Patents

Highlights

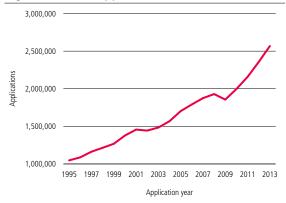
Applications surpass 2.5 million in 2013—Grants rise to 1.17 million

In 2013, patent applications filed worldwide amounted to around 2.57 million, up 9% from 2012, after passing the 2 million mark in 2011 (figure 1). Driving that strong growth were filings in China and the United States of America (US).

China and the US received the most applications

The State Intellectual Property Office of the People's Republic of China (SIPO) received the most applications in 2013, followed by the United States Patent and Trademark Office (USPTO), the Japan Patent Office (JPO), the Korean Intellectual Property Organization

Figure 1. Patent applications worldwide



Source: Standard figure A1.

(KIPO) and the European Patent Office (EPO; figure 2). The EPO received around a fifth of SIPO's total. The gap between SIPO and the other offices has widened considerably since 2011, when SIPO became number 1.

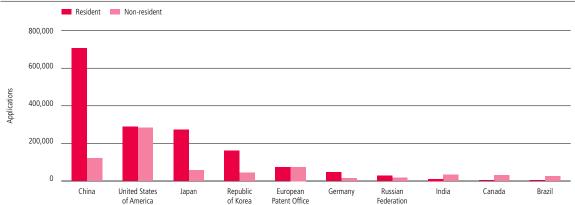
The top 20 list includes patent offices from 13 high-income countries and 7 low- and middle-income countries, such as Brazil and India. One notable change of the top 20 list is the entry of Indonesia, which replaces South Africa. SIPO increased its share in the world total, while the JPO and the EPO saw theirs decline. The top five offices accounted for 81% of the world total in 2013.

Around 40% of applications filed worldwide in 2013 were at offices in low- and middle-income countries. Among those offices, Malaysia and South Africa each received around 7,200. Bangladesh, Kenya and Nepal received only a few hundred.

Double-digit growth in Australia and China

Of the top 20 offices, 14 received more applications in 2013 than in 2012. Australia and China had double-digit growth, but the source of their growth differs. Resident applications accounted for almost all the growth in China and non-resident applications for almost all the growth in Australia.





Source: Standard figure A8.

Patent filings since 1883

From 1883 to 1963, the USPTO was the leading office in world filings. Applications filed with the top five offices show that application numbers at the JPO and the USPTO were stable until the early 1970s, when the JPO began to see rapid growth, a pattern also observed by the USPTO from the 1980s onwards.

Among the top five offices, the JPO surpassed the USPTO in 1968 and maintained the top position until 2005. But since 2005, the number of applications at the JPO has trended downward. Both the EPO and KIPO have seen increases each year since the early 1980s. So has SIPO since 2001: It surpassed the EPO and KIPO in 2005, the JPO in 2010

and the USPTO in 2011—and now it receives the largest number of applications worldwide. There has been a gradual upward trend in the combined share of the top five offices in the world total—from 74% in 2003 to 81% in 2013.

Note

a. The IP office of the Soviet Union, not represented in this figure, was the leading office in the world in terms of filings from 1964 to 1969. Like the JPO and the USPTO, the office of the Soviet Union saw stable application numbers until the early 1960, after which it recorded rapid growth in applications filed.

Trend in patent applications for the top five offices China — United States of America — Japan — Republic of Korea — European Patent Office 1,000,000 800,000 -600,000 400,000 200,000 1883 1893 1903 1913 1923 1933 1953 1963 1973 1983 1993 2003 2013 Application year Source: Standard figure A7.

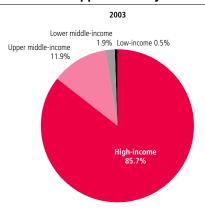
Other offices exhibiting notable growth in 2013 are those of the Republic of Korea (+8.3%), China Hong Kong (SAR, +7.1%), Iran (Islamic Republic of, +5.3%) and the US (+5.3%). Japan recorded a 4.2% decline in 2013, while India saw a 2.1% decline after strong growth in the previous three years. Among the top five offices, only SIPO and the USPTO saw growth in each of the past four years, with SIPO recording double-digit growth each year.

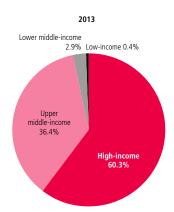
South Africa, among the top 20 offices in 2012, dropped off the list because of a 2% decline in 2013, due mainly to falling non-resident applications. Among selected offices of low- and middle-income countries.

Nepal had the fastest growth in 2013 (+76.5%), but from a small base in 2012.

Although growth in the offices of some low- and middle-income countries such as Jamaica, Morocco, the Philippines and Ukraine was similar in magnitude, its source differs, with non-resident applications being the main source in Jamaica and the Philippines. The variation in year-on-year growth is considerable, especially for offices with low numbers of applications. But the majority of low- and middle-income countries reporting show an upward long-term trend.

Figure 3. Patent applications by income group





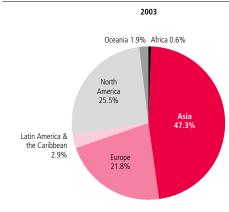
Source: Standard table A5.

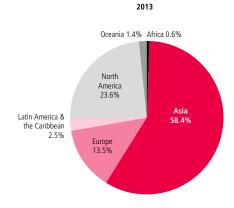
A shift toward Asia

High-income countries, despite falling shares, received 60.3% of applications filed worldwide in 2013, reflecting their high R&D spending (figure 3). The distribution of applications is shifting towards the upper middle-income group, given the growth in China and the decline in Japan. Applications in China rose sevenfold from 2003 to 2013, while those in Japan fell by a fifth.

Due to the high number of applications filed in China, offices of the upper middle-income countries increased their share of the world total from 11.9% in 2003 to 36.4% in 2013. But without China, the share of the remaining upper middle-income countries would have dropped from

Figure 4. Patent applications by region



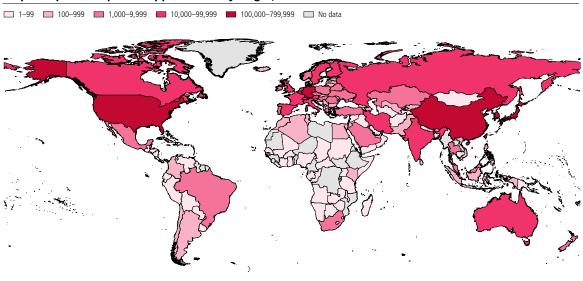


Source: Standard table A6.

5% to 4%.¹ Patent applications at the offices of upper middle-income countries grew 18% a year between 2003 and 2013, but without China that growth was 4% a year. Patent applications filed at the offices of low-income and lower middle-income countries accounted for around 3% of the world total.

Asia received 58.4% of applications filed worldwide in 2013, considerably above its 2003 share (figure 4). This reflects the fact that three of the top five patent offices are in Asia (the JPO, KIPO and SIPO). North America accounted for 23.6% and Europe 13.5%. Over the past 10 years, there has been a gradual shift in patenting

The impact of SIPO data on the upper middle-income total is considerable. In 2013, SIPO accounted for 88% of the upper middle-income group total.



Map 1. Equivalent patent applications by origin, 2013

Source: Standard map A14.

activity away from Europe and North America towards Asia due to the low growth in applications in Europe, and a rapid rise in China and the Republic of Korea. The combined share of Africa, Latin America & the Caribbean and Oceania was around 4.5%, lower than in 2003.

China also the largest origin of filings

Applications received by offices from resident and non-resident applicants are referred to as office data, whereas applications filed by applicants at a national office (resident applications) or at foreign offices (applications abroad) are referred to as origin data. Here, patent statistics based on the origin of the residence of the first-named applicant are reported to complement the picture of patent activity worldwide.

Applicants from China, Germany, Japan, the Republic of Korea and the US filed 82% of applications world-wide in 2013, up from 73% in 2003, thanks to strong growth in applications originating from China and the US (map 1).

Applicants from China filed more applications than applicants from Japan and the Republic of Korea combined. Applications from China grew at a double-digit rate and surpassed those from Japan and the US in 2012. More than half the top 20 origins are in Europe, with applications from Germany topping those from France, Switzerland and the United Kingdom (UK) combined. Of the top 20 origins, only China and India are not high-income countries.

Applicants from the top 20 saw their combined share rise from 91% in 2003 to 98% in 2013. China's share jumped from 3.9% in 2003 to 28.6% in 2013, as Japan's fell from 32.5% to 18.4%.

The two middle-income countries in the top 20—China and India—recorded the fastest growth in 2013. Denmark is the only other origin to exhibit double-digit growth in 2013. Growth in applications abroad was the main source of growth for Denmark and India, while growth in resident applications was the main source for China.

Patent families

Patent families, defined as patent applications interlinked by—or by a combination of—priority claim, Patent Cooperation Treaty (PCT) national phase entry, continuation, continuation-in-part, internal priority and addition or division. A special subset comprises foreign-oriented patent families, which include only patent families that have at least one filing office different from the office of the applicant's country of origin. Some foreign-related patent families include only one filing office, because applicants may choose to file only with a foreign office. For example, if a Canadian applicant files a patent application directly with the USPTO (without previously filing with the patent office of Canada), that patent family constitutes a foreign-oriented patent family with just one office.

Filing abroad reflects the globalization of intellectual property (IP) protection and the desire to penetrate foreign markets. The cost of filing abroad can be substantial, so the patents are likely to confer higher values. Applications abroad made up a large share of Denmark's and Finland's totals. In absolute numbers, the US led in 2013, followed by Japan and Germany.

China, while first in resident applications, filed only 30,000 applications abroad, fewer than Switzerland and the UK. Despite substantial growth in resident applications, only a small fraction of Chinese applications were destined abroad. However, in recent years China's applications abroad have increased markedly.

Among other things, proximity and market size influence cross-border applications. US applicants accounted for 44% of applications filed in Australia, Canada and Mexico. Japan and the US had the second or third largest shares at many offices. In contrast, Chinese applicants accounted for only 2.6% of applications received by the EPO and the USPTO.

Now consider patent families

Inventors traditionally file at their national offices, and subsequently abroad, so some inventions are recorded more than once. To take this into account, WIPO has developed indicators for patent families, and the trend in patent families mirrors that of patent applications. Over the past 10 years, the ratio of families to

applications has varied between 51% and 56%, so about half the applications are initial filings and the other half are repetitive filings mostly at foreign offices.² Austria, France, the Netherlands, Sweden, Switzerland and the UK have low family-to-application ratios—at more than three-quarters from 2009 to 2011. Poland, the Russian Federation and the Republic of Korea have high ratios, indicating fewer duplications.

The size of patent families reflects the geographical coverage of families. Between 2009 and 2011, a third of foreign-oriented patent families were single-office families—they were filed only in one foreign office but not in a national office. Around 60% of the families created worldwide between 2009 and 2011 were filed in fewer than three patent offices. However, there is considerable variation among the top 20 origins. Applicants from France, Norway and the UK tend to cover three offices when filing abroad. Those from Canada, China Hong Kong (SAR), India and Singapore tend to cover fewer offices, with the average less than two.

Adjusting for GDP and population

Differences in patent activity reflect both the size of the economy and the level of development. So it is interesting to express the number of resident patent applications relative to GDP, population, R&D spending or other variables—commonly referred to as "patent activity intensity" indicators.

For the world, resident applications per GDP rose from around 1,437 in 2003 to 1,828 in 2013.³ China ranks third when its resident applications are adjusted by GDP, below the Republic of Korea and Japan (figure 5). The resident applications-to-GDP ratio of the Republic of Korea is more than twice that of China and five times that of the US. Despite a big gap in the number of

- 2 Also includes subsequent filings at national offices, such as continuation in parts, divisional applications, and the like.
- 3 GDP data are in 2011 purchasing power parity dollars. The global resident applications-to-GDP ratio is a WIPO estimate based on data covering 108 offices.

2003 2013

10,000

8,000

6,000

2,000

Republic of Korea Japan China Germany Switzerland

Figure 5. Resident patent applications per 100 billion USD GDP for the top five origins

Source: Standard figure A27.

resident applications, Finland and the US had similar applications-to-GDP ratios in 2013. Brazil, with 170 resident applications per unit of GDP is the highest ranking origin in Latin America, and Morocco and Kenya are the highest ranking in Africa. Patent activity is much more intensive in North-East Asia than in other parts of the world.

The profile of resident applications per million population is similar but shows some subtle differences. The top two origins—the Republic of Korea and Japan—are identical on both measures. But China's resident applications-to-population ratio is below Denmark's, whose population is less than 0.5% of China's. The Republic of Korea had the highest resident applications-to-population ratio, followed by Japan, Switzerland and Germany.

Some technologies feature more than others

In 2012, the latest year with complete data due to the delay between application and publication, computer technology saw the most published applications worldwide, followed by electrical machinery, measurement, digital communication and medical technology. The top five technological fields rose from 151,000 published applications in 1995 to 613,000 in 2012. Electrical machinery was the leader until 2001, when computer

technology took over. The combined share of the five went from 19% in 1995 to 28% in 2012.

Of the top 10 origins in 2010–12, Switzerland filed mainly in pharmaceuticals, the Russian Federation in food chemistry, France and Germany in transport and China, the Republic of Korea, the UK and the US in computer technology. The combined share of top three technologies ranged from 20% for France and the UK to 28% for Switzerland.

Patent applications in technologies related to fuel cells, geothermal, solar and wind grew continually between 1995 and 2012, except in 2006, when it declined slightly. Applications in the four energy-related technologies reached around 41,200 in 2012. Finland, Japan and the UK had concentrations in fuel cells; Switzerland, Australia, Israel and the Republic of Korea in solar.

Latest trends in patent grants

Offices carry out a formal or substantive examination to decide whether to issue a patent. The procedure for issuing a patent varies across offices, and differences in the numbers of patent grants among offices depend on factors such as examination capacity.

Grants have followed a path similar to patent applications, growing continually since 2001 and increasing sharply from 810,000 in 2009 to 1.17 million in 2013.

Growth of 3.1% in 2013 is down from 12.2% in 2010, 9.7% in 2011 and 13.5% in 2012, due partly to a decline at SIPO and a slowdown at the JPO. KIPO and the USPTO accounted for almost all the growth in 2013.

Who grants most patents?

The USPTO and the JPO, each with around 277,000 grants, issued the most in 2013. SIPO, despite a 4.3% drop in 2013, also issued more than 200,000. Among the top five, the Republic of Korea had the fastest growth in 2013, granting 127,330 patents. The number of grants issued by offices ranked from 6th to 20th ranged from about 31,600 (the Russian Federation) to 3,600 (Ukraine).

The top five offices increased their combined share from 70% in 2003 to 82% in 2013, due to growth at the JPO, KIPO and SIPO. The EPO's share has fallen continually over the past 10 years, and those of France, Germany and the UK have followed a downward path, while most of the other top 20 have remained fairly stable.

How are patents maintained over time?

Patent rights generally last up to 20 years from the date of filing. The estimated number of patents in force worldwide rose from 8.72 million in 2012 to 9.45 million in 2013,⁴ when the USPTO recorded the most, with 2.39 million patents (26% of the total) followed by the JPO with 1.84 million (19%). SIPO for the first time had more than a million patents in force in 2013. Mexico and South Africa are other middle-income countries with more than 50,000 patents each in force in their jurisdictions. All the top 20 had more patents in force in 2013 than in 2012.

4 This estimate is based on data covering 103 offices.

Potentially pending applications

Potentially pending applications include all patent applications, at any stage in the process, that are awaiting a final decision by a patent office, including those applications for which applicants have not filed a request for examination—where applicable.

Holders must pay maintenance fees to maintain the validity of their patents but may opt to let a patent lapse before the end of the full term. For 77 offices that reported data, more than half the grants they issued remained in force for at least seven years after the application date, and about a sixth lasted the full 20 years.

Patent office workloads

Patent offices must assess whether the claims in applications meet the standards of novelty, non-obviousness and industrial applicability, as set out in national laws. So, processing patents consumes time and resources.

The number of applications potentially pending fell from 5.34 million in 2010 to 4.91 million in 2013. But this figure would be higher if data from SIPO were available.

The USPTO had the most applications potentially pending in 2013, with 1.2 million, slightly lower than its peak of 1.25 million in 2008. The JPO's 930,000 in 2013 was about a third of its 2004 number. India, Viet Nam and Thailand had substantial numbers in 2013. The EPO is the only office among the top four to have more potentially pending applications in 2013 than in 2012. A high proportion of potentially pending applications in India, Israel and Japan have not yet entered the examination phase. That contrasts with Australia, the EPO and the Russian Federation, where the bulk of their potentially pending applications are currently being examined. This may reflect a difference across offices in the time limit that applicants have for filing requests for examination.

Some offices saw pendency time increase, the time it takes to process an application before deciding

whether to reject it or issue a patent. The JPO and SIPO managed to reduce pendency times for patents granted between 2000–02 and 2010–12, while the EPO, USPTO and the offices of Germany and Mexico saw pendency time increase.

International cooperation

The PCT offers applicants an advantageous route for seeking patent protection internationally as an alternative to the Paris Convention for the Protection of Industrial Property (the Paris Convention) for pursuing patent rights in different countries—for further information see *PCT Yearly Review*, 2014.

China and the US drove record PCT filings in 2013, when total PCT applications surpassed 200,000 for the first time, at 205,256, up 5.1% from 2012. With more than 57,000 PCT international applications, the US exceeded in 2013 its previous filing peak of just over 54,000 in 2007. Japan is the second-largest user, and China surpassed Germany to become the third largest. After China, India is the largest user of the PCT system among the BRICS countries (Brazil, the Russian Federation, India, China and South Africa).

Of the top 20 PCT filers, China, Israel and the US saw double-digit growth in 2013, with the US recording its fastest growth since 2001.

Patent offices are entering more bilateral agreements that enable applicants to request a fast-track examination where examiners can use the work of the other office—the so-called patent prosecution highways

(PPH). The JPO and the USPTO had 83% of applications for which applicants subsequently filed PPH requests. Canada, the JPO, KIPO, SIPO and the USPTO accounted for 81% of all PPH requests. The use of the patent prosecution highway is skewed towards the JPO and the USPTO—which accounted for the bulk of PPH filings, whether first or subsequent. The trend is similar for PCT-PPH. The JPO and the USPTO received 77% of applications that resulted in PCT-PPH requests.

Uneven use of utility models

A utility model protects an invention for a limited period, with terms and conditions different from those for patents. The growth in utility model applications has been strong since 2008, mainly due to filings at SIPO. An estimated 978,000 applications were filed in 2013, up 18% from 2012. But when SIPO data are excluded, this number is only around 86,000, 1.6% lower than in 2012.

SIPO had by far the largest number of utility model applications in 2013, receiving nearly 900,000. Germany, the Russian Federation, the Republic of Korea and Ukraine each received between 10,000 and 15,000 applications last year. Resident applications made up 98% of global applications in 2013—so the use of utility models abroad is rare.

The Czech Republic, the Philippines and Ukraine are intense users of utility models.

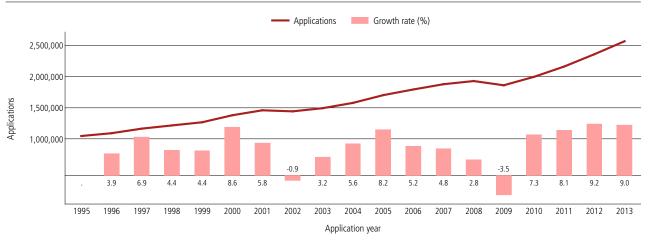
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Patent applications and grants worldwide

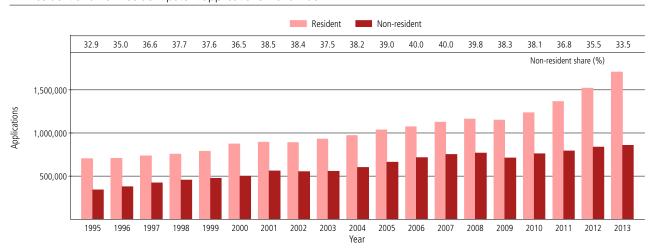
A1 Trend in patent applications worldwide



Note: WIPO estimates cover 139 patent offices and include direct applications and Patent Cooperation Treaty national phase entry data.

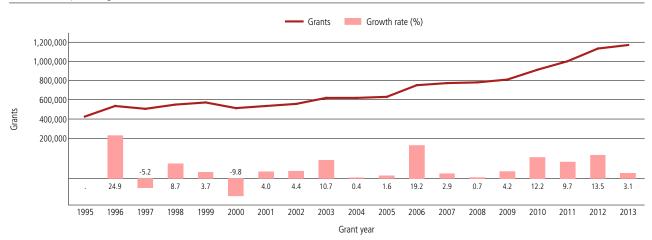
Source: WIPO statistics database, October 2014.

A2 Resident and non-resident patent applications worldwide



Note: WIPO estimates cover 139 patent offices and include direct applications and Patent Cooperation Treaty national phase entry data. See the glossary for definitions of resident and non-resident applications.

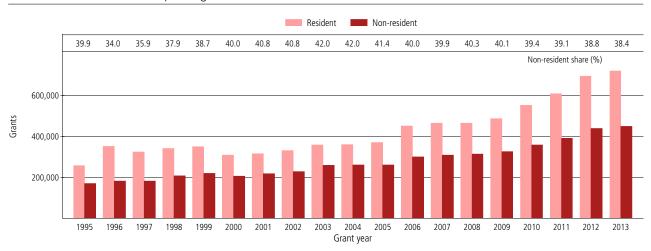
A3 Trend in patent grants worldwide



Note: WIPO estimates cover 127 patent offices and include patent grants based on direct applications and on Patent Cooperation Treaty national phase entry data.

Source: WIPO statistics database, October 2014.

A4 Resident and non-resident patent grants worldwide



Note: WIPO estimates cover 127 patent offices and include patent grants based on direct applications and on Patent Cooperation Treaty national phase entry data. See the glossary for definitions of resident and non-resident.

Source: WIPO statistics database, October 2014.

Patent applications and grants by office

A5 Patent applications by income group

		lumber oplications		Resident share (%)	of v	Share world total (%)	Average growth (%)
	2003	2013	2003	2013	2003	2013	2003-13
World	1,490,300	2,567,900	62.5	66.5	100.0	100.0	5.6
High-income	1,276,800	1,548,900	66.1	61.0	85.7	60.3	2.0
Upper middle-income	177,700	933,900	40.3	79.0	11.9	36.4	18.0
Lower middle-income	28,600	74,500	29.0	23.2	1.9	2.9	10.0
Low-income	7,200	10,600	87.5	84.0	0.5	0.4	3.9

Note: WIPO estimates cover 139 offices and include the following number of offices: high-income countries (52), upper middle-income (39), lower middle-income (31) and low-income (17). European Patent Office data are allocated to the high-income group, because the majority of its member states are high-income countries. For the same reason, data for the African Regional Intellectual Property Organization and for the African Intellectual Property Organization data are allocated to the low-income group, while those for the Eurasian Patent Organization are allocated to the lower middle-income group. For information on income group classification, see the Data description section.

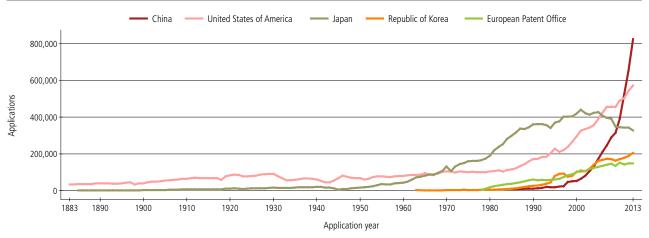
A6 Patent applications by region

		Number pplications		Resident share (%)	of v	Share vorld total (%)	Average growth (%)
	2003	2013	2003	2013	2003	2013	2003-13
World	1,490,300	2,567,900	62.5	66.5	100.0	100.0	5.6
Africa	9,200	14,900	18.5	15.4	0.6	0.6	4.9
Asia	705,600	1,500,400	74.3	78.8	47.3	58.4	7.8
Europe	324,500	346,400	62.2	63.3	21.8	13.5	0.7
Latin America & the Caribbean	42,800	63,300	13.8	12.2	2.9	2.5	4.0
North America	379,700	606,300	50.8	48.2	25.6	23.6	4.8
Oceania	28,500	36,600	15.1	12.8	1.9	1.4	2.5

Note: WIPO estimates cover 139 offices and include the following number of offices: Africa (24), Asia (41), Europe (44), Latin America & the Caribbean (23), North America (2) and Oceania (5).

Source: WIPO statistics database, October 2014.

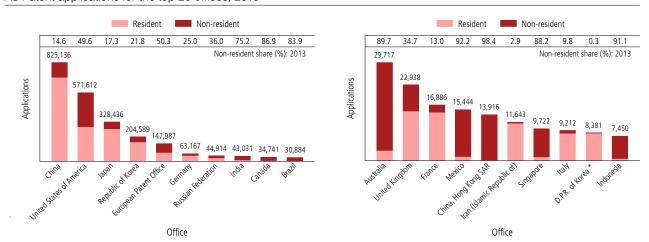
A7 Trend in patent applications for the top five offices



Note: The top five offices were selected based on their 2013 totals.

Source: WIPO statistics database, October 2014.

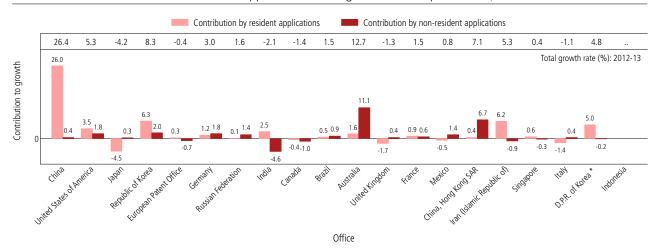
A8 Patent applications for the top 20 offices, 2013



^{*} indicates 2012 data.

Note: D.P.R. of Korea is Democratic People's Republic of Korea. In general, national offices of European Patent Office members receive lower volumes of applications, which is somewhat expected due to the availability of national and regional systems to seek protection within European Patent Office member states.

A9 Contribution of resident and non-resident applications to total growth for the top 20 offices, 2012–13

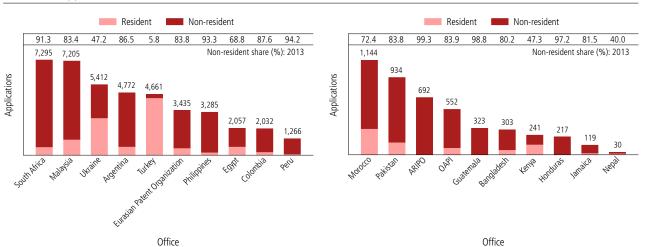


^{*} indicates 2012 data and growth rate refers to 2011-12.

Note: D.P.R. of Korea is Democratic People's Republic of Korea. The figure shows total growth in applications, and the growth of resident and non-resident applications. For example, applications filed in China grew 26.4%, with resident applications contributing 26 percentage points.

Source: WIPO statistics database, October 2014.

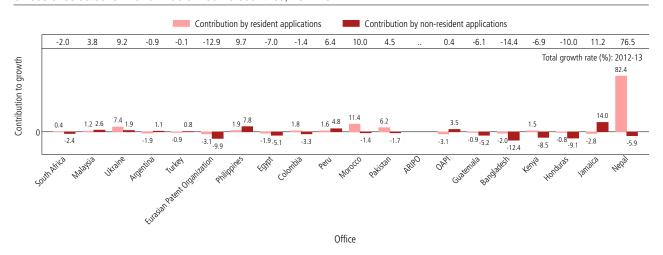
A10 Patent applications for offices of selected low- and middle-income countries, 2013



Note: ARIPO is the African Regional Intellectual Property Organization, and OAPI is the African Intellectual Property Organization. The selected offices are from different world regions and income groups (low-income, lower middle-income and upper middle-income). Where available, data for all offices are in the statistical table at the end of this section.

^{..} indicates not available.

A11 Contribution of resident and non-resident applications to total growth for offices of selected low- and middle-income countries, 2012-13

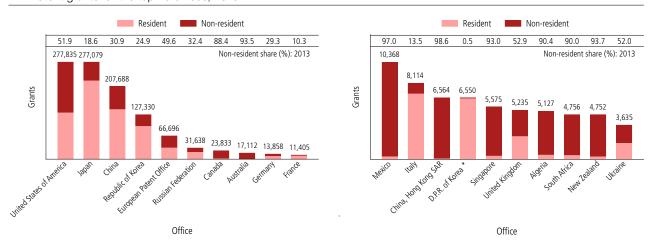


.. indicates not available.

Note: ARIPO is the African Regional Intellectual Property Organization, and OAPI is the African Intellectual Property Organization. The selected offices are from different world regions and income groups (low-income, lower middle-income and upper middle-income). Data for all available offices are in the statistical table at the end of this section. The figure shows total growth in applications, plus contribution of growth of resident and non-resident applications. For example, applications filed in Malaysia grew 3.8%, with the growth in non-resident applications contributing 2.6 percentage points.

Source: WIPO statistics database, October 2014.

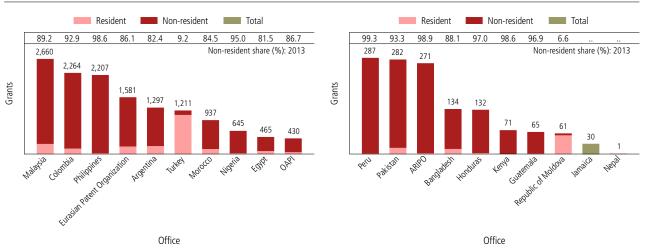
A12 Patent grants for the top 20 offices, 2013



^{*} indicates 2012 data.

Note: D.P.R. of Korea is Democratic People's Republic of Korea. Applications received are examined by offices (formal and/or substantial) to decide whether or not to issue patent rights. The procedure for issuing patents varies across offices, and differences in the numbers of patent grants among offices depend on such factors as examination capacity. The examination process can also be lengthy, so there is a time lag between the application and grant dates.

A13 Patent grants for offices of selected low- and middle-income countries, 2013



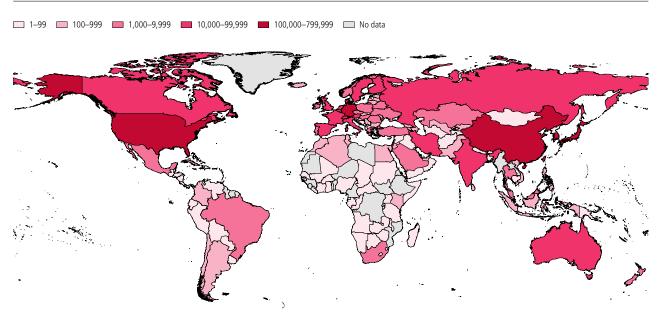
.. indicates not available.

Note: ARIPO is the African Regional Intellectual Property Organization, and OAPI is the African Intellectual Property Organization. The selected offices are from different world regions and income groups (low-income, lower middle-income and upper middle-income). Where available, data for all offices are in the statistical table at the end of this section.

Source: WIPO statistics database, October 2014.

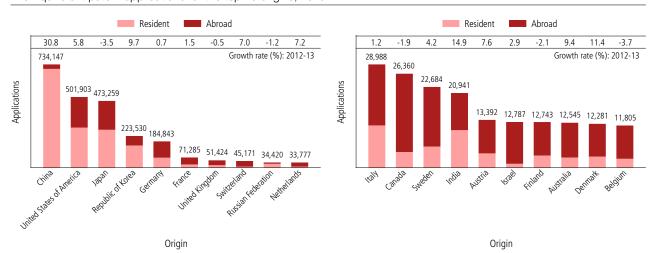
Patent applications and grants by origin

A14 Equivalent patent applications by origin, 2013



Note: Patent activity by origin includes resident applications and applications filed abroad. The origin of a patent application is determined by the residence of the first-named applicant. Because some offices do not provide data by origin, the numbers shown are likely to be lower than their actual numbers. Applications filed at regional offices are considered equivalent to multiple applications in the respective states member to these offices. See the glossary for the definition of equivalent application.

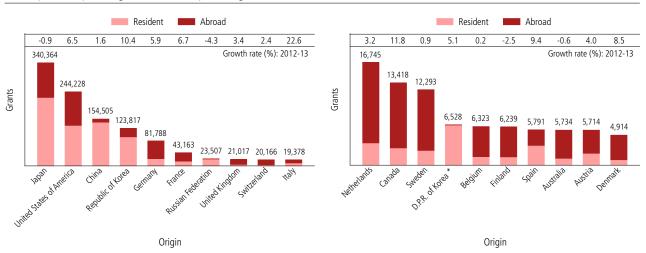
A15 Equivalent patent applications for the top 20 origins, 2013



Note: Patent activity by origin includes resident applications and applications filed abroad. The origin of a patent application is determined by the residence of the first-named applicant. Because some offices do not provide data broken down by origin, the numbers shown are likely to be lower than their actual numbers.

Source: WIPO statistics database, October 2014.

A17 Equivalent patent grants for the top 20 origins, 2013



 $^{^{\}star}$ indicates 2012 data and growth rate refers to 2011-12.

Note: D.P.R. of Korea is Democratic People's Republic of Korea. Because some offices do not provide data by origin, the numbers shown are likely to be lower than their actual numbers.

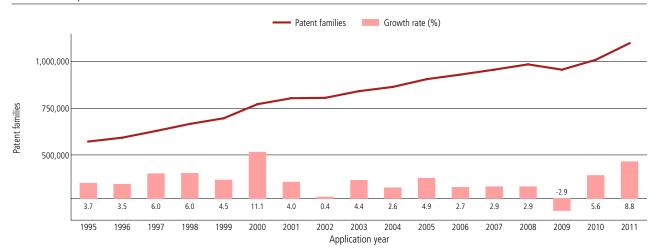
A16 Patent applications for the top 25 offices and origins, 2013

	silerteuA	Brazil	Canada	China	China, Hong Kong SAR	European Patent Office	France	Сегтапу	sibnl	sizenobni	Iran (Islamic Republic of)	lsrael	Yisil	negel	Alaysia	Mexico	bnsisəZ wəV	Republic of Korea	Russian Federation	Singapore	South Africa	bnslisdT	Ukraine	mobgniy bətinU
	3,061	235	461	641	190	833	œ	27	321	105		89	2	4 42	66	130	620	182	66	126	174	20	13	113 3,676
	209	233	225	811	54	1,997	16	923	281	20		13	6	372	65	91	41	291	210	73	88	17	20	
	294	328	265	642	89	1,885	104	41	278	61		-	19	432	43	133	46	275	172	69	89	2	43	223 2,401
	42	4,959	43	115	14	192	9	7	51	18		က	2	107	80	69	6	55	59	21	24	œ	-	
	633	315	4,567	1,037	337	1,860	14	29	468	28		29	2	169	45	262	113	410	139	134	94	4	27	13,675
	532	493		704,936	222	4,059	118	270	820	180		47	14	2,064	157	179	98	1,147	458	192	167	160	46	
	310	291	329	840	94	1,934	က	22	373	06		12	4	402	92	185	99	210	189	28	83	12	46	89 2,100
	180	227	287	1,039	110	1,896	Ξ	99	326	62		17	-	362	30	78	18	312	236	63	81	4	17	
	846	1,785	1,669	4,143	345	9,848	14,690	202	1,535	218		112	40	3,325	237	637	161	1,953	1,109	317	356	113	169	
	1,722	3,006	2,477	13,712	896	26,576	999	47,353	3,762	468		42	227	6,897	485	1,317	351	4,419	2,346	629	200	163	420	
	197	153	162	279	41	563	2	18	10,669	78		21		251	85	115	99	159	65	98	88	103	24	49 6,600
Iran (Islamic Republic of)				-		-					11,305							-						1 32
	302	184	305	530	120	1,045	2	10	294	15		1,201		444	-	91	27	224		92		က		100 7,237
	337	772	499	1,318	211	3,710	69	87	627	92		20	8,307	669	63	243	20	393	497	98	122	09	85	
	1,751	2,703	1,901	41,193	1,708	22,566	100	4,440	5,885	2,114		211	185 2	271,731	1,405	1,057				1,384		2,662		343 84,967
Netherlands	613	1,275	208	2,546	136	5,836	44	113	1,326	320		32	12	1,850	147	430		624	992	139		19		241 4,467
	30	39	41	27	15	371	-	24	43	-		80	2	53	-	48			32	4	19	9		12 377
Republic of Korea	681	465	425	10,866	105	6,342	77	1,373	819	268		39	2	6,134	216	279			428	166	80	143		143 33,499
Russian Federation	42	38	65	152	25	232	2	51	93	48		17		75	26	22	21	54 2	8,765	56	27	2		22 959
	127	302	183	378	88	1,506	70	44	193	31		21	17	234	28	209	32		137	4	88	7		61 1,707
	455	529	435	1,795	140	3,668	20	305	863	116		20	44	1,024	87	204	92	583	472	104	149	20	32	108 4,509
Switzerland	1,341	1,604	1,452	3,212	1,006	6,662	243	801	1,724	461		27	83	2,414	445	1,049	365	1,330	1,126	554	640	18		249 4,747
	15	12	12	79	9	377	2	27	16	-		က	9	35	-	9	2	22	23	2	7		4	9 203
United Kingdom	1,168	728	1,113	1,849	408	4,580	22	177	1,065	163		159	27	1,665	212	367	277	773	377	304	381	94	99 14,	14,972 12,807
United States of America	13,161	9,072	15,564	29,992	5,762	33,859	262	5,597	10,087	1,347		2,367	80	23,481	1,589	6,642	2,058	12,991	4,388	3,515	2,302	1,511	675 2,	2,890 287,831
Others / Unknown	1,668	1,106	1,231	2,953	1,407	5,589	264	1,119	1,112	1,115	338	1,635	127	3,252	1,654	1,628	1,879	1,750	871	1,584	1,023	2,217 3	3,029 1,	1,662 32,327
	29,717	30.884	24 741 8	025 126	12 046 4	147.007	10 00	69 467	45 054	7 450	44.0.40	1010	0,000	200 400	1001		20. 10.	704 500 4	44 044	0.07.0	1001	,		000 000

Note: Origin data are based on absolute counts, not equivalent counts.

Patent families

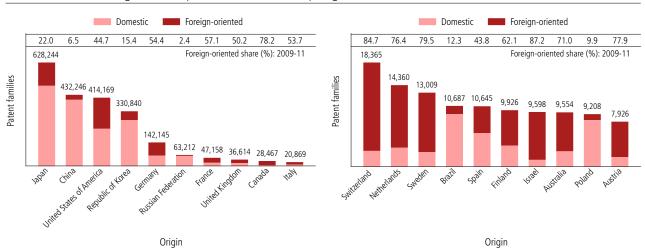
A18 Trend in patent families worldwide



Note: Applicants often file patent applications in multiple jurisdictions, so some inventions are recorded more than once. To take this into account, WIPO has indicators related to patent families, defined as patent applications interlinked by—or by a combination of—priority claim, Patent Cooperation Treaty national phase entry, continuation, continuation-in-part, internal priority and addition or division. Patent families associated with patent applications for inventions and exclude patent families associated with utility model applications. A special subset comprises foreign-oriented patent families, which include only patent families that have at least one filing office different from the office of the applicant's country of origin. Some foreign-related patent families include only one filing office, because applicants may choose to file directly with a foreign office. For example, if a Canadian applicant files a patent application directly with the USPTO (without previously filing with the patent office of Canada), that application, and applications filed subsequently with the USPTO, form a foreign-oriented patent family.

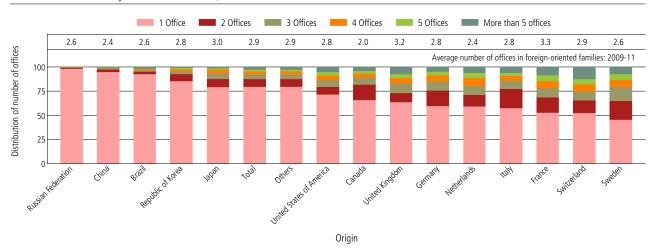
Source: WIPO statistics database and EPO PATSTAT database, October 2014.

A19 Domestic and foreign-oriented patent families for the top origins, 2009-11



Note: A patent family is defined as patent applications interlinked by—or by a combination of—priority claim, Patent Cooperation Treaty national phase entry, continuation, continuation-in-part, internal priority and addition or division. A foreign-oriented patent family is defined as a patent family having at least one filing office that is different from the office of the first-named applicant's country of origin. Patent families include only those associated with patent applications for inventions and exclude patent families associated with utility model applications.

A20 Patent families by number of offices, 2009-11



Note: The patent family dataset includes only published patent applications. A patent family is defined as patent applications interlinked by—or by a combination of—priority claim, Patent Cooperation Treaty national phase entry, continuation, continuation-in-part, internal priority and addition or division. This figure shows the distribution of total patent families by the number of offices at which they exist. For example, 97% of families originating from the Russian Federation are single-office families.

Source: WIPO statistics database and EPO PATSTAT database, October 2014.

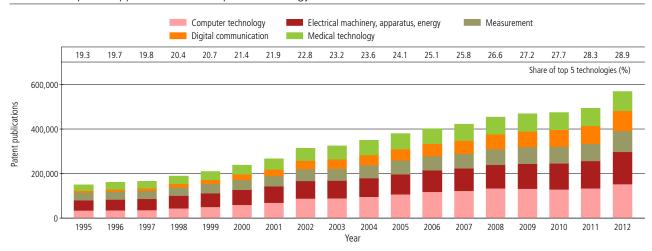
Published patent applications by field of technology

A21 Patent applications worldwide by field of technology

Field of technology	2008	2009	Publication year 2010	2011	2012	Average growth rate (%): 2008-12	Share (%)
Electrical engineering							
Electrical machinery, apparatus, energy	105,246	111,479	115,865	122,817	145,440	8.4	7.
Audio-visual technology	91,122	85,244	80,252	75,755	78,552	-3.6	3.
Telecommunications	68,772	60,458	56,311	49,975	50,374	-7.5	2.
Digital communication	65,250	69,536	74,512	79,714	89,687	8.3	4.
Basic communication processes	17,733	17,162	16,558	15,616	16,098	-2.4	0.
Computer technology	134,273	132,793	129,710	134,396	152,692	3.3	7.
IT methods for management	21,871	25,183	23,430	23,751	28.127	6.5	1.
Semiconductors	81,072	78,617	77,557	80,036	86,747	1.7	4.
Instruments	- /-		,	,	,		
Optics	74,361	69,316	64,134	61,551	64,716	-3.4	3.
Measurement	71,864	76,156	76,827	77,156	93,891	6.9	4.
Analysis of biological materials	11,398	11,768	11,426	11,802	12,066	1.4	0.
Control	28,660	29,019	28,717	27,857	32,279	3.0	1.
Medical technology	77,174	77,573	77,381	79,123	87,014	3.0	4.
Chemistry	,	,	,	,	,		
Organic fine chemistry	53,826	52,771	52,349	51,461	53,478	-0.2	2
Biotechnology	35,626	37,541	38,311	41,007	41,933	4.2	2
Pharmaceuticals	73,803	71,905	69,114	69,820	72,842	-0.3	3.
Macromolecular chemistry, polymers	28,234	28,701	28,591	28,750	33,557	4.4	1.
Food chemistry	23,633	27,172	27,877	30,894	34,552	10.0	1.
Basic materials chemistry	41,045	42,169	43,787	45,386	53,042	6.6	2.
Materials, metallurgy	33,955	34,732	36,953	38,623	47,285	8.6	2.
Surface technology, coating	30,748	32,716	33,123	33,890	39,233	6.3	2.
Micro-structural and nano-technology	2,535	2,907	3,163	3,261	3,753	10.3	0.
Chemical engineering	35,208	35,769	36,681	38,261	43,990	5.7	2.
Environmental technology	22,630	24,290	25,556	26,425	31,596	8.7	1.
Mechanical engineering	,	,	.,	-,	. ,		
Handling	42,875	42,765	42,368	44,482	50,683	4.3	2.
Machine tools	38,423	40,442	43,159	46,375	56,080	9.9	2.
Engines, pumps, turbines	43,676	48,039	48,256	48,559	55,559	6.2	2.
Textile and paper machines	33,710	32,259	30,657	30,421	34,448	0.5	1.
Other special machines	46,124	47,437	49,015	51,212	60,449	7.0	3.
Thermal processes and apparatus	25,755	27,215	29,324	29,890	33,854	7.1	1.
Mechanical elements	47,590	47,197	46,307	46,953	53,913	3.2	2
Transport	67,780	70,362	66,938	65,618	77,525	3.4	3.
Other fields			•		,		
Furniture, games	44,911	43,594	42,521	42,243	47,515	1.4	2.
Other consumer goods	32,015	32,076	32,112	33,414	38,229	4.5	1.
Civil engineering	52,687	54,640	55,947	57,752	66,311	5.9	3.
Unknown	49,759	48,732	47,738	46,132	44,058	-3.0	2.
Total	1,755,344	1,769,735	1,762,527	1,790,378	2,011,568	3.5	100.

Note: Every patent application is assigned one or more International Patent Classification (IPC) symbols. If a patent application relates to multiple fields of technology, it is divided into equal shares, each representing one field of technology (fractional counting). Applications with no IPC symbol are not considered. Data refer to published patent application. There is a minimum delay of 18 months between the application date and the publication date. For this reason, 2012 is the latest year with statistics on patents by technology field. The IPC-technology concordance table (available at www.wipo.int/ipstats/en) was used to convert IPC symbols into 35 corresponding fields of technology.

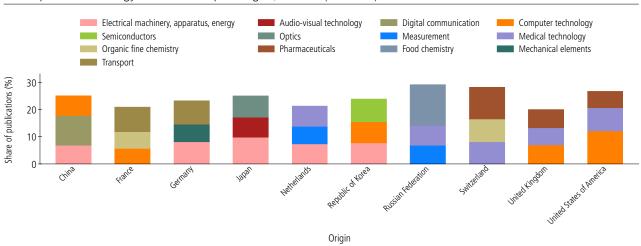
A22 Trend in patent applications for the top five technology fields



Note: The IPC-technology concordance table (available at www.wipo.int/lipstats/en) was used to convert IPC symbols into 35 corresponding fields of technology. Data refer to published patent applications. The top five fields were selected based on their 2012 totals.

Source: WIPO statistics database and EPO PATSTAT database, October 2014.

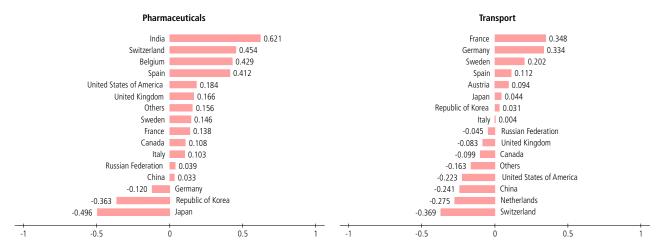
A23 Top three technology fields for the top 10 origins, 2010-12 (% of total)



Note: The IPC-technology concordance table (available at www.wipo.int/ipstats/en) was used to convert IPC symbols into 35 corresponding fields of technology. Data refer to published patent applications. The top three technology fields for each origin were selected from the total number of applications covering 2010–12.

A24 Relative specialization index for patent applications for selected fields of technology, 2010-12





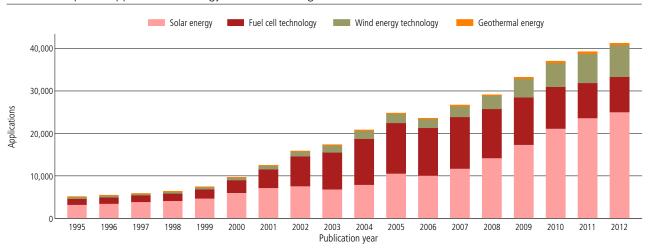
Note: The index corrects for the effects of country size and focuses on the concentration in specific technology fields; it captures whether a country tends to have a lower or a higher propensity to file in certain technology fields. It is calculated using the following formula:

$$RSI = Log(\frac{F_{CT} \sum F_{CT}}{\sum F_C \sum F_T})$$

where F_C and F_T denote applications from country C and in technological field T. A positive value for a technology indicates that a country has a relatively high share of patent filings related to that field of technology. The IPC-technology concordance table (available at www.wipo.int/ipstats/en) was used to convert IPC symbols into 35 corresponding fields of technology. Data refer to published patent applications.

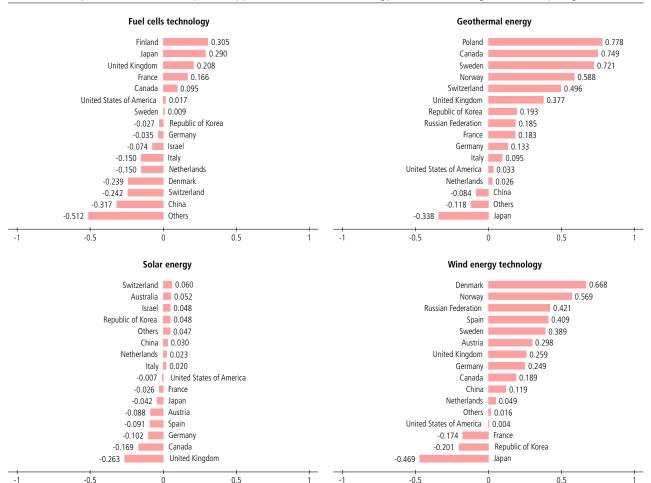
Source: WIPO statistics database and EPO PATSTAT database, October 2014.

A25 Trend in patent applications in energy-related technologies



Note: For definitions of the technologies—fuel cells, geothermal, solar and wind energy—see annex A. The correspondence between IPC symbols and technology fields is not always clear (there is no one-to-one relationship). It is thus difficult to capture all patents in a specific technology field. Even so, the IPC-based definitions are likely to capture the vast majority of patent applications in these areas. Data refer to published patent applications.

A26 Relative specialization index for patent applications for selected energy-related technologies for the top origins, 2010-12



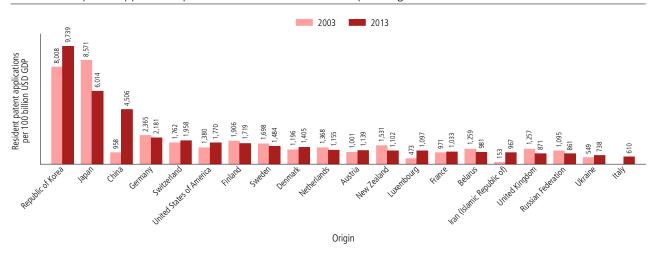
Note: For definitions of the technologies—fuel cells, geothermal, solar and wind energy—see annex A. The correspondence between IPC symbols and technology fields is not always clear (there is no one-to-one relationship). It is thus difficult to capture all patents in a specific technology field. Even so, the IPC-based definitions are likely to capture the vast majority of patent applications in these areas. The index corrects the effects of country size and focuses on the concentration in specific technology fields; it captures whether a given country tends to have a lower or a higher propensity to file in certain technology fields. The index is calculated using the following formula:

$$RSI = Log(\frac{F_{CT} \sum F_{CT}}{\sum F_C \sum F_T})$$

where F_C and F_T denote applications from country C and in technological field T. A positive value for a technology indicates that a country has a relatively high share of patent filings related to that field of technology.

Patent applications in relation to GDP and population

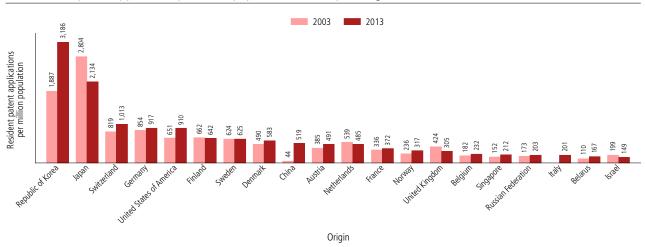
A27 Resident patent applications per 100 billion USD GDP for the top 20 origins



Note: GDP data are in 2011 PPP dollars. The top 20 origins were included if they had a GDP greater than 20 billion USD PPP and more than 100 resident patent applications. Due to space constraints, only the top 20 origins that fulfil these criteria are presented.

Source: WIPO statistics database and World Bank, October 2014.

A28 Resident patent applications per million population for the top 20 origins

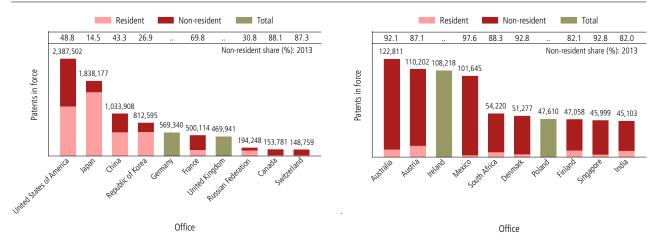


Note: The top 20 origins were included if they had a population greater than 5 million and if they had more than 100 resident patent applications. Due to space constraints, only the top 20 origins that fulfil these criteria are presented.

Source: WIPO statistics database and World Bank, October 2014.

Patents in force

A29 Patents in force at the top 20 offices, 2013

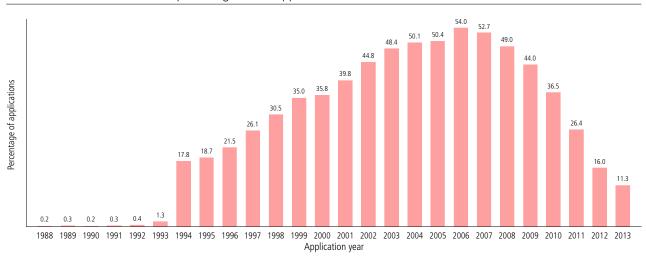


.. indicates not available.

Note: Patent rights last for a limited period—generally 20 years from the date of filing. Patents in force provide information on the volume of patents currently valid, as well as the historical patent life cycle.

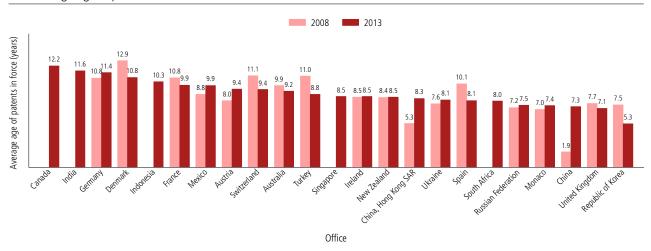
Source: WIPO statistics database, October 2014.

A30 Patents in force in 2013 as a percentage of total applications



Note: Percentages are calculated as the number of patent applications filed in year t and in force in 2013, divided by the total number of patent applications filed in year t. Patent holders must pay maintenance fees to maintain the validity of their patents. Depending on technological and commercial considerations, patent holders may opt to let a patent lapse before the end of the full protection term. This figure shows the distribution of patents in force in 2013 as a percentage of total applications in the year of filing. But not all offices provide these data. Data for 77 offices show that more than half of the applications for which patents were eventually granted remained in force for at least seven years after the application date. About 17.8% of these patents lasted the full 20-year patent term.

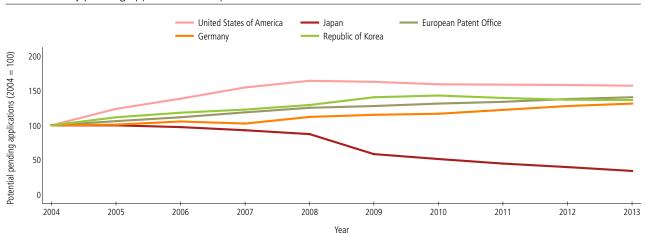
A31 Average age of patents in force at selected offices



Source: WIPO statistics database, October 2014.

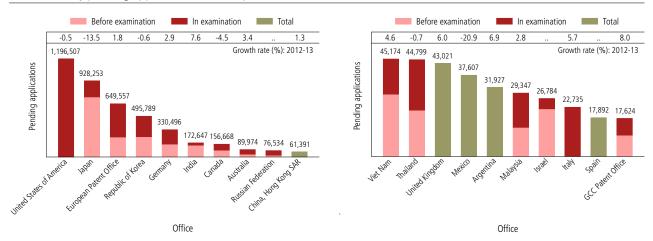
Pending patent applications and pendency time

A32 Potentially pending applications for top offices



Note: Application processing varies across offices, making it difficult to measure pending applications. In some offices patent applications automatically proceed to the examination stage unless applicants withdraw them; in others applications do not proceed to the examination stage unless applicants file a separate request for examination. To take account of procedural differences, pending application data are separated between (a) all patent applications, at any stage in the process, that are awaiting a final decision by a patent office, including those for which applicants have not filed a request for examination (where applicable) and (b) patent applications undergoing examination for which the applicant has requested examination (where such separate requests are necessary). Data for the State Intellectual Property Office of the People's Republic of China, the office that receives the most applications, were unavailable.

A33 Potentially pending applications for the top 20 offices, 2013

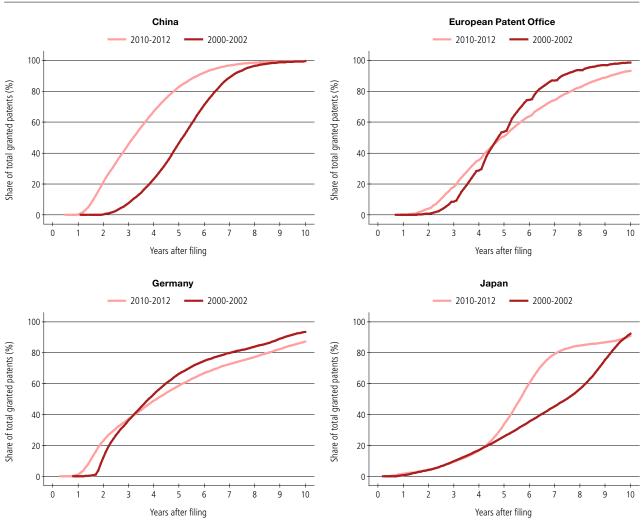


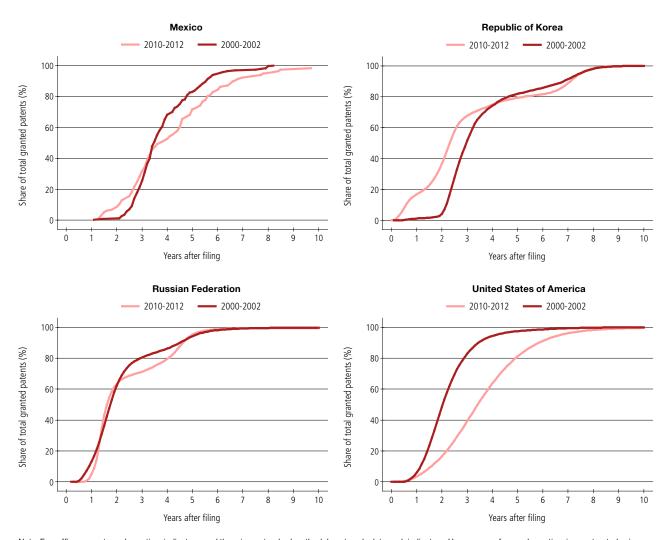
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Note: Potentially pending applications include all patent applications, at any stage in the process, awaiting a final decision by a patent office, including those for which applicants have not filed a request for examination (where applicable).

Source: WIPO statistics database, October 2014.

A34 Distribution of pendency time for selected offices

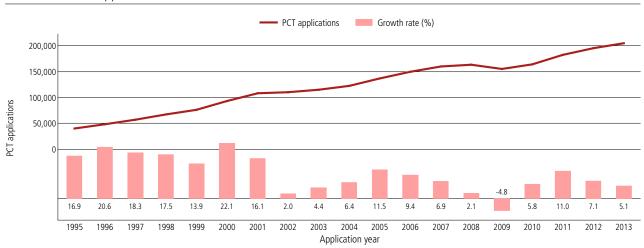




Note: Few offices report pendency time indicators, and there is no standard methodology to calculate such indicators. Here, a proxy for pendency time is constructed using patent application and grant dates from the EPO PATSTAT database. One limitation of this approach is that the pendency time for patents withdrawn, abandoned or refused are not included due to data unavailability. Pendency time can vary among offices for several reasons; for example, an applicant may file an application and then decide to delay the request for examination. So, comparing pendency times across offices can be misleading. For a more meaningful comparison, pendency times reported here should be compared across time for individual offices.

Patent applications filed through the Patent Cooperation Treaty system (PCT)

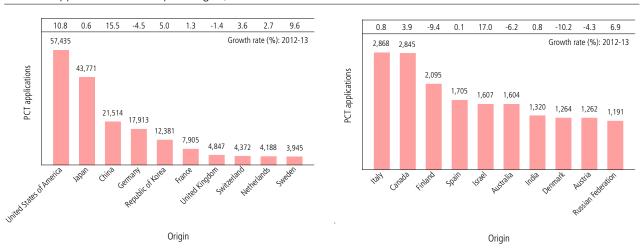
A35 Trend in PCT applications



Note: Data refer to the international phase of the Patent Cooperation Treaty system. Counts are based on the international application date. See the glossary for information on Patent Cooperation Treaty system.

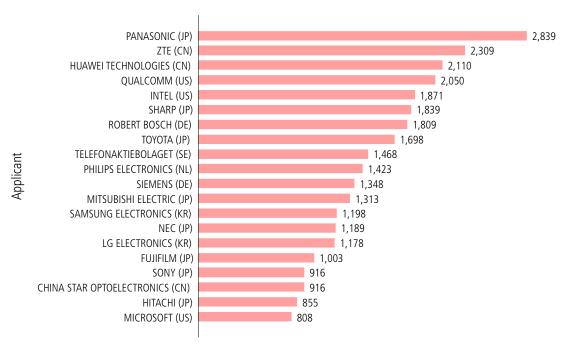
Source: WIPO statistics database, October 2014.

A36 PCT applications for the top 20 origins, 2013



Note: Data refer to the international phase of the Patent Cooperation Treaty system. Counts are based on the residency of the first-named applicant and the international application date.

A37 Top PCT applicants, 2013

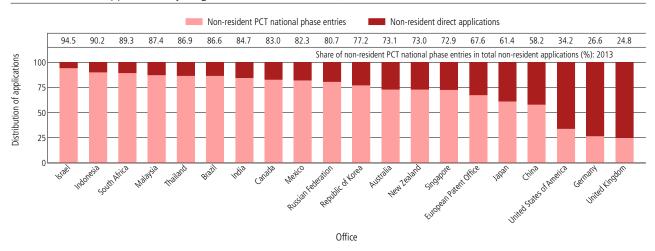


PCT publications

Note: Origin codes are CN (China), DE (Germany), JP (Japan), KR (Republic of Korea), NL (the Netherlands), SE (Sweden) and US (United States of America). Data refer to the international phase of the Patent Cooperation Treaty system. Due to confidentiality requirements, counts are based on publication date.

Source: WIPO statistics database, October 2014.

A38 Non-resident applications by filing route for selected offices, 2013



Note: A patent office may receive patent applications filed either directly with the office (Paris route) or through the Patent Cooperation Treaty system (Patent Cooperation Treaty national phase entries).

Patent Prosecution Highway (PPH)

A39 Number of PPH requests, cumulative total to June 2014

											Office	Office of subsequent filing	equent fi	ling										
	silsttenA	Canada	China	Colombia	D enmark	European Patent Office	Finland	Сегтапу	Hungary	sisənobnl	lsrael	negel	Mexico	Norway	Republic of Korea	Russian Federation	Singapore	nisq2	Sweden	Thailand United Kingdom		United States of America	Others	lstoT
Australia	n/a	82		٠	0		0		0		-	8	١.	0	4	0		0	0		0 390*	*.	- 42	421***
Austria	,		2				0	0	0			4			0						- 1	*-	-	17***
Canada	က	n/a	က		0		2	-	0		2	20	0	0	15	5		0	0		0 322*	*.	- 37	373***
China		7	n/a		0	18	0	7				29	-		25	8	0	0	0		- 329*	*6	- 42	424***
Colombia				n/a																		2		2
Denmark	0	က	32		n/a		0		0		0	38		0	56	-		0	0		0 172	.2		272
European Patent Office			78			n/a						315			32						- 1490*	*(- 186	1865***
Finland	0	∞	2		0		n/a	0	0		0	13		0	6	က		0	0		0 52*	*.	6 -	***06
Germany		51	49				0	n/a				153			32					-	7 162	25		454
Hungary	0	0			0		0		n/a		0	2		0	0	0		0	0	- 0		9		∞
Iceland	0	0	0		0		0		0		0	0		0	0	0		0	0	- 0		2		2
E Israel	2	4	-		0		0		0		n/a	0	-	0	0	2		0	0	0 -	17*	**	- 2	25***
Japan	21	282	3,526		4	1,860	2 1	1,421	0	3**	က	n/a	70	2 3,2	232 1	143	29	0	0 26	6 48	3 10133*	3* 949	9 21754***	4**
Mexico		0	0									0	n/a		0			0				7		7
E Norway	0	0			0		0		0		0	-		n/a	0	0		0	0	- 0		13		14
Poland		1	-	٠								-	,											2
Portugal	0	-	0	٠	0		0		0		0	0		0	0	0		0	0	-	0	0		-
Republic of Korea	0	16	161	٠	0	Ħ	0	13	0		-	320	0	0	n/a	15	-	2	0	-	6 2204*	*+	- 275	2750***
Russian Federation	1	3	4	٠	0		0		0		0	9		0	4	n/a		0	0	-	0 50*)*	9 -	88***
Singapore	٠		0	٠	٠							3	0		0		n/a					7		10
Spain	0	0	0	-	0		0				0	0	0	0	0	0	-	n/a	0	-	, 0	4*	_	***9
Sweden	0	0	0	1	0		-		0		0	2	1	0	0	0		0 n/a		-	.38*	3*	- 4	41***
United Kingdom	9	42			0		0	15	0		0	136		0	65	2		0	0	- n/a	ı 579	6,		845
United States of America	669	4,574	2,013	13	10	1,296	4	281	2		58 3,3	3,363 2	211	27 1,6	635 1	146	59	_	2	- 158		n/a 711		15,233
Others	'	•			٠							4										13 n	n/a	11
Total	732	5,009	5,824	4	4	3,185	9	1,738	2	3**	65 4,	4,418 2	282	29 5,0	5,079 3	325	29	3	2 26	6 219	16003*		1,661 44701***	***
200 06 paul of 1100 1 monacl most stanmond	14 to line	, 20 201																						

Office of first filing

Note: To avoid unnecessary duplication of work and to improve the efficiency of the examination process, patent offices increasingly seek to use the search and examination results of other offices. Patent prosecution highway is a bilateral agreement to evides that enables applicants to request a fast-track examination whereby patent examiners can use the have institutionalized as office such search and prosecution highway agreement between the subsequent filings are not reported in the table. For example, the Czech Republic is party to a patent prosecution highway agreement but did not receive any patent prosecution highway requests. A definition of patent prosecution highway statistics is available at www.jpo.go.jp/ppph-portal/statistics.htm.

Source: WIPO, based on data from the JPO, October 2014.

^{*} Requests from January 1, 2014 to June 30, 2014. ** Cumulative total on December 31, 2013. *** Patent Cooperation Treaty-patent prosecution highway requests filed during the period January 1, 2014 to June 30, 2014. n/a indicates not applicable

A40 Number of PCT-PPH requests, cumulative total to June 2014

										Offic	e of filin	n								
		Australia	Canada	China	Denmark	European Patent Office	Finland	Iceland	Indonesia	Israel	Japan	Mexico	Philippines	Republic of Korea	Russian Federation	Spain	Sweden	United Kingdom	United States of America	Total
	Australia	32	0	-	0	ш -	0	0	-	0	0	_	_	1	0	0	0	1	281*	315*
	Austria	-		0		_	0	-	_	-	0	_	_	2	-		-	-	31*	33*
	Canada	1	219	_	0	-	0	0	-	0	10	0	-	2	1	0	0	0	42	275*
	China	-	-	-	0	21	0	-	-	-	77	0	-	31	2	-	-	-	562*	693*
	European Patent Office	-	-	62	-	-	-	-	-	-	883	-	-	83	-	-	-	-	2488*	3516*
	Finland	0	0	1	0	-	1	0	-	0	4	-	-	3	1	0	0	0	53*	63*
or IPEA	Israel	0	0	-	0	-	0	0	-	2	2	-	-	0	0	0	0	0	15*	19*
	Japan	12	6	1,066	0	736	0	1	22*	1	3,112	16	36	387	14	1	7	1	1690*	7108*
ISA	Nordic Patent Institute	0	0	-	1	-	0	0	-	0	9	-	-	0	0	0	0	0	68	78
	Republic of Korea	18	1	476	0	15	0	0	-	1	74	-	-	160	2	0	0	1	2927*	3675*
	Russian Federation	0	0	9	0	-	0	0	-	0	3	-	-	1	0	0	3	1	52*	69*
	Spain	0	0	-	0	-	0	0	-	0	2	10	-	0	1	0	0	0	10*	23*
	Sweden	0	0	0	0	-	0	0	-	0	27	-	-	1	0	0	11	0	126*	155*
	United States of America	53	61	56	0	119	0	0	-	3	42	-	10	58	21	1	0	0	568	992
	Total	116	287	1,670	1	891	1	1	22	7	4,245	26	46	729	42	2	11	4	8913*	17014*

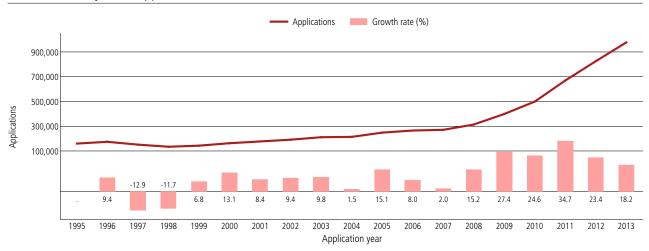
^{*} Up to December 31, 2013.

Note: ISA is international searching authority. IPEA is international preliminary examining authority. Offices that have a patent prosecution highway agreement but did not receive any requests are not reported in this table. For example, the Czech Republic is party to a patent prosecution highway agreement but did not receive any Patent Cooperation Treaty-patent prosecution highway requests. A definition of patent prosecution highway statistics is available at www.jpo.go.jp/ppph-portal/statistics.htm.

Source: WIPO, based on data from the JPO, October 2014.

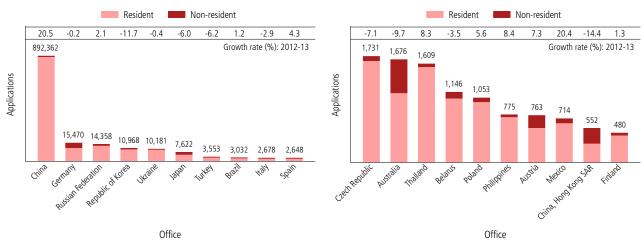
Utility model applications

A41 Trend in utility model applications worldwide



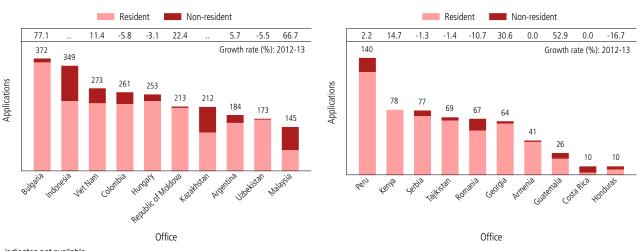
Note: WIPO estimates cover 75 patent offices and include direct applications and Patent Cooperation Treaty national phase entries.

A42 Utility model applications for the top 20 offices, 2013



Source: WIPO statistics database, October 2014.

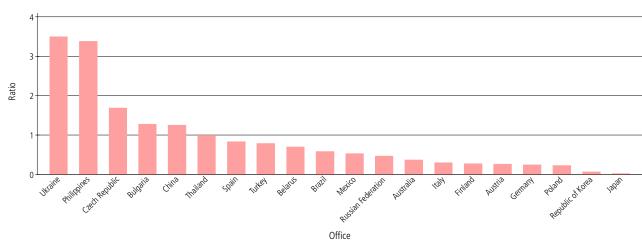
A43 Utility model applications for offices of selected low- and middle-income countries, 2013



.. indicates not available.

Source: WIPO statistics database, October 2014.

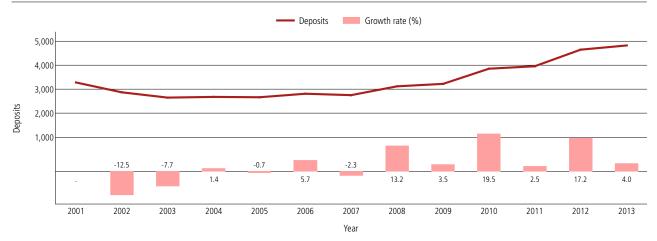
A44 Resident utility model applications in relation to resident patent applications, 2013



Note: A ratio greater than one indicates more intensive use of the utility model system than the patent system at an office.

Microorganisms

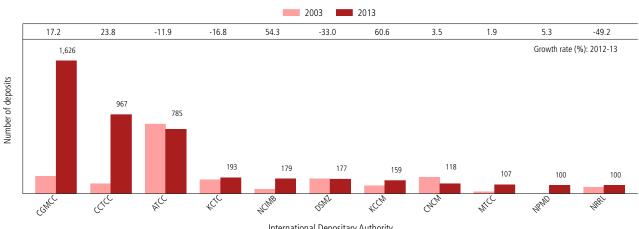
A45 Trend in microorganism deposits worldwide



Note: Deposits of microorganisms for patent procedures are important for biotechnological inventions. Disclosing an invention is an important requirement for receiving a

Source: WIPO statistics database, October 2014.

A46 Deposits for the top international depositary authorities



International Depositary Authority

Note: ATCC is American Type Culture Collection (United States of America), CCTCC is China Center for Type Culture Collection, CGMCC is China General Microbiological Culture Collection Center, CNCM is Collection Nationale de Culture Center is Original Center for Type Culture Collection, CGMCC is Clinia General Microbiological Culture Collection Center, CNCM is Collection Nationale de Cultures de Micro-organismes (France), Leibniz-Institut DSMZ (Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Germany), KCCM is Korean Culture Center of Microorganisms (Republic of Korea), KCTC is Korean Collection for Type Cultures (Republic of Korea), MTCC is Microbial Type Culture Collection and Gene Bank (India), NCIMB is National Collections of Industrial, Food and Marine Bacteria (United Kingdom), NPMD is National Institute of Technology and Evaluation, Patent Microorganisms Depositary (Japan) and NRRL is Agriculture Research Services Culture Collection (United States of America).

Statistical tables

A47 Patent applications by office and origin, 2013

	Ар	plications by 0	ffice	Equivalent applications by Origin	PCT Intern		PCT National Pha	
Name —	Total	Resident	Non- Resident	Total (a)	Receiving Office	Origin	Office	Origin
Afghanistan				1	n.a.	0		
African Intellectual Property Organization	552	89	463	n.a.	3	n.a.	426	n.a.
African Regional Intellectual Property Organization	692	5	687	n.a.	2	n.a.	637	n.a.
Albania	4	0	4	27	1	1	3	1
Algeria	840	118	722	138	7	8	676	1
Andorra				25	n.a.	4		19
Angola (e)				3	n.a.	3		1
Antigua and Barbuda	7	0	7	2	0	0		1
Argentina	4,772	643	4,129	923	n.a.	26		79
Armenia	131	125	6	179	5	8	5	6
Aruba				3	n.a.	0		2
Australia	29,717	3,061	26,656	12,545	1,521	1,604	20,720	7,653
Austria	2,406	2,162	244	13,392	473	1,262	533	6,421
Azerbaijan	156	156	0	481	5	6	5	6
Bahamas				145	n.a.	10		<u></u>
Bahrain	170	3	167	19	0	2	170	6
Bangladesh	303	60	243	84	n.a.	3		16
Barbados (e)	42	3	39	566	n.a.	149	39	458
Belarus	1,634	1,489	145	2,418	13	18	105	20
Belgium	876	715	161	11,805	68	1,103		6,711
	32	0	32	32	00	3	29	14
Belize								
Bermuda				186	n.a.	0		95
Bhutan	7	3	4	6	n.a.	0		1
Bolivia (Plurinational State of)		<u></u>		5	n.a.	1		1
Bosnia and Herzegovina	29	7	22	15	6	6	21	5
Botswana	9	8	1 25.005	20	0	0	1	
Brazil	30,884	4,959	25,925	6,850	616	657	22,576	1,296
Brunei Darussalam	11	0	11	19	0	0		8
Bulgaria	297	282	15	504	55	58	8	105
Burkina Faso ^(f)		••		2	0	0	••	2
Burundi				-	n.a.	11	••	
Cabo Verde				11	n.a.	0		1
Cambodia	75	1	74	1	n.a.	0		
Cameroon (f)					n.a.	11		
Canada	34,741	4,567	30,174	26,360	2,091	2,845	26,627	9,430
Central African Republic (f)				2	0	0		1
Chad (f)				11	0	0	••	1
Chile	3,072	340	2,732	806	102	142	2,504	303
China	825,136	704,936	120,200	734,147	22,927	21,514	72,867	18,863
China, Hong Kong SAR	13,916	226	13,690	1,743	0	0	••	238
China, Macao SAR	60	6	54	34	n.a.	0	••	2
Colombia	2,032	251	1,781	382	12	82	1,690	79
Congo ^(f)				3	0	0		3
Cook Islands				4	n.a.	0		1
Costa Rica	603	21	582	72	1	11	567	18
Côte d'Ivoire (b,c,f)	27	26	1	459	0	2		1
Croatia	253	230	23	415	37	44	10	165
Cuba	170	27	143	231	9	9	137	159
Curaçao				17	n.a.	0		10
Cyprus	3	2	1	361	0	34		161
Czech Republic	1,081	984	97	2,148	175	197	41	516
Democratic People's Republic of Korea (b,c)	8,381	8,354	27	8,364	1	1	27	7
	-,	,	· · · · · · · · · · · · · · · · · · ·	-,				-

		Applications by (Office	Equivalent applications by Origin		ernational cations		CT nase Entries
Name	Total	Resident	Non- Resident	Total (a)	Receiving Office	Origin	Office	Origin
Djibouti	3	1	2	1	n.a.	0		
Dominica				1	0	0		1
Dominican Republic	267	11	256	25	2	7	240	6
Ecuador				20	2	17		12
Egypt	2,057	641	1,416	760	41	50	1,353	36
El Salvador				8	0	0		7
Eritrea					n.a.	1		<u>.</u>
Estonia	42	25	17	278	6	21	14	135
Eurasian Patent Organization	3,435	555	2,880	n.a.	17	n.a.	2,796	n.a.
European Patent Office	147,987	73,503	74,484	n.a.	32,034	n.a.	87,367	n.a.
Fiji			,	1	n.a.	0		1
Finland	1,737	1,596	141	12,743	1,265	2,095	38	7,136
France	16,886	14,690	2,196	71,285	3,313	7,905		36,719
Gabon ^(f)	<u> </u>		-	1	0,010	0		1
Georgia	333	114	219	119	10	10	199	4
Germany	63,167	47,353	15,814	184,843	1,458	17,913	5,253	78,888
Ghana	03,107	41,000		21	2	2		2
Greece	717	698	19	1,084	71	111		135
Grenada				2	0	0		133
Guatemala	323	4	319	8	1	2	308	1
Honduras	217	6	211	8	0	0	204	
Hungary	708	642	66	1,577	136	163	7	639
	46	33	13	233	14		5	119
Iceland	43,031				817	43		
India		10,669	32,362	20,941		1,320	27,592	4,345
Indonesia	7,450	663	6,787	755	9	15	6,129	59
International Bureau				n.a.	10,390	n.a.	••	n.a.
Iran (Islamic Republic of)	11,643	11,305	338	11,343	0	4	••	2
Iraq				4 440	n.a.	0		1 004
Ireland	390	333	57	4,410	26	432		1,834
Israel	6,185	1,201	4,984	12,787	1,198	1,607	5,101	5,706
Italy	9,212	8,307	905	28,988	369	2,868	••	12,760
Jamaica	119	22	97	38	n.a.	0		5
Japan	328,436	271,731	56,705	473,259	43,075	43,771	54,157	121,933
Jordan	392	35	357	213	n.a.	1		120
Kazakhstan	2,202	1,824	378	2,448	17	18	166	64
Kenya	241	127	114	182	3	7	111	43
Kiribati	18	18	0	18	n.a.	0	10	10
Kuwait				163	n.a.	0		8
Kyrgyzstan	114	111	3	132	0	0	2	1
Lao People's Democratic Republic (e)					n.a.	2	••	<u></u>
Latvia	233	225	8	482	14	25	••	103
Lebanon	••			55	n.a.	5		14
Lesotho				1	0	0		
Liberia				1	0	0		1
Liechtenstein (g)				908	n.a.	190		326
Lithuania	137	117	20	223	18	40	10	65
Luxembourg	169	113	56	2,670	0	372		1,521
Madagascar (e)	51	4	47	4	n.a.	1	44	<u></u>
Malawi	**			1	0	0		
Malaysia	7,205	1,199	6,006	2,301	269	308	5,284	624
Mali (b,d,f)				6	0	0		1
Malta	17	13	4	274	0	73		108
Marshall Islands				8	n.a.	0		6
Mauritius	20	2	18	129	n.a.	6		14
Mexico	15,444	1,210	14,234	2,145	195	233	11,766	593
Monaco	5	5	0	161	0	17		89
Mongolia				2	0	0		2

Morness 1,44		A	pplications by (Office	Equivalent applications by Origin		ernational cations	PC National Pha	
Montengerors	Name	Total	Resident		Total (a)		Origin	Office	Origin
Nember	Montenegro (e)	23	23	0	27	0	2		
Newart	Morocco	1,144	316	828	354	54	54	775	21
Necharlandes	Namibia (h)				2	0	4		
New Zealand	Nepal	30	18	12	21	n.a.	0		3
Nearragian 127	Netherlands	2,764	2,315	449	33,777	1,022	4,188		20,448
Negeria* 919 50 880 64 0 7	New Zealand	6,781	1,614	5,167	3,461	242	320	3,808	1,287
Norway	Nicaragua	127	3	124	5	1	2	116	
Oman III Image of the part of the par	Nigeria (e)	919	50	869	64	0	7		
Passistan 934 151 783 207 n.a. 1 11 Personare 87 9 78 70 3 12 4 Poguni Mere Guinea 79 0 79 1 0 0 76 Paraguay 9 n.a. n.a. n.a. n.a. Perlamit Officer of the Congention Cournal for the Aria States of the Guint 2.981 260 2,731 n.a. n.a. n.a. n.a. Perlam Officer of the Congention Cournal for the Aria States of the Guint 3.285 220 3.085 550 20 32 2.747 4.6 Philippines 3.285 220 3.085 550 20 32 2.747 4.6 Portugal 689 647 22 1,322 70 144 10 5.6 Galary 4.6 193 453 124 6 12.8 19.3 Godal <td>Norway</td> <td>1,749</td> <td>1,101</td> <td>648</td> <td>5,806</td> <td>285</td> <td>708</td> <td>538</td> <td>3,382</td>	Norway	1,749	1,101	648	5,806	285	708	538	3,382
Pename 87 9 78 70 3 12 — 47 Papea New Guinea 79 0 79 1 0 0 76 1 Papean How Guinea 2 0 2 2 0 0 0 0 0 0 6 Patent Office of the Cooperation Council to the Armis States of the Guilf 12,991 260 2,731 na.	Oman (e)				4	0	3		1
Pagus New Surines 79 0 79 1 0 0 76 Paragusy .	Pakistan	934	151	783	207	n.a.	1		11
Paraguang	Panama	87	9	78	70	3	12		47
Patent Office of the Cooperation Council of the Arab States of the Gulf of the Arab States	Papua New Guinea	79	0	79	1	0	0	76	
for the App States of the Galf Peru 1,1266 1,278 1,318 1,089 1,1267 1,	Paraguay				9	n.a.	0		6
Philippines 3,285 220 3,065 350 20 32 2,747 4.2 Poland 4,411 4,237 174 6,049 218 332 80 978 Portugal 669 669 647 22 1,323 70 28 314 8 Republic of Norea 204,589 159,789 44,611 223,330 12,439 12,381 35,168 19,237 Republic of Notiova 96 67 29 146 1 1 20 20 Romania 1,046 993 53 1,245 18 25 18 11 Romania 1,046 993 53 1,245 18 25 18 11 Romania 1,044 993 44 1 1 1 1 Romania 1,04 91 4 28,765 18,149 34,420 118 22,91 Saint Vincertarin 8 0		2,991	260	2,731	n.a.	n.a.	n.a.		n.a.
Poland 4,411 4,237 174 6,049 218 332 80 976 Portugal 669 647 22 1,323 70 144 10 510 Gadar 332 9 323 84 0 28 131 8 Republic of Mordova 96 67 29 146 1 1 20 56 Republic of Mordova 96 67 29 146 1 1 1 20 56 Remanda 1,046 993 35 1,245 18 191 131,15 2,881 Russian Federation 4,974 28,765 16,149 34,420 1,188 1,911 31,15 2,881 Russian Kirts and Nevis 4 n 0 2,881 Saint Lucia**	Peru	1,266	73	1,193	97	10	13	1,069	15
Poland 4,411 4,237 174 6,049 218 332 80 976 Portugal 669 647 22 1,323 70 144 10 510 Gadar 332 9 323 84 0 28 131 8 Republic of Mordova 96 67 29 146 1 1 20 56 Republic of Mordova 96 67 29 146 1 1 1 20 56 Remanda 1,046 993 35 1,245 18 191 131,15 2,881 Russian Federation 4,974 28,765 16,149 34,420 1,188 1,911 31,15 2,881 Russian Kirts and Nevis 4 n 0 2,881 Saint Lucia**	Philippines		220		350	20			42
Oater 332 9 323 84 0 28 314 8 Republic of Korea 204,589 159,778 44,611 222,530 12,439 12,381 35,186 19,278 Republic of Modora 96 67 29 1146 1 1 20 55 Romania 1,046 993 53 12,45 18 25 18 111 Russian Federation 44,914 28,765 16,149 34,420 1,188 1,311 13,115 2,98 Saint Kitis and Newis 11 n.a. 2 Saint Kitis and Newis	Poland	4,411	4,237	174	6,049	218	332	80	976
Republic of Korea 204,589 159,978 44,611 223,530 12,439 12,381 35,168 19,237 Republic of Moldova 96 67 29 146 1 1 20 0.56	Portugal	669	647	22	1,323	70	144	10	510
Republic of Moldova 96 67 29 146 1 1 20 56 Romania 1,046 993 53 1,245 18 25 18 110 Russian Federation 44,914 28,765 16,149 34,420 1,188 1,191 13,115 2,881 Rwanda № 70 40 30 42 10 1						0		314	8
Romania 1,046 993 53 1,245 18 25 18 110 Russian Federation 44,914 28,765 16,149 34,240 1.88 1,911 13,115 2,988 Rwanda ⁶⁴² 70 40 30 42 0 1 Saint Kitts and Nevis 4 n.a. 0 Saint Kitts and Nevis 4 n.a. 0 Saint Kitts and Nevis 4 n.a. 0	Republic of Korea	204,589	159,978	44,611	223,530	12,439	12,381	35,168	19,237
Russian Federation 44,914 28,765 16,149 34,420 1,188 1,191 13,115 2,981 Rwanda № 70 40 30 42 0 1 1 1 2 8 <	<u> </u>								56
Rwanda □ 0 40 30 42 0 1 1 Saint Kifs and Nevis 11 n.a. 2 8 Saint Lyincent and the Grenadines □ 8 0 8 44 0 2 8 33 Samoa 22 0 4 San Marino 22 0 4 <td>Romania</td> <td>1,046</td> <td>993</td> <td>53</td> <td>1,245</td> <td>18</td> <td>25</td> <td>18</td> <td>110</td>	Romania	1,046	993	53	1,245	18	25	18	110
Saint Kitts and Nevis	Russian Federation	44,914	28,765	16,149	34,420	1,188	1,191	13,115	2,981
Saint Lucia (miller) m. m. d m.a. d.a.	Rwanda (b,c)	70	40	30	42	0	1		1
Saint Lucia (mil) 4 n.a. 0 Saint Vincent and the Grenadines (mil) 8 0 8 44 0 2 8 33 Samoa <t< td=""><td>Saint Kitts and Nevis</td><td></td><td></td><td></td><td>11</td><td>n.a.</td><td>2</td><td></td><td>8</td></t<>	Saint Kitts and Nevis				11	n.a.	2		8
Samoa <	Saint Lucia (e)				4	n.a.	0		
Samoa <	Saint Vincent and the Grenadines (e)	8	0	8	44	0	2	8	33
Sao Tome and Principe IIII 8 0 8 n.a. 0 437 Saudi Arabia 931 491 440 3,132 0 187 437 Senegal IIII 1 0 1 Serbla 1 0 1	Samoa				23	n.a.	3		9
Saudi Arabia 931 491 440 3,132 0 187 437 Senegal III 1 0 1 <t< td=""><td>San Marino</td><td></td><td></td><td></td><td>22</td><td>0</td><td>4</td><td></td><td>5</td></t<>	San Marino				22	0	4		5
Senegal (m) 1 0 1 </td <td>Sao Tome and Principe (e)</td> <td>8</td> <td>0</td> <td>8</td> <td></td> <td>n.a.</td> <td>0</td> <td></td> <td></td>	Sao Tome and Principe (e)	8	0	8		n.a.	0		
Serbia 221 201 20 334 22 26 13 81 Seychelles 133 0 10 113 Singapore 9,722 1,143 8,579 5,486 563 838 6,557 2,527 Sint Maarten (Dutch Part) 1 n.a. 0 Slovakia 210 184 26 403 32 41 9 131 Slovania 543 88 125 330 Somalia 2 n.a. 2 n.a.	Saudi Arabia	931	491	440	3,132	0	187		437
Seychelles	Senegal (f)				1	0	1		
Singapore 9,722 1,143 8,579 5,486 563 838 6,557 2,527 Sint Maarten (Dutch Part) 1 n.a. 0 Slowakia 210 184 26 403 32 41 9 133 Slowania .543 88 125 330 Somalia 2 n.a. 0 230 South Africa 2 n.a. 0 130 Spain 2 n.a. 6,105 1,308 Spain <td>Serbia</td> <td>221</td> <td>201</td> <td>20</td> <td>334</td> <td>22</td> <td>26</td> <td>13</td> <td>81</td>	Serbia	221	201	20	334	22	26	13	81
Sint Maarten (Dutch Part) 1 n.a. 0 Slovakia 210 184 26 403 32 41 9 131 Slovenia 543 88 125 330 Somla 2 n.a. 0 2 South Affrica 7,295 638 6,657 2,216 95 351 6,105 1,308 Spain 3,244 3,026 218 11,034 1,215 1,705 111 4,657 Spain 3,244 3,026 218 11,034 1,215 1,705 111 4,657 Spain 3,244 3,026 218 188 445 n.a. 14 81 Siddan (%) 157 1 0 0	Seychelles				133	0	10		113
Slovakia 210	Singapore	9,722	1,143	8,579	5,486	563	838	6,557	2,527
Slovenia	Sint Maarten (Dutch Part)				1	n.a.	0		
Somalia 2 n.a. 0 2 South Africa 7,295 638 6,657 2,216 95 351 6,105 1,308 Spain 3,244 3,026 218 11,034 1,215 1,705 111 4,657 Sri Lanka (%) 516 328 188 445 n.a. 14 81 Sudan (%) 157 1 0 0 1 Swaziland (%,0) 3 3 0 68 0 0 9 Sweden 2,495 2,332 163 22,684 1,819 3,945 67 14,575 Switzerland 2,156 1,525 631 45,171 232 4,371 75 26,273 Syrian Arab Republic 15 1 1 6 Taylikistan <	Slovakia	210	184	26	403	32	41	9	131
South Africa 7,295 638 6,657 2,216 95 351 6,105 1,308 Spain 3,244 3,026 218 11,034 1,215 1,705 111 4,667 Sri Lanka (lo) 516 328 188 445 n.a. 14 81 Sudan (lo,0) 157 1 0 0 Swazilland (lo,0,0) 3 3 0 68 0 0 9 Sweden 2,495 2,332 163 22,684 1,819 3,945 67 14,575 Switzerland 2,156 1,525 631 45,171 232 4,371 75 26,273 Syrian Arab Republic 15 1 1 T F Y R of Macedonia 46 42 4 49 1 1 <	Slovenia				543	88	125		330
Spain 3,244 3,026 218 11,034 1,215 1,705 111 4,657 Sri Lanka (lo) 516 328 188 445 n.a. 14 81 Sudan (lo.d) 157 1 0 0 Swaziland (lo.c.ii) 3 3 0 68 0 0 9 Sweden 2,495 2,332 163 22,684 1,819 3,945 67 14,575 Switzerland 2,156 1,525 631 45,171 232 4,371 75 26,273 Syrian Arab Republic 15 1 1 8 Tey R of Macedonia 46 42 4 49 1 1	Somalia		**		2	n.a.	0		2
Sri Lanka (**) 516 328 188 445 n.a. 14 81 Sudan (****) 157 1 0 0 Swaziland (*****) 3 3 0 68 0 0 9 Sweden 2,495 2,332 163 22,684 1,819 3,945 67 14,575 Switzerland 2,156 1,525 631 45,171 232 4,371 75 26,273 Syrian Arab Republic 15 1 1 8 Tey R of Macedonia 46 42 4 49 1 1 6 Tajikistan 4 2 2 12 0 0 2 Thailand 7,404 1,572 5,832 1,911 65 69 5,604 686 <	South Africa	7,295	638	6,657	2,216	95	351	6,105	1,308
Sudan (6.6.1) 157 1 0 0	Spain	3,244	3,026	218	11,034	1,215	1,705	111	4,657
Swaziland (b.c.h) 3 3 0 68 0 0 9 Sweden 2,495 2,332 163 22,684 1,819 3,945 67 14,575 Switzerland 2,156 1,525 631 45,171 232 4,371 75 26,273 Syrian Arab Republic 15 1 1 8 TFYR of Macedonia 46 42 4 49 1 1 6 Tajikistan 4 2 2 12 0 0 2 Thailand 7,404 1,572 5,832 1,911 65 69 5,604 686 Tonga </td <td>Sri Lanka (e)</td> <td>516</td> <td>328</td> <td>188</td> <td>445</td> <td>n.a.</td> <td>14</td> <td></td> <td>81</td>	Sri Lanka (e)	516	328	188	445	n.a.	14		81
Sweden 2,495 2,332 163 22,684 1,819 3,945 67 14,575 Switzerland 2,156 1,525 631 45,171 232 4,371 75 26,273 Syrian Arab Republic 15 1 1 8 T FY R of Macedonia 46 42 4 49 1 1 6 Tajikistan 4 2 2 12 0 0 2 Thailand 7,404 1,572 5,832 1,911 65 69 5,604 686 Tonga	Sudan (b,d)	157			1	0	0		
Switzerland 2,156 1,525 631 45,171 232 4,371 75 26,273 Syrian Arab Republic	Swaziland (b,c,h)	3	3	0	68	0	0		9
Syrian Arab Republic	Sweden	2,495	2,332	163	22,684	1,819	3,945	67	14,575
T F Y R of Macedonia 46 42 4 49 1 1 6 Tajikistan 4 2 2 12 0 0 2 Thailand 7,404 1,572 5,832 1,911 65 69 5,604 686 Tonga n.a. 1 Trinidad and Tobago 12 0 0 2 Turisia 549 112 437 220 1 2 437 91 Turkey 4,661 4,392 269 5,807 386 805 231 989 Turkmenistan 1 0 0	Switzerland	2,156	1,525	631	45,171	232	4,371	75	26,273
Tajikistan 4 2 2 12 0 0 2 Thailand 7,404 1,572 5,832 1,911 65 69 5,604 686 Tonga 1 <	Syrian Arab Republic		**		15	1	1		8
Thailand 7,404 1,572 5,832 1,911 65 69 5,604 686 Tonga n.a. 1 12 0 0 2 Tunisia 549 112 437 220 1 2 437 91 Turkey 4,661 4,392 269 5,807 386 805 231 989 Turkmenistan 1 0 0	T F Y R of Macedonia		42	4	49	1	1		6
Tonga n.a. 1 Trinidad and Tobago 12 0 0 2 Tunisia 549 112 437 220 1 2 437 91 Turkey 4,661 4,392 269 5,807 386 805 231 989 Turkmenistan 1 0 0	Tajikistan	4	2	2	12	0	0	2	
Trinidad and Tobago 12 0 0 2 Tunisia 549 112 437 220 1 2 437 91 Turkey 4,661 4,392 269 5,807 386 805 231 989 Turkmenistan 1 0 0	Thailand	7,404	1,572	5,832	1,911	65	69	5,604	686
Trinidad and Tobago .12 0 0 2 Tunisia 549 112 437 220 1 2 437 91 Turkey 4,661 4,392 269 5,807 386 805 231 989 Turkmenistan 1 0 0	Tonga					n.a.			
Tunisia 549 112 437 220 1 2 437 91 Turkey 4,661 4,392 269 5,807 386 805 231 989 Turkmenistan 1 0 0	Trinidad and Tobago						0		2
Turkey 4,661 4,392 269 5,807 386 805 231 989 Turkmenistan 1 0 0	Tunisia				220	1	2		91
Turkmenistan 1 0 0							805		989
						0			
	Uganda ^(h)	14	10	4	10	n.a.	3	5	1

	Aŗ	oplications by C	Office	Equivalent applications by Origin		rnational eations		CT nase Entries
Name	Total	Resident	Non- Resident	Total (a)	Receiving Office	Origin	Office	Origin
Ukraine	5,412	2,856	2,556	3,510	153	152	2,280	194
United Arab Emirates (e)	1,426	18	1,408	419	n.a.	57	1,334	148
United Kingdom	22,938	14,972	7,966	51,424	3,894	4,847	2,381	23,224
United Republic of Tanzania (h)				6	0	0		5
United States of America	571,612	287,831	283,781	501,903	57,666	57,434	119,899	165,445
Uruguay (b,c)	700	22	678	52	n.a.	4	**	10
Uzbekistan	557	299	258	308	1	2	249	6
Vanuatu	**			2	n.a.	0		1
Venezuela (Bolivarian Republic of)	**			49	n.a.	1	**	4
Viet Nam	3,995	443	3,552	497	12	18	3,063	36
Yemen	80	43	37	43	n.a.	1	**	
Zambia (b,c)	38	7	31	8	0	0	26	1
Zimbabwe	**			2	0	3		

- a. Equivalent applications by origin data are incomplete because some offices do not report by origin.
 b. 2012 data are for applications by office.
 c. 2012 data are for equivalent applications by origin.
 d. The office did not report resident applications, so the equivalent applications by origin data may be incomplete.
 e. The International Bureau acts as the receiving office for Patent Cooperation Treaty applications.
 f. The African Intellectual Property Organization acts as the receiving office for Patent Cooperation Treaty applications.
 g. The Swiss Federal Institute of Intellectual Property acts as the receiving office for Patent Cooperation Treaty applications.
 h. The African Regional Intellectual Property Organization acts as the receiving office for Patent Cooperation Treaty applications.
 .. indicates not available.
 n.a. is not applicable.

A48 Patent grants by office and origin, and patents in force, 2013

		Grants by Office				
Name	Total	Resident	Non-Resident	Origin ^(a)	Total	
Afghanistan				1		
African Intellectual Property Organization (d)	430	57	373	n.a.	3,120	
African Regional Intellectual Property Organization	271	3	268	n.a.	2,291	
Albania	9	2	7	17	4,322	
Algeria	5,127	492	4,635	492	4,666	
Andorra				9		
Antigua and Barbuda				2		
Argentina	1,297	228	1,069	412		
Armenia	99	92	7	114	263	
Aruba				2		
Australia	17,112	1,110	16,002	5,734	122,811	
Austria	1,256	1,069	187	5,714	110,202	
Azerbaijan	78	73	5	193	248	
Bahamas		••		90		
Bahrain (b,c)	2	2	0	3	123	
Bangladesh	134	16	118	19	1,031	
Barbados	9	0	9	362		
Belarus	1,117	1,117	0	1,572	4,478	
Belgium	745	620	125	6,323		
Belize	10	0	10	5	102	
Bermuda		••		119		
Bhutan (b.c)	2	2	0	2	2	
Bolivia (Plurinational State of)		<u></u>		3		
Bosnia and Herzegovina	31	7	24	8	583	
Botswana	3	0	3	1		
Brazil	2,972	385	2,587	1,243		
Brunei Darussalam				3	119	
Bulgaria	125	67	58	135	1,431	
Burundi		••		17		
Cameroon		0.756	01 077	4	150 701	
Canada	23,833	2,756	21,077	13,418	153,781	
Central African Republic		••		1		
Chad				2		
Chile	898	119	779	312	9,585	
China Chan Kana CAR	207,688	143,535	64,153	154,505	1,033,908	
China, Hong Kong SAR	6,564	92	6,472	822	38,858	
China, Macao SAR	22		21	15	442	
Cook lalanda	2,264	160	2,104	213	5,967	
Cook Islands			106	1		
Costa Rica Croatia	106 159	0 18	106 141	12 85	417 4,243	
Cuba	125	21	104	153	972	
Cyprus	125	0		187	82	
Czech Republic	611	408	203	886	7,780	
Democratic People's Republic of Korea (b,c)	6,550	6,520	30	6,528	1,700	
Democratic Republic of the Congo				2	•	
Denmark	309	251	 58	4,914	51,277	
Dominican Republic	44	0	44	9	229	
Ecuador Ecuador				6	229	
Egypt	465	86	379	129	3,553	
El Salvador				2	3,333	
Estonia	78	47	31	164	1,228	
Eurasian Patent Organization	1,581	219	1,362	n.a.	1,220 n.a	
European Patent Office	66,696	33,600	33,096	n.a.		
Finland	711	639	72	6,239	n.a 47,058	
France	11,405	10,235	1,170	43,163	500,114	
Georgia	286	10,233	184	106	2,050	
uoorgiu	200	102	104	100	2,000	

		Grants by Offi	ra .	Equivalent grants	In Force by Office
Name	Total	Resident	Non-Resident	Origin (a)	Total
Germany	13,858	9,792	4,066	81,788	569,340
Greece	282	271	11	467	2,966
Guatemala	65	2	63	3	746
Guinea				1	
Haiti				1	
Honduras (d)	132	4	128	4	241
Hungary	1,351	134	1,217	710	5,237
Iceland	43	5	38	151	603
India	3,377	594	2,783	4,402	45,103
Indonesia				37	22,564
Iran (Islamic Republic of)	3,476	3,373	103	3,416	
Iraq				3	<u></u>
Ireland	214	155	59	2,021	108,218
Israel (c)	1,988			4,622	25,372
Italy ^(d)	8,114	7,017	1,097	19,378	68,000
Jamaica	30	0	30	3	296
Japan	277,079	225,571	51,508	340,364	1,838,177
Jordan	48	9	39	22	317
Kazakhstan	351	199	152	361	377
Kenya	71	11	70	8	
Kuwait				91	<u>-</u> -
Kyrgyzstan	88	85	3	123	348
Latvia	136	127	9	204	6,329
Lebanon	316	67	249	81	<u></u>
Liberia				11	<u></u>
Liechtenstein				514	
Lithuania	93	79	14	97	519
Luxembourg (b.c)	112	63	49	1,110	20,421
Madagascar	40	0	40		514
Malaysia Malta	2,660 15	288 10	2,372	720 158	22,782 560
Marshall Islands			5	100	
Mauritius	5	0	5	72	
Mexico	10,368	312	10,056	825	101,645
Monaco	5	2	3	66	41,976
Mongolia				3	41,970
Montenegro	121	7	114	9	1,448
Morocco	937	145	792	158	
Namibia				2	. "
Nauru				1	<u></u>
Nepal	1	1	0	1	72
Netherlands	2,029	1,732	297	16,745	12,704
New Zealand	4,752	298	4,454	1,042	28,217
Nicaragua	72	0	72	1	328
Nigeria	645	32	613	44	
Norway	1,430	493	937	2,837	19,297
Oman				4	
Pakistan	282	19	263	31	
Panama	266	6	260	61	1,858
Papua New Guinea	57	0	57		42
Paraguay				1	
Patent Office of the Cooperation Council for the Arab States of the Gulf	553	32	521	n.a.	2,510
Peru	287	2	285	12	2,615
Philippines	2,207	30	2,177	82	<u></u>
Poland	2,804	2,339	465	2,736	47,610
Portugal	130	118	12	360	36,782
Qatar				8	
Republic of Korea	127,330	95,667	31,663	123,817	812,595
Republic of Moldova	61	57	4	58	471

		Equivalent grants	In Force by Office		
Name	Total	Resident	Non-Resident	Origin ^(a)	Total
Romania	451	430	21	506	17,100
Russian Federation	31,638	21,378	10,260	23,507	194,248
Rwanda (b,c,d)	24	12	12	12	119
Saint Kitts and Nevis		**		8	
Saint Vincent and the Grenadines				27	28
Samoa (b,c,d)	126	1	125	10	99
San Marino				46	
Saudi Arabia	233	37	196	718	1,988
Senegal				2	
Serbia	136	78	58	120	2,644
Seychelles				37	
Singapore	5,575	393	5,182	2,255	45,999
Slovakia	115	39	76	95	2,755
Slovenia				254	
South Africa	4,756	474	4,282	1,445	54,220
Spain	3,004	2,784	220	5,791	36,893
Sri Lanka	307	71	236	76	
Sudan (b,d)	84				27
Swaziland (b,c)	3	3	0	3	9
Sweden	685	603	82	12,293	14,539
Switzerland	534	360	174	20,166	148,759
Syrian Arab Republic				3	
T F Y R of Macedonia	378				
Tajikistan	2	0	2	9	256
Thailand	1,149	68	1,081	182	11,211
Trinidad and Tobago				9	
Tunisia	535	98	437	116	3,685
Turkey	1,211	1,100	111	1,637	7,890
Uganda	3	1	2	1	30
Ukraine	3,635	1,744	1,891	2,025	26,033
United Arab Emirates	63	1	62	69	451
United Kingdom	5,235	2,464	2,771	21,017	469,941
United States of America	277,835	133,593	144,242	244,228	2,387,502
Uruguay (b,c)	22	3	19	22	
Uzbekistan	184	105	79	105	1,155
Venezuela (Bolivarian Republic of)				36	
Viet Nam	1,182	59	1,123	70	10,615
Yemen	62	10	52	11	62
Zambia (b,c,d)	32	1	31	2	4,384
Zimbabwe				1	

<sup>a. Equivalent grants by origin data are incomplete because some offices do not report by origin.
b. 2012 data are for grants by office.
c. 2012 data are for equivalent grants by origin.
d. 2012 data are for patents in force.
.. indicates not available.
n.a. is not applicable.</sup>

A49 Utility model applications and grants by office and origin, 2013

		Applications by	Office	Equivalent applications by Origin		Grants by Offi	ce
Name	Total	Resident		Total (a)	Total	Resident	
African Intellectual Property Organization (b,d)	8			n.a.	7		
African Regional Intellectual Property Organization	7	6	1	n.a.			
Algeria				1			
Argentina	184	161	23	175	53	44	9
Armenia	41	40	1	44	31	30	1
Australia	1,676	1,131	545	1,199	450	290	160
Austria	763	569	194	1,039	582	418	164
Azerbaijan	11	11	0	13	8	5	3
Bahamas				3			
Barbados	**	**		4		••	
Belarus	1,146	1,043	103	1,130	952	883	69
Belgium	**			68			
Belize	6	0	6	7			
Bermuda	**			5			
Bolivia (Plurinational State of)				4			
Botswana (b,c,d)	3	3	0	9	1	1	0
Brazil	3,032	2,891	141	2,924	347	338	9
Brunei Darussalam				4			
Bulgaria	372	361	11	371	178	164	14
Cambodia	6	0	6				
Canada				75			
Chile	104	88	16	129	30	22	8
China	892,362	885,226	7,136	886,613	692,845	686,208	6,637
China, Hong Kong SAR	552	312	240	411	538	330	208
China, Macao SAR	21	1	20	15	7	1	6
Colombia	261	224	37	242	153	140	13
Cook Islands				3			
Costa Rica	10	3	7	5	5	3	2
Croatia	81	78	3	83	74	66	8
Cuba	3	3	0	5			
Cyprus				53			
Czech Republic	1,731	1,661	70	1,900	1,550	1,495	55
Denmark	197	157	40	247	164	127	37
Dominican Republic	8	5	3	8	5	1	4
Estonia	101	95	6	107	68	58	10
Finland	480	444	36	663	418	385	33
France	480	200	280	597			
Gambia	3	3	0	3	3	3	0
Georgia	64	62	2	63	43	43	0
Germany	15,470	11,644	3,826	12,649	13,341	9,770	3,571
Greece	27	25	2	31	35	34	1
Guatemala	26	20	6	22	2	2	0
Honduras	10	7	3	7	9	7	2
Hungary	253	233	20	245	137	120	17
Iceland							
India				50			
Indonesia	349	233	116	236			
Iraq							
Ireland				00			
Israel				400	<u></u>		
Italy	2,678	2,480	198	2,812	2,495	2,322	173
Japan	7,622	5,965	1,657	9,261	7,363	5,738	1,625
Jordan				1			
Kazakhstan	212	128	84	136			
Kenya	78	78	0	78	4	4	0
Kyrgyzstan	9	8	1	8	19	19	0
Latvia							
Lebanon							
Liberia						-	
LIVVIIG				'	**	**	<u></u>

		Applications by	Office	Equivalent applications by Origin		Grants by Offi	ce
Name	Total	Resident	Non-Resident	Total (a)	Total	Resident	Non-Resident
Liechtenstein				38			
Lithuania				3			
Luxembourg				49			
Malaysia	145	70	75	92	31	17	14
Malta				5			
Marshall Islands				2			
Mauritius				1			
Mexico	714	645	69	671	193	165	28
Monaco				4			
Netherlands				192			<u></u>
New Zealand				54			
Nicaragua	2	0	2	1	1	0	<u></u> 1
Nigeria				3			
			••		••		:
Norway			••				
Pakistan			0	2			
Panama	9	1	8	2	9	3	6
Paraguay				1			
Peru	140	124	16	126	17	16	1
Philippines	775	743	32	746	500	477	23
Poland	1,053	986	67	1,033	654	621	33
Portugal	120	95	25	108	63	44	19
Republic of Korea	10,968	10,463	505	10,795	5,959	5,718	241
Republic of Moldova	213	211	2	215	123	123	0
Romania	67	54	13	58	38	29	9
Russian Federation	14,358	13,589	769	13,959	12,653	12,154	499
Rwanda (b,c,d)	12	12	0	12	2	2	0
Saint Kitts and Nevis				3			<u></u>
Samoa				20			
San Marino				5			<u>.</u>
Saudi Arabia				3			
Senegal				1			
Serbia	77	71	6	72	51	47	4
Seychelles	**			20			
Singapore				62			
Slovakia	429	339	90	406	287	228	59
Slovenia				14			
South Africa				14			
Spain	2,648	2,527	121	2,724	2,336	2,225	111
Swaziland				2			
Sweden				131			
Switzerland				574			
Tajikistan	69	66	3	66	58	55	3
Thailand	1,609	1,561	48	1,600	868	808	60
Tunisia				1,000			
Turkey	3,553	3,465	88	3,504	2,037	1,997	40
Ukraine	10,181	9,977	204	10,260	10,137	9,946	191
United Arab Emirates				3			
							.
United Kingdom				248			-
United Republic of Tanzania				1 0.740			
United States of America				2,718			
Uruguay (b,c,d)	55	38	17	42	36	24	12
Uzbekistan	173	171	2	173	86	83	3
Venezuela (Bolivarian Republic of)				4			<u></u>
Viet Nam	273	226	47	226	92	74	18

a. Equivalent applications by origin data are incomplete because some offices do not report by origin. b. 2012 data are for applications by office. c. 2012 data are for equivalent applications by origin. d. 2012 data are for grants by office. .. indicates not available. n.a. is not applicable.