

CROSS-BORDER PROTECTION OF INTELLECTUAL PROPERTY: ISSUES AND OPPORTUNITIES FOR GENETIC RESOURCES, TRADITIONAL KNOWLEDGE, AND TRADITIONAL CULTURAL EXPRESSIONS

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OVERVIEW

- Some Cross Border IP Protection Facilitation Tools
- Issues and opportunities with using Cross-Border Protection Facilitation Tools for IP and GR/TK/TCEs
- Conclusions

SOME CROSS-BORDER IP PROTECTION FACILITATION TOOLS

- **National Treatment**– treat foreigners no less favorably than domestic applicants/rightsholders
- **Most Favored Nation** - Any privilege granted to nationals of any other country shall be granted to nationals of all other Members
- **Mutual Recognition** - first country enforces rights granted by a second country to the same extent as a right granted domestically and vice-versa
- **One-Way Recognition** - enforce rights granted by another country to the same extent as a right granted domestically
- **IP Office Worksharing** (WIPO CASE, Patent Prosecution Highway, and IP5 initiatives) - use search and examination information generated by one office to expedite examination/granting of rights in another office
- **Reciprocity** - Foreigners get the same protection in a second country as the second country's nationals would get in the foreigner's country.

NATIONAL TREATMENT AND OTHER CROSS-BORDER TOOLS WORK WELL FOR HOLDERS OF CONVENTIONAL IP RIGHTS (E.G., PATENTS, TRADEMARKS, COPYRIGHTS, DESIGNS, UTILITY MODELS)

- Enables IP owners to take advantage of national IP protection laws around the world
- Facilitates goal of obtaining effective IP protection in each country of interest at lowest cost and desired speed
- Allows IP owners to maximize market reach with increased certainty, efficiency, and protection

GR/TK/TCE HOLDERS HAVE SIMILAR GOALS TO IP HOLDERS, BUT CANNOT EFFECTIVELY USE SUCH CROSS-BORDER PROTECTION TOOLS FOR GR/TK/TCE

- Why not?
- Cross border tools facilitate getting rights under national laws of other countries, BUT
 - Absence/dearth of national TK/TCE and GR protection laws outside of a limited number of developing countries means there is no national treatment to receive
 - The developing countries with national TK/TCE laws tend not to be where much misappropriation is taking place

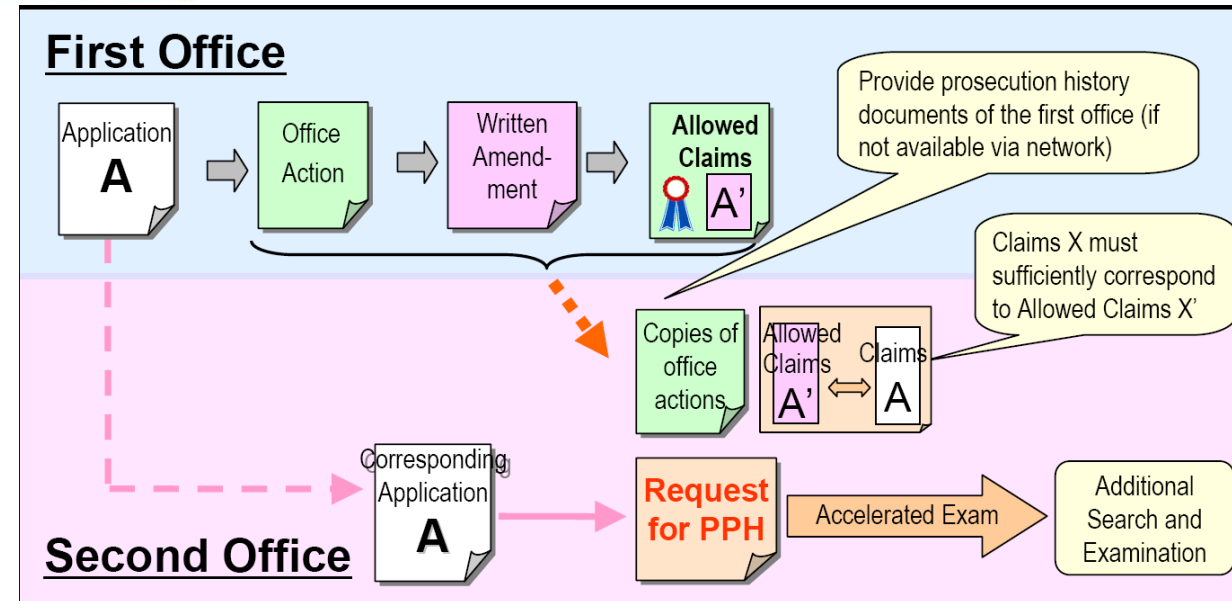
EXAMPLE: WORKSHARING BENEFITS PATENT APPLICANTS AND OFFICES

- Patent Prosecution Highways (PPH): Obtaining an allowable claim in one office allows for expedited examination (and possibly greater chance of obtaining a patent) in other participating offices

Global / IP5 PPH



Global PPH: 21 member offices (Began January 2014)



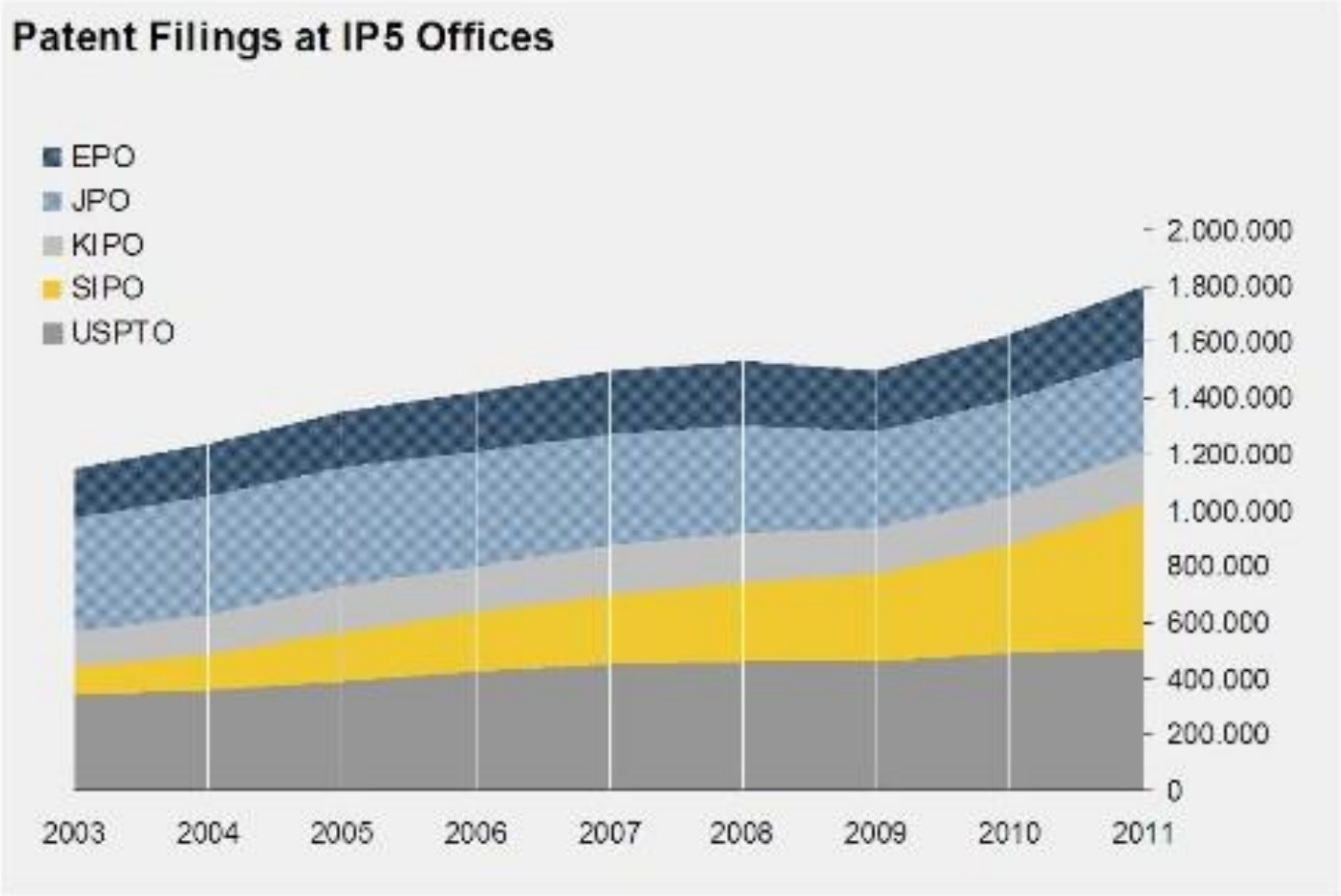
<http://www.uspto.gov/patents-getting-started/international-protection/patent-prosecution-highway-pph-fast-track>

WIPO CASE (CENTRALIZED ACCESS TO SEARCH AND EXAMINATION)

- Objective: Increase efficiency of search and examination process in multiple offices
- Digital library of search and examination reports that can be accessed and used by other offices
- Now Open to any Patent Office as accessing office, depositing office, or both
- Participants (accessing only in black):
 - Australia
 - Brunei Darussalam
 - Canada
 - Chile
 - China
 - India
 - Indonesia
 - Israel
 - Lao People's Democratic Republic
 - Malaysia
 - Mongolia
 - New Zealand
 - Phillipines
 - Singapore
 - UK
 - Viet Nam



WORKSHARING/INFOSHARING BENEFITS OFFICES AND APPLICANTS DUE TO DUPLICATIVE APPLICATION FILINGS AROUND THE WORLD



MUTUAL RECOGNITION (RARE)

- Each country agrees to give full effect to the IP right(s) issued by the other government. Example:

Italy and San Marino (patent, trademark, designs and utility models on applications filed with the national offices only)

<http://www.sib.it/en/news-and-events/news/1271.html>

ONE-WAY RECOGNITION: “VALIDATING” RIGHTS GRANTED IN ANOTHER JURISDICTION

- Old concept (echoes of colonial revalidation systems)
- European Patent Office Program: Encourages European and non-European countries that are not EPO member states to allow **international applicants** to validate the effects of their European patent applications and patents on **their national territory** as national rights.
- Morocco first non-European country to recognize “the legal validity of a European patent on its territory” in March 2015
- Expected to “reduce national office examination workload by up to 90% and allow the offices to **focus on developing their examination capacity for national filings.**” www.epo.org

EPO PATENT VALIDATION PROGRAM

2010: 150, 961 patent applications filed in EPO
 26% from U.S.
 18% Germany
 15% From Japan
23% from six other EU countries
82% from nine countries

Table A.3.3.1 Number of patent applications by origin and office: selected origins and offices, 2010

Origin	Office														
	AU	BR	CA	CN	DE	EP	FR	GB	HK	JP	KR	MX	RU	SG	US
Australia	2,409	182	482	608	18	996	3	92	156	451	196	112	71	160	3,739
Austria	157	155	216	475	825	1,730	21	10	54	289	155	63	145	35	1,661
Belgium	287	218	320	563	67	2,040	74	257	148	456	255	132	124	104	2,084
Canada	497	303	4,550	940	60	2,664	10	193	232	740	471	252	112	130	11,685
China	242	225	345	293,066	84	2,049	74	127	400	1,063	517	80	265	94	8,162
Denmark	296	205	299	734	38	1,843	1	96	102	387	140	146	0	71	1,773
Finland	217	226	343	1,089	111	1,639	5	50	110	413	387	105	315	65	2,772
France	751	1,602	1,771	3,506	209	9,530	14,748	121	315	3,425	1,575	623	873	391	10,357
Germany	1,467	2,390	2,640	9,867	47,047	27,354	509	342	719	6,794	3,412	1,235	2,237	627	27,702
India	138	139	119	168	11	423	2	16	22	162	103	79	64	55	3,789
Israel	289	142	359	450	12	1,239	3	94	82	429	196	101	94	62	5,149
Italy	287	543	464	1,184	91	4,088	58	57	181	733	368	215	406	91	4,156
Japan	1,788	1,826	1,938	33,882	2,970	21,824	173	395	1,595	290,081	14,346	742	1,554	1,253	84,017
Netherlands	615	828	683	2,998	86	5,957	19	226	198	2,252	918	499	765	213	4,463
Republic of Korea	323	242	337	7,178	684	4,715	49	152	126	4,872	131,805	215	342	120	26,040
Russian Federation	22	22	43	111	36	176	4	17	8	40	30	14	28,722	10	606
Sweden	469	504	547	1,780	269	3,560	16	127	238	1,369	521	259	379	128	3,840
Switzerland	1,222	1,196	1,444	2,644	944	6,742	184	193	681	2,232	1,028	843	748	501	4,017
United Kingdom	1,131	653	1,227	1,737	138	5,402	53	15,490	395	1,738	572	392	321	321	11,038
United States of America	10,639	7,274	15,541	25,380	4,228	39,519	266	2,359	5,067	23,183	11,516	6,800	3,735	3,902	241,977
Other / Unknown	1,641	3,811	1,781	2,817	1,317	7,471	308	1,515	873	3,489	1,590	1,669	1,228	1,440	31,199
Total	24,887	22,686	35,449	391,177	59,245	150,961	16,580	21,929	11,702	344,598	170,101	14,576	42,500	9,773	490,226

Note: The actual numbers of patent application and grant data by country of origin might be higher than the data reported above, due to incomplete data and/or because a breakdown by country of origin is not supplied by some offices. Patent office codes: AU (Australia), BR (Brazil), CA (Canada), CN (China), DE (Germany), EP (European Patent Office), FR (France), GB (United Kingdom), HK (China, Hong Kong (SAR)), JP (Japan), KR (Republic of Korea), MX (Mexico), RU (Russian Federation), SG (Singapore) and US (United States of America).

Source: WIPO Statistics Database, October 2011

“[F]or applicants of European patents this signifies an important administrative simplification which **makes it possible to easily extend the scope of geographic protection** available to them through the procedure at the EPO”. Benoit Battistelli, EPO President

BUT MAY NOT BE IDEAL FOR LOWER INCOME COUNTRIES: MOST PATENTS FILED BY FOREIGNERS

Figure A.2.1.8 Resident and non-resident patent applications worldwide by income, 2011



Source: WIPO Statistics Database, October 2012

RISKS TO COUNTRIES OF RELYING ON OUTSIDE PATENT EXAMINATION

- Laws of developing countries may be different to EPC (more use of TRIPS flexibilities)
- The fact that a first country/region has a similar patent law does not mean its patent office is *applying* the law to applications in accordance with a second country's *domestic* court interpretations of national law
- Potentially easier/faster for foreigner to get a patent than a domestic applicant.

RISKS OF RELYING ON OUTSIDE EXAMINATION: NO TRACKING OF WHAT HAPPENS TO PATENT IN FOREIGN JURISDICTION AFTER IT IS GRANTED

- 66% of challenged EPO patents revoked or narrowed Steven Seidenberg, Patent Lawyers
Ponder the Changed Post-Grant Process, ABA J., Feb. 2013
- ~50% patent nullifications in Germany (anecdotal)
- claims invalidated in 86% of U.S. cases (where validity challenged between 2007–2011)(Smyth 2012)
- U.S. Supreme Court decisions invalidating thousands of patents
 - (e.g., *AMP v. Myriad Genetics*: isolated genomic DNA, *Mayo v. Prometheus* (some diagnostic methods), *Bilski v. Kappos* (some business methods), *CLS Bank v. Alice* (many software patents))
- 40% of patents challenged at JPO cancelled or modified (2013 JPO Annual Report)

NEED FOR NATIONAL TK/TCE PROTECTION LAWS AND GR/TK DISCLOSURE OF ORIGIN REQUIREMENTS

- Cross-border tools can be used effectively for holders of TK/TCEs/GRs **IF** there is domestic TK/TCE protection legislation in Member states and GR/TK disclosure of origin requirements

CROSS-BORDER “PROTECTION” OF GENETIC RESOURCES AND ASSOCIATED TRADITIONAL KNOWLEDGE: DISCLOSURE OF ORIGIN REQUIREMENTS

- Unauthorized patenting of GR/TK based inventions contributed to creation of the Convention on Biological Diversity (CBD). CBD has 196 Parties, in effect since 1993. Key Principles:
 - States have sovereign control over biological resources within their borders and shall ensure conservation of same
 - But states shall endeavor to create conditions to facilitate **access** on mutually agreed terms and subject to **prior informed consent**, AND there should be **fair and equitable sharing of benefits** of use of genetic resources with providing party (PIC/ABS)
- CBD provides for PIC/ABS but does not specify methodology
- Parties implemented widely varying legislation (or none at all) to comply
- Need for **uniform** framework, **enforceable** obligations on users, **reasonable** access provisions by providers

NAGOYA PROTOCOL TO THE CBD: ACCESS AND USER COMPLIANCE

- Adopted October 2010, came into effect October 2014
- **Framework** for **access** to genetic resources and traditional knowledge with **prior informed consent** and on **mutually agreed terms**, including terms on fair and equitable benefit sharing from *utilization* of genetic resources and associated traditional knowledge
- Among other things the Nagoya Protocol:
 - obligates Parties to **designate compliance checkpoints** (Art. 17); and
 - “provide that genetic resources utilized within [their] jurisdiction” have been **accessed in accordance with** the domestic ABS/PIC/MAT requirements of another Party, and to **cooperate** in cases where another Party’s domestic ABS legislation has been **violated** (Art. 15).

THE NAGOYA PROTOCOL (NP) IS NOT AN IP TREATY, AND IS NOT UNDER WIPO, BUT

- Many WIPO members are party to CBD/NP
- Many WIPO members will be implementing CBD/NP
- IP office is a logical NP compliance checkpoint (with GR/TK disclosure of origin requirement for patent applicants)
- **Cross-border cooperation** against violations of CBD/NP-based GR/TK access and benefit sharing laws can affect grant/denial of conventional IP rights

TRADITIONAL KNOWLEDGE AND GENETIC RESOURCE DISCLOSURE OF ORIGIN (DOO) REQUIREMENT

- DOO requirements may facilitate TK protection and GR utilization compliance:
 - Can provide information that can be used to **identify violations** of domestic TK/TCE protection laws
 - **Existence** of DOO requirements in multiple countries (more than 20 currently) could be a **deterrent** to non-compliance with national protection regimes (e.g., where domestic law requires obtaining permission from owner/creator before use)

COMPLIANCE WITH GR/TK DISCLOSURE OF ORIGIN (DOO) REQUIREMENTS

- China: currently receives more patent applications every year than any other country.
- Article 26.5 of the Chinese Patent Act (3rd Revision) requires patent applicants to disclose the origin of genetic resources used in creating a claimed invention.
- Between October 1, 2009 and June 30, 2013, genetic resource source forms were filed in 7,149 patent applications, most after the examiner requested submission of the form.
- Authors of China DOO study conclude that the new genetic resource disclosure requirements are **not placing an “undue burden”** on patent applicants
- More than 20 countries already have GR/TK disclosure of origin requirements for patent applicants
- **Foreign applicants are already having to deal with such a requirement** if they are seeking patent protection in DOO countries such as China.
- National genetic resource DOO requirements need not be harmonized to be effective. However, minimum standards are needed and could be provided in an IGC international agreement.

Qingkui Zhang and Dongcheng Pang, Chinese Patent Law and Protection for Genetic Resources 2014

IMPLICATIONS

- Cross-border IP protection facilitation tools promote a balance between national sovereignty-based policy provisions and non-discrimination against foreign applicants.
- Harmonization of national laws is not necessary for the global IP system to function effectively and benefit from cross-border tools
- Likewise, harmonization of genetic resource, traditional knowledge, or traditional cultural expression protection laws at the national level is not necessary for owners to benefit from cross-border tools and international legal protection agreements

CONCLUSIONS

- Cross-border IP protection facilitation tools work well for traditional IP regimes, currently ineffective for traditional knowledge and traditional cultural expressions due to dearth of national TK/TCE protection legislation
- Current interplay between IP and genetic resource/traditional knowledge PIC/ABS facilitation likely to increase with implementation of Nagoya Protocol
- Reciprocity may provide an initial way forward (no need to change domestic laws)
- IGC international instrument(s) for the protection of genetic resources, traditional knowledge, and traditional cultural expressions would facilitate the development of national protection legislation, making cross-border tools more relevant and beneficial for genetic resources, traditional knowledge, and traditional cultural expressions protection and appropriate exploitation