
Current status and future expectation for Machine Translation

Japan Patent Office
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English Databases on IPDL

1. Patent Databases

DB with Machine Translation Service

Patent & Utility Model Gazette DB
Patent & Utility Model Concordance
FI/F-term Search

Human Translation Database

Patent Abstracts of Japan (PAJ)

2. Design Database

DB with Machine Translation Service

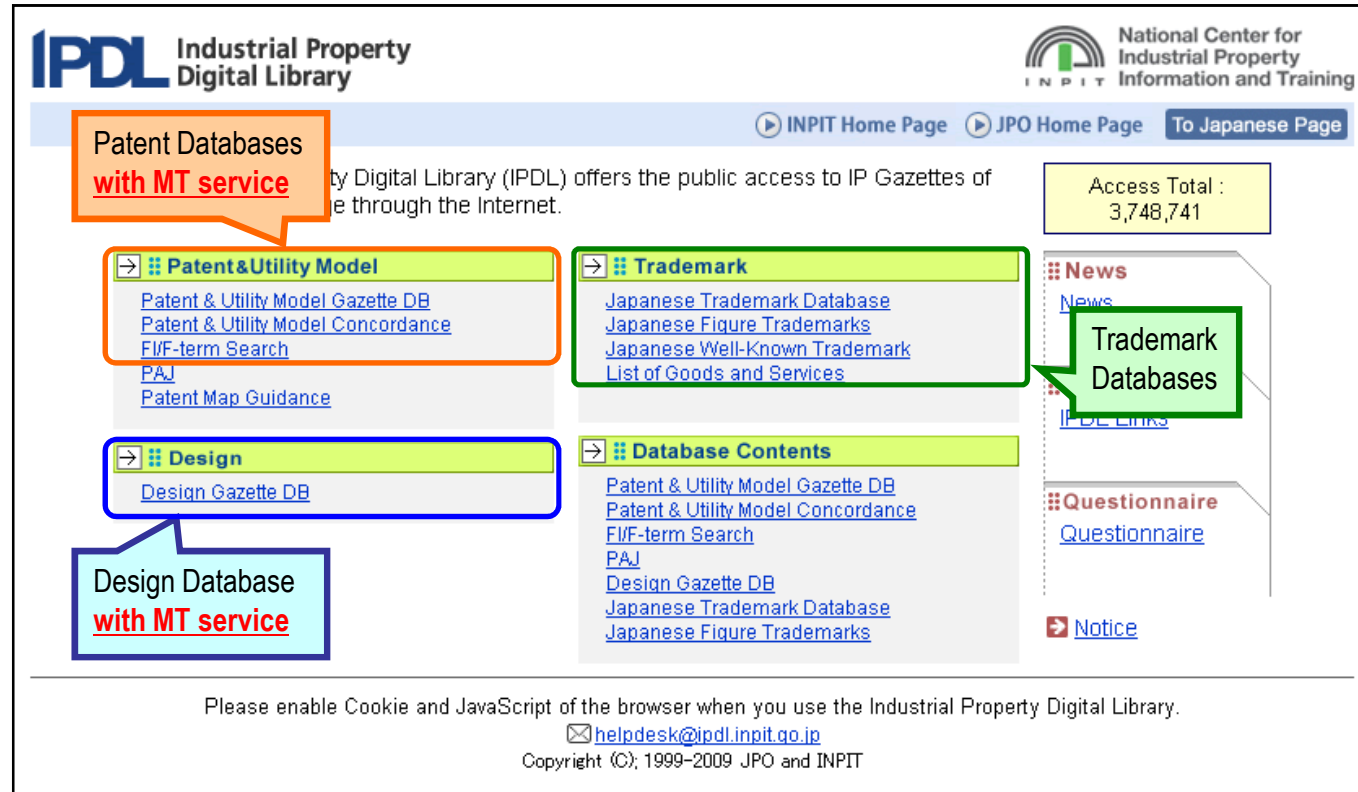
Design Gazette DB

3. Trademark Database

Human Translation Database

Japanese Trademark Database
Japanese Figure Trademarks
Japanese Well-Known Trademark
List of Goods and Services

Industrial Property Digital Library (IPDL)



The screenshot shows the IPDL website interface. The header includes the IPDL logo and the text 'Industrial Property Digital Library'. On the right, it says 'National Center for Industrial Property Information and Training' with the INPIT logo. Navigation links include 'INPIT Home Page', 'JPO Home Page', and 'To Japanese Page'. A yellow box in the top right corner displays 'Access Total : 3,748,741'. The main content area is divided into several sections:

- Patent Databases with MT service** (orange box):
 - Patent & Utility Model
 - Patent & Utility Model Gazette DB
 - Patent & Utility Model Concordance
 - FI/F-term Search
 - PAJ
 - Patent Map Guidance
 - Design
 - Design Gazette DB
- Trademark** (green box):
 - Japanese Trademark Database
 - Japanese Figure Trademarks
 - Japanese Well-Known Trademark
 - List of Goods and Services
- Database Contents** (green box):
 - Patent & Utility Model Gazette DB
 - Patent & Utility Model Concordance
 - FI/F-term Search
 - PAJ
 - Design Gazette DB
 - Japanese Trademark Database
 - Japanese Figure Trademarks

On the right side, there are links for 'News', 'Questionnaire', and 'Notice'. A green box labeled 'Trademark Databases' points to the Trademark section. A blue box labeled 'Design Database with MT service' points to the Design section. At the bottom, a footer contains the text: 'Please enable Cookie and JavaScript of the browser when you use the Industrial Property Digital Library. helpdesk@ipdl.inpit.go.jp Copyright (C); 1999-2009 JPO and INPIT'.

AIPN

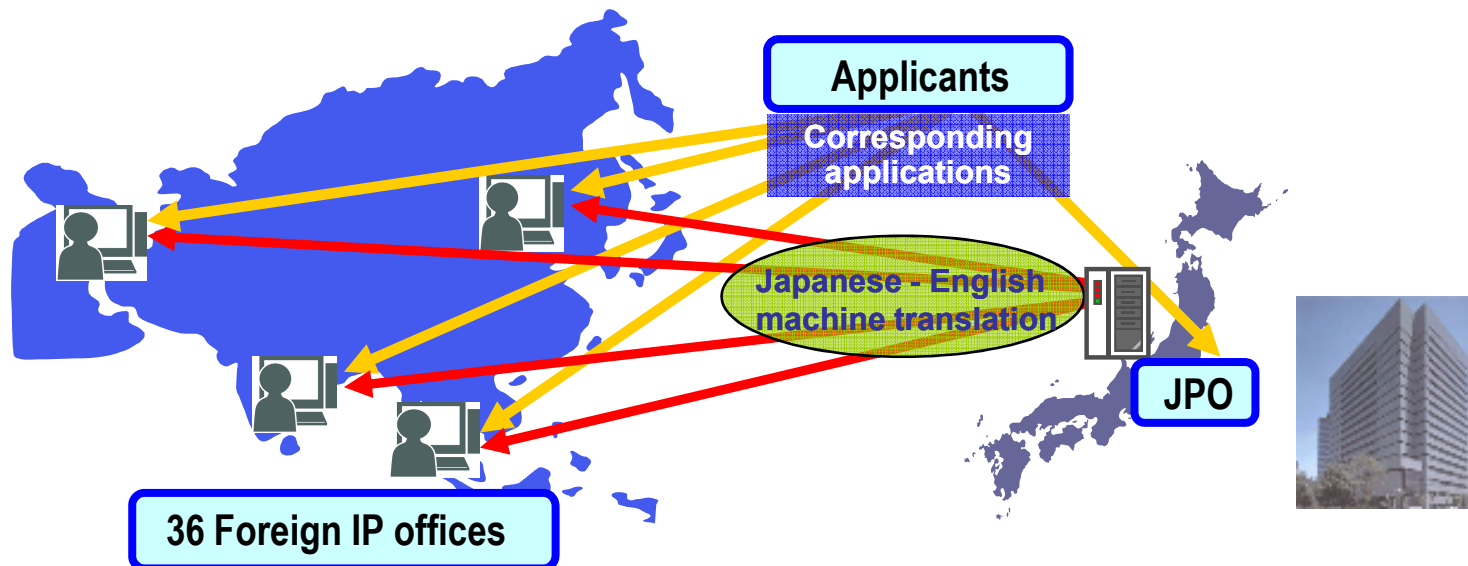
(Advanced Industrial Property Network)

- Japanese **examination-related information** is available for inspection in English by means of **Japanese-English machine translation**
- Available for **foreign IP offices**
- **Free of charge**



Advantageous effect

1. Reducing burden on examiners in foreign IP offices
2. Accelerating quick examination and acquisition of the right



Ongoing MT services and our prospect

Prospect of MT services in JPO

Cross-lingual retrieval system

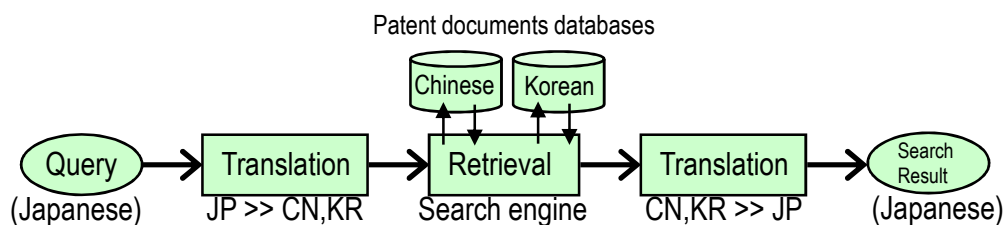
JPO has a plan to establish “Cross-lingual retrieval system” which enable to search Chinese and Korean documents.

JPO has conducted researches for the system.

- Evaluation of the effectiveness of the two translation methods (Keyword translation, Contents translation)

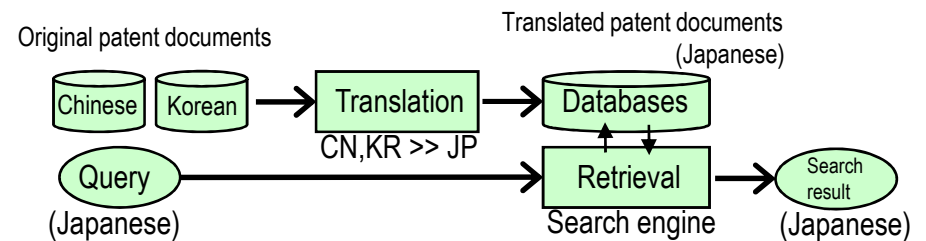
Keyword translation

Query in Japanese is translated into Chinese or Korean in each transaction for search.
Patent documents, written in the original language, are searched by using translated query.



Contents translation

Original patent documents are translated into Japanese and stored into database in advance.
The translated databases are searched by using query in Japanese



- Evaluation of translation results (Korean-Japanese, Chinese-Japanese)

Korean-Japanese

>> Translated sentences are fairly understandable.
(practicable level)

Chinese-Japanese

>> Further development is needed.
(especially, enrichment of the dictionaries)

Benefits

Further development is needed but MT is playing important role for work sharing among IP offices and IP information dissemination in English via AIPN and IPDL.

Accurate MT enable to reduce translation cost and increase amount of IP information provided in English.

Challenges

Availability of text data of foreign IP documents.

Further accurate translation of long sentences, specific expressions and technical terms are longstanding subject in IP documents

Improvement of accessibility to foreign IP documents are important issue, especially Chinese and Korean documents.

Other patent processing tools/function coordinating with MT

JPO would like to introduce accurate Chinese-Japanese, Korean-Japanese MT as an essential function of cross-lingual retrieval system, for the time being.

Future expectation: How far do you think we can expect to go?

Further development of existing Japanese-English MT system through consistent effort.

Expansion of languages to be translated