

Patent Statistics

Worldwide trends

Data collection and dissemination

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Senior statistical analyst
Economics and Statistics Division

IP information roundtable

Geneva, October 30, 2018
Uchtenhagen Room

Part I

WIPO Economics and Statistics Division

- Core objective
- Organizational chart
- Data collection
- Types of data

WIPO Economics and Statistics Division

Set up in 2009

to provide WIPO stakeholders

with

accurate and comprehensive datasets

and

high quality empirical analysis

WIPO Economics and Statistics Division

Dr. Carsten Fink

Chief Economist

Five sections – Fifteen staff

IP Statistics Section

Innovation Economics Section

Creative Economy Section

Data Development Section

Composite Indicator Research Section

Main sources of **WIPO Statistics Database**

WIPO data

*exhaustive
up-to-date
complete*

PCT System – international phase *(for patents)*

Madrid System *(for trademarks)*

Hague System *(for industrial designs)*

IP offices data

*> 30 questionnaires
annual survey
aggregate*

Geo. Indication
Industrial design

Patent

Plant variety

Publishing

Trademark

Utility model

Filing

Registration/grant

In force

Pending

etc.

Application data coverage for 2016

Patent

99.2%

119 offices

Trademark

97.7%

116 offices

Utility model

99.9%

62 offices

Industrial design

99.8%

124 offices

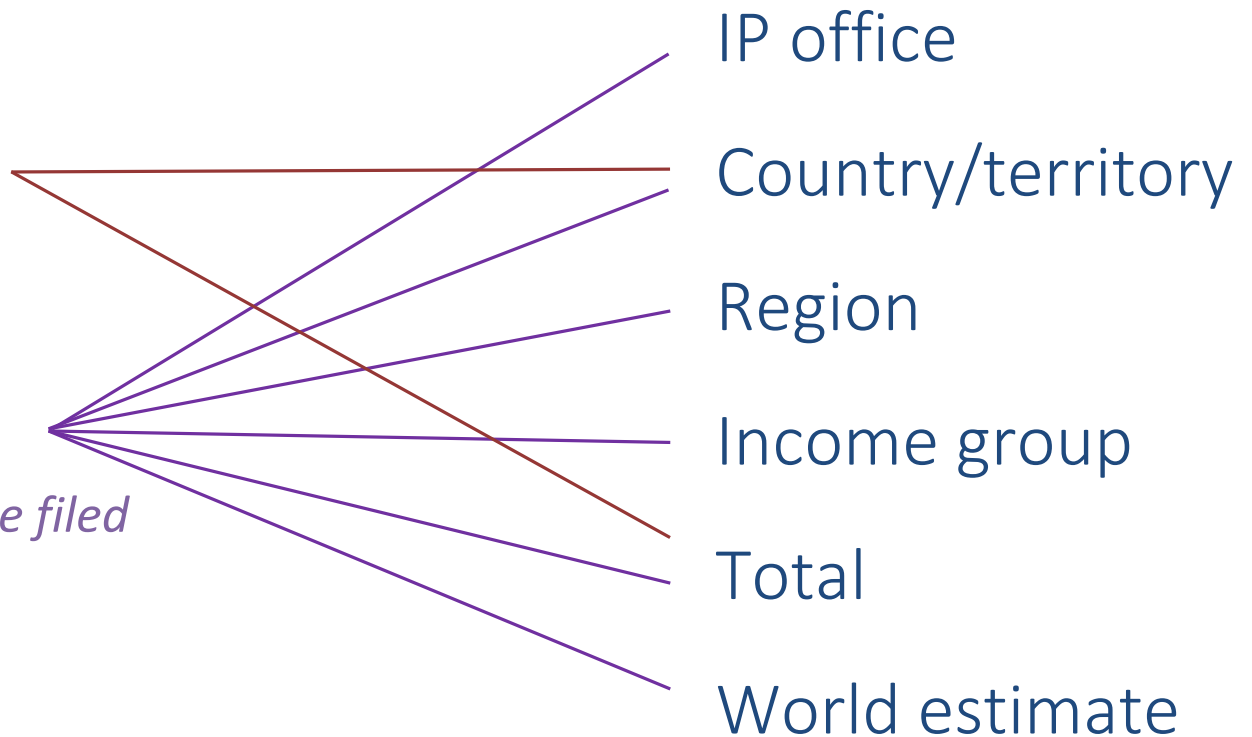
What information provide most WIPO IP statistics data

Source

the origin of filings

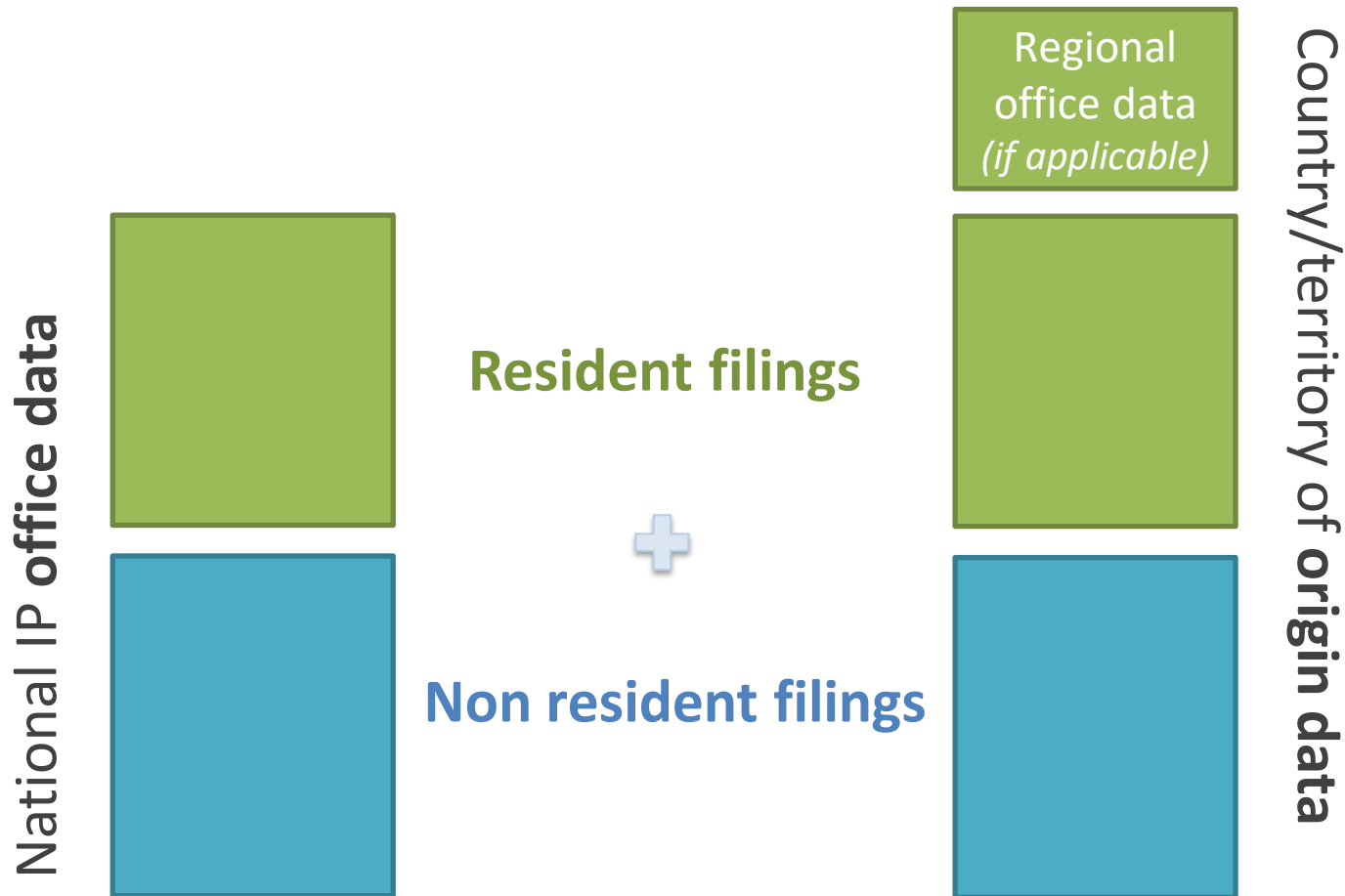
Destination

where applications are filed



Destination

where an application is filed

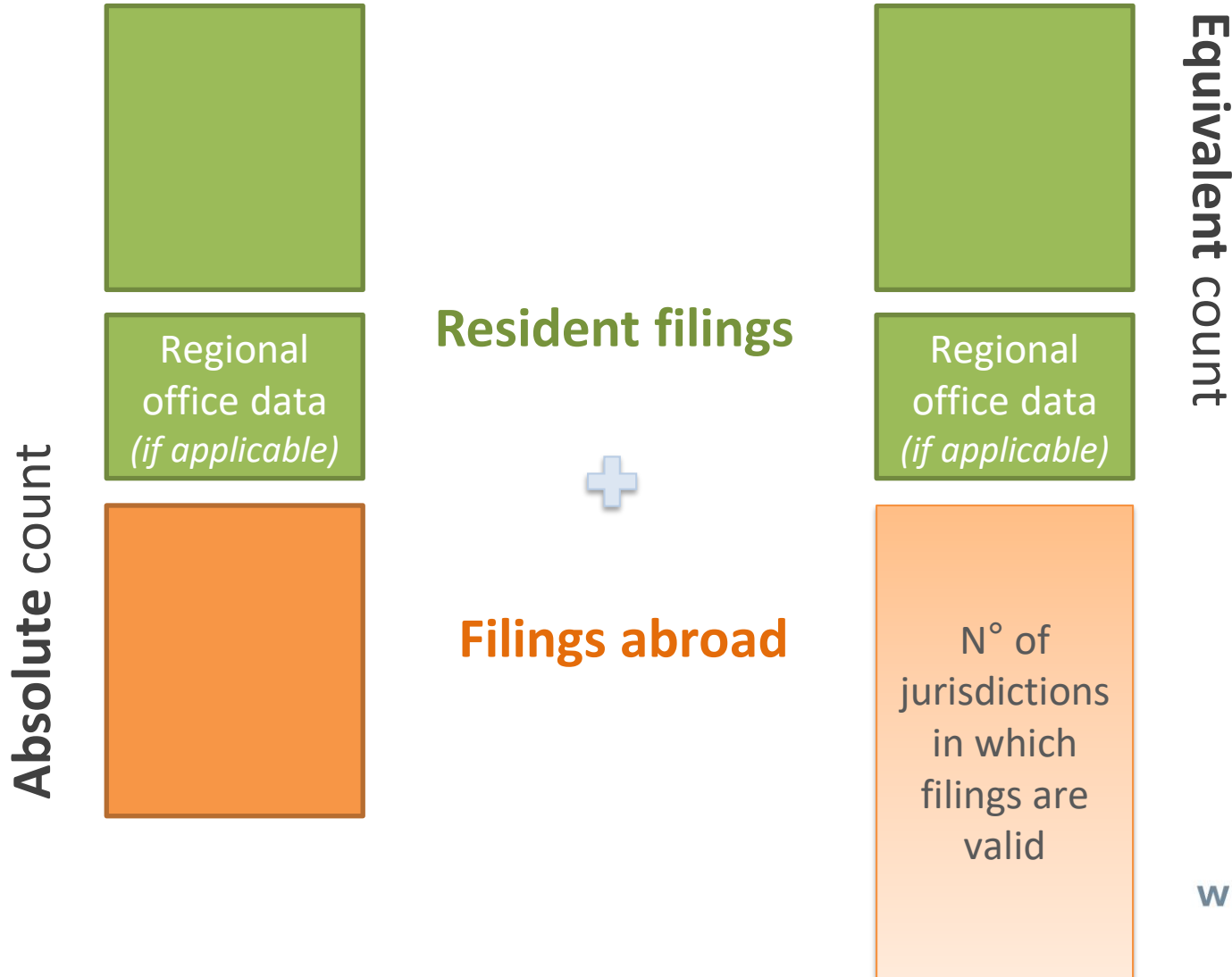


Source

country/territory of origin



Two counting methods
absolute & equivalent



Concordance table : absolute to equivalent count

example of patents:

One patent application filed is the equivalent of:

Regional patent office	Abbreviation	Does the applicant reside in a member state of the regional office?	
		Yes	No
African Intellectual Property Organization	OAPI	1 + 16	17
African Regional Intellectual Property Organization	ARIPO	1 + 1	1
Eurasian Patent Organization	EAPO	1 + 7	8
European Patent Office	EPO	1 + 1	1
Patent Office of the Cooperation Council for the Arab States of the Gulf	GCC Patent Office	1 + 5	6

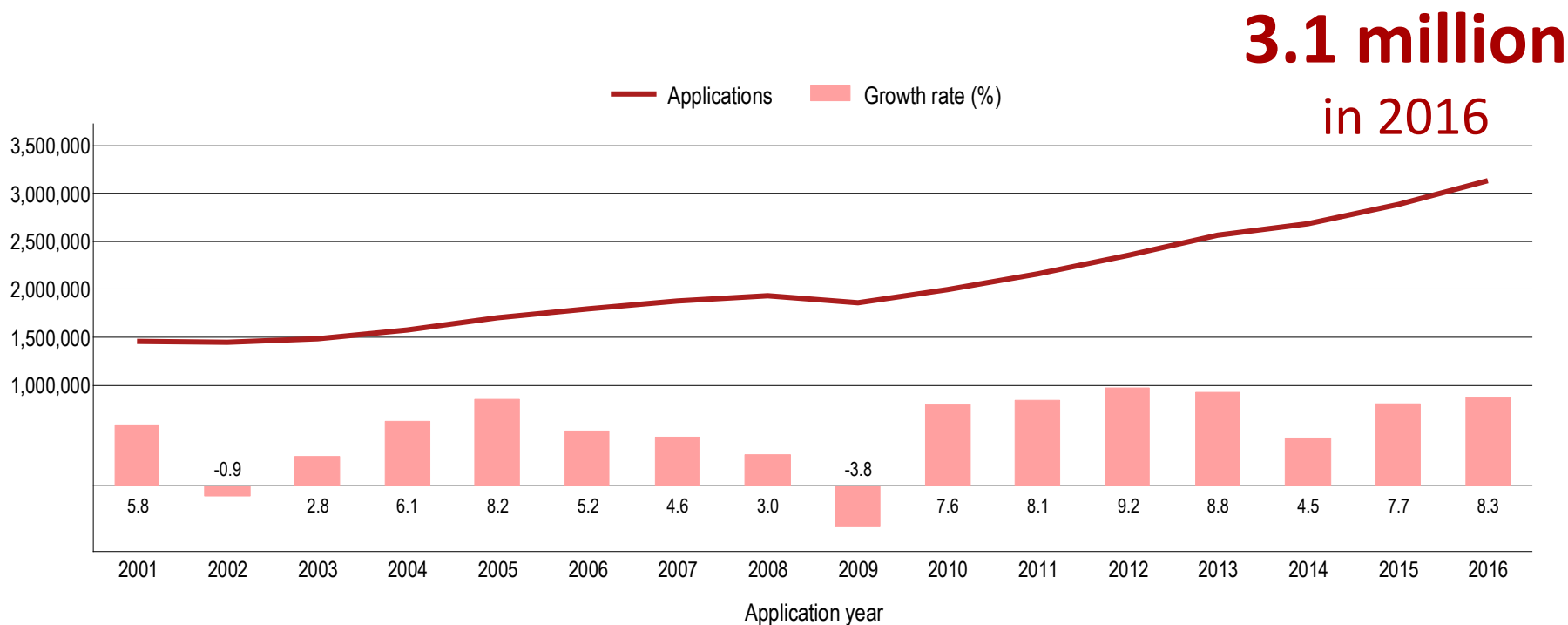
Legend: resident filing ; filing abroad

Part II

Global trends in IP activity

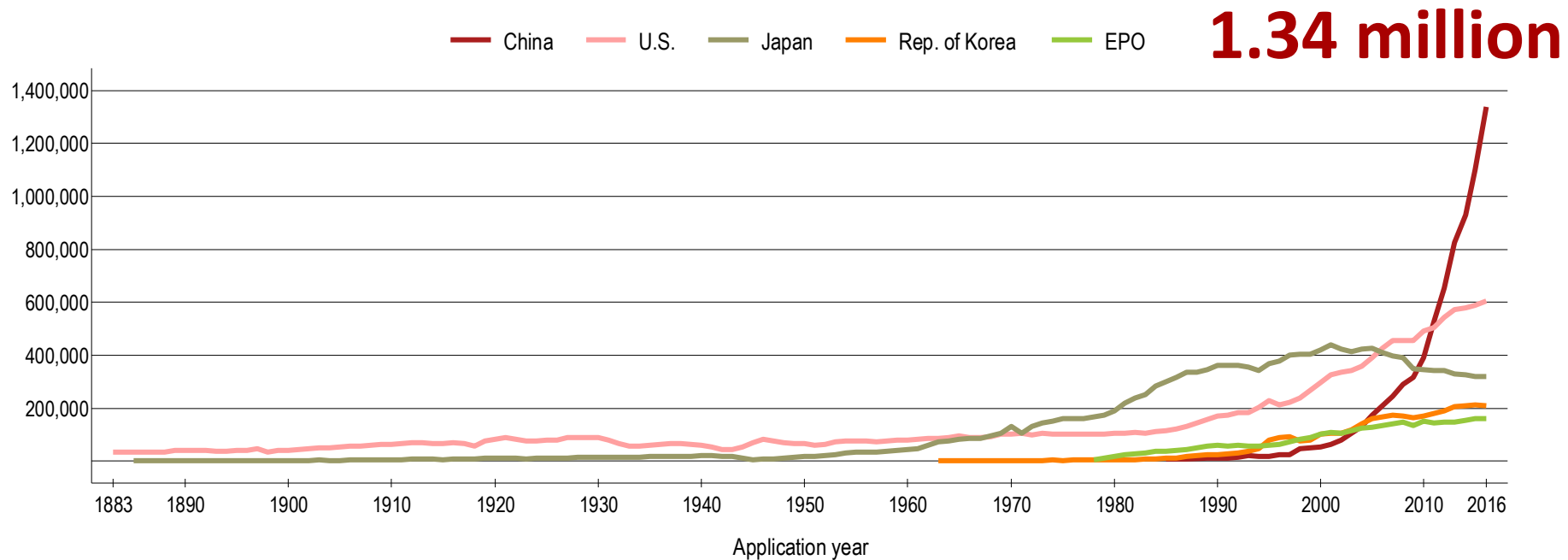
- Patent
- WIPO IP Services

Patent applications filed worldwide, 2001-2016



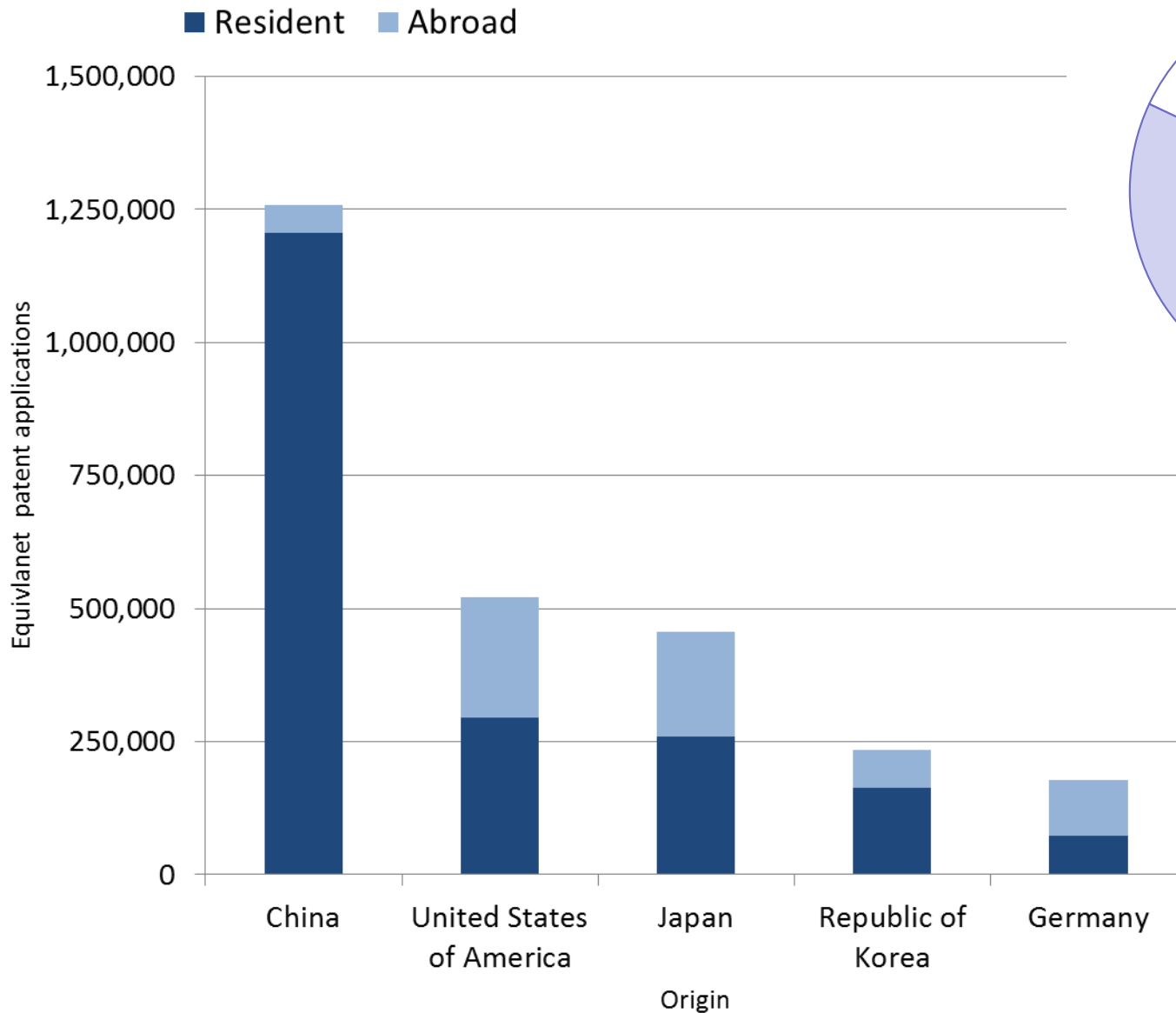
doubled in 13 years

Filings at the top five offices, 1883-2016



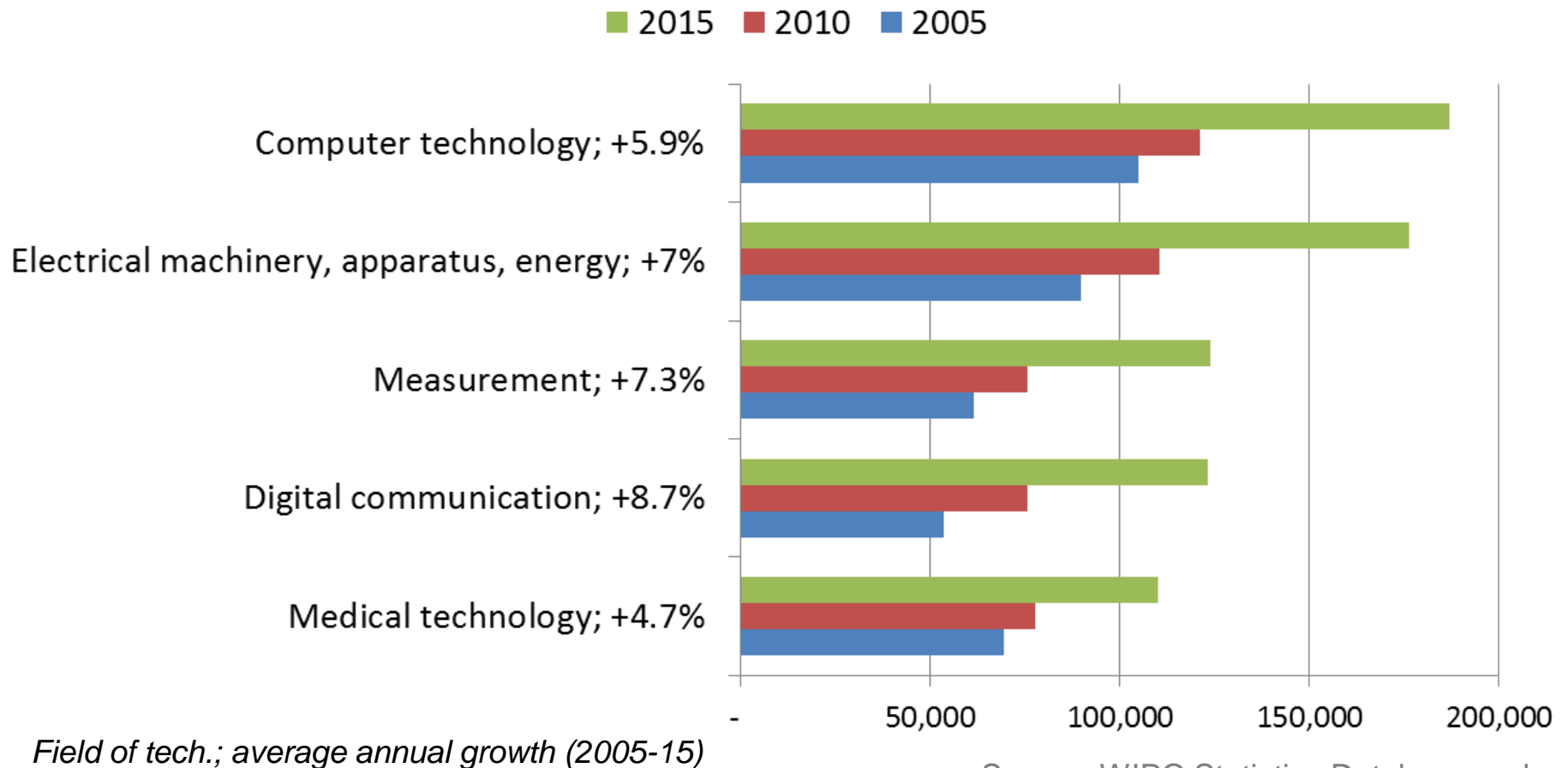
U.S.+ Japan + Rep. of Korea + EPO = 1.29 million

The top five countries of origin in 2016



China
accounts for
40%
of world total

Top 5 fields of technology in patent applications worldwide

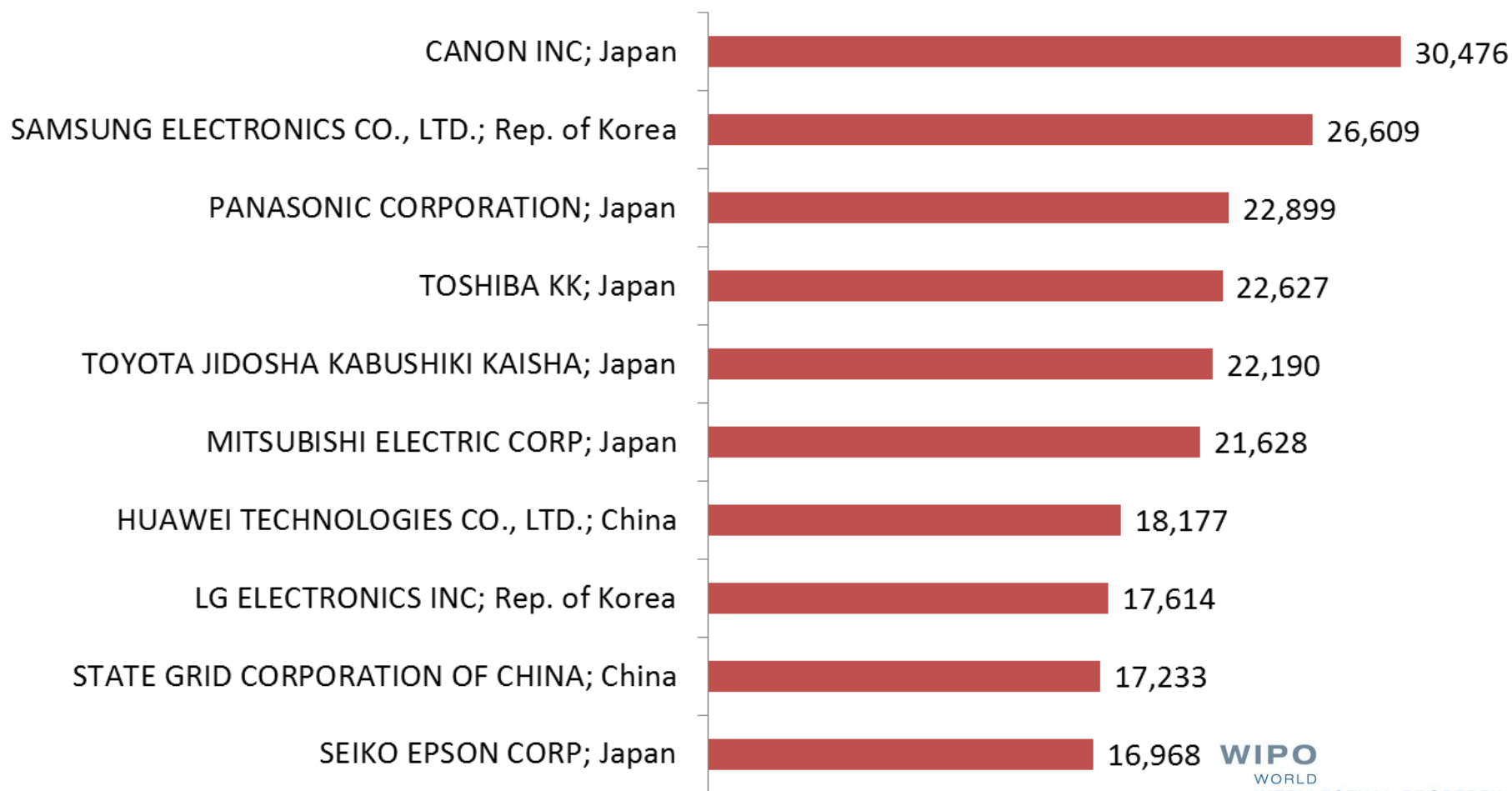


Source: WIPO Statistics Database and EPO PATSTAT database

Top 5 = 29% of total filings in 2015

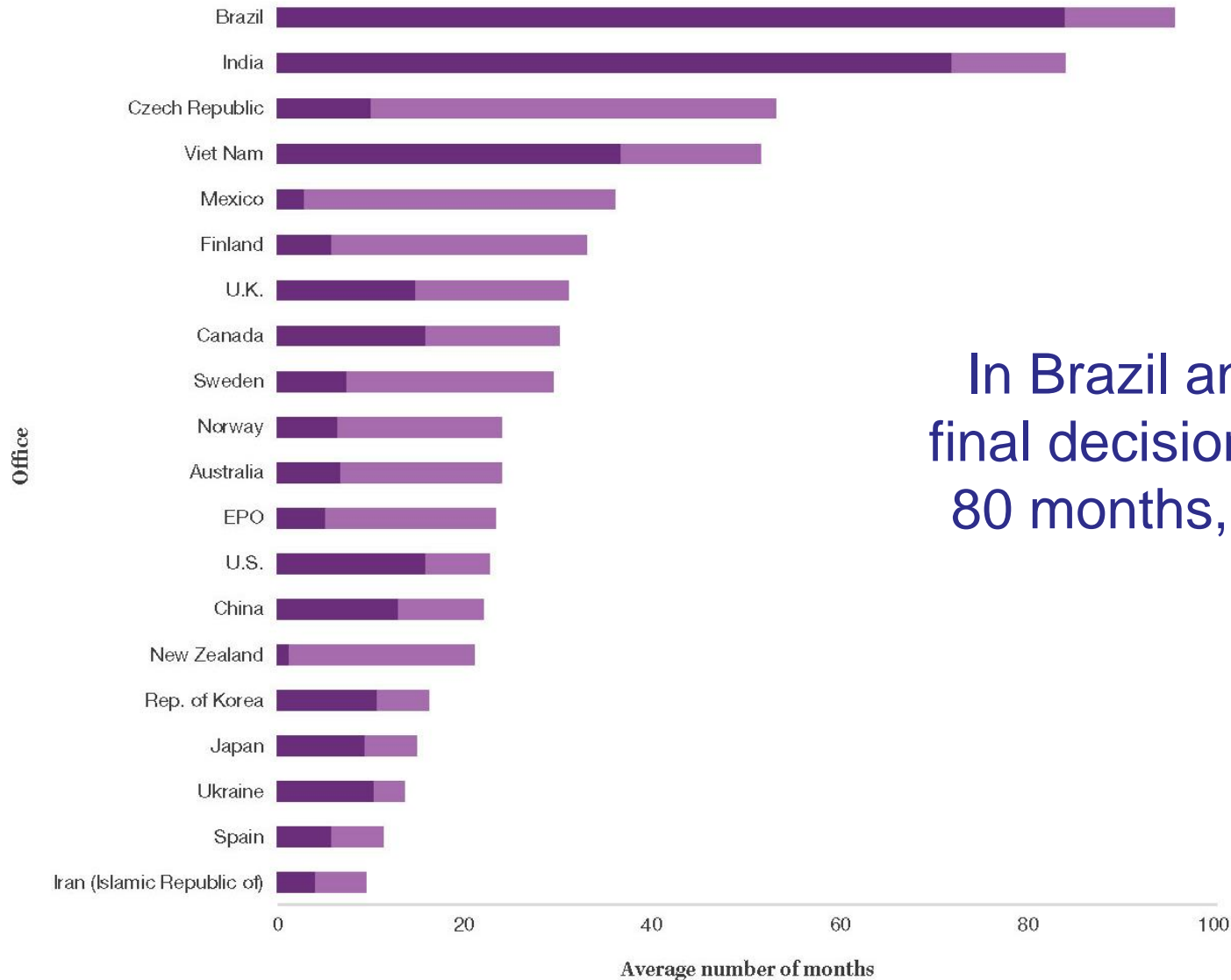
Top 10 patent applicants worldwide, based on total number of patent families, 2011-14

All are from Asia and accounted for 4% of total



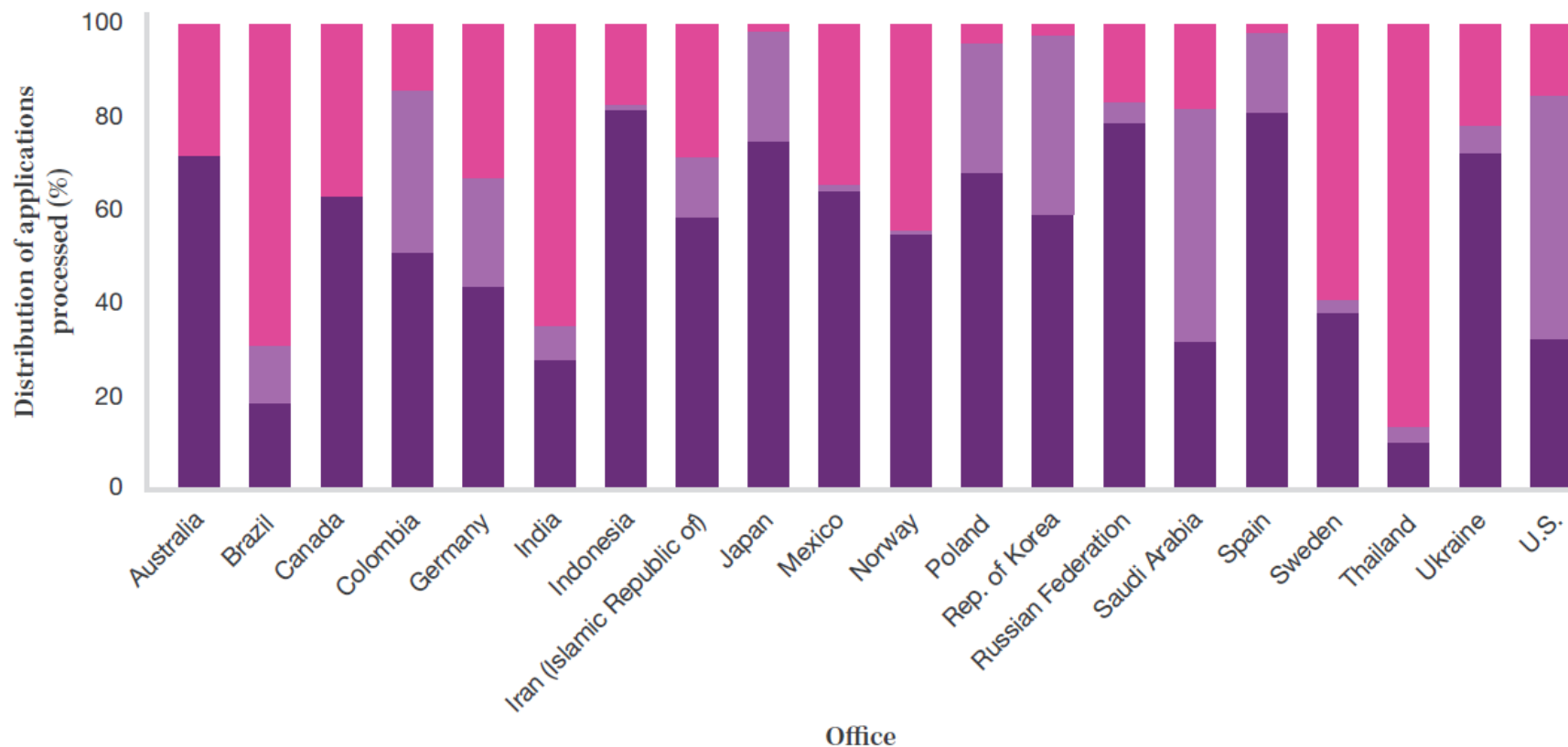
Source: WIPO Statistics Database and EPO PATSTAT database

Average pendency times from filing to first office action and final decision (months), 2016



In Brazil and India, the final decision occurs after 80 months, on average.

Distribution of patent examination outcome for selected offices, 2016



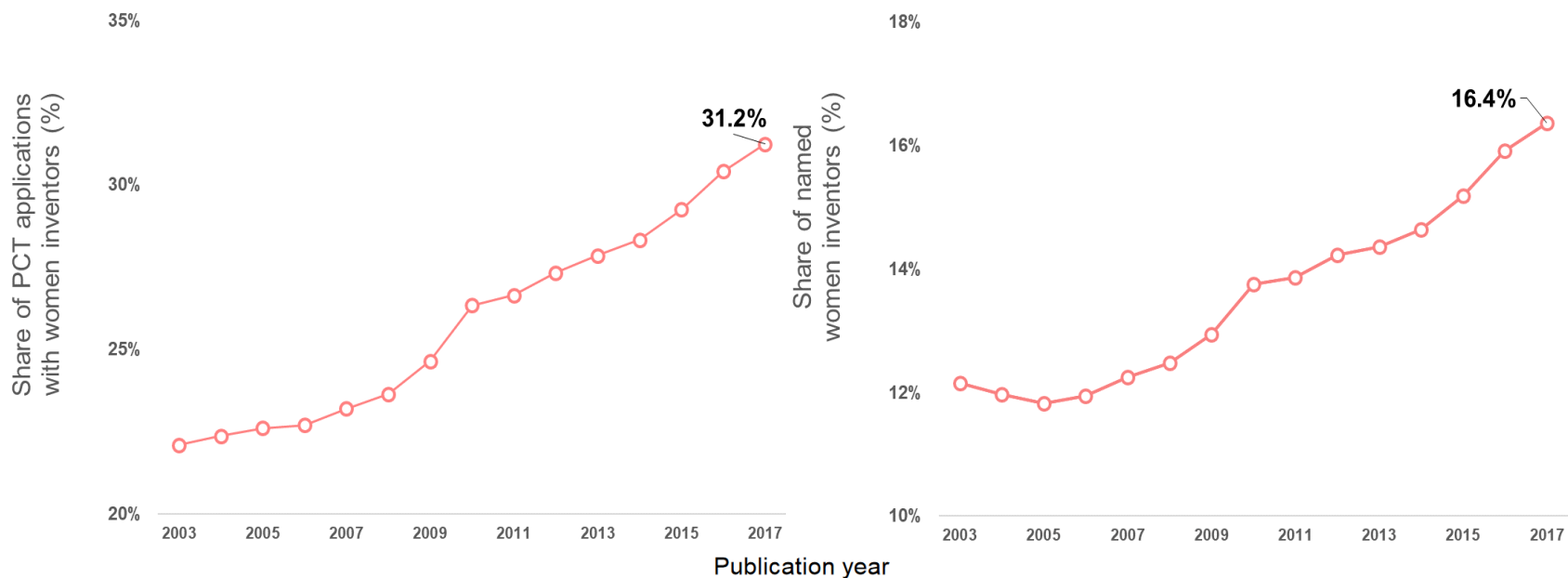
■ GRANTED ■ REJECTED ■ WITHDRAWN/ABANDONED

Source: WIPO Statistics Database, September 2017.

PCT applications by gender

In 2017, 31.2% of all PCT applications included women inventors.

A22. Share and number of PCT applications with women inventors, 2003–2017

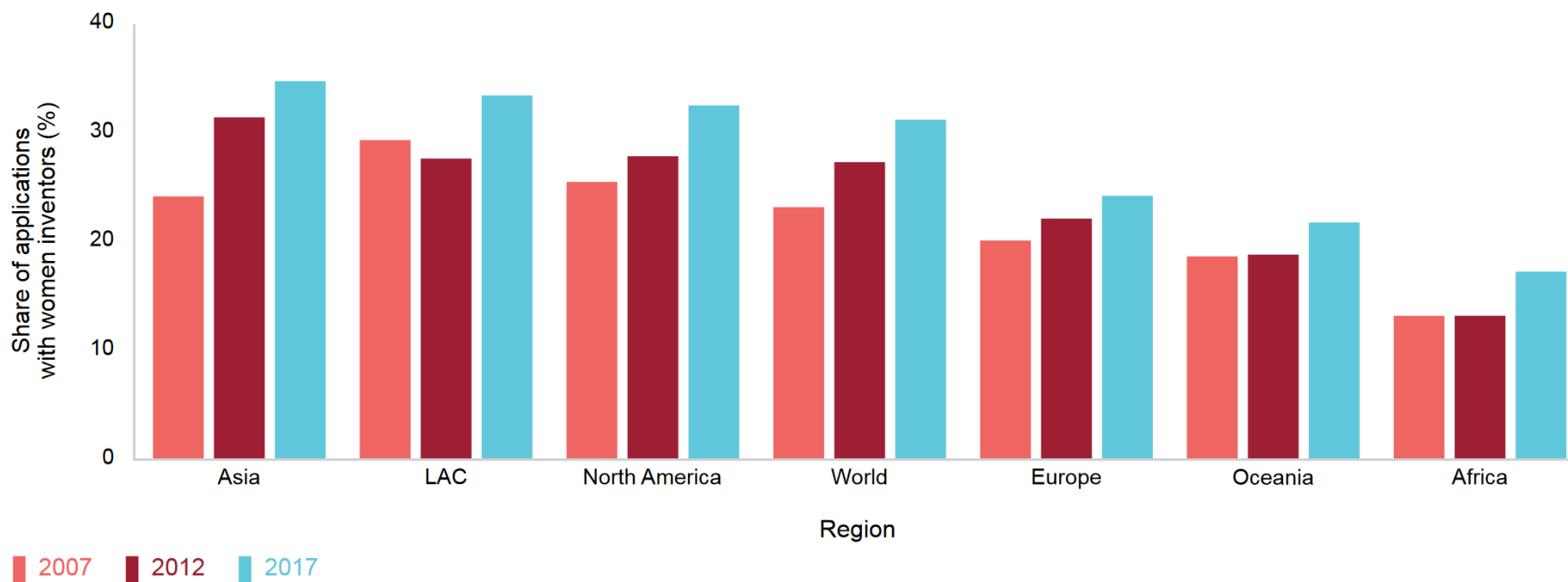


Note: For further details on methodology, refer to Martínez, G.L., J. Raffo and K. Saito (2016). Identifying the Gender of PCT Inventors. *WIPO Economic Research Working Paper No. 33*. Geneva: WIPO. Available at: www.wipo.int/publications/en/details.jsp?id=4125&plang=EN.

Source: WIPO Statistics Database, March 2018.

The share of PCT applications with women inventors has risen in each geographical region in the world between 2007 and 2017.

A23. Share of PCT applications with women inventors by geographical region, 2007, 2012 and 2017



Note: For further details on methodology, refer to Martínez, G.L., J. Raffo and K. Saito (2016). Identifying the Gender of PCT Inventors. *WIPO Economic Research Working Paper No. 33*. Geneva: WIPO. Available at: www.wipo.int/publications/en/details.jsp?id=4125&plang=EN.

Source: WIPO Statistics Database, March 2018.

Top 20 external PCT applicant representatives, 2016-17

Rank	Name	Origin	PCT applications
1	AFD CHINA INTELLECTUAL PROPERTY LAW OFFICE	China	3,256
2	SHIGA INTERNATIONAL PATENT OFFICE	Japan	3,156
3	KANGXIN PARTNERS P.C.	China	2,714
4	SAKAI INTERNATIONAL PATENT OFFICE	Japan	2,698
5	CHINA PAT INTELLECTUAL PROPERTY OFFICE	China	2,075
6	KBK & ASSOCIATES	Republic of Korea	1,696
7	FISH & RICHARDSON P.C.	United States of America	1,627
8	SCHWEGMAN LUNDBERG & WOESSNER	United States of America	1,537
9	TSINGYIHUA INTELLECTUAL PROPERTY LLC	China	1,531
10	Y.P. LEE, MOCK & PARTNERS	Republic of Korea	1,516
11	KILPATRICK TOWNSEND & STOCKTON LLP	United States of America	1,504
12	GUANGZHOU SCIHEAD PATENT AGENT CO., LTD.	China	1,425
13	CHINA PATENT AGENT (H.K.) LTD.	China	1,383
14	BEIJING SANYOU INTELLECTUAL PROPERTY AGENCY LTD.	China	1,281
15	LIU, SHEN & ASSOCIATES	China	1,270
16	UNITALEN ATTORNEYS AT LAW	China	1,259
17	SOEI PATENT AND LAW FIRM	Japan	1,236
18	TDIP & PARTNERS	China	1,225
19	IPICS CORPORATION	Japan	1,212
20	KNOBBE, MARTENS, OLSON & BEAR, LLP	United States of America	1,191

Statistics for WIPO services in 2017



243,500

applications
filed

+4.5%

annual growth

56.2%

non-resident
share worldwide
(2016)



56,200

applications
filed

+5%

annual growth

63%

non-resident
share worldwide
(2015)



19,429

application
design counts

+3.8%

annual growth

47.7%

non-resident
share worldwide
(2016)

Part III

Dissemination of WIPO IP Statistics

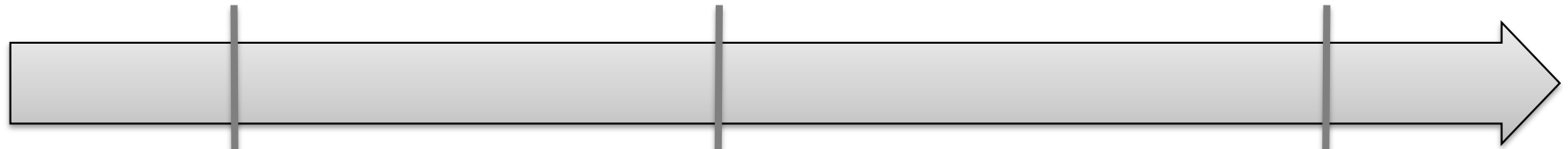
- Reports
- On-line tools
- Economics of IP

Release dates of the statistical publications

March

June/August

December

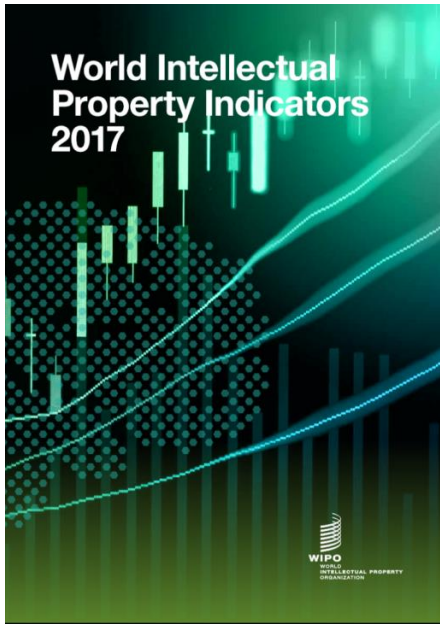


**Hague/Madrid/PCT
yearly reviews**
provides key statistics
Executive summaries
in up to nine languages

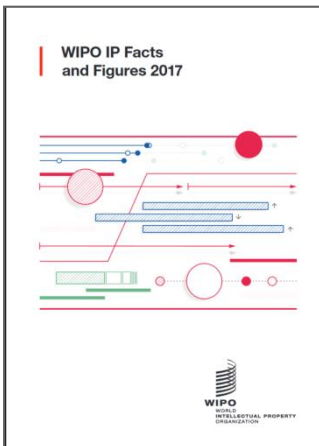
**World
IP
Indicators**
*patent, utility model,
trademark, industrial design,
plant variety, geographical
indication*
IP Facts & Figures
in French, English & Spanish

Press release
*first annual statistics on
WIPO's IP services
(partly estimated data)*

Publications on global IP Statistics



- Gives world IP activity trends
- Provides short analysis of five IP rights' main trends
- Explores all stages of the process through a large sets of indicators



- The key statistics
- Available in English, French and Spanish

The yearly reviews

- Describes the latest **statistical trends**
- Provides detailed sets of **indicators**
- Analyzes the **System's performance**

PCT



Madrid



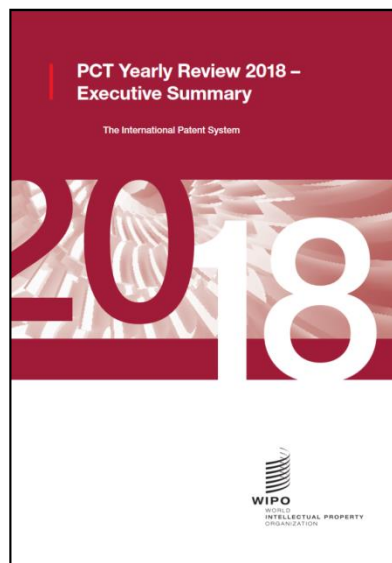
Hague



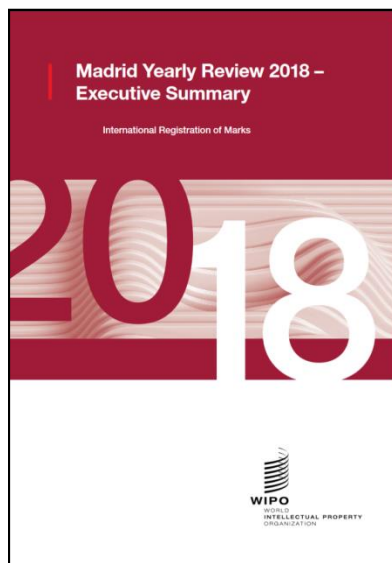
Executive summaries of the yearly reviews

- Focuses on the **key facts**
- Available in **Spanish** (in 6 to 9 languages)
- Released after the review (1-2 months after)

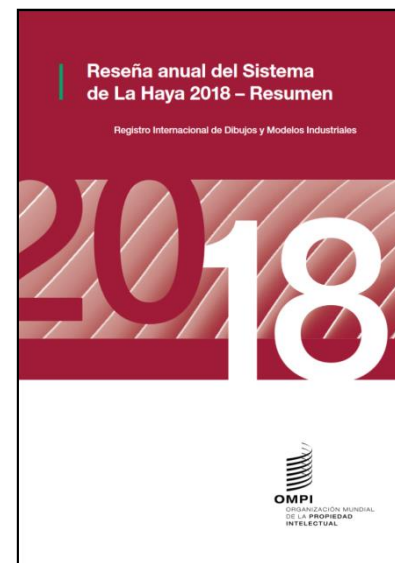
PCT



Madrid




Hague



IP Statistics Country Profiles

3 IP rights - 14 indicators - 192 countries


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Statistical Country Profiles

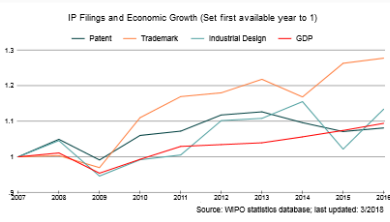


Germany

Population (Million): 82.67 (2016)
 Gross Domestic Product (Billion US\$)(Constant 2011 US\$ (PPP)): 3,643.36 (2016)

IP Filings (Resident + Abroad, Including Regional) and Economy

Year	Patent	Trademark	Industrial Design	GDP (Constant 2011 US\$)
2007	163,779	1,800,775	561,169	3,329.61
2008	171,835	1,806,827	586,673	3,365.65
2009	162,332	1,745,954	530,833	3,176.54
2010	173,619	1,999,020	556,584	3,306.14
2011	175,606	2,105,613	564,082	3,427.14
2012	183,048	2,124,688	618,289	3,444.00
2013	184,493	2,193,102	621,807	3,460.86
2014	179,506	2,103,796	648,210	3,516.08
2015	175,423	2,274,047	573,271	3,576.58
2016	177,073	2,300,068	636,395	3,643.36

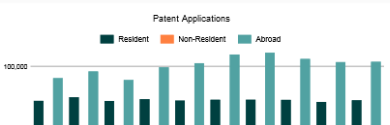


Source: WIPO statistics database; last updated: 3/2018

Patent

Patent Applications

Year	Resident	Non-Resident	Abroad
2007	73,036	13,139	90,743
2008	75,900	13,177	95,935
2009	72,971	11,724	89,361
2010	74,401	12,198	99,218
2011	73,216	12,458	102,390
2012	72,085	14,720	100,412

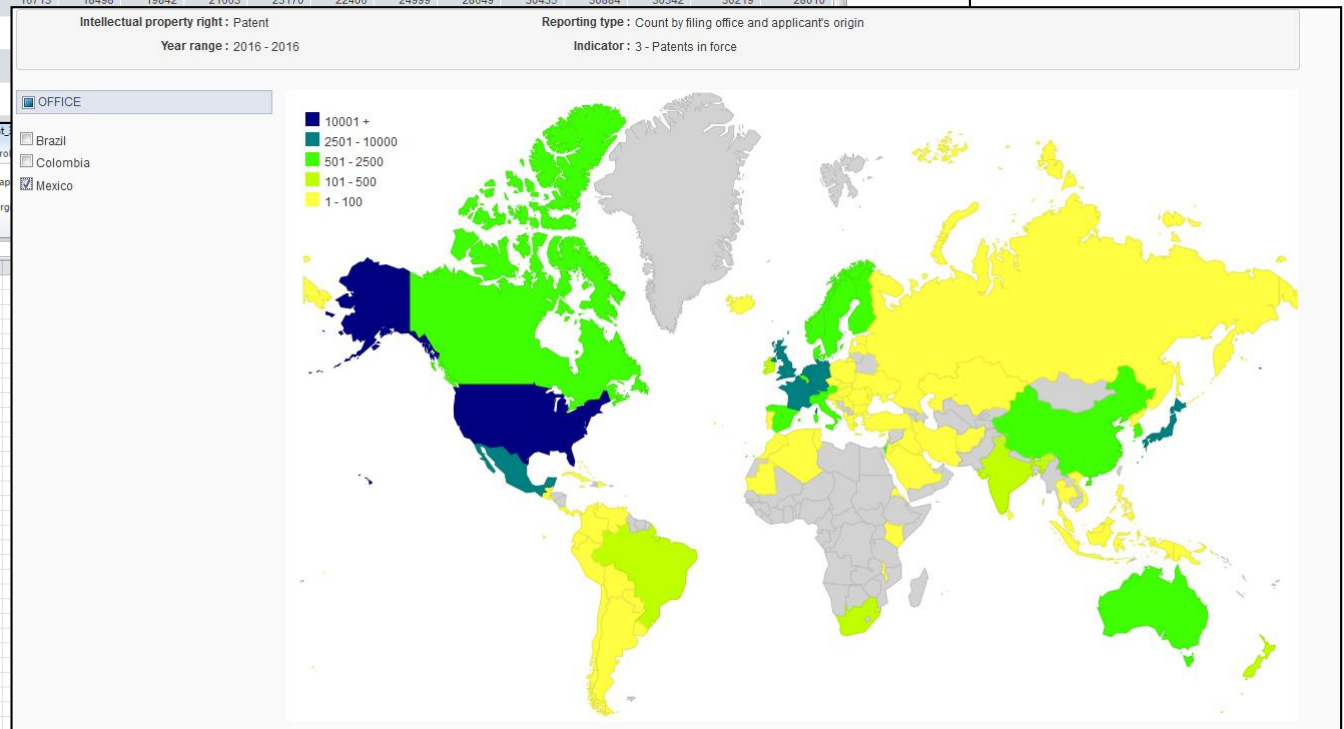


WIPO IP Statistics Data Center

- Query our database
- Find our most comprehensive and up-to-date datasets
- Visualize and download our data

The screenshot shows the WIPO IP Statistics Data Center website. At the top, there is a dark blue header with the WIPO logo and the text "WORLD INTELLECTUAL PROPERTY ORGANIZATION". To the right of the logo are links for "Contact Us" and "English". Below the header is a navigation bar with tabs for "Home", "Reference", "Statistics", and "Data center". The main content area features the title "WIPO IP Statistics Data Center" and a subtitle "Source: WIPO statistics database. Last updated: March 2015". On the right side, there is a "Links" box containing a link to "Find out more about the Data Center". Below this, there is a horizontal menu with tabs for "Key indicators", "Patent", "Trademark", "Industrial design", "Utility model", "PCT", "Madrid", and "Hague". The "Patent" tab is currently selected. Underneath the menu, there are three search filters: "Indicator" with a dropdown menu showing "Indicator", "Report type" with a dropdown menu showing "Type", and "Year range" with two dropdown menus labeled "From" and "To". At the bottom of the search filters are two buttons: "Search" and "Reset".

WIPO IP Statistics Data Center



patent_3 - Patents in force

Source: WIPO statistics database. Last updated: May 2018

Office	Office (Code)	Origin	2016
Brazil	BR	Andorra	1
Brazil	BR	United Arab Emirates	6
Brazil	BR	Argentina	63
Brazil	BR	Austria	190
Brazil	BR	Australia	177
Brazil	BR	Barbados	2
Brazil	BR	Belgium	219
Brazil	BR	Bahrain	3
Brazil	BR	Bolivia (Plurinational State of)	1
Brazil	BR	Brazil	2918
Brazil	BR	Bahamas	2
Brazil	BR	Canada	258
Brazil	BR	Central African Republic	5
Brazil	BR	Switzerland	1275
Brazil	BR	Cook Islands	1
Brazil	BR	Chile	11
Brazil	BR	China	69
Brazil	BR	Colombia	6
Brazil	BR	Costa Rica	4
Brazil	BR	Cuba	12
Brazil	BR	Cyprus	2
Brazil	BR	Czech Republic	4
Brazil	BR	Germany	3169
Brazil	BR	Denmark	160
Brazil	BR	Egypt	1
Brazil	BR	Spain	140
Brazil	BR	Finland	389
Brazil	BR	France	1048
Brazil	BR	United Kingdom	683
Brazil	BR	Greece	6
Brazil	BR	China, Hong Kong SAR	2
Brazil	BR	Croatia	1
Brazil	BR	Hungary	9

WIPO economics of IP products

publications

Global Innovation Index

1.  2.  3. 

World IP Report

*Intangible Capital in Global Value
Chains*

Economic Researches

*N°44: Measuring innovation in energy
technologies*

web

Home page

www.wipo.int/econ_stat

Literature Database

key literature on economics of IP

Development Studies

IP and economic development

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Contact us

ipstats.mail@wipo.int

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