Expectations for ASEAN IT systems

NAGANO Shiho

Patent Information Policy Planning Office
1. What’s FIT/Japan IP Global?
2. Bilateral DATA Exchanges
3. JPO IT systems
4. Hot Topics
5. Expectations for ASEAN patent offices
What’s FIT/Japan IP Global?
Funds-In-Trust Japan Industrial Property Global (FIT/Japan IP Global) supports developing countries to improve their knowledge of IP systems and enhance their IP capabilities to facilitate innovation and technology transfer worldwide.

Since the Japan Patent Office (JPO) made its first voluntary contribution to WIPO in 1987, it contributed to more than 90 million CHF in total to more than 80 countries in Asia and Pacific region and African region for supporting diverse activities in the field of Intellectual Property.
FIT Japan IP Global has supported the development of **WIPO’s IT systems** and organized **seminars or workshops** to encourage their use in developing countries.

From 2014 to 2019, WIPO’s support to IP offices in the ASEAN region and Africa region utilizing the FIT Japan IP Global has achieved following several milestones.

**WIPO CASE**
- developed and made available in the ASEAN region
- successfully linked to the IP5* One Portal Dossier
- public access was implemented through the IP5 Global Dossier and through WIPO PATENTSCOPE
  *IP5: JPO, USPTO, EPO, CNIPA and KIPO

**WIPO products**
- enhanced to provide better solutions for IP administration and for online filing and online publication of IP data

**ASEAN PATENTSCOPE**
- developed and patent data from 9 ASEAN offices has become available

**IP Register**
- developed one portal access to WIPO Publish, WIPO IPAS, WIPO Publish
Recent projects for IT systems development

**Digitization Project in Thailand**
- In 2022, WIPO completed a digitization project in Thailand in cooperation with the DIP and with support from the FIT/Japan IP Global.

**Sharing-Best-Practices Workshop on Smarter IP Office Business Services**
- From December 5 to 9, 2022, WIPO, together with the IPOPHL, co-organized a sharing-best-practices workshop on smarter IP office business services in Manila, the Philippines, with support from FIT/Japan IP Global.

**Integration of WIPO CASE functionality within IPAS**
- In 2022, WIPO completed a project to integrate WIPO CASE functionality within IPAS with support from the FIT/Japan IP Global.
DATA Exchanges
DATA Exchanges between IP Offices

Benefits by Data Exchange

For IP Offices

- Examiners can conduct the prior art search with the exchanged data

For Users

- Infringement search and technology trends search will be more accurate with the exchanged data

- Quality of examination of both IP office will be improved

- Both countries can boost their economy by welcoming more investments with less barriers for respective market entries
Current Status of DATA Exchanges

- We have data Exchange policies with individual 20 Countries.
  - United States, EPO, China, EUIPO, WIPO, Germany, France, Russia, Canada, Australia, Ukraine, Singapore, Thailand, Philippine, Malaysia, Vietnam, Indonesia, Thailand, and Saudi Arabia
- We are Exchanging data between individual 15 countries.

<table>
<thead>
<tr>
<th>Countries/Regions</th>
<th>Agreement</th>
<th>Data Exchange</th>
<th>Public provision</th>
<th>Current State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>○</td>
<td>△</td>
<td>×</td>
<td>Data has not been arrived since 2015. → Preparing new MOU</td>
</tr>
<tr>
<td>Thailand</td>
<td>○</td>
<td>○</td>
<td>×</td>
<td>Data has not been arrived since 2020. → Arriving Now.</td>
</tr>
</tbody>
</table>
| Malaysia          | ○         | △             | ×                | Data has abstract only. Data had better include followings.  
|                   |           |               |                  | ・ claim, description, figures  
|                   |           |               |                  | ・ gazettes of patent and design  
|                   |           |               |                  | Often cannot access download cite.  
|                   |           |               |                  | Data more than 10MB is impossible to be downloaded. |
| Vietnam           | ○         | ○             | ×                | Data has abstract only. Data had better include followings.  
|                   |           |               |                  | ・ claim, description, figures  
|                   |           |               |                  | ・ gazettes of patent and design |
| Indonesia         | ○         | ○             | ○                | Data has abstract only. Data had better include followings.  
|                   |           |               |                  | ・ claim, description, figures |
FOPISER (Foreign Patent Information Service)

- FOPISER provides exchanged data to Japanese users
  https://www.foreignsearch2.jpo.go.jp/

Select countries/regions

Enter search keywords

Documents can be viewed in Japanese by machine translation
JPO IT systems
Background of JPO Computerization

Before computerization (- 1990)

- Application
  - Bringing
  - Mailing

- Examination

Now

- Application
  - Bringing
  - Mailing

- Examination
  - Through Internet
    - Internet Application Software
  - JPO’s Receiving System
Applicants are able to submit an application to the JPO either online or on paper.
E-filing procedures in JPO

To Prepare e-filing circumstances:
- Purchase e-certification
- Download e-filing software

1. E-filing software imports HTML files and converts them into XML files. Applicants can verify the conversion results before filing.
   - 1) Applicants draft an application with commercially available word processing software such as “MS WORD” and save it as a HTML document.
   - 2) Applicants import the application into e-filing software. The e-filing software converts the HTML document into XML and conduct formality check roughly.

2. Register e-certification to the JPO.

3. Applicants submit the XML formatted documents to the JPO via e-filing software.

4. Applicants receive XML documents from JPO via e-filing software.
Benefits of computerization

Office’s benefits

● Improvement of the effectiveness of business operations

Public Users’ benefits

● Improvement of procedural convenience in filing, etc.
● Timely and user-friendly utilization of IP information
Benefits of gazettes processed by text

Office’s benefits

- Higher quality of search by full text
- Easy to write documents (grant/refusal, etc.) by editing the text of gazette

Public Users’ benefits

- Appropriate filing and right by searching and comparing with prior art
  → High quality filing lighten the load of patent examiner search
Hot Topics
– J-PlatPat and API –
J-PlatPat (Japan platform for patent information)

J-PlatPat is IP Data search service of JPO (run by INPIT), and one of the largest, internet-based patent information databases in Japan.

✓ 130 million domestic and foreign publications
  - Patent, Utility model, Design, and Trademark
  - Examination records, Trial/Appeal info.
    (updated 1 day after the reception)
  - Legal status, Global dossier information

✓ Simple and user-friendly interface.
  - “Simple search” with keywords without the specification of advanced criteria
  - AI-based machine translation

✓ Over 100 million accesses per year

URL: https://www.j-platpat.inpit.go.jp/
Search items of J-PlatPat

Searchable by text, classification, number, applicant, etc.
J-PlatPat - Release schedule

Released in 2023
✓ Relaxation of download ceilings (Entire publication DL, OPD examination document DL)
✓ Relaxation of split size ceiling of long publication PDF of patents & utility models
✓ Implementation of page feeding function of long publication of patents & utility models
✓ Addition of image design search function, “GrIP” in the global menu
✓ Another tab is displayed when clicking PMGS link
✓ Provision of Regal Status Data

To be released in February 2024
✓ Addition of information (e.g. gazette numbers) in the division application information screen
✓ Provision of simplified URL of document fixed address
✓ Partial matching search (as names) of trademark search and trial decision search
✓ Addition of functions to save, import/export logical expression of all jurisdictions
✓ Countermeasures against large volume of accesses during trademark search and display of trademark application and registration information
JPO provides the Patent Legal Status Data on J-PlatPat.

**Before**

<table>
<thead>
<tr>
<th>No.</th>
<th>Document number</th>
<th>Application number</th>
<th>Filing date</th>
<th>Publication date</th>
<th>Title of the invention</th>
<th>Applicant/Right holder</th>
<th>FI</th>
<th>Options</th>
</tr>
</thead>
</table>

**Update**

<table>
<thead>
<tr>
<th>No.</th>
<th>Document number</th>
<th>Application number</th>
<th>Filing date</th>
<th>Publication date</th>
<th>Title of the invention</th>
<th>Applicant/Right holder</th>
<th>FI</th>
<th>Options</th>
</tr>
</thead>
</table>

**Status**

- **Grant**
  - IP right granted following substantive examination

Stage + Event of WIPO ST.27
Improve accessibility to GrIP (Graphics Image Park)

- GrIP link is added into global menu of J-PlatPat
- Get easy access to design image search function

On selecting global menu, you can jump to GrIP
Preserve/Import/Export search formulas

- Preserve/import/export up to 5 search formula.
- It enables users to search documents efficiently

(Own Interface Image)
APIs provided by the JPO enable users to acquire patent information directly in user’s programs or Apps.
Benefits of using APIs

APIs can contribute to lower cost of handling patent information.

Bulk data download service
- Document information
- Bulk data

API service
- Display document information only when requested

JPO

commercial providers

Bulk Data Download Site

DB
## APIs for acquiring IP information

There are several types of information provided by the APIs.

<table>
<thead>
<tr>
<th>Types of APIs</th>
<th>Formats of files</th>
<th>Limits of access per day</th>
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</thead>
<tbody>
<tr>
<td>Application History</td>
<td>JSON</td>
<td>400</td>
</tr>
<tr>
<td>Application History (simple)</td>
<td>JSON</td>
<td>400</td>
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<tr>
<td>Divisional information</td>
<td>JSON</td>
<td>30</td>
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<tr>
<td>Priority information</td>
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<tr>
<td>Applicant name</td>
<td>JSON</td>
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<tr>
<td>Applicant code</td>
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<tr>
<td>Patent number reference</td>
<td>JSON</td>
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<tr>
<td>Applied document</td>
<td>XML (in a ZIP file)</td>
<td>100 or 500※</td>
</tr>
<tr>
<td>Office action document</td>
<td>XML (in a ZIP file)</td>
<td>100 or 500※</td>
</tr>
<tr>
<td>Notice of Reasons for Refusal</td>
<td>XML (in a ZIP file)</td>
<td>100 or 500※</td>
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<tr>
<td>Cited document</td>
<td>JSON</td>
<td>50</td>
</tr>
<tr>
<td>Registration information</td>
<td>JSON</td>
<td>200</td>
</tr>
</tbody>
</table>

※ 500 access per day for commercial providers if they are JPO’s Bulk Data download service users and provide the data via their services.
Patent Information Retrieval APIs

As of 31\textsuperscript{st} March 2023

- Individuals: 39%
- Commercial Providers: 10%
- Corporate Users: 9%
- Patent Attorneys: 42%

Access (%)

- 9%
- 5%
- 27%
- 59%

History information is also provided via Bulk Data download service.
Application History API Service

✓ JPO starts to provide API retrieval in April 2023
  • Design
  • Trademark
  • OPD

✓ Design API Specific contents
  • Design classification and principal design application number
  • International design registration number and design number

✓ Trademark API Specific contents
  • Trademark for display, transliteration, vienna classification,
    classification of designated category name and codes for classification
    based on similarity

✓ OPD API
  • Examination Procedure data of IP 5
Purposes to use the APIs

- **Individuals**
  - for obtaining data in research (text mining, translation, etc.)
  - for evaluating procedures of examination

- **Patent attorneys**
  - for updating in-house DB automatically
  - for making formats of response documents automatically

- **Corporate users**
  - for updating in-house DB automatically
  - for monitoring competitors’ applications
  - for analyzing reasons for refusal
Access to API Information Website

Detailed information about the APIs can be obtained on the website below.

https://ip-data.jpo.go.jp/pages/top_e.html
Expectations for ASEAN patent offices
Expectation for ASEAN offices

**Data (by text) Exchange**
- Quality of examination of both bilateral IP offices will be improved
- Both countries can boost their economy by welcoming more

**Computerization and digitization**
- IP office can improve the effectiveness of business operations
- The accuracy of business operations can be guaranteed.
- Both of examiners and users can search appropriately by full text.
IP information is essential factor for IP ecosystem

IP information is a key driver for IP ecosystem consisting of IP creation, protection and utilization.
Thank you!
Background of JPO Computerization

Before computerization…

Office’s issues
- Resource to manage a pile of paper documents
- Delays (filing, examination including formality, publication)

Users’ issue
- Difficulties in retrieving prior art from paper gazettes

<table>
<thead>
<tr>
<th></th>
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<td>299,851</td>
<td>921,715</td>
<td>316,162</td>
<td>336,884</td>
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</tbody>
</table>
### Background of JPO Computerization

- **1984** Paperless Project was formulated
- **1990** E-filing using a special machine for patents/utility models started
- **1998** E-filing using PC through ISDN line started
- **2000** E-filing for designs, trademarks, PCT and appeals and started
- **2005** E-filing using “Internet Application Software” started

#### Ratio of E-Filing in IP Applications

![Graph showing the ratio of E-Filing in IP Applications from 1990 to 2016.](image_url)

- **1990**: Patents/Utility Models = 43%
- **2016**: Patents/Utility Models = 99%
- **2016**: Designs = 98%
- **2016**: Trademarks = 93%
- **2016**: Appeals = 85%
DATA Exchanges Overview

Steps to Data Exchange

① Assign a person in charge of data exchange
② Discuss on conditions for data exchange
③ Agree on the data exchange policy and the available list
④ Start the data exchange

Conditions for Data Exchange Policy

Conditions (Data Types, Range of Use, etc.) will be arranged by mutual agreement

For example…

◆ How to exchange data
  ○ FTP (recommended) and Internet
    ※ Using hard disk drive (HDD) is also available

◆ Data to be exchanged
  ○ Patent, Utility Model, Design and Trademark related image data, text data, bibliographic data, etc.

◆ Frequency of data exchange
  ○ Quarterly, Monthly, Biweekly etc.
## Data Exchange Overview

### Example of Available List

<table>
<thead>
<tr>
<th>Category</th>
<th>Office</th>
<th>Product Name</th>
<th>Data Format</th>
<th>coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent and Utility Model Data</td>
<td>JPO</td>
<td>Image/Text products - kind codes A B U Y*</td>
<td>PDF, XML, SGML, TXT, TIF</td>
<td>2004-present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Note</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A: patent application</td>
<td></td>
<td>2004-present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B: granted patent</td>
<td></td>
<td>2004-present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>U: registered utility model (unexamined)</td>
<td></td>
<td>1983-2003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Y: registered utility model (examined)</td>
<td></td>
<td>1971-1982</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>1922-1993</td>
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<td>Patent specifications of Japan in Japanese</td>
<td>IMG</td>
<td>1885-1956</td>
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<td>IMPI</td>
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<tr>
<td>Classification Data</td>
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<tr>
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<tr>
<td>Design</td>
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<tr>
<td>Trade mark</td>
<td></td>
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</tr>
</tbody>
</table>
Data Exchange Overview

How To Exchange Data Via FTP

FTP Server

Enter ID & Password

Download

Upload

Enter ID & Password

Download

FTP Server
In 1990, the JPO launched the world’s first e-filing system. The large-scale information system that handles a wide range of operations, such as receiving large numbers of applications (about 500,000 a year) for patents, utility models, designs and trademarks, examinations, registrations, trials and appeals is in operation. So far, the JPO has built the system for each operation, which currently consists of about 70 subsystems. About 93% of applications are made online (patents/utility models: about 99%, designs: about 93%, trademarks: about 84%). Most of the staff operations are already systematized.

- Online filing
- Online notification (receiving notifications from the JPO)
- Online requests (e.g. file inspection, issuing of documents stored on the patent registry)
- Data entry for applications on paper
- Prior art search by registered search organizations
- J-PlatPat search
- Public inspection
- Internet publication
- Data exchange
- Cooperation on examination
- Support for IT infrastructure development
Mission of computerization

Mission 1: To Provide stable administrative services (e.g. 24-hour / 365-day application receiving) and operational environments. To respond to changes in the environment surrounding the intellectual property system.

Mission 2: The system structure requires to be reviewed because a considerable period of time has passed since the system was built.

Mission 3: Cooperation with and support to foreign IPOs for improvement of operational efficiency.

Mission 4: Expansion of patent information distribution services.
Organization and Roles of the JPO

Roles of JPO

1. Appropriately granting industrial property (IP) rights
2. Drafting measures dealing with IP
3. Promoting international harmonization and assistance to developing countries
4. Reviewing the IP rights system
5. Supporting SMEs and universities
6. Improving information services on IP
Organization and Roles of the IT Division

Policy Planning and Coordination Department

Information Technology and Patent Information Management Office

Information Technology Policy Planning Office
- IT-related international measures
- IT-related projects
- IT-related budget
- IT-related procurement

Information Technology System Development Office
- System development, maintenance, and operation according to optimization plan
- Development, maintenance, and operation of current system

System Management Support Office
- Support for the management and creation of business visualization materials

Patent Information Policy Planning Office
- Investigation and planning related to patent information
- Multilingual support of patent information
- Management of patent information
Workflow and Related Systems

Applicant

JPO procedures

JPO IT systems

Simple formality check by e-filing software

Available to request for inspection

Written opinion/amendment

Appeal

Trial

Decision of refusal

Publication of granted rights

Decision to grant

Registration

Publication of

Reception

Formality
Examination

Publication of Applications

Substantive Examination

Reasons for refusal

JPO procedures

Receiving System

Formality Examination System

Fee System

J-PlatPat

J-PlatPat

Gazette System

Search system

Peripheral System for Patents/Utility Models/Design/Trademark

One Portal Dossier
Overview of patent & utility model search system

Patent and utility model search system

- Fopiser
- F-term search system
- Full text search system
- DNA search system

Common search system for patents and utility models (Document inquiry section)

External users

- Research institute / Individual person etc.

JPO

Examiner

Web browser

J-PlatPat

Web browser