

# Part 1

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## Current Status of Intellectual Property Rights





## Chapter 1

### Current Status of Applications, Registrations, Examinations, Appeals and Trials in and outside Japan

The landscape surrounding intellectual property rights (patents, utility models, designs and trademarks) is rapidly changing due to several factors such as more globalized business activities, the rapidly increasing number of applications filed in emerging countries such as China. Under these circumstances, the number of applications filed from Japan to abroad for patents, designs and trademarks is increasing year by year, and filings for intellectual property rights are also changing significantly. This chapter presents the current status of applications, registrations of intellectual property rights, examinations, appeals and trials both in and outside Japan.

#### 1. Patents

The JPO achieved a long-term goal proposed in 2004 that it would shorten an average First Action period to 11 months by the end of FY2013 (FA11). This section presents the current statistics on applications, registrations of patents, and patent examination both in and outside Japan.

##### (1) Changes in the number of Patent Applications and Requests for Examinations, and Current Status of Patent Examination in Japan

###### 1) Change in the Number of Patent Applications and PCT International Applications<sup>1</sup>

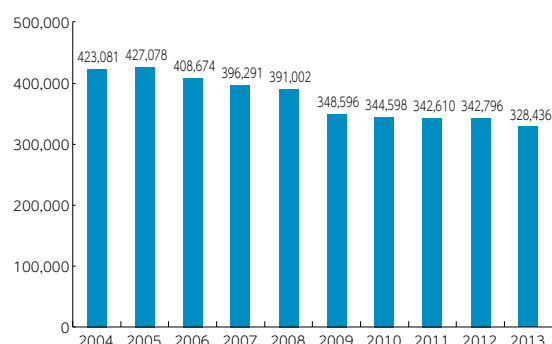
Although the annual number of patent applications filed in Japan had remained high, at more than 400,000, the number has been gradually decreasing since 2006, with the number of patent applications sharply dropping in 2009. The total number of patent applications in 2013

was 328,436. That of the previous year was 342,796 (See Figure 1-1-1).

Meanwhile, the number of international patent applications filed under the Patent Cooperation Treaty (PCT international applications) for which the Japan Patent Office was the receiving office in 2013, was 43,075, a 0.7% increase over the previous year. This shows a continued increase year by year (See Figure 1-1-2).

Reasons for these changes may be that applicants tend to file PCT international applications more and more, and strictly select patent applications focusing on their quality not quantities because the globalization of research and development activities as well as business activities have progressed substantially, and intellectual property strategies not just for Japan but for both Japan and abroad have become more and more important for enhancing further innovation and company revenue.

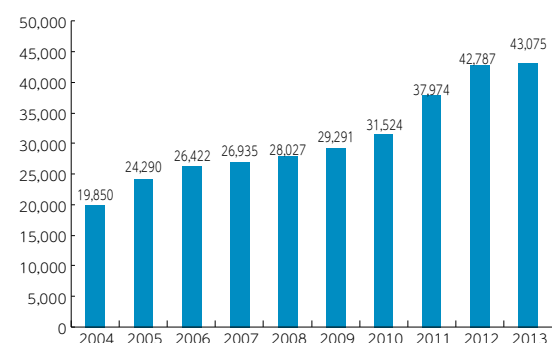
**Figure 1-1-1 Change in the number of patent applications**



Note:

The number of patent applications includes PCT applications which entered the national phase.

**Figure 1-1-2 Changes in the Number of PCT Applications**



<sup>1</sup> PCT international application: An international application filed based on the Patent Cooperation Treaty (PCT). Under this system, when one request for application is submitted in accordance with the Treaty, it has the same effect as simultaneous filings with all PCT contracting parties.

## 2) Changes in the Number of Requests for Examination

In October 2001, the period during which applicants could request examinations was reduced to three years from seven years. As a result of this change, there was a temporary surge in the number of requests for examination (the so called “bump in requests”). However, the bump in requests ended at the end of September 2008 and the number of requests for examination in 2009 had decreased significantly. The number of requests for examination in 2013 was 240,188 (a year-on year decrease of 2.0%), nearly the same level as that in 2013 (See Figure 1-1-3).

## 3) Timely Examination

The work load involving patent examinations has increased year by year due to the following three reasons: (1) the complex and sophisticated content of applications, (2) the increase in the number of accumulated documents for prior art searches, and (3) the increase in the number of PCT international applications for which the time limit for creating international search reports<sup>1</sup> and international preliminary examination reports<sup>2</sup> is set based on the Treaty. In order to conduct prompt and accurate patent examinations under these circumstances, the JPO is strengthening its examination framework and improving the efficiency of its examination work by steadily implementing various measures,<sup>3</sup> including hiring about 500 fixed-term examiners and enhancing projects for prior art searches.

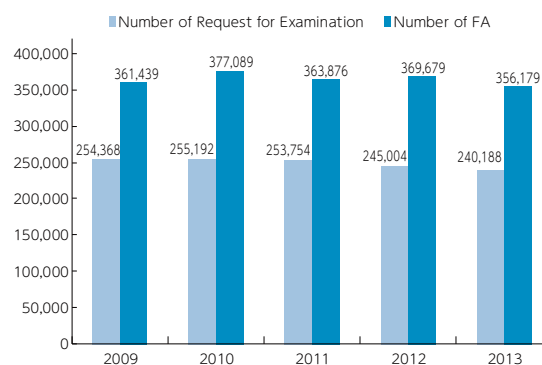
Consequently, when compared in respect of the average number of applications processed per examiner, the JPO's average number per examiner is 3.1 times larger than that of the USPTO and 4.7 times larger than that of the EPO (See Figure 1-1-4), and therefore the JPO already processes applications fairly efficiently.

As a result of these efforts, the number of

First Actions (FAs)<sup>4</sup> of national applications in 2013 remained almost at the 2012 level (356,179, decrease by 3.7% compared with the previous year), exceeding the number of requests for examination (See Figure 1-1-3).

Based on the above results, average First Action Pendency is steadily being reduced, and the long-term goal of 11 months was achieved at the end of FY2013 (See Figure 1-1-5). In Japan as well the United States, Europe and other countries/regions, there is a movement that will require Offices to not only shorten first action pendency but also reduce the time it takes applicants to be granted rights. This is a great challenge. (See Figure 1-1-6).

**Figure 1-1-3 Changes in the number of requests for examination**



Note:

The number of requests for examinations made between 2009 and 2012 includes those that used the Deferral System for Examination Request Fee.<sup>5</sup>



<sup>1</sup> An international search report is prepared by an examiner of a patent office which is designated as an international search authority by a filed PCT international application. The examiner searches related prior art to prepare the report.

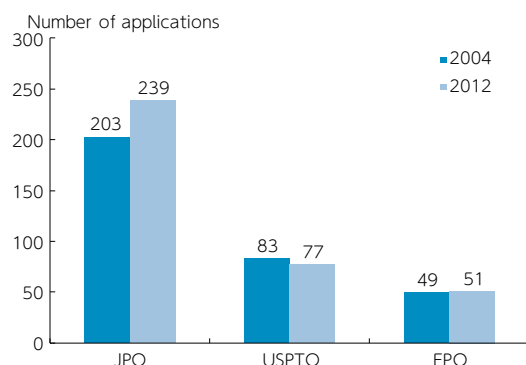
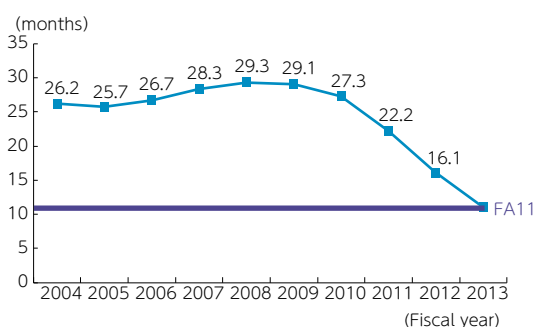
<sup>2</sup> An international preliminary examination report is prepared by an examiner to show his/her final judgment on an international preliminary examination of an application.

<sup>3</sup> See Part 2, Chapter 1, 1.(1).

<sup>4</sup> The first examination conducted after a request for examination is filed by the applicant. FA is an abbreviation of First Action.

<sup>5</sup> This is a system that allowed applicants to postpone payment of their examination request fees up to one year from the date they requested for examination, as long as they notified the JPO to that effect. The system ended on March 31, 2012.



**Figure 1-1-4 Average number of applications processed per examiner****Figure 1-1-5 Trend of average first action pendency**

Note:

The number of applications awaiting the first action is based on the figure as of the end of each fiscal year.

**Figure 1-1-6 Average “period of time for applicants to acquire rights” at each office**

JPO	29.6 months
USPTO	31.7 months
EPO	36.2 months

#### 4) Changes in Patent Examination Performance

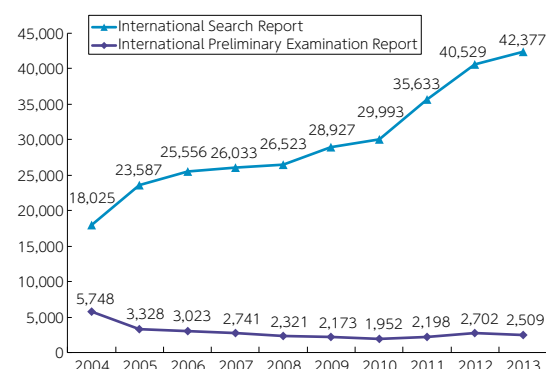
In line with the increase in the number of PCT international applications as shown in 1) above, the number of international search reports created by the Japan Patent Office as an international search organization, increased from 40,529 in 2012 to 42,377 in 2013, up 4.6% over the previous year (See Figure 1-1-7).

On the other hand, the number of international preliminary examination reports has been decreasing since 2004 and remains almost unchanged in recent years. This is due to

the Enhanced International Search System,<sup>1</sup> which was introduced in 2004, in which a written opinion (similar to the one that used to be prepared at the international preliminary examination phase) has to be established at the same time as the international search report.

In addition, the number of subsequent examinations<sup>2</sup> in 2013 decreased by 3% year-on-year, while the number of reconsiderations by examiners before appeal proceedings<sup>3</sup> in 2013 decreased by 3% year-on-year (See Table 1-1-8).

In addition, in line with applicants' strict selection of patent applications, the number of decisions to grant patents increased to 260,000 in 2013, up 2% year-on-year (See Figure 1-1-9). The rate of decisions granting patents was 69.8%. On the other hand, the number of decisions of refusal decreased to 109,000 in 2013, a drop of 10% year-on-year; and the percentage of final decisions of refusal was 30.2% (See Table 1-1-10).

**Figure 1-1-7 Changes in the number of reports created for PCT applications**

<sup>1</sup> A system in which an International Searching Authority creates a written opinion as to whether the invention described in the claim is recognized to have novelty or inventive step (the invention is not obvious) and whether it is recognized to be industrially applicable at the time when the international search report is created.

<sup>2</sup> An examination conducted upon the submission of a written opinion and a written amendment from the applicant after the first action.

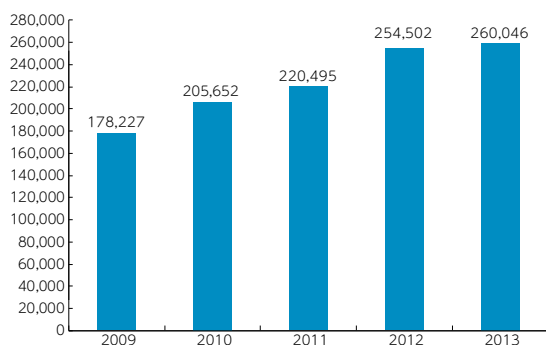
<sup>3</sup> An examination conducted by the examiner based on Article 162 of the Patent Act in the case an amendment of claims is made at the request for an appeal against an examiner's decision of refusal.

**Table 1-1-8 Changes in patent examination performance**

Record	2009	2010	2011	2012	2013	Year-on-year
Number of First Actions	361,439	377,089	363,876	369,679	356,179	96%
Number of Subsequent Examinations	306,018	336,613	327,736	338,738	329,409	97%
Number of International Search Reports of PCT	28,927	29,993	35,633	40,529	42,377	105%
Number of International Preliminary Examination Reports of PCT	2,173	1,952	2,198	2,702	2,509	93%
Number of Reconsiderations by Examiner before Appeal Proceedings	24,131	26,707	25,739	23,851	23,168	97%
Total	722,688	772,354	755,182	775,499	753,642	97%

Notes:

1. The "year-on-year" column is a comparison between 2013 and 2012.
2. The "number of reconsiderations by examiners before appeal proceedings" is the total number of decisions to grant patents during the procedure,<sup>1</sup> reconsideration reports made to the JPO Commissioner,<sup>2</sup> and notifications of reasons for refusal made in the procedure.

**Figure 1-1-9 Changes in the number of decisions to grant a patent****(2) Trends of Patent Applications/Registration in the JPO****1) Patent Application Structure in Japan****Table 1-1-10 Changes in final decision performance**

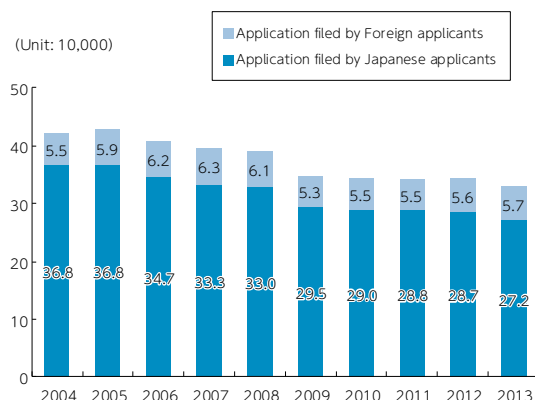
Performance	2009	2010	2011	2012	2013	Year-on-year
Number of Decisions to Grant a Patent	178,227	205,652	220,495	254,502	260,046	102%
Number of Decisions of Refusals	171,396	164,639	138,784	120,896	108,544	90%
(Of which number of decisions of refusal without a dissenting response from the applicant)	105,004	100,951	84,419	70,297	60,356	86%
Withdrawals/Abandonments After the First Action	5,169	4,600	5,433	5,566	4,090	73%
Rate of Decisions to Grant a Patent	50.2%	54.9%	60.5%	66.8%	69.8%	-
Rate of Decisions of Refusal	49.8%	45.1%	39.5%	33.2%	30.2%	-

Notes:

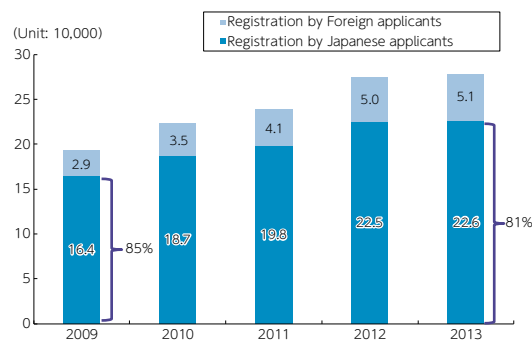
1. "The number of decisions of refusal for cases in which applicants did not respond" is the number of decisions of refusal decided because the applicants did not respond, from the time they received their notices of reason for refusal issued by the examiners.
2. "Withdrawals/abandonments after the first action" is the number of applications withdrawn/abandoned after the first action.
3. "Rate of decisions to grant a patent" is the number of decisions in which a patent was granted divided by (1) the number of decisions to grant a patent plus (2) the number of decisions of refusals plus (3) the number of withdrawals/abandonment after the first action.
4. "Rate of decisions of refusal" is the number of decisions in which a patent was not granted (refusal) plus the number of withdrawals/abandonments after the first action, divided by (1) the number of decisions to grant a patent plus (2) the number of decisions of refusal plus (3) the number of withdrawals/abandonments after the first action.

<sup>1</sup> The number of cases in which the examiner's decision of refusal was cancelled and a decision to grant a patent was made, as a result of reconsiderations by examiners

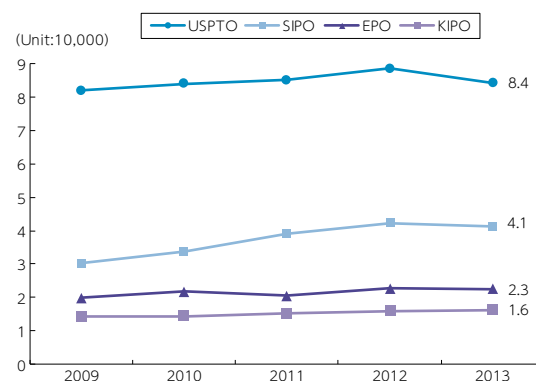
<sup>2</sup> The number of cases in which the examiner's decision of refusal was upheld, as a result of reconsiderations by examiners

**Figure 1-1-11 Breakdown of patent applications in the JPO****2) Patent Registration Structure in Japan**

The number of patent registrations at the JPO was 277,000 in 2013. The number of patent registrations filed by Japanese was 226,000 (81% distribution), a 4% decrease compared to the percentage distribution in 2009 (85%) (See Figure 1-1-12). This indicates that the percentage of patent registrations filed by foreign applicants has been increasing.

**Figure 1-1-12 Patent registration structure in the JPO****3) Patent Applications Filed with Major Offices by Japanese Applicants**

In 2013, the number of applications filed by Japanese applicants with major patent offices was as follows: 84,429 with the USPTO (down 4.8% over the previous year); 41,193 with the SIPO (down 2.6%); 22,555 with the EPO (down 0.5%); 16,298 with the KIPO (up 1.8%). The total number of applications filed with these offices in 2013 was lower than that in the previous year (See Figure 1-1-13).

**Figure 1-1-13 Changes in the number of patent applications filed with major offices by Japanese applicants**

	2009	2010	2011	2012	2013
USPTO	81,982	84,017	85,184	88,686	84,429
SIPO	30,302	33,882	39,231	42,278	41,193
EPO	19,863	21,767	20,538	22,659	22,555
KIPO	14,168	14,346	15,234	16,004	16,298
Total	146,315	154,012	160,187	169,627	164,475

Sources:

USPTO: USPTO website for 2009 to 2012, and data provided by the USPTO for 2013 (provisional)

SIPO: SIPO website

EPO: EPO Annual Report 2013

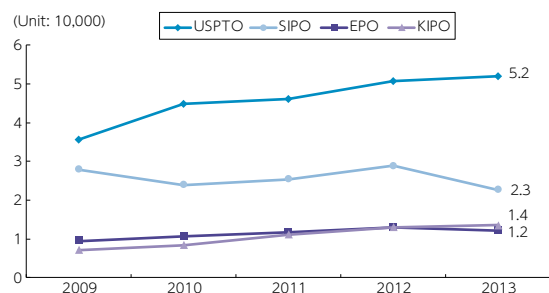
KIPO: KIPO website for 2009 to 2012, and data provided by the KIPO for 2013 (provisional)

**4) Patent Registrations in Major Offices Held by Japanese**

The number of patent registrations in the USPTO held by Japanese in 2013 was 51,919 (up 2.5% year-on-year), that in the SIPO was 22,609 (down 21.6 %), and that in the KIPO was 13,514 (up 4.1%). In addition, the number of Japanese applications to which the EPO decided to grant patents was 12,135 (down 5.6%) (See Figure 1-1-14).



**Figure 1-1-14 The number of patent registrations in major offices held by Japanese applicants**



	2009	2010	2011	2012	2013
USPTO	35,501	44,813	46,139	50,677	51,919
SIPO	27,897	23,890	25,387	28,847	22,609
EPO	9,439	10,580	11,649	12,855	12,135
KIPO	7,141	8,332	11,083	12,980	13,514
Total	79,978	87,615	94,258	105,359	100,177

Sources:

USPTO: USPTO website

SIPO: SIPO website

KIPO: KIPO website for 2007 to 2011, and data provided by the KIPO for 2013 (provisional)

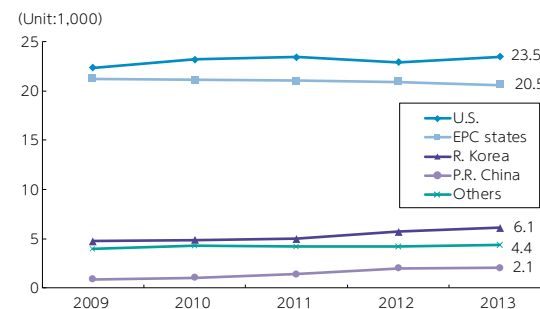
### 5) Patent Applications Filed with the JPO by Foreign Applicants

The number of patent applications filed with the JPO by foreign applicants slightly increased to 56,705 in 2013, compared with that in 2012.

In 2013, applications filed by US and European applicants accounted for 78% of the total number of applications filed by foreign applicants. The number of applications filed by Korean applicants has been slightly increasing, as in the previous year. The number accounted for 11% of the total number of applications filed by foreign applicants in 2013.

On the other hand, the number of applications filed by Chinese applicants in 2013 was 2,064, remaining almost unchanged year-on-year. This number still remains low compared to the number of applications filed by US, European and Korean applicants (See Figure 1-1-15).

**Figure 1-1-15 Changes in the number of applications filed with the JPO by foreign applicants**



	2009	2010	2011	2012	2013	Percentage to total (2013)
U.S.	22,367	23,183	23,414	22,922	23,481	41.4%
EPC states	21,251	21,122	21,023	20,899	20,604	36.3%
R. Korea	4,782	4,872	5,007	5,708	6,134	10.8%
P.R. China	891	1,063	1,401	2,022	2,064	3.6%
Others	3,990	4,277	4,185	4,232	4,422	7.8%
Total	53,281	54,517	55,030	55,783	56,705	

Notes:

1. EPC Countries stands for the number of applicants from EPC member countries at the end of each CY.
2. The figures in the table include the number of direct applications and PCT national-phase applications.

### 6) Patent Registrations in Japan Held by Foreigners

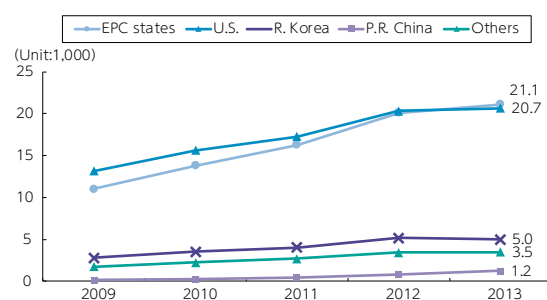
The number of patent registrations in Japan held by foreigners in 2013 increased to 51,499, up 3% over the previous year.

In 2013, registrations based on applications filed by US and European applicants accounted for 81% of the total. The number of registrations based on applications filed by Korean applicants was 4,984 and this accounted for 10% of the total.

The number of registrations based on applications filed by Chinese applicants in 2013 was 1,243, 1.5 times larger than that of the previous year. The number has been increasing. However, Chinese registrations still only account for 2% of the total number of registrations (See Figure 1-1-16).



**Figure 1-1-16 Changes in the number of registrations filed with the JPO by foreign applicants**



	2009	2010	2011	2012	2013	Percentage to total (2013)
U.S.	13,177	15,626	17,292	20,329	20,679	40.2%
EPC states	11,033	13,824	16,262	20,103	21,131	41.0%
R. Korea	2,777	3,505	4,048	5,165	4,984	9.7%
P.R. China	156	255	416	822	1,243	2.4%
Others	1,747	2,246	2,711	3,455	3,462	6.7%
Total	28,890	35,456	40,729	49,874	51,499	

Notes:

1. EPC Countries stands for the number of applicants from EPC member countries at the end of each CY.
2. The figures in the table include the number of direct applications and PCT national-phase applications.

## 2. Utility Models

This section presents changes in the number of applications for utility models and the Technical Reports of expert opinion on registrability of utility models in Japan.

### (I) Change in the Number of Applications for Utility Model Registrations and Technical Reports of Expert Opinion on Registrability of Utility Models

#### 1) Changes in the Number of Applications for Utility Models

The number of applications for utility model registrations has been decreasing since the utility model system was changed to a non-substantive examination system in 1994. Due to this situation, the utility model system was amended and the new system came into force in April 2005 in order to make the system more attractive. The following is an outline of the provisions that were amended in the utility model system: (i) extending the term of utility model rights, (ii) reducing the annual fee for utility model rights, (iii) expanding the allowable scope of corrections, and (iv) allowing the filing of a patent application based on a utility model

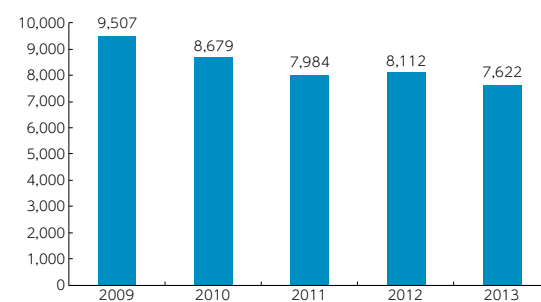
registration. The number of applications for utility models reached a peak of 11,386 in 2005, an increase of 43% from the previous year. However, the number once again has been gradually declining over the years, and it now was 7,622 in 2013.

#### 2) Technical Reports of Expert Opinion on Registrability of Utility Models

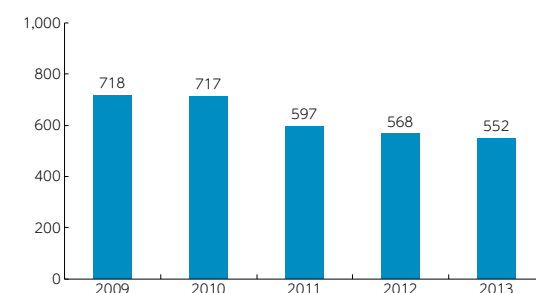
Under the new utility model system that is based on the non-substantive examination principle, the owner of a utility model right first needs to give a warning by presenting a Technical Report of Utility Models in terms of the registrability of the utility model when enforcing the right (Article 29-2 of the Utility Model Act). The Technical Report is created by a JPO examiner who evaluates the novelty and inventive step of the filed device to determine the validity of any right and notifies the person filing the request (Articles 12 and 13 of the Utility Model Act).

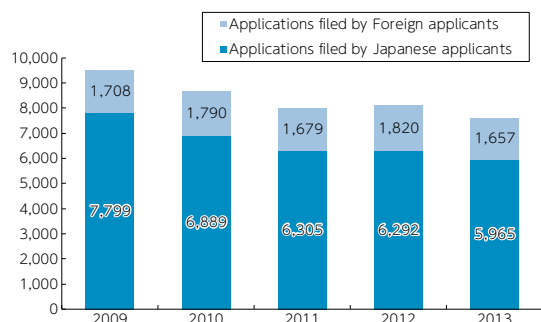
The number of Technical Reports of expert opinion on registrability of utility models has been decreasing. It was 552 in 2013, a year-on-year decrease of 3%.

**Figure 1-1-17 Changes in the number of utility model applications**



**Figure 1-1-18 Changes in the number of technical reports of expert opinion on resistibility of utility models**



**Figure 1-1-19 Structure of utility model applications in Japan**

### 3. Designs

This section presents the changes in the number of design applications and the current status of design examination in Japan, and the trends in applications for design registration and design registrations in major countries and organizations.

#### (1) Change in the Number of Design Applications and Current Status of Design Examination in Japan

##### 1) Trends in Applications for Design Registration

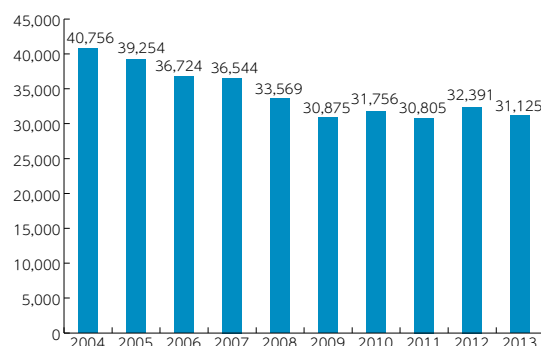
The number of applications in the past ten years was on a downward trend, after peaking at 40,756 in 2004. In the past five years (2009 - 2013), it has fluctuated within a narrow range and remained almost unchanged. The reasons for the decrease in the number of applications after 2004 can be attributed to the fact that more applications are being filed with foreign offices in line with Japanese companies expanding their business operations overseas as well as the fact that the number of products newly developed has been decreasing due to mergers of companies and businesses. In addition, applicants are more selective when it comes to filing applications in Japan. The numbers of applications per Japanese Design Classification groups are almost the same as or slightly less than those in previous years in general. However, the number of applications for Transport or Conveyance Machinery (Group G) has been increasing steadily since 2011.

On the other hand, since a partial-design

system<sup>1</sup> was introduced in 1999, the percentage of applications to register partial designs has been increasing each year, and such applications were about 36% of all the applications in 2013. The percentage of applications to register related designs,<sup>2</sup> based on a system introduced at the same time, has remained almost unchanged at slightly less than 15% of the total number of applications (See Figure 1-1-21).

#### 2) Status of Design Examination

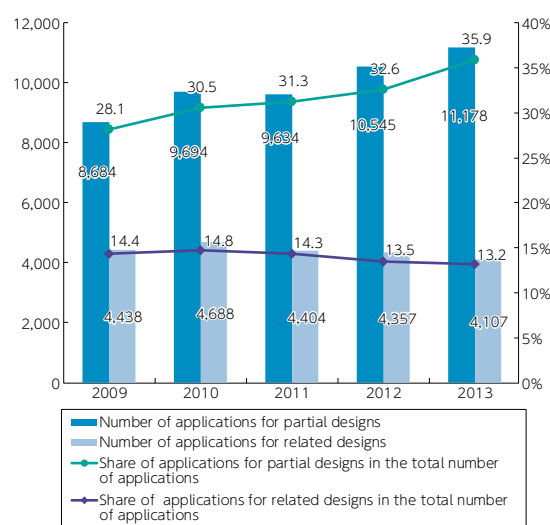
In 2013, the number of first actions (FAs) for design examination was 31,268, and has remained almost unchanged as that of applications for design registration. The number of decisions to grant registrations has remained at around 30,000 since 2009 (See Figure 1-1-22). The average period from the filing date to the notice of the first action (FA pendency period) in the end of FY2013 was 6.4 months, and has been decreasing steadily (See Figure 1-1-23).

**Figure 1-1-20 Changes in the number of applications for design registration**

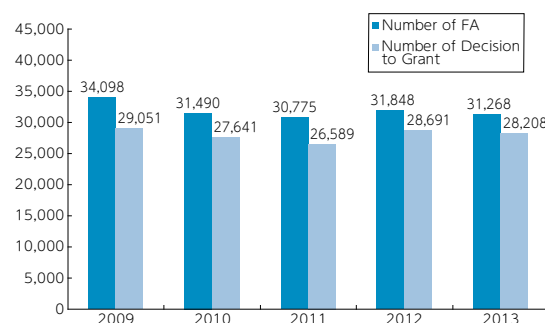
<sup>1</sup> Registering a design of a part of an article: Since the amended Design Act went into effect in 1999, it became possible to register a design, which forms a part of an article, that cannot even be physically separated from the entire article.

<sup>2</sup> The related design system enables a design which is similar to the principal design to be registered as a related design only when both design applications are filed by the same applicant. Related-design rights are enforceable independently from the principal design. This system was introduced in 1999.

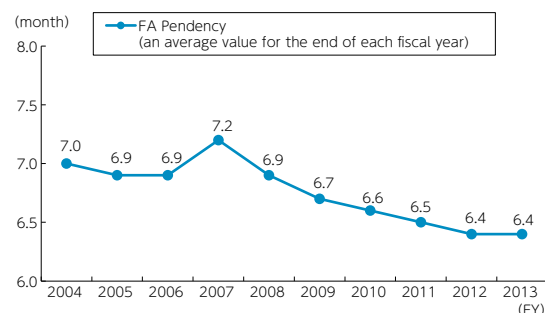
**Figure 1-1-21 Changes in the number and the rate of applications for partial designs and related designs**



**Figure 1-1-22 Changes in the number of first actions and decisions of registration**



**Figure 1-1-23 Changes in the average first action pendency for design applications (average values for respective fiscal years)**



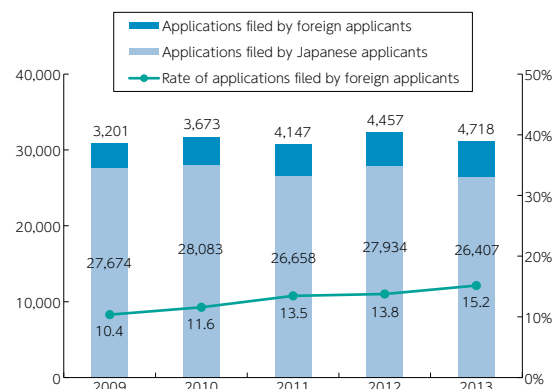
Note:

Each is an average value for the end of each fiscal year.

## (2) Trends in Applications for Design Registration and Registration in Japan

### 1) Structure of application for design registration in Japan

**Figure 1-1-24 Structure of application for design registration in Japan**

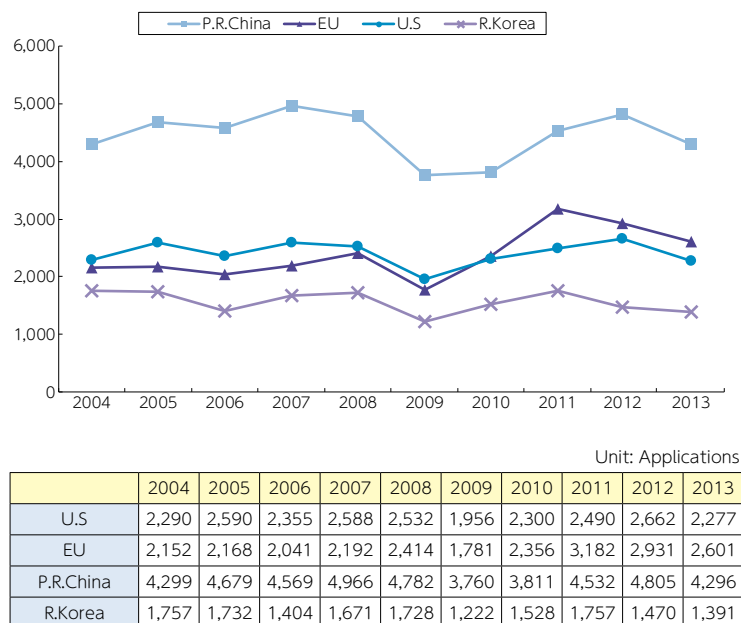


### 2) Number of Applications filed by Japanese for Design Registrations with Foreign Offices

Although the number of applications filed by Japanese with the USPTO, the OHIM, the SIPO and the KIPO dropped in 2009 when significantly affected by global business recession, it started to increase again in 2010. It has continuously increased till 2011, however, the number of applications filed with the OHIM and the KIPO dropped again in 2012. Applications to all these offices decreased in 2013 compared with those of the previous year.



**Figure 1-1-25 Change in the number of applications filed by Japanese for design registrations with foreign offices**



Note:

The numbers for the OHIM and the KIPO refer to the number of designs filed with the OHIM and KIPO.

USPTO: 2002 WIPO Statistics, 2003 - 2011 data provided by the USPTO

OHIM: OHIM website (The OHIM started to accept from 2003)

SIPO: SIPO website

KIPO: Data provided by KIPO (provisional)

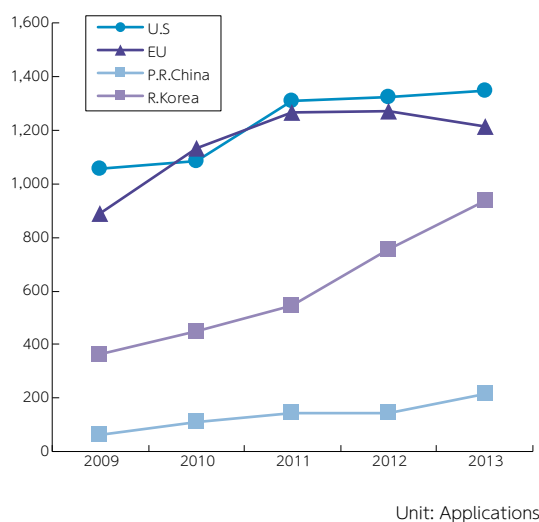
Other Offices: Created by the JPO based on WIPO Statistics (World Intellectual Property Indicators 2012 Edition)

### 3) Number of Applications for Design Registrations Filed by Foreign Applicants with the JPO

In 2013, the number of applications for design registrations filed with the JPO by European applicants decreased compared with that in 2012. On the other hand, the number of applications for design registration filed with the JPO by Korean applicants has been significantly increasing, and that by US and Chinese applicants has been slightly increasing.



**Figure 1-1-26 Changes in the number of applications filed by foreign applicants for design registrations with the JPO**



Note:

The figures for the EU are the total number of applications filed with the JPO by applicants from EU member states.



## 4. Trademarks

This section shows the changes in the number of applications for trademark registrations; the current status of trademark examination in Japan; trends in applications for trademark registrations; comparison of trademark registrations in Japan, the U.S., EU, China and Korea; and trends in international applications under the Madrid Protocol.

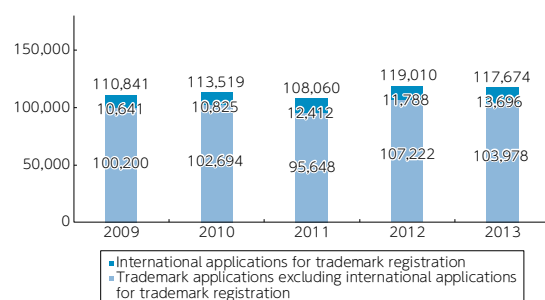
### (1) Changes in the Number of Trademark Applications and Current Status of Trademark Examination in Japan

#### 1) Trends in Trademark Applications

The number of applications filed to register trademarks in 2013 was 117,674 and has remained almost unchanged compared with that in 2012. With regard to the breakdown of the number of applications for registration, the number of applications for international trademark registrations<sup>1</sup> in 2013 increased by 16.2% over the previous year. The number of applications for other trademark registrations decreased by 3.0% over the previous year (See Figure 1-1-27).

The average number of classes per application for trademark registrations<sup>2</sup> (multiple class rates) was 1.75 in 2013 and has remained the same as the previous year (See Figure 1-1-28).

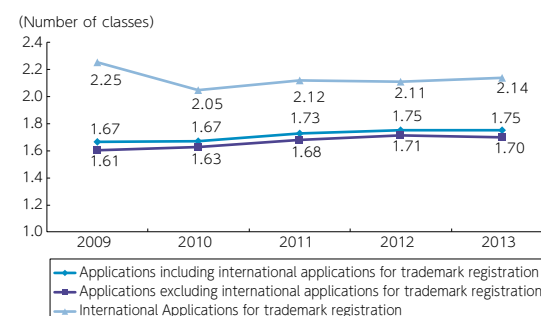
**Figure 1-1-27 Changes in the Number of Trademark Applications**



<sup>1</sup> International applications under the Madrid Protocol designating the JPO (See Article 68-9 of the trademark Act of Japan)

<sup>2</sup> When applicants file applications to register trademarks, the applications must designate one or more goods (services) to which the trademarks should be applied and describe their corresponding classes in the requests. Goods and services are classified into 45 classes.

**Figure 1-1-28 Changes in the Average Number of Classes Designated per Application**



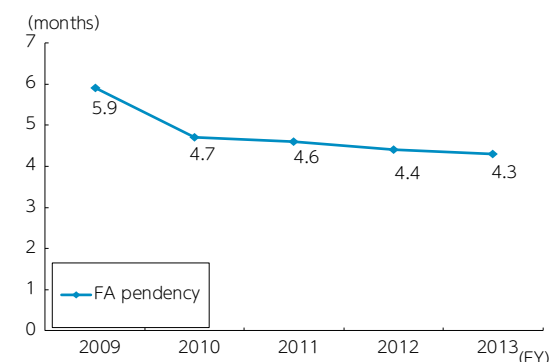
Note:

The number of classes was divided by the number of applications to obtain the average number of classes for each year.

#### 2) Status of Trademark Examination

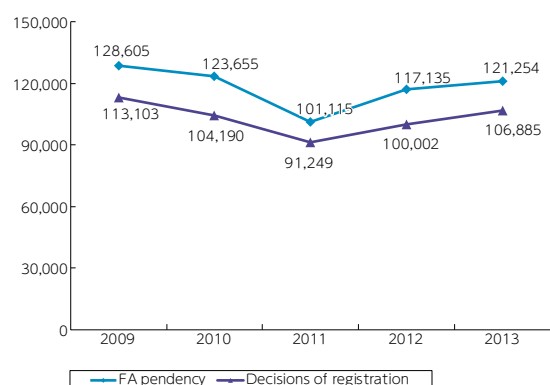
The JPO has been working to improve the efficiency of the examination process through enhancing computerization and outsourcing work to the private-sector.<sup>3</sup> As a result, in 2013, the period from the filing date to the date of issuing the first notice of examination results, i.e., the first action (FA) pendency was 4.3 months (See Figure 1-1-29). In 2013, the number of FAs has increased compared with that in 2012, and that of trademark registrations has also increased (See Figure 1-1-30).

**Figure 1-1-29 Changes in the Average FA Pendency in Trademark Examination**



<sup>3</sup> In FY2013, preliminary searches on distinctiveness of trademarks, unclear indication of goods and services, and similarity of figures, which are required for trademark examinations, were conducted by the Japan Patent Information Organization (Japio). Examiners make use of these search results in trademark examinations.

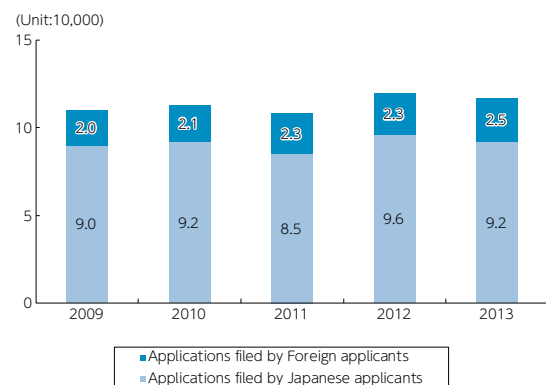
**Figure 1-1-30 Changes in the Number of FAs and the Number of Decisions to Register Trademark**



## (2) Trends in applications for trademark registrations in Japan

### 1) Breakdown of Trademark Applications for Trademark Registration in Japan

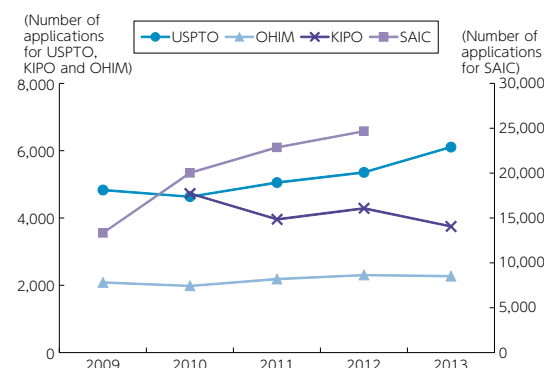
**Figure 1-1-31 Breakdown of Trademark Applications in Japan**



### 2) Number of Applications for Trademark Registrations filed with the Foreign Offices by Japanese Applicants

The number of applications for trademark registrations filed in 2013 with the USPTO by Japanese applicants increased by 14.0% year-on-year. However, that with the OHIM and that with the KIPO decreased by 1.5% and 12.6% year-on-year, respectively.

**Figure 1-1-32 Changes in the Number of Applications Filed by Japanese for Trademark Registrations with Foreign Offices**



	2009	2010	2011	2012	2013
USPTO	4,832	4,633	5,054	5,358	6,110
OHIM	2,082	1,979	2,181	2,302	2,268
SAIC	13,340	20,021	22,866	24,676	—
KIPO	—	4,727	3,961	4,288	3,748

Note:

USPTO: Since the USPTO does not publish the number of applications, the figures given here refer to the number of application classes. The figures for each year are on an annual basis counted from October in the previous year to September in the year indicated. (Example) FY2013: October, 2012 - September, 2013

SAIC: Use the vertical axis on the right side for the number of applications. Since the SAIC does not publish the number of applications, the figures given here refer to the number of application classes. The number of applications in 2013 was not publicized at the time of this annual report's publication.

KIPO: The figures do not include the number of applications for international registrations under the Madrid Protocol.

Sources:

USPTO: USPTO Annual Report

OHIM: OHIM website

SAIC: CTMO Annual Report (2009 - 2012)

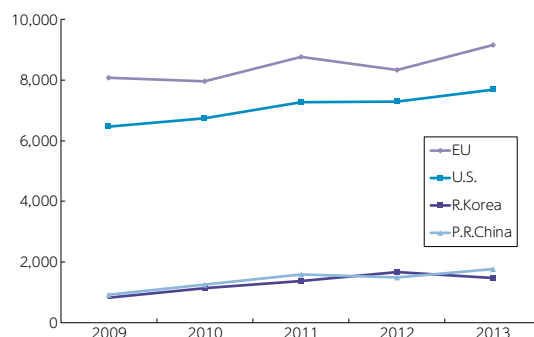
KIPO: KIPO Annual Report (2010 - 2012)

Data provided by the KIPO (2013) (provisional values)

### 3) Number of Applications Filed by Foreign Applicants for Trademark Registrations with the JPO

In 2013, the number of applications filed by foreign applicants for trademark registration with the JPO increased by 7.3% year-on-year to 25,179, in total. The number of applications filed by Chinese applicants, EU applicants and U.S. applicants increased by 17.2%, 9.9% and 5.4%, respectively, while that filed by Korean applicants decreased by 12.3%.

**Figure 1-1-33 Changes in the Number of Applications Filed by Foreign Applicants for Trademark Registrations with the JPO**



	2009	2010	2011	2012	2013	Percentage to total (2013)
U.S.	6,461 (1,767)	6,748 (1,992)	7,275 (2,320)	7,294 (2,379)	7,690 (2,719)	30.5%
EU	8,079 (6,337)	7,960 (6,005)	8,775 (6,895)	8,340 (6,442)	9,167 (7,260)	36.4%
P.R.China	918 (589)	1,259 (764)	1,584 (938)	1,498 (779)	1,755 (1,147)	7.0%
R.Korea	822 (135)	1,141 (187)	1,381 (277)	1,671 (312)	1,465 (277)	5.8%
Others	5,102 (1,802)	5,102 (1,866)	5,102 (1,980)	5,102 (1,861)	5,102 (2,284)	20.3%
Total	20,367 (10,630)	21,356 (10,814)	23,387 (12,410)	23,463 (11,773)	25,179 (13,687)	100.0%

Notes:

Figures in parentheses are the numbers of international applications for trademark registration under the Madrid Protocol out of the total.

#### 4) Trends in International Trademark Applications Filed for International Registrations under the Madrid Protocol<sup>1</sup>

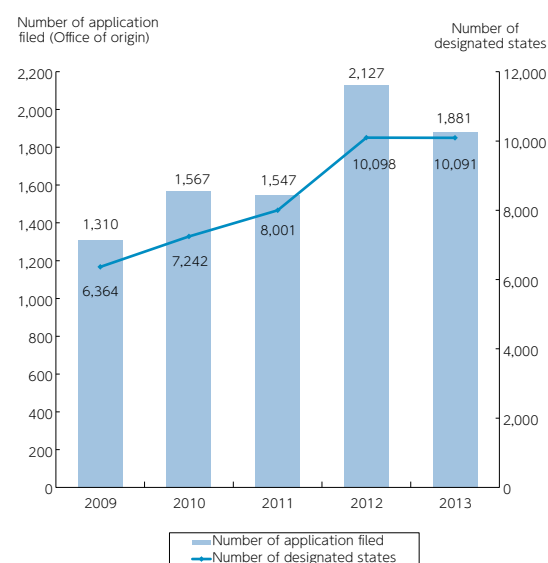
##### a. Applications filed by Japanese with Foreign Offices

The number of international applications

<sup>1</sup> Outline of the international trademark application system under the Madrid Protocol: Based on a trademark applied for or registered with an Office of one of the Contracting Parties (Office of origin), a request for designating an Office/Offices of Contracting Party (designated Office) for which protection is sought is filed for international registration with the WIPO International Bureau (IB) through the Office of origin. This application for the international registration is registered in the International Register managed by the IB. The IB sends the notification of an extension to the designated Contracting Party to the designated Office. The international registration is protected in the designated Contracting Party unless the designated Office notifies reasons for refusal within one year or 18 months by declaration (18 months in the case of Japan).

filed by Japanese in 2013 to register<sup>2</sup> trademarks with foreign Offices decreased 11.6%, and the number of designated states has remained almost unchanged compared with that in 2012.

**Figure 1-1-34 Changes in the Number of International Trademark Applications (Filed with the JPO as an office of origin for International Registrations under the Madrid Protocol)**



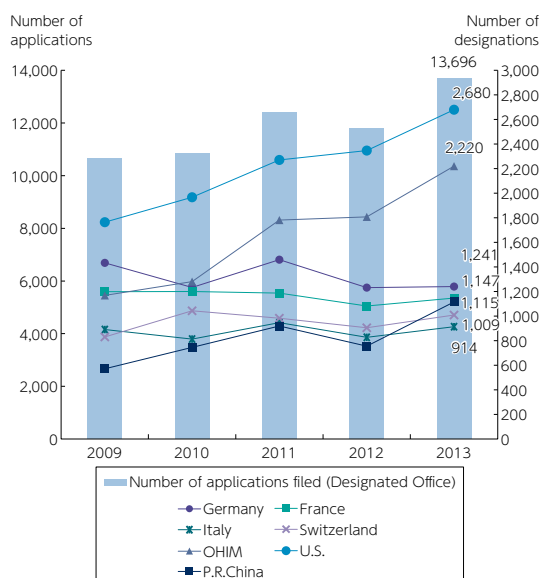
##### b. International Trademark Applications Designated to Japan by Foreign Applicants under the Madrid Protocol<sup>3</sup>

The number of international trademark applications designated to Japan by foreign applicants in 2013 under the Madrid Protocol increased 16.2% year-on-year, in total. Especially, the number of applications filed by applicants in China, the OHIM and the United States increased significantly by 47.7%, 22.9% and 14.1%, respectively.

<sup>2</sup> International applications filed with the JPO as an Office of origin (See Article 68-2 of the Trademark Act).

<sup>3</sup> International trademark applications filed with the JPO as a designated Office by foreign applicants (See Article 68-9 of the Trademark Act).

**Figure 1-1-35 Changes in the Number of International Trademark Applications Designated to Japan (Filed with the JPO from Foreign Countries under the Madrid Protocol)**



## 5. Trials and Appeals

This section describes trends in requests for trials and appeals, and those in examinations conducted by the JPO Trial and Appeal Department as well as those in lawsuits filed against the JPO Trials and Appeals Department's decisions.

### (1) Status of Trials and Appeals

#### 1) Trends in Requests for Trials and Appeals

##### a. Trends in Appeals against Examiners' Decisions of Refusal<sup>1</sup>

The number of appeals against examiners' decisions of refusal for patents was 24,644, remaining almost unchanged year-on-year.

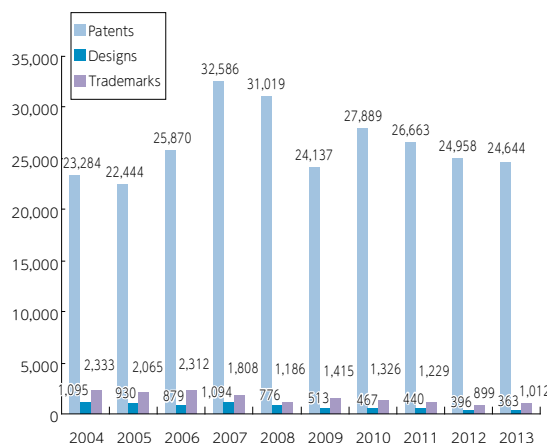
The number of appeals against examiners' decisions of refusal for trademarks was 1,012, showing a rapid increase by 12.6% year-on-year (See Figure 1-1-36).

In looking at the results in terms of reconsiderations by examiners before appeal proceedings<sup>2</sup> for patents begin, we find that the

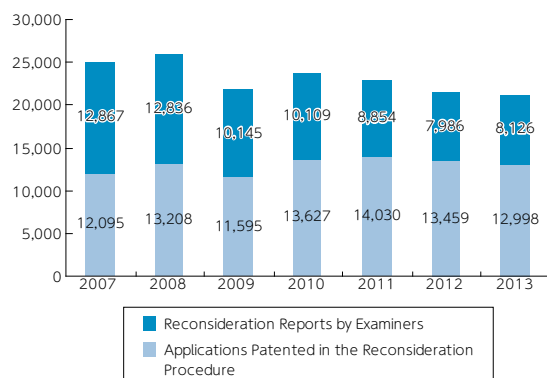
percentage of applications for which the original decisions of refusal were cancelled and changed to decisions to grant patents has been increasing.

The number of patents granted based on reconsiderations by examiners before appeal proceedings took place has exceeded the number of applications for which the original decision of refusal was not changed. In other words, the number of reconsideration reports<sup>3</sup> made to the JPO Commissioner based on reconsiderations by examiners before appeal proceedings has increased since 2008 (See Figure 1-1-37).

**Figure 1-1-36 Changes in the Number of Appeals against an Examiner's Decision of Refusal**



**Figure 1-1-37 Changes in Results of Reconsiderations by Examiners before Appeal Proceedings (Patents)**



<sup>1</sup> Trials and Appeals requested to the JPO in opposition to the decision of refusal made by a patent examiner.

<sup>2</sup> Examiners examine applications whose claims have been amended at the time of filing requests for appeals against the examiners' decisions of refusal based on the provision of

Article 162 of the Patent Act. These examinations are called "reconsiderations by examiners before appeal proceedings."

<sup>3</sup> When examiners determine that decisions of refusal are to remain unchanged, even after amendments are made based on reconsiderations by the examiners before appeal proceedings, the results are to be reported to the JPO Commissioner as "reconsideration reports." Then, a panel conducts proceedings.

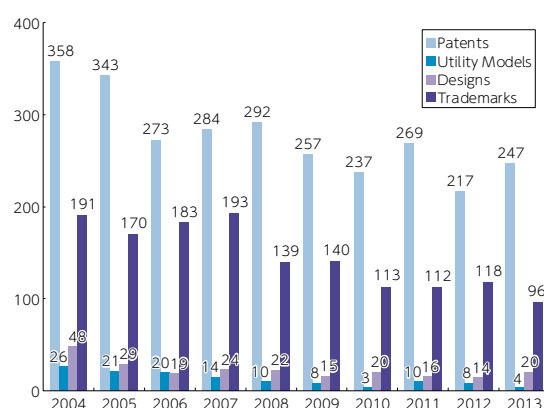


### b. Trends in Trials for Invalidation<sup>1</sup>

The number of requests for trials for patent invalidation decreased to 217 in 2012, but increased to 247 in 2013.

The number of requests for trials for invalidation for utility models has been less than or equal to 10 since 2008. The number of requests for trials for invalidation for designs has been around 20 since 2006.

**Figure 1-1-38 Changes in the Number of Requests for Trials for Invalidation**



### c. Trends in Requests for Trials for Corrections<sup>2</sup> (Patent and Utility Model (examined))

The number of requests for trials for corrections of patents and utility models was around 150 between 2007 and 2011. However, a slight increase has been seen in the past two years: 179 in 2012 and 238 in 2013 (See Figure 1-1-39).



<sup>1</sup> Trials and Appeals requested to the JPO for the invalidation of already registered patents, utility models, designs and trademarks.

<sup>2</sup> Trials for correcting the description, claims or drawings on their own after patentees acquire the rights.

**Figure 1-1-39 Changes in the Number of Requests for Trials for Corrections<sup>\*1</sup>**



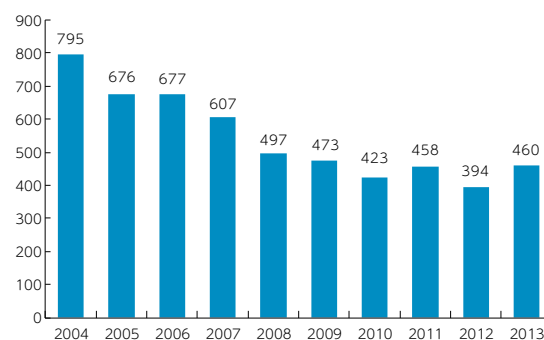
Note:

<sup>\*1</sup> Total number of patents and utility models (examined)

### d. Trends in Oppositions<sup>3</sup>

The number of oppositions to trademark registrations decreased to 394 in 2012, but it increased to 460 in 2013 (See Figure 1-1-40).

**Figure 1-1-40 Changes in the Number of Trademark Rights Subject to Oppositions**



Note:

The system enabling persons to file oppositions to patents was abolished with the revision made to the law in 2003. That system was integrated into the invalidation trial system on January 1, 2004.

### e. Trends in Trials for rescission of trademark registrations

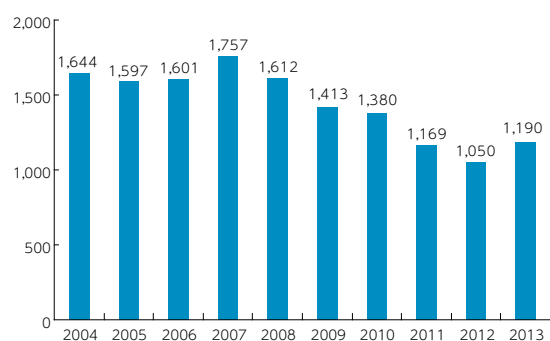
The number of requests for trials for rescission of trademark registrations<sup>4</sup> decreased

<sup>3</sup> A system which permits the cancellation of a trademark right for a certain period after it has been registered.

<sup>4</sup> Trials for rescinding trademarks when the owners of the trademark right have not used the trademarks for more than three consecutive years

to 1,050 in 2012, but it increased to 1,190 in 2013 (See Figure 1-1-41).

**Figure 1-1-41 Changes in the Number of Requests for Trademark Cancellation Trials**



## 2) Trends in Examinations Conducted by the JPO Trial and Appeal Department

### a. Patents and Utility Models

The average first action pendency for appeals against examiners' decisions of refusal in 2013 was 12.3 months (See Table 1-1-42).

Looking at the results of appeals against examiners' decisions of refusal, the percentage of decisions in which appeals were sustained (appeal success rate<sup>1</sup>) has been increasing since 2008. It was 55% in 2013 (See Table 1-1-43 and Figure 1-1-44).

Examinations involving trials for invalidation are conducted on a priority basis in order to settle disputes over rights as soon as possible, depending on the circumstances. In 2013, the average period for proceedings was 8.7 months (See Table 1-1-42). Oral proceedings<sup>2</sup> have been used more frequently in invalidation trials for patents and utility models in order to raise the quality of the trial examination process. As a result, the number of oral proceedings conducted in 2013 was 203.

Efforts were made to speed up trials for corrections on a priority basis because applicants often request to have trials in connection with infringement lawsuits. As a result, the average period for proceedings in 2013 was 2.0 months (See Table 1-1-42).

**Table 1-1-42 Current Status of Trial and Appeal Examination Processing in 2013**

	Appeals against an examiner's decision of refusal		Invalidation trials		Limitation/Correction trials		Oppositions		Cancellation trials	
	No. of first actions* <sup>1</sup>	Average first action pendency (months)* <sup>2</sup>	No. of final dispositions* <sup>3</sup>	Average trial pendency (months)* <sup>4</sup>	No. of final dispositions* <sup>3</sup>	Average trial pendency (months)* <sup>4</sup>	No. of final dispositions* <sup>3</sup>	Average trial pendency (months)* <sup>4</sup>	No. of final dispositions* <sup>3</sup>	Average trial pendency (months)* <sup>4</sup>
Patent/ Utility model	11,247	12.3	247	8.7	212	2				
Design	393	6.9	5	8.1						
Trademark	841	5.7	100	7.6			379	6	1,060	5.3

Notes:

\*1. Number of cases in which the first examination results were notified

\*2. Average period from the date of appeal until the date the notification of the first examination results was sent

\*3. Includes withdrawals and abandonments, but does not include advanced notices of trial decisions in trials for patent invalidations

\*4. Average period of time from the date on which the trial was requested up until the date of the final disposition (decision or ruling). (However, in case an advance notice of a trial decision is issued in trial for patent invalidation, the period will be up until the date on which the notice is issued)

<sup>1</sup> The appeal success rate means the percentage of cases in which the Trials and Appeals Department decided that the appeal is sustained, in relation to the total number of decisions and rulings.

<sup>2</sup> In this system, the panel conducts questioning orally so that the parties concerned are encouraged to establish their appeals appropriately and their points in issue are well organized.

**Table 1-1-43 Trial and Appeal Results in 2013\*<sup>1</sup>**

	Ex-parte appeals* <sup>2</sup>		Inter-partes trials* <sup>3</sup>		Oppositions	
	Appeal accepted	Appeal denied* <sup>4</sup>	Appeal accepted	Appeal denied* <sup>4</sup>	Appeal accepted* <sup>5</sup>	Appeal denied* <sup>6</sup>
Patent/Utility model	6,890	5,492	48	143		
Design	252	134	0	4		
Trademark	627	245	849	175	42	296

Notes:

\*1. Numbers are only for cases in which final trial/appeal decisions have been made

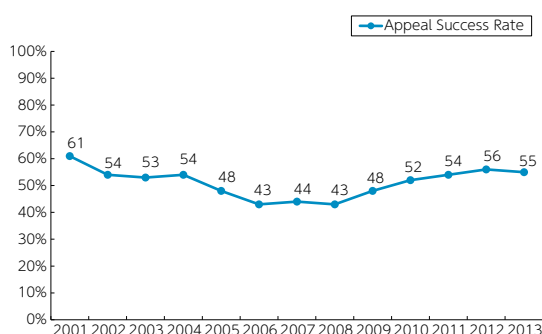
\*2. Appeals against examiners' decisions of refusal, appeals against examiners' rulings to dismiss amendments, and trials for correction

\*3. Trials for invalidation and trials for cancellation

\*4. Includes dismissals

\*5. Includes partial revocations

\*6. Includes dismissals

**Figure 1-1-44 Changes in the Appeal Success Rate in Appeals against Examiners' Decisions of Refusal (Patents)**

Note:

The appeal success rate is the number of acceptances, divided by the total number of acceptances and denials (including dismissals).

#### b. Design

As for the appeal/trial process against examiners' decisions of refusal, the average first action pendency in 2013 was 6.9 months.

With regard to trials for invalidations of design registrations, trials were conducted on a priority basis in order to settle disputes over rights as soon as possible like those of patents and utility models. In 2013, the average period for proceedings was 8.1 months (See Table 1-1-42).

#### c. Trademarks

The appeal process against examiners' decisions of refusal has become more efficient in recent years. The average first action pendency in 2013 was 5.7 months.

With regard to trials for invalidations

trademark registrations, trials were conducted on a priority basis in order to settle disputes over rights as quickly as possible. In 2013, the average period for proceedings was 7.6 months.

The average period for proceedings for oppositions in 2013 was 6.0 months and that for cancellation trials was 5.3 months (See Table 1-1-42).

### (2) Lawsuits against the JPO Trials and Appeals Department's Decisions

#### 1) Trends in the Number of Lawsuits

Looking at the number of lawsuits filed against the JPO Trials and Appeals Department's decisions<sup>1</sup> in 2013, we found that the number of ex-parte appeals decreased for patents and designs, but increased for trademarks, compared to the figures for 2012. With regard to lawsuits against ex-parte appeal decisions for patents in 2013, the number of lawsuits that the Trials and Appeals Department decided to deny appeals to was 5,492 and the number of lawsuits filed against these decisions was 147. The lawsuit-filed rate<sup>2</sup> was 2.7%, which is almost the same rate as that of the previous year (2.6%). (See Table 1-1-43 and Table 1-1-45)

The number of inter-parties trials in 2013

<sup>1</sup> A lawsuit filed to the IP High Court to reverse an appeal/trial decision made by the JPO, by a person who is dissatisfied with the appeal/trial decision.

<sup>2</sup> The percentage of appeal/trial decisions and rulings for lawsuits that have been filed in relation to the total number of appeal/trial decisions and rulings

decreased in all fields of industrial property rights, compared to that in 2012 (See Table 1-1-45).

**Table 1-1-45 Number of Actions in 2012\*<sup>1</sup>**

	Patent/Utility model	Design	Trademark
Ex-parte appeals* <sup>2</sup>	147(175)	8(16)	19(14)
Inter-partes trials* <sup>3</sup>	121(167)	0(6)	52(71)
Oppositions			1(6)

Notes:

\*1. The figures for 2011 are in parentheses.

\*2. Appeals against examiners' decisions of refusal, appeals against examiners' rulings to dismiss amendments, and trials for corrections

\*3. Trials for invalidations and trials for cancellations

## 2) Trends in the Number of Court Decisions

Looking at the number of court decisions against the JPO Trials and Appeals Department's decisions in 2013, we found that the number of dismissal of a claim decreased in patents and designs, and increased in trademarks

compared with those of the previous year in the case of ex-parte appeals. The number of inter-parties trials for patents and designs remained almost unchanged while that for trademarks increased year-on-year (See Table 1-1-46).

**Table 1-1-46 Number of Court Decisions in 2013\*<sup>1</sup> \*<sup>2</sup>**

	Patent/Utility model		Design		Trademark	
	Claim dismissed	Appeal Dept.'s decision cancelled	Claim dismissed	Appeal Dept.'s decision cancelled	Claim dismissed	Appeal Dept.'s decision cancelled
Ex-parte appeals* <sup>3</sup>	104(115)	35(37)	2(9)	0(7)	16(13)	1(7)
Inter-partes trials* <sup>4</sup>	76(74)	28(31)	1(0)	0(0)	37(33)	15(19)
Oppositions					0(6)	0(1)

Notes:

\*1. The figures for 2012 are in parentheses.

\*2. This does not include decisions to reverse appeal/trial decisions specified in Article 181, Paragraph 2 of the Patent Act and rulings to reverse appeal/trial decisions that have been confirmed as corrected during lawsuits.

\*3. Appeals against an examiners' decisions of refusal, appeals against examiners' rulings to dismiss amendments, and trials for corrections

\*4. Trials for invalidations and trials for cancellations





## Chapter 2

### Current Status of Intellectual Property Activities in Companies and Universities

Japanese users' activities concerning intellectual property vary, depending on their characteristics such as their sizes of business, their technical fields and other factors. This chapter introduces the current status of intellectual property activities of users with different sizes of business and other characteristics in Japanese companies and universities, and the trends in application filings for patents, designs and trademarks in and outside of the country.

#### 1. Intellectual Property Activities in Companies

Along with the growth of globalized business activities, the environment surrounding intellectual property activities by Japanese companies has changed to a large degree. This section introduces trends in the number of applications being filed and other intellectual property activities.

##### (1) Changes in the Number of Patent and Utility Model Applications

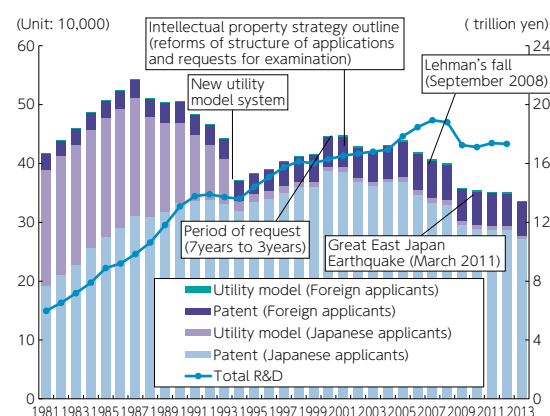
Looking at the changes in the number of patent applications being filed by Japanese companies, we can see the medium- to long-term perspective that there has been a slight increase between 1981 and 1987 in line with the increase in total R&D costs (See Figure 1-2-1). Since the revised multiple claim<sup>1</sup> system was introduced in 1998, the pace of increase has slowed down. However, the number of patent applications continued to increase slowly, and reached its peak in 2000 (387,000 applications). Subsequently, there has been a slight downward, and the number of patent applications being filed by Japanese companies was 272,000 in 2013. There was a significant decrease from 2008 to 2009. The global economic recession precipitated by the

bankruptcy of Lehman Brothers in September 2008 is considered to be a reason for this decrease.

For 27 years, from 1981 to 2007, the number of patent applications filed by foreign applicants gradually increased. After reaching a peak of 63,000 applications in 2007, it decreased to around 53,000 in 2009 due to the global economic recession precipitated by the bankruptcy of Lehman Brothers in September 2008. Thereafter the number took a slight upward turn. The number increased to about 57,000 in 2013.

Looking at the number of patent applications by scale of application ranking<sup>2</sup>, we see that about 30% of all the annual applications were filed by the top 30 companies, and more than 60% were filed by the top 300 companies (See Figure 1-2-2). The number of applications filed by the top 30 companies, whose applications accounted for about 30% of all the annual patent applications, decreased from 106,000 in 2011 to 94,000 in 2013 (See Figure 1-2-3).

**Figure 1-2-1 Changes in the number of patent applications and utility model applications filed by Japanese and foreign applicants; and the total R&D costs**



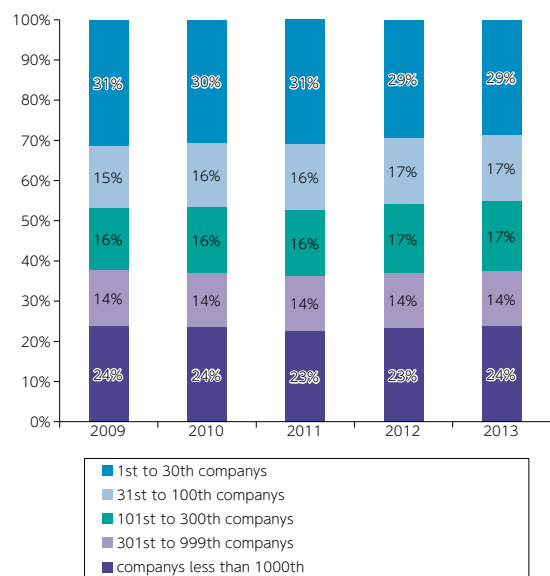
Note:

Utility models include both former and new utility models.

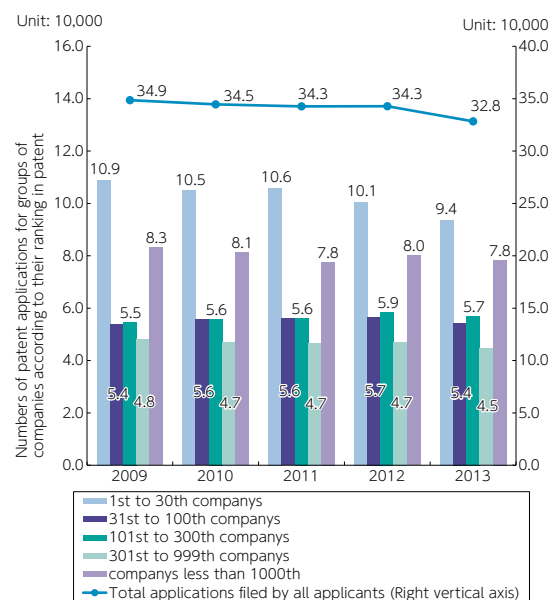
<sup>2</sup> For the trends in the number of patent applications by ranking, the number of patent applications was calculated by categorizing the top-ranking companies for applications into five classes (1st to 30th, 31st to 100th, 101st to 300th, 301st to 999th and less than 1,000th) and then the number of patent applications for each year from 2008 to 2012 was also calculated. (Companies subject to the calculation vary every year).

<sup>1</sup> A system that allows the applicant to state several claims that satisfy the unity of applications in the scope of claims

**Figure 1-2-2 Ratio of companies by scale of application ranking in the number of patent applications filed per applicant<sup>1</sup>**



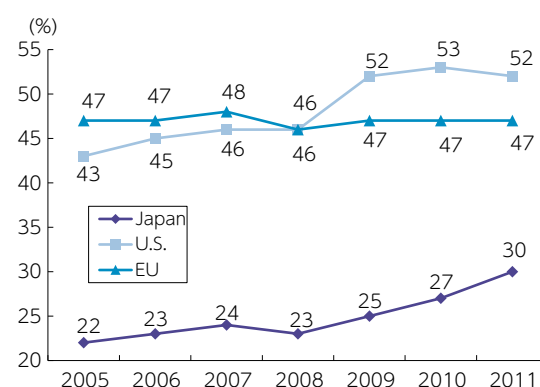
**Figure 1-2-3 Change in the number of patent applications by scale of application ranking**



<sup>1</sup> The sum of ratios in 2013 is 101% because the figures were rounded off.

The global application rate<sup>2</sup> of Japanese applicants has been increasing gradually since 2008, reaching at about 30% in 2011. However, it is still low compared with the global application rate of applicants residing in the U.S. and that of applicants residing in Europe, which are about 50% (See Figure 1-2-4).

**Figure 1-2-4 Global application rates of Japanese, American and European applicants**

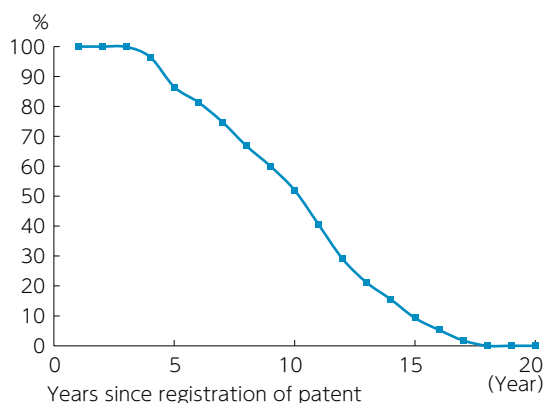


## (2) Existing Rate of Patent Rights

The existing rate of patent rights, as based on the number of years that the patent rights had been registered in Japan, decreased to 87% within 5 years, 52% within 10 years, and 12% within 15 years since the rights were registered (See Figure 1-2-5).

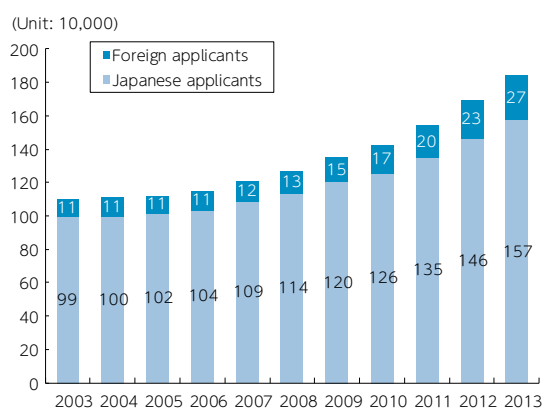


<sup>2</sup> The global application rate refers to the rate of patent applications filed also with other countries out of the patent applications filed with the JPO, the EPO and the USPTO each year. The number of countries where foreign applications are filed does not affect the global application rate. The global application rate of Japan was created using the JPO data. The patent applications include international applications under the Patent Cooperation Treaty (PCT) filed directly with each Office without filing national applications. The global application rates of the US and Europe were created using data of the World Patents Index (WPI). WPI data is for disclosed patent applications and only calculates disclosed patent applications at the time of acquiring data.

**Figure 1-2-5 Existing rate of patent rights**

- The existing rate refers to the number of registrations still in effect with respect to the total number of patent right registrations.
- The data is as of the end of 2013.

The number of patents owned by Japanese applicants in Japan has been increasing year by year, and reached 1.57 million by the end of 2013 (1.6 times as large as 990,000 in 2003). The number of patents owned by foreign applicants reached 270,000 by the end of 2013 (about 2.4 times as large as 110,000 in 2003) (See Figure 1-2-6).

**Figure 1-2-6 Number of existing patent rights owned by Japanese and foreign applicants**

## 2. Intellectual Property Activities in Universities

### Efforts to Support Intellectual Property Activities in Universities

Universities in Japan that own abundant research resources<sup>1</sup> play a major role in creating intellectual property. Based on this understanding, university intellectual property headquarters<sup>2</sup> and technology licensing organizations (TLOs) have been established nationwide. In addition, several initiatives have been introduced, including sending Intellectual Property Advisors to universities and reducing/exempting annual patent fees and examination request fees.<sup>3</sup>

In line with efforts to promote academia-industry cooperation, as well as with the progress being made in open innovation in recent years, joint research at universities has been increasing. The number of joint research projects conducted at universities in FY2012 increased to 20,147 over the previous fiscal year (up about 848 cases) and the number of contract research projects increased to 21,217 over the previous fiscal year (up about 287 cases).

The number of patent applications that universities filed was less than 2,000 in 2002. This number rapidly increased to more than 7,300 in 2005 after national universities were incorporated as national university corporations in 2004. However, the number of patent applications stopped steadily increasing after peaking in 2007, and has been gradually decreasing (See Figure 1-2-9).

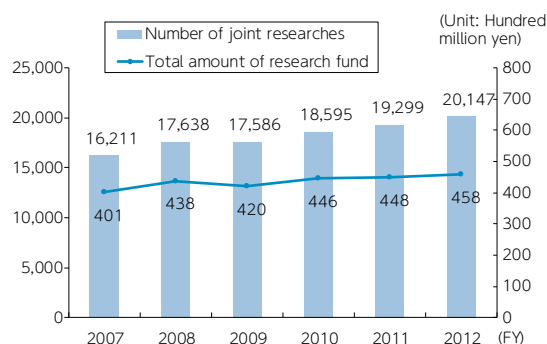


<sup>1</sup> According to the "2013 Outline of the Science and Technology Research Investigation Results" (December 18, 2013) prepared by the Ministry of Internal Affairs and Communications (MIC), about 20.6% of the entire research fund of Japan is invested in universities in FY2012.

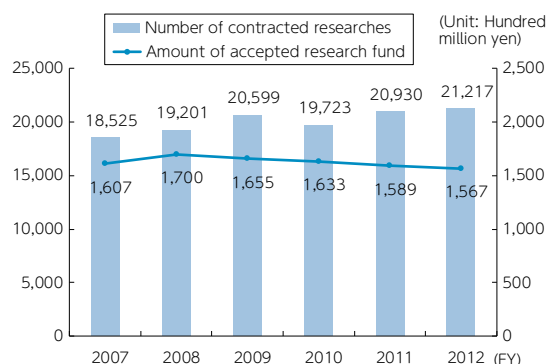
<sup>2</sup> Departments at universities that strategically create, acquire, manage and utilize intellectual property at the universities.

<sup>3</sup> See Part 2, Chapter 6, 2. (3).

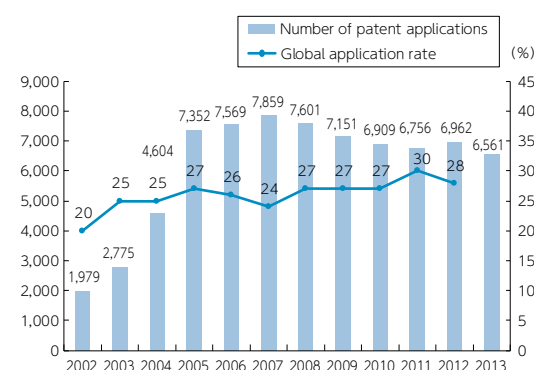
**Figure 1-2-7 Change in achievements of joint research projects at universities**



**Figure 1-2-8 Change in achievements of contract research projects at universities**



**Figure 1-2-9 Change in the number of patent applications filed by universities in Japan and the global application rate**

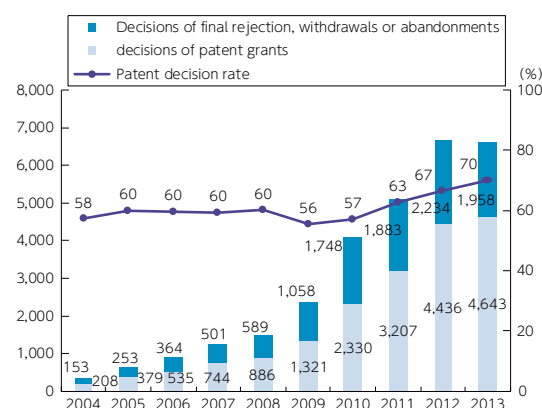


Note:

Patent applications filed by universities in Japan are those that were found by searching and calculating applications and the applicants of these applications were identified as university presidents, educational corporations that own universities, and applications filed by approved TLOs. They also include applications that were filed jointly with companies.

Looking at the trend in examination of patent applications filed by universities, the rate of patented applications for applications, for which examination results were publicized in 2013, was 70% (patent allowance rate). The patent allowance rate of universities is higher than that for all applicants<sup>1</sup> (See Figure 1-2-10).

**Figure 1-2-10 Change in current status of examination results of patent applications filed by universities in Japan**



Note:

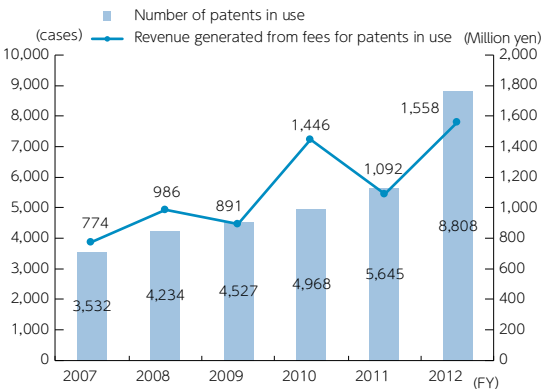
Patent applications filed by universities in Japan are those that were found by searching and calculating applications and the applicants of those application were identified as university presidents, educational corporations that own universities, and applications filed by approved TLOs. They also include applications that were filed jointly with companies.

The number of patents in use by universities from FY2007 and after has been steadily increasing, rising by about 2.5 times in five years (FY2007 to FY2012). While the revenue generated from fees for patents in use has repeated ups and downs, it has increased about 2.0 times in the same 5-year period. The increase in revenue generated by fees for patents in use in FY2012 was about 470 million yen from the previous fiscal year (up 42.7%).

<sup>1</sup> See Part 1, Chapter 1, 1.(1)4) (Figure 1-1-10).



**Figure 1-2-11 Change in the number of patents in use at universities and their revenue**



Source:  
Created by the JPO based on “FY2012 Status of Academia-Industry Cooperation at Universities” (December 13, 2013) prepared by the MEXT.

There is a possibility that a number of research results obtained by universities will be put into practical use after a long period of time and these results will be patented and become dominant in the future. The private sector has high expectations for this. Universities will need to cooperate even further with the private sector such as actively transferring information and conducting more flexible contract negotiations. At the same time, since expectations are high in terms of universities cooperating to create innovation in local areas, universities will have to play a role not only to provide seeds but also evaluate those seeds and develop human resources in the intellectual property field.

