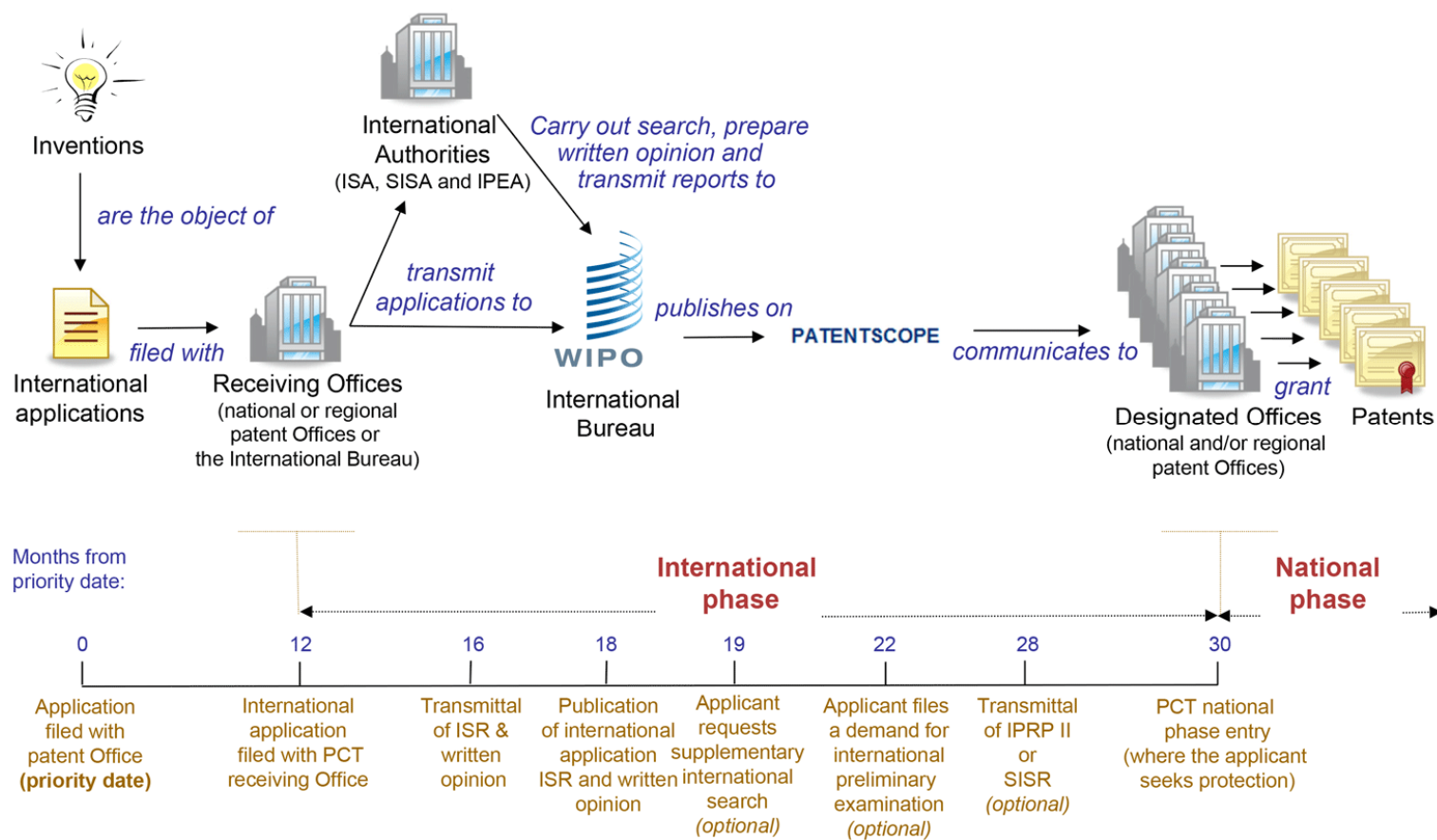
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Patent Cooperation Treaty (PCT)

- The Patent Cooperation Treaty (PCT) assists applicants in seeking patent protection internationally for their inventions, helps patent Offices with their patent granting decisions, and facilitates public access to a wealth of technical information relating to those inventions. By filing one international patent application under the PCT, applicants can simultaneously seek protection for an invention in 148 countries.
- <http://www.wipo.int/pct/en/>

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PATENTSCOPE

- Essential function of the patent system is the full public disclosure of technological information.
- The PATENTSCOPE database provides access to international Patent Cooperation Treaty (PCT) applications in full text format on the day of publication. The information may be searched by entering keywords, names of applicants, international patent classification and many other search criteria in multiple languages:
- <http://www.wipo.int/patentscope/en/>
 - tracking new technological developments in a field of particular interest (e.g. tracking new developments in fuel cells or hydrogen technologies);
 - monitoring the activities of particular actors, such as firms, inventors or institutes of interest (e.g. maintaining a watch on an oil company's research activities in alternative energy technologies);
 - locating and negotiating partnerships with developers of complementary technologies to (e.g. matching alternative power generation technologies with new electrical storage technologies)

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“International Patent Classification (IPC) GREEN INVENTORY”

- The “IPC Green Inventory” was developed by the IPC Committee of Experts in order to facilitate searches for patent information relating to so-called Environmentally Sound Technologies (ESTs), as listed by the United Nations Framework Convention on Climate Change (UNFCCC)
- <http://www.wipo.int/classifications/ipc/en/est/>

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Patent Landscape Reports

- Patent landscape reports provide a snap-shot of the patent situation of a specific technology, either within a given country or region, or globally.
- Start with a state-of-the-art search for the relevant technology in selected patent databases. The search results are then analyzed to answer specific questions about, for example, patterns of patenting activity (- who's doing what? what is filed where?) or patterns of innovation (innovation trends, diverse solutions for a technical problem, collaborations). The results are presented visually to assist understanding, as well as conclusions or recommendations based on the empirical evidence provided.
- Support policy discussions, strategic research planning or technology transfer. In a wider sense, some patent landscapes reports may analyze the validity of patents by referring to legal status data, and thereby form a basis, e.g., for freedom to operate analysis.
- WIPO's Patent Landscape Reports are based on the Development Agenda project "Developing Tools for Access to Patent Information".
- http://www.wipo.int/patentscope/en/programs/patent_landscapes/

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Patent Landscape Reports

TITLE	AUTHOR	DATE	LANGUAGE
Graphene: An analysis of worldwide patent filings relating to Graphene	UK IPO	2012	English
Desalination Technologies and the Use of Alternative Energies for Desalination	WIPO/Cambridge IP	2011	English
Current and Future Trends in Wind Turbine Technology (Summary available. Complete report fee-based)	Totaro & Associates	2011	English
Patent and Clean Energy	UNEP/ICTSD/EPO	2010	English
Cleantech Energy Patent Landscape Report (Executive summary available. Complete report upon request)	Foley & Lardner LLP	2010	English
Lithium Metal Phosphate Batteries (Abstract available. Complete report fee-based)	Fist/Frinnov	2010	English, French
Producción de etanol a partir de residuos lignocelulósicos (Ethanol Production from Lignocellulosic Residues)	Cuban Intellectual Property Office	2010	Spanish
Innovation Nanotechnology Patent Landscape Analysis	UK IPO	2009	English
Patent-based Technology Analysis Report – Alternative Energy Technology	WIPO	2009	English
Patent Landscape Analysis of Recycling and Separation Technologies	UK IPO	2009	English
Patent Informatics Study of Energy from Waste	UK IPO	2009	English
Who Owns our Low Carbon Future?	UK Department for International Development – DFID/Chatham House/Cambridge IP	2009	English
Who Holds the Power? Lessons from Hybrid Car Innovation for Clean Technologies	Griffith Hack	2009	English
Australian Solar Innovation: Losing our Place in the Sun	Griffith Hack	2009	English
Clean Coal Technologies, Where Does Australia Stand?	Griffith Hack	2009	English
PV Thin Film Cells Patent Landscape (Photovoltaic)	Fist/Frinnov	2009	English, French
PV Organic and Hybrid Cells Patent Landscape (Photovoltaic) (Abstract available. Complete report fee-based)	Fist/Frinnov	2009	English, French
PV Crystalline Silicon Cells Patent Landscape (Photovoltaic) (Abstract available. Complete report fee-based)	Fist/Frinnov	2009	English, French
Technologiestatus der Österreichischen Umwelttechnologie (Status of the Austrian Environmental Technology)	Austrian Institute of Technology	2009	German
Carbon Nanotubes Patent Landscape (Abstract available. Complete report fee-based)	Fist/Frinnov	2008	English, French
Mapeamento tecnológico do biodiesel y tecnologías correalatas sob o enfoque dos pedidos de patentes (Biofuel Patent Mapping): Volume I – Mundo (Worldwide) Volume II – Brasil (Brazil) Volume III – Estados Unidos, China e União Européia (USA, China, European Union)	Brazilian National Institute of Industrial Property	2008	Portuguese

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Patent Landscape Reports

- Patent Landscape Report on E-Waste Recycling Technologies
- Patent Landscape Report on Solar Cooking
- Patent Landscape Report on Desalination Technologies and Use of Alternative Energies for Desalination

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Access to Research and Development for Innovation (ARDI)

■ The Access to Research for Development and Innovation (ARDI) program is coordinated by WIPO together with its partners in the publishing industry with the aim to increase the availability of scientific and technical information in developing countries.

■ By improving access to scholarly literature from diverse fields of science and technology, ARDI seeks to:

-reinforce the capacity of developing countries to participate in the global knowledge economy; and
-support researchers in developing countries in creating and developing new solutions to technical challenges faced on a local and global level.

■ Currently, 17 publishers provide access to around 20,000 journals, books, and reference works for 117 developing countries and territories through ARDI.

■ <http://www.wipo.int/ardi/en/>

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Access to Specialized Patent Information (ASPI)

- The Access to Specialized Patent Information (ASPI) program is a public-private partnership administered by WIPO and made possible through cooperation with leading patent information providers: LexisNexis, Thomson Reuters, Minesoft, Questel.
- Through the ASPI program, eligible patent offices and academic and research institutions in developing countries can receive free or low-cost access to sophisticated tools and services for retrieving and analyzing patent data.
- <http://www.wipo.int/aspi/en/>

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Technology and Innovation Support Centers (TISCs)

- The WIPO Technology and Innovation Support Center (TISC) program provides innovators in developing countries with access to locally based, high quality technology information and related services, helping them to exploit their innovative potential and to create, protect, and manage their intellectual property (IP) rights.
- Services offered by TISCs may include:
 - Access to online patent and non-patent (scientific and technical) resources and IP-related publications;
 - Assistance in searching and retrieving technology information;
 - Training in database search;
 - On-demand searches (novelty, state-of-the-art and infringement);
 - Monitoring technology and competitors;
 - Basic information on industrial property laws, management and strategy, and technology commercialization and marketing.
- <http://www.wipo.int/tisc/en/>

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Global Challenges Reports and Briefs

- Global Challenges Brief: The acceleration of climate change and mitigation technologies: Intellectual property trends in the renewable energy landscape
- Global Challenges Report: Renewable Energy Technology: Evolution and Policy Implications— Evidence from Patent Literature
- Global Challenges Brief: When policy meets evidence: What's next in the discussion on intellectual property, technology transfer & the environment?
- Global Challenges Report: Intellectual Property & the Transfer of Environmentally Sound Technologies

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WIPO GREEN Case Studies

- WIPO GREEN Case Study on Replacing Expensive, Ineffective, and Unhealthy Sources of Energy
- WIPO GREEN Case Study Addressing Water Contamination without Using Chemicals

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Capacity Building Programs Related to Innovation Promotion and Knowledge Transfer

■ **Objectives**

- To effectively support Member States, in particular LDC s developing and countries in transition, to enhance and strengthen their capacity for local creation, development, ownership, management, strategic use and commercialization of IP as an economic asset for the benefit of their nationals and economic growth.
- Training Programs contents: policy, organizational and management aspects of the issues relevant for innovation promotion and knowledge transfer, practical exercises related to IP protection, management and commercialization.
- Deliverables: providing support for the development of adequate human capital with innovation related professional skills and enhancement of their capacity to use IP in order to contribute to “Win- Win” solutions .

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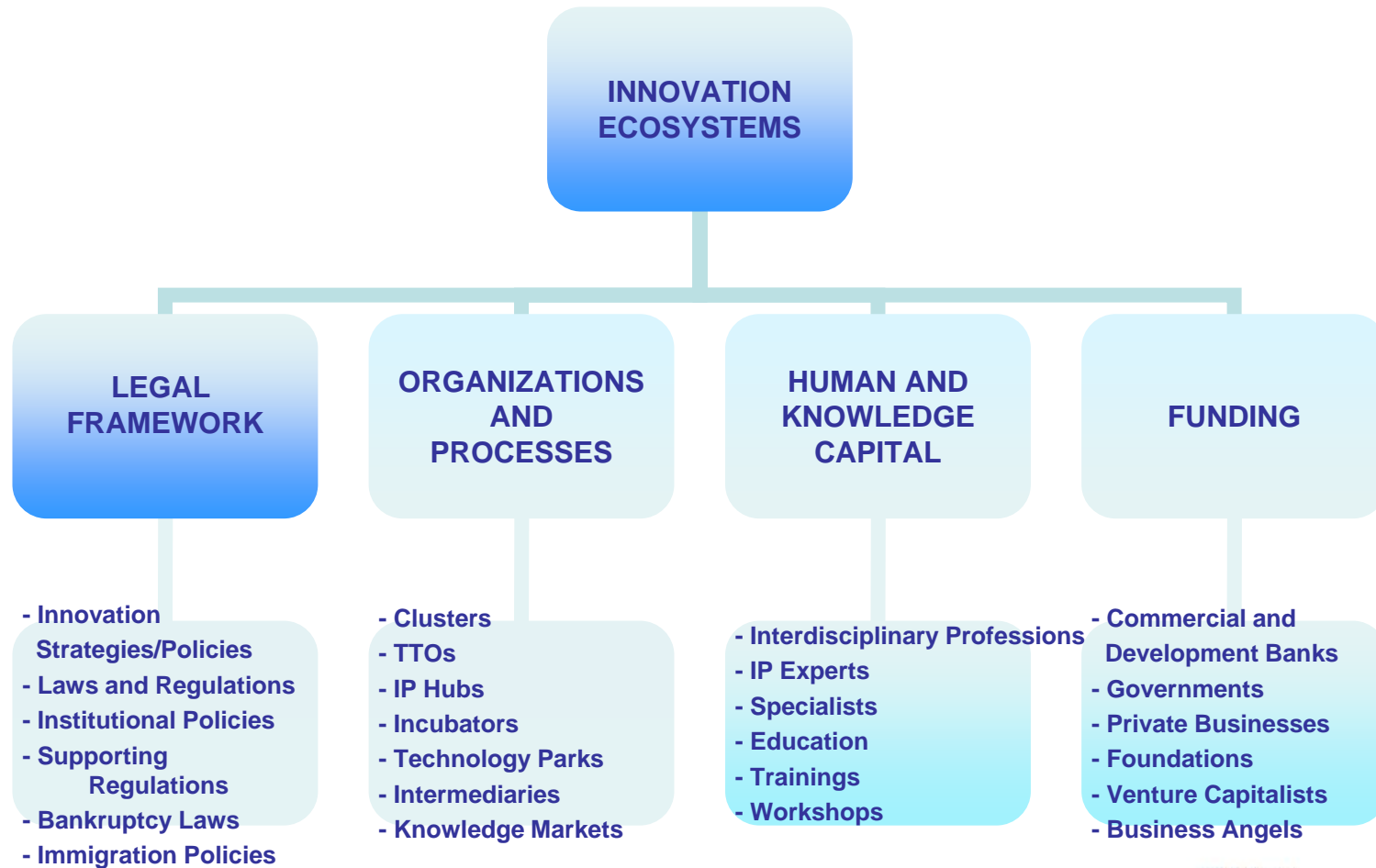
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Capacity Building Programs Related to Innovation Promotion and Knowledge Transfer

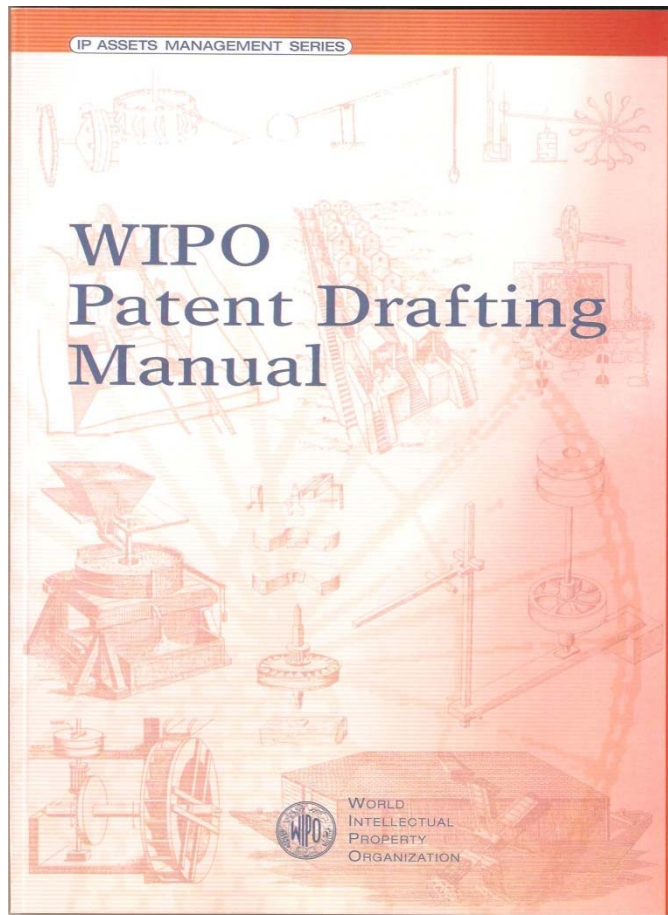
- Innovation Division
 - Innovation Policy Section
 - Small and Medium-Sized Enterprises (SMEs) Section
 - Innovation Structures Section

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WIPO “IP Asset Management Series”



Objectives:

- To fill the critical shortage of persons skilled in drafting patents in developing countries

Target audience:

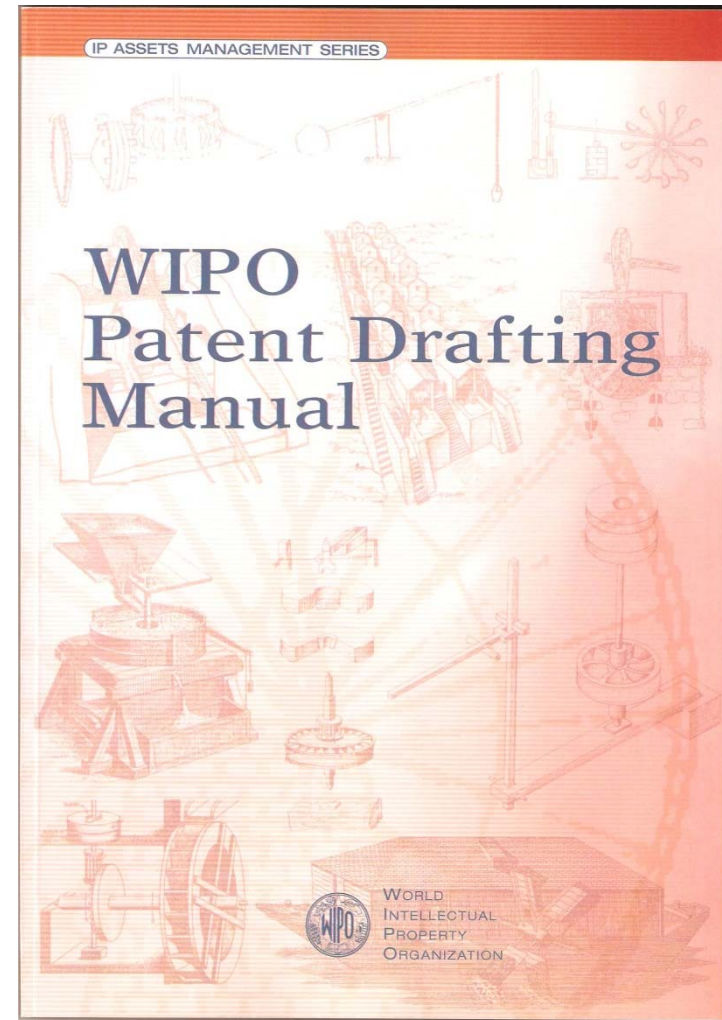
- Scientists, researchers, technology managers, inventors and attorneys with technical background, who will be drafting patents in the future

Expected key deliverables:

- Clear understanding of scope of patents
- Knowing structure of patent documents and patent application procedures
- Determining what, when, how and where to patent
- Claim designing and drafting skills

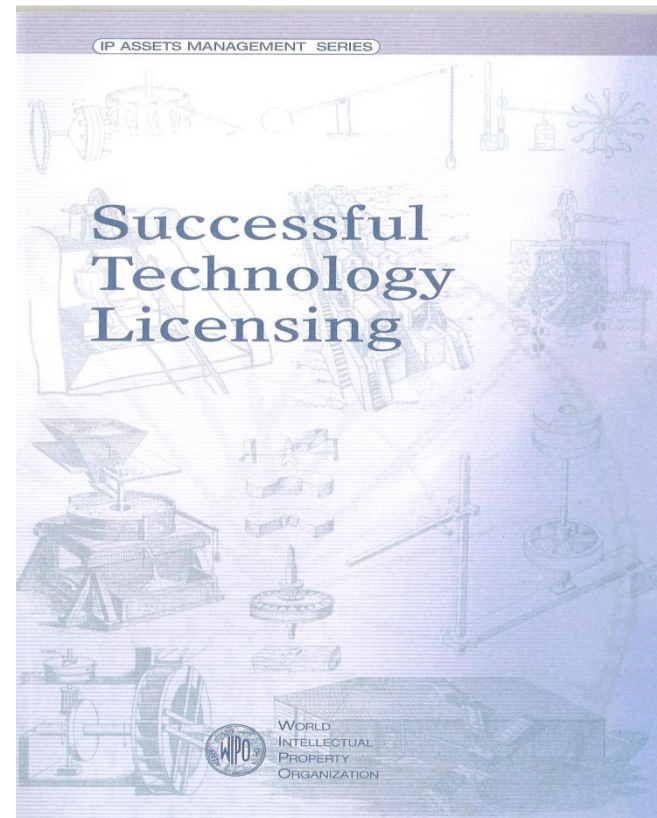
WIPO “IP Asset Management Series”

- Customized trainings for specific scientific area – biotechnology, technical engineering, IT, nanotechnology etc.;
- One week program with coaches in the destination;
- Followed by distance learning monitored work on patent applications.
- New Exercise Book available.



WIPO “IP Asset Management Series”

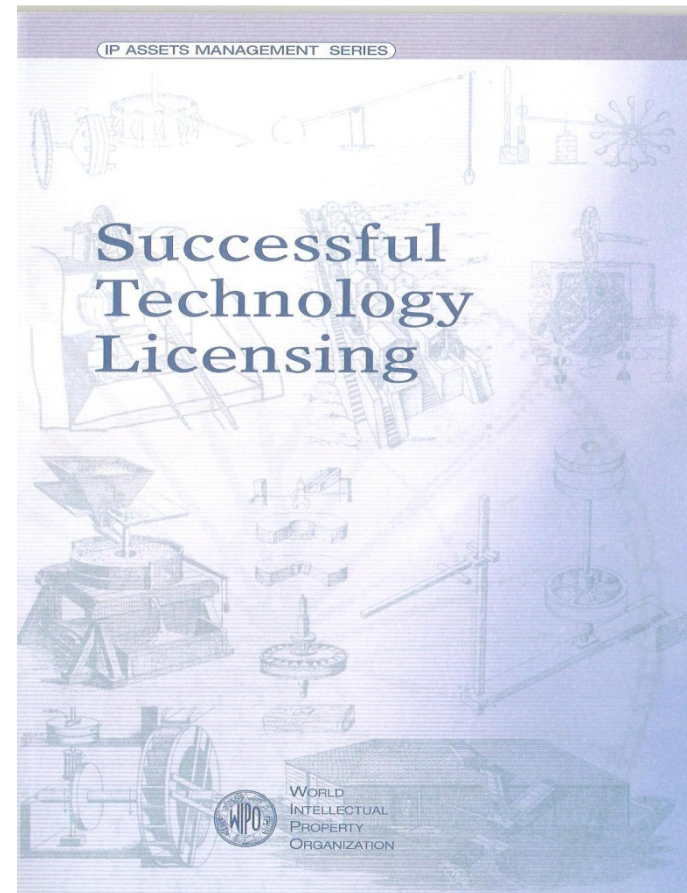
- ❖ 4 to 5 Days Program
- ❖ Theoretical Part and Simulation of Licensing Negotiation
- ❖ Available as Basic, Advanced and Training of Trainers Course
- ❖ Translated in English, French, Spanish, Arabic, Russian, Chinese, Portuguese, Serbian, Vietnamese and Romanian
- ❖ Sustainable and Evolving (New Editions in Preparation)
- ❖ Create Synergies and Promote Networking
- ❖ Field of Substantial Collaboration between WIPO and **Relevant Professional Regional and International Associations (LESI, AUTM, ASTF, ..)**



WIPO “IP Asset Management Series”

Objectives:

- To understand different technology transfer options and make licensing an accessible tool for technology transfer and business in emerging and developing countries,
- To empower potential users to recognize licensing **business opportunities and risks**,
- To provide a solid base for **practical application of the IP and licensing knowledge acquired**,
- Broaden scope of users in developing countries: technology managers, scientists and researchers, lawyers, policy makers, funding institutions, SMEs and business.



IPR Management for Universities and R&D Institutions

- Review of necessary preconditions for an effective IPR management and knowledge transfer – on national and institutional level;
- How to create institutional innovation eco – system;
 - Definition of IP institutional policy:
 - Method “10 Questions”;
 - Group exercise – drafting of basic elements of IP institutional policy customized to specific conditions in the country and institutions.
 - Establishment of Knowledge Transfer Units (KTU):
 - Models of KTU s;
 - Mandate and services;
 - Staff, education and incentives
 - Management of IPR
 - Protocols and procedure, timelines
 - Funding
 - Available as 3 – 4 days course.

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WIPO Arbitration and Mediation Center

- The WIPO Arbitration and Mediation Center is a neutral, international and non-profit dispute resolution provider that offers time- and cost-efficient alternative dispute resolution (ADR) options. WIPO mediation, arbitration, expedited arbitration, and expert determination enable private parties to efficiently settle their domestic or cross-border IP and technology disputes out of court.
- International and domestic R&D and transfer of technologies involve a rich variety of contracts and transactions, including research contracts, collaborative projects, licensing, joint ventures, alliances, spin-offs and buyer-supplier relationships. Efficient dispute avoidance and resolution practices are key in such complex situations. ADR may help parties to find solutions to their disputes, without the need for court litigation, contributing to the continuation of research activities and commercialization of research results.
- <http://www.wipo.int/amc/en/>

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WIPO Academy

- Face-to-face training and distance learning courses on intellectual property (IP).
- WIPO Academy was established in 1998 and plays a central role in WIPO's activities to enhance the capacity of countries to use the IP system.
- Adopts an interdisciplinary approach to IP education focusing on its links with trade, innovation, health, applied sciences, information technology, and creative industries.
- Portfolio of general and specialized courses on IP caters to different target audiences: inventors and creators, business managers and IP professionals, policy makers and government officials of IP institutions, diplomats, students and teachers of IP, and civil society.
- Courses combine traditional face-to-face and distance learning methodologies and are taught by people versed in IP and how it works to stimulate innovation, creativity and development.

- <http://www.wipo.int/academy/en/>

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THANK YOU!