

Key Numbers

Patent grant rate at JPO

2019	2020
74.9%	74.4%

- ✓ Patent grant rate is similar to that of the past few years. It has stably remained high.
- ✓ The number of applications has decreased slightly, mainly due to the impact of COVID-19.

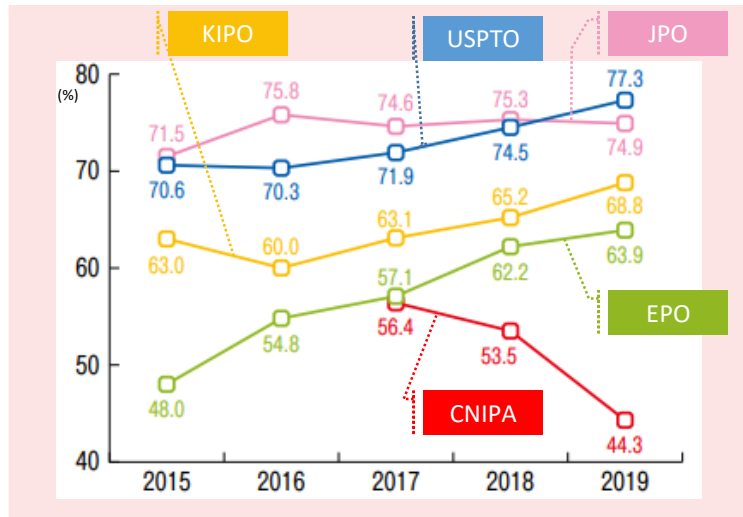
Number of JPO filings

2019	2020
307,969	288,472

The average period for OAs/Decision in 2019 (Months)

	1 st OAs	Decision issued on Examination Stage
JPO	9.5	14.3
USPTO	13.3	21.8
EPO	5.5	28.1
CNIPA	14.9	22.2
KIPO	10.8	15.6

Patent grant rate in major five countries



Number of Patent Applications for AI-Related Inventions

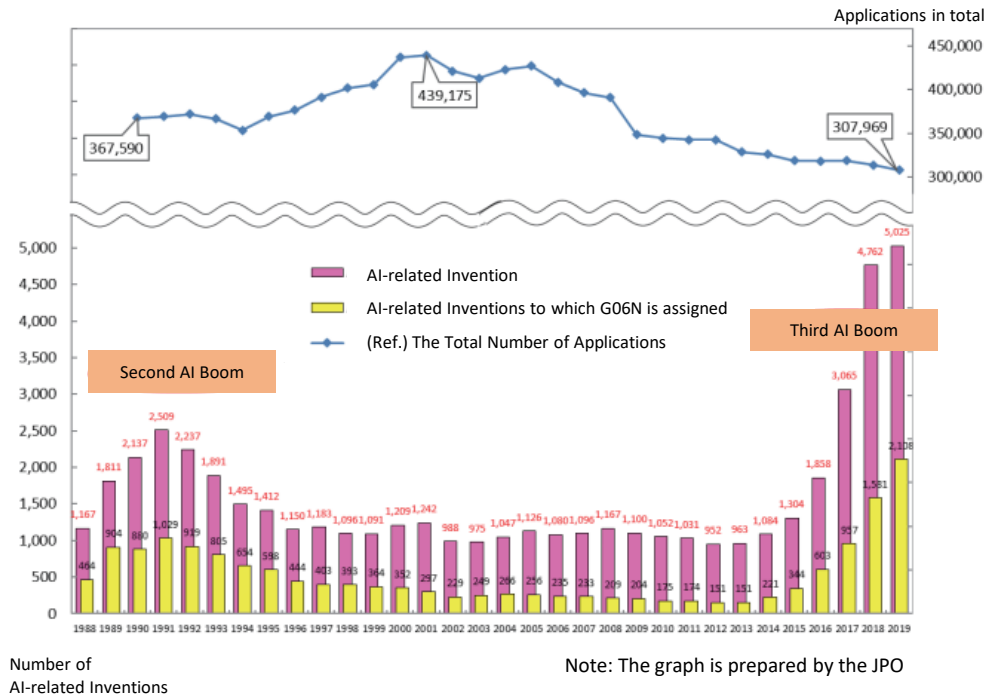
The JPO conducted a survey of the number of patent applications for AI-related inventions. The subjects of the survey are as follows:

- AI core inventions (FI:G06N)
- Inventions in which AI is applied to various technical fields

The number of AI-related applications has shown remarkable growth from 2017 to the present (this is considered to be the third AI boom). AI-related inventions accounted for 1.6% of all patent applications in 2019.

The most common areas to which AI technology is applied are image processing, information retrieval and recommendation, business-related applications, and medical diagnostics. Between 2015 and 2019, applications in the control, robotics and traffic control areas have remarkably increased.

It is highly likely that such growth can be attributed to sparse JPO examination criteria for AI-related inventions in addition to the technologies in demand.



Note: The graph is prepared by the JPO

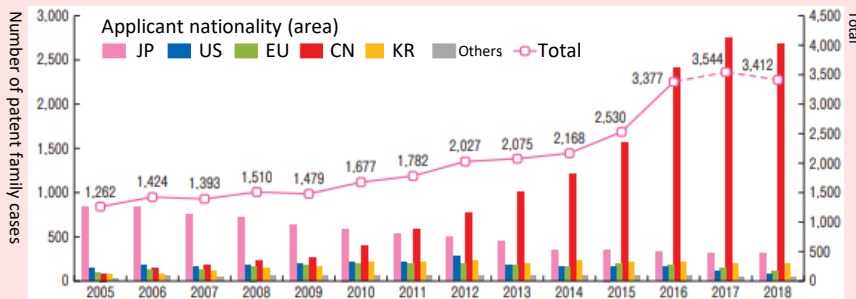
Technical Trends

The JPO releases technology trend reports for patent applications every year. The reports focus on promising technologies which should be advanced as part of national policy and which may lead to market creation.

1. Touch Sensing
2. Smart Agriculture
3. MaaS (Mobility as a Service)
In View of Self-Driving Technology
4. Medium Molecule Medicine
5. Recycling of Plastic Resources
6. Machine Translation
7. Image Processing in Imaging Devices

Pickup: Recycling of Plastic Resources (Number 5 in the List)

The number of patent family cases for the complete recycling of plastic resources has seen a rising trend and the number of family cases filed by Chinese applicants has been growing since 2010. On the other hand, the number of patent families filed by Japanese applicants is on a slight decline. In overall family numbers, Chinese applicants have accounted for the largest, 48.1% of the total, followed by Japan (25.4%), Korea (8.3%), the U.S. (8.2%) and Europe (7.6%). Japanese applicants have more applications related to "molding technology" of "molded products" than other nations, showing a technical advantage.



The number of patent families by applicant nationality (area)

Filed at: JPO, USPTO, EPO, CNIPA, KIPO
Application year (Priority year): 2005-2018

JPO proactively delivering information for overseas users

1. The JPO Quick Reads

The Quick Reads contains JPO's policies and the latest statistics that can be of use to overseas users in English. 24 articles were posted in FY2020.

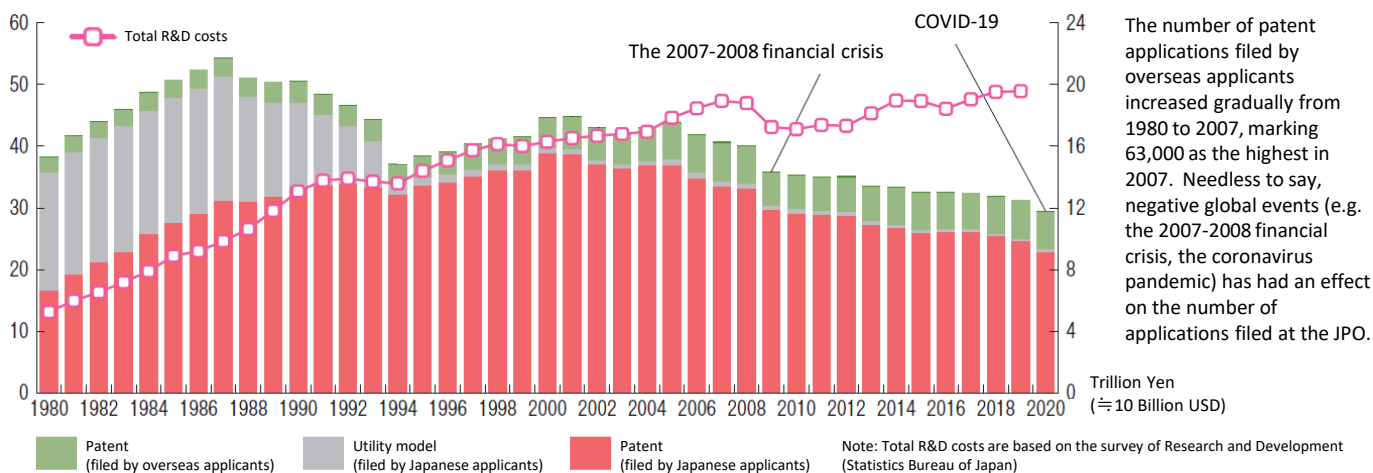
2. The JPO Key Features

The JPO has announced their initiatives in action; *speedy & high quality of examination, world's largest global network by PPH, examination case examples to AI and IoT related technologies, collective examinations for IP portfolio supporting business strategy, interview examination, etc.*

3. The Step-by-step Guide

A navigation page that summarizes information by jurisdiction in chronological order of application, examination and registration. The guide is intended to make it easier for overseas applicants to find information.

Forty-year trends in the number of patent applications and R&D costs



The number of patent applications filed by overseas applicants increased gradually from 1980 to 2007, marking 63,000 as the highest in 2007. Needless to say, negative global events (e.g. the 2007-2008 financial crisis, the coronavirus pandemic) has had an effect on the number of applications filed at the JPO.