Introducing the USPTO China Resource Center and Various Examples of Empirical IP Data We Analyze

Larry (Lubing) Lian Attorney Advisor, China Team Office of Policy and International Affairs US Patent & Trademark Office May 19, 2015

> UNITED STATES PATENT AND TRADEMARK OFFICE USPTO

USPTO 2014-2018 Strategic Plan



uspto 2014-2018 Strategic Plan

- "[D]evelop empirical data and analysis" by "establish[ing] the China Resource Center" and "expanding [other programs]";
- "[E]xpand knowledge of the domestic and international IP landscape and public impacts of IP through empirical research and fact-finding";
- "The results of the [empirical data] research ... to guide USPTO initiatives and policy recommendations."

uspto

USPTO China Resource Center

- Responds to the need to develop, aggregate and support more data and research-intensive alignment with China-related IP and innovation issues;
- <u>Advocate</u> for empirical data driven decision and policy making, and counter uninformed or anecdote-driven decision-making;
- Works closely with the Office of Chief Economist of the USPTO;
- Seeks out collaborative relationships with other government agencies and private sectors.

Major Databases Containing Chinese IP Data

- Cnipr, by IP Publishing House (IPPH), spinoff from SIPO), patent application data (<u>www.cnipr.com</u>; www.en-cnipr.com)
- "Soucase" (also by IPPH), SIPO Patent Reexamination Board (PRB) cases (http://reexam.souips.com/)
- Ciela (China IP Litigation Analysis) by Rouse (free) (www.ciela.cn)
- Darts-IP (global case law database) (http://www.darts-ip.com/)
- Thompson Reuters (e.g., <u>http://info.thomsoninnovation.com/</u>, Thompson Analyzer)
- GBI (General Biologics) (www.generalbiologic.com)
- MIIT IP (free) (www.miitip.org)
- PKU Law (Peking University Law School) (http://en.law.pku.edu.cn/)
- Other databases, e.g., China's Ministry of Science Technology (MoST) has a HNTE (high and new technology enterprise) database that includes numbers of patents filed/employees/types of the enterprises

Exemplary Studies by the Office of the Chief Economist

Studies on IP and Innovation

- "Intellectual Property and the U.S. Economy"⁽¹⁾
- "Perspectives on the Growth in Chinese Patent Applications to the USPTO" ⁽²⁾ Alan Marco, Rick Miller, Jay Kesan



Examples of IP Data we look at:

- SIPO patent licensing and pledging data
- Pendency and allowance rate of Chinese patent applicants at the USPTO
- US-China licensing flow
- U.S. Litigation involving Chinese parties
- IP cases in major jurisdictions on important bilateral issues supplemental data as an example

"Patent Utilization Rate" – Patent Licensing and Pledging Data

 "Parties pledgee <u>should (应当)</u> register their licensing contract within three months of the effective date of the contracts"
"当事人应当自专利实施许可合同生效之日起3个月内办理备案手续"

《专利实施许可合同备案办法》 (<u>http://www.gov.cn/gzdt/2011-07/06/content_1900941.htm</u>)

• "If a patent right is pledged, the pledger and pledgee pledgee <u>should go through registration procedure</u> ... at the Patent Administration Department under the State Council [i.e., SIPO] jointly."

Article 14 of "Implementing Regulations of the Patent Law of China"

• "The Patent Administration Department under the State Council <u>should</u> keep a Patent Register:(3) any pledge and preservation of the patent right and their discharge...." Article 89 of "Implementing Regulations of the Patent Law of China

Percentage of Licensed Patents – Preliminary Data on Percentage of Licensed <u>Invention</u> Patents

application year	cumulative total granted invention patents as of given year	cumulative total licensed invention patents	percentage of licensed invention patents
2014	1,550,552	33,326	2.1%
2013	1,548,417	33,293	2.2%
2012	1,499,556	33,048	2.2%
2011	1,377,135	32,154	2.3%
2010	1,224,752	30,228	2.5%
2009	1,061,259	27,477	2.6 %
2008	899,358	23,897	2.7%
2007	751,731	20,095	2.7%
2006	621,747	16,222	2.6%
2005	501,840	12,204	2.4%
2004	394,640	8,556	2.2%
2003	304,439	5,742	1.9%
2002	226,665	3,638	1.6%
2001	167,993	2,264	1.3%
2000	125,082	1,550	1.2%
1999	91,369	1,083	1.2%
1998	64,398	676	1.0%
1997	40,056	444	1.1%
1996	18,309	245	1.3%

uspto

Source: Cnipr database

"Patent Utilization Rate" – Percentage of Licensed Patents (Invention compared with UMP)

application year	cumulative total granted UMP patents as of given year	cumulative total licensed UMP patents	percentage of licensed UMP Patents	percentage of licensed invention patents
2014	4,051,625	62,632	1.5%	2.1%
2013	3,461,907	62,064	1.8%	2.2%
2012	2,822,108	58,838	2.1%	2.2%
2011	2,195,312	53,012	2.4%	2.3%
2010	1,709,875	45,603	2.7%	2.5%
2009	1,366,858	37,377	2.7%	2.6%
2008	1,097,237	28,271	2.6%	2.7%
2007	904,597	20,071	2.2%	2.7%
2006	754,083	12,808	1.7%	2.6%
2005	624,877	7,113	1.1%	2.4%
2004	518,440	3,485	0.7%	2.2%
2003	429,411	1,761	0.4%	1.9%
2002	345,847	969	0.3%	1.6%
2001	272,029	569	0.2%	1.3%
2000	209,945	305	0.1%	1.2%
1999	156,367	163	0.1%	1.2%
1998	110,282	80	0.1%	1.0%
1997	71,432	35	0.0%	1.1%
1996	35,315	14	0.0%	1.3%

Source: Cnipr database

"Patent Utilization Rate" – Preliminary Data on Percentage of Pledged Patents (Invention and UMP)

application year	granted invention patents as of given year	cumulative total pleged invention patents	percentage of pledged invention patents	percentage of pledged UMP patents
2014	1,550,552	7,222	0.5%	0.4%
2013	1,548,417	7,222	0.5%	0.4%
2012	1,499,556	7,171	0.5%	0.5%
2011	1,377,135	6,914	0.5%	0.5%
2010	1,224,752	6,189	0.5%	0.4%
2009	1,061,259	5,174	0.5%	0.4%
2008	899,358	4,081	0.5%	0.3%
2007	751,731	3,209	0.4%	0.3%
2006	621,747	2,448	0.4%	0.3%
2005	501,840	1,892	0.4%	0.2%
2004	394,640	1,436	0.4%	0.2%
2003	304,439	1,126	0.4%	0.2%
2002	226,665	777	0.3%	0.1%
2001	167,993	555	0.3%	0.1%
2000	125,082	365	0.3%	0.1%
1999	91,369	221	0.2%	0.0%
1998	64,398	141	0.2%	0.0%
1997	40,056	61	0.2%	0.0%
1996	18,309	20	0.1%	0.0%

Source: Cnipr database

U.S. China Licensing Flow – Patents and Software

U.S. receipts from China and rest of world, royalties and license fees by type of intangible asset, 2004–2013 (million \$) based on BEA/Census data High tech exports (China and the rest of world) 2004-2012 (million \$) based on World Bank data

	Industrial Processes	Computer Software	Total	total	industrial process + software	Receipts from China as a percentage of total receipts from all countries (Industrial processes + software)		Total High Tech Export	China High tech export as a percentage of total high tech export of all countries
China							China		
2013	2735	856	5,778	5,778		4.1%	2013		
2012	1,981	982	4,786		2,963	3.6%	2012	505,646	19.2%
2011	1,335	973	3,870			2.9%	2011	457,107	19.1%
2010	1,335	752	3,043			2.9%	2010	406,090	18.6%
2009	921	580	2,190			2.3%	2009	309,601	16.4%
2008	993	680	2,310			2.4%	2008	340,118	15.6%
2007	842	586	1,939			2.2%	2007	302,773	14.6%
2006	663	528	1,550			2.2%	2006	273,132	13.0%
2005	159	71	285			1.8%	2005	215,928	12.0%
2004	185	61	312			2.4%	2004	163,007	10.2%

uspto

U.S. China Licensing Flow – China Compared with Japan



China's National IP Strategy 2014-2020:

Indicators	2013	2015	2020
Export income from royalties and franchise fees for proprietary rights (in 100 million USD)	13.6	20	80

uspto

2014 JCCT Outcomes on Licensing:

The U.S. and China both commit to continue to maintain exchanges and dialogue regarding technology import and export license agreement issues.



Chinese Applicants at USPTO – Pendency



Chinese Applicants at USPTO – Allowance Rate



SIPO Patent Application Filing Trend

year	Invention Patents (INV)	Utility Model Patents (UMP)	INV yearly increase	UMP yearly increase
1999	36694	57492		
2000	51747	68815	41.0%	19.7%
2001	63204	79722	22.1%	15.8%
2002	80232	93139	26.9%	16.8%
2003	105318	109115	31.3%	17.2%
2004	130133	112825	23.6%	3.4%
2005	173327	139566	33.2%	23.7%
2006	210490	161366	21.4%	15.6%
2007	245161	181324	16.5%	12.4%
2008	289838	225586	18.2%	24.4%
2009	314573	310771	8.5%	37.8%
2010	391177	409836	24.4%	31.9%
2011	526412	585467	34.6%	42.9%
2012	652777	740290	24.0%	26.4%
2013	825000	892000	26.4%	20.5%
2014	928177	868511	12.5%	- 2.6 %



Monitoring U.S. IP Litigations Involving Chinese Parties

- Monthly reports to interagency on U.S. litigation involving Chinese companies;
- Reverse "Media Box" case:

An example of Chinese IP owner pursuing their rights against defendant located in the U.S.

A number of Chinese television broadcasters and DISH Network filed suit accusing a number of entities of illegally streaming the broadcasters' content. Several of the accused entities are US-based companies. The plaintiffs (including the largest TV station in China, the CCTV, or China Central Television) alleged the defendants were promoting a brand of pirate TV player called the TVPad.

uspto

In Depth Analysis of Cases on Important Bilateral Issues – supplemental data as an example

Original application discloses effect 1 (e.g., stability), supplemental data can only show surprising stability?

For supplemental data to be accepted to show surprising results, such data needs to be on effects/properties that:

(1) "<u>inherently flow</u>" from the original specification (*In re Zenith, 333 F.2d 924 (CCPA* 1966), MPEP 716.02(f)

(2) "there is <u>some description</u> [in the original specification] <u>enough</u> for a person ordinarily skilled in the art to <u>recognize</u> or assume the 'effect of invention' therein (*Japan IP High Court, case number 2009 (Gyo-ke) 10238*)

In Depth Analysis of Cases on Important Bilateral Issues – supplemental data as an example

(3) "relate to effects that are explicitly described in the original specification or **can be inferred** from the descriptions in the original specification" (*Korean Supreme Court, case no. 2000 Hu 3234; and Korean Patent Court, case no. 2006 Heo 8958*)

(4) "are **implied** by or at least related to the technical problem initially suggested" in the original spec. (EPO Examination Guideline Part G Chapter VII-11,

(5) "technical effect to be proven by the [supplemental] data should <u>have been</u> <u>recorded</u> in the application documents." (SIPO internal memo, April 21, 2014)

• 2014 JCCT outcome:

The U.S. and China have been maintaining a useful and informative discussion on the supplementation of data, since the 24th JCCT in 2013, and China has made improvements on the practice pursuant to Chinese laws and regulations. Both sides affirm that continued exchanges and engagement on specific cases are beneficial.

Future Studies

- Further analysis of patent pledging and licensing data;
- metrics to show the levels of legitimate sales

2014 JCCT outcome:

"The United States and China agree to study and exchange information on how to accomplish this objective. Areas of study and exchange are to include, as appropriate: <u>metrics</u> <u>to show the levels of legitimate sales</u>; information on how to analyze the economic impact of IP in each economy, sharing data on IP-intensive imports and exports if available; information on effective IP enforcement actions as well as relevant IP-related legal and regulatory reforms, and information on civil damages. "

- Ownership transfer indicate value of patents Percentage of patents with ownership transfer? How does it compare with the U.S.?
- Map China's patent filing, R&D investments, IP enforcement, industrial policies and talent migration

THANK YOU!

Larry (Lubing) Lian Lubing.lian@uspto.gov

UNITED STATES PATENT AND TRADEMARK OFFICE USPLO





UNITED STATES PATENT AND TRADEMARK OFFICE

