

Prior Art Search - Entry level -

Japan Patent Office

---- (Slide 0) ----

Let's begin our prior art search lecture.



- I. Basics of Prior Art Search
- II. Search Strategy
- III. Search Tool J-PlatPat
- IV. Search Tool PATENTSCOPE

--- (Slide 1) ---

Here is the outline of this lecture.

- 1. Basics of Prior Art Search
- 2. Search Strategy
- 3. Search tool J-PlatPat
- 4. Search tool PATENTSCOPE



I. Basics of Prior Art Search

- II. Search Strategy
- III. Search Tool J-PlatPat
- IV. Search Tool PATENTSCOPE

 \cdots (Slide 2) \cdots

First, let me explain the basics of Prior Art Search.

I. Basics of Prior Art Search



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A. Backgrounds - 1/3

In Japan,

an Examiner shall, as the administrative agency, determine whether a patent shall be granted or rejected for the examined patent applications according to the given regulatory requirements to decide granting or rejecting a patent

(Japanese Patent Act Articles 47, 49, 50, and 51)



--- (Slide 3) ---

Why do examiners have to conduct prior art searches?

One of the answers is that the law suggests it.

For example, articles 47, 49, 50, and 51 of the Japanese Patent act say that an examiner, as the administrative agency, shall determine whether a patent shall be granted or rejected according to the stated regulatory requirements for granting or rejecting a patent.

I. Basics of Prior Art Search



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A. Backgrounds - 2/3

Among regulatory requirements for patent, those closely related to a prior-art document search are

Novelty
 Inventive step
 Conflicting applications



Examiners normally need to conduct a **prior-art-search** to identify that the examined patent applications are in conformity with those requirements.

 \cdots (Slide 4) \cdots

Among the regulatory requirements for patents, the following items are closely related to prior-art document searches:

Firstly, Novelty.

Secondly, Inventive step.

Thirdly, Conflicting applications.

Examiners normally need to conduct a prior-art-search to identify whether the examined patent applications are in conformity with these requirements.

I. Basics of Prior Art Search



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A. Backgrounds - 3/3

Three elements for an ideal search



Establishment of search strategies is necessary

---- (Slide 5) ----

The next topic is that of ideal searches.

This slide shows the three elements for an ideal search.

First: High quality.

Second: Efficiency.

Third: Objectivity.

To conduct prior art searches that satisfy these three elements, we need to establish search strategies.



I. Basics of Prior Art Search

II. Search Strategy

- III. Search Tool J-PlatPat
- IV. Search Tool PATENTSCOPE

---- (Slide 6) ----

Next, let me explain a search strategy.



A. Search Flow



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---- (Slide 7) ----

This diagram shows the search flow upon which search strategies are normally established.

The first step is to understand and recognize the invention.

The second step is to decide the scope of the search.

The third step is to decide which database you will use.

The fourth step is to decide the search formulae.

The next step is to retrieve documents using the search formulae, and screen the search results.

Following the screening, you may finish the search if you have found appropriate documents or have determined you already covered most of the related area and no more useful documents could be found.

Each step will be explained in the following slides.



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B. Decision of search scope - 1/7



- Step 3. Determine search scope
- Step 4. Change search scope

--- (Slide 8) ---

Next, let me explain the decision of the search scope.

The first step is to recognize the invention. This is represented as a black dot, and will be a standard point to decide the scope of the search.

The second step is to determine the outer border of the search scope. This is determined based upon examiners' knowledge and experience.

The third step is to determine the search scope.

The fourth step is to change the search scope. As you continue your search, the scope will be changed.

Let's have a closer look at steps 3 and 4 in the following slides.



B. Decision of search scope - 2/7

~ Step 3. Determination of search scope ~

Search scope having all the elements of the claimed invention



---- (Slide 9) ---

Let's take a closer look at step 3, the search scope decision.

The first search scope is determined so as to have all elements of the claimed invention.

In case the claimed invention is "a pen having a clip and a cap", the search scope should be "pen AND clip AND cap".



B. Decision of search scope - 3/7

~ Step 4. Change of search scope ~



---- (Slide 10) ---

Next, let's see step 4, changes to the scope of the search.

Roughly speaking, there are two types of search scope changes: expansion and shifts. An example of expansion is generalizing or deleting elements of the claimed invention. By contrast, an example of shifting is making a change to a neighboring technical field.



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B. Decision of search scope - 4/7

~ Step 4. 1. Expansion of search scope ~



--- (Slide 11) ---

I will explain how you can expand the scope of your search.

First, you can generalize the concept of the elements. (This is known as "generic conceptualization").

A pen is a type of writing instrument. Therefore, "a pen having a clip and a cap" can be generalized and defined as "a writing instrument having a clip and a cap".

Second, you can delete a part of the elements.

If you delete the element "clip" from "a pen having a clip and a cap", the search scope will be "a pen having a cap".

Or, if you delete the element "cap" from "a pen having a clip and a cap", the search scope will be "a pen having a clip".



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B. Decision of search scope - 5/7

~ Step 4. 2. Shift of search scope ~



--- (Slide 12) ---

Next, I will explain the shift of the search scope.

Even in cases where the combination of "clip" and "cap" has not been found in the technical field of "pen", you may find the same combination in neighboring technical fields. In such cases, the inventive step of the claim "A pen having a clip and a cap" could be denied based on the documents found in neighboring technical fields.

Consequently, in order to conduct searches with no overlooked prior art, there are cases where it may be necessary to shift the scope of your search to encompass the prior art in neighboring technical fields.

For example, you can shift the search scope from "a pen having a clip and a cap" to "an electronic stylus having a clip and a cap".



--- (Slide 13) ---

This diagram illustrates an example of how the scope of a search may be shifted.

In this case, the claimed invention is "a+b". Therefore, the scope including both "a" and "b" should be searched first, as the black arrow indicates. If the prior art document disclosing "a+b" has been found in this scope, the said document is a category "X" document. Therefore, the claim has no novelty or inventive step.

Next, if the search result didn't return the document disclosing "a+b" but returned the document disclosing "a", follow the yellow arrow. In this case, the scope of the search should be shifted to search for documents including "b".

Then, if a document including "b" has been found, each of the documents disclosing "a" or "b" is a category "Y" document.

On the other hand, if a document disclosing "b" has not been found, the purple arrow should be followed and the search scope should be expanded.

The red arrow on the right side shows that the document disclosing "b" was not found even when the search scope was expanded to maximum capacity. In this case, the claim "a+b" has both novelty and inventive step.



B. Decision of search scope - 7/7

~ Tips for more efficient search ~



--- (Slide 14) ---

I will next explain the method for an efficient search.

In some cases, a claim may be the generalization of embodiments disclosed in the description.

For example, let's say that "a ball-point pen having a clip and a cap" is disclosed in the description, while "a pen having a clip and a cap" is described in the claim.

One idea is to set Target 1, "a ball-point pen having a clip and a cap", as the first search scope, to meet later possible amendments to the claim. If the document that satisfies Target 1 has been found, the claim has neither novelty nor inventive step.

If the document that satisfies Target 1 has not been found, the search scope should be expanded to Target 2.

Target 2 is "A pen having a clip and a cap", which is the same as described in the claim. If the document that satisfies Target 2 has been found, the claim has neither novelty nor inventive step.

If the document that satisfies Target 2 has not been found, the claim has at least novelty. In this case, the scope of the search should be expanded to Target 3. That is, the scopes "A pen having a clip" and "a pen having a cap" should both be searched.

- C. Decision of database
- ~ How to select database ? ~
- Basic inventions and academic inventions of element(s)
 - Patent Gazette
 - Papers by using <u>Commercial DB</u> and <u>Internet</u>
- The fields where specific search tools have been established
 - CAS for compounds
 - ICIREPAT for metal alloys
- Improvement invention
 - Patent Gazette
- --- (Slide 15) ---

Next, I will explain how to select the database to be used.

There are different varieties of databases to be used for prior art searches, and different databases cover different types of prior art documents, and have different functions. Therefore, it's important to select a database that is appropriate for an application in prior art searches.

If you use an appropriate database, you will be able to more quickly find the prior art that is most appropriate.

Quite possibly, pioneer inventions and academic inventions are published in academic papers other than patent publications. Therefore, it is appropriate to search for such inventions in academic papers. You can search academic papers on commercial databases, and on the Internet.

The commercial database called "CAS" is available to use when you need to specify and search the chemical structure of a compound.

We have a database called "ICIREPAT", which is an internal database at the JPO and can be used at the JPO for prior art searches concerning the invention of alloy.

Improvements, such as making a known existing apparatus more user-friendly, are not usually published in academic papers. Therefore, when conducting prior art searches for the improvement of inventions, it is recommended that you put emphasis on patent publications rather than academic papers.





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D. Decision of search formulae - 1/3

- Search formulae are created based on search scope and database
- Search scope determines the <u>contents</u> of search formulae.
 - When search scope is "pen AND clip AND cap", search formulae can be <u>"(pen*clip*cap)/tx</u>".
- Database determines the *description methods* of search formulae.
 - When classification(IPC) is assigned to documents in the database, search formulae whose search scope is "pen AND clip AND cap" can be "<u>B43K9/00 * clip/tx</u>" (B43K9/00 : Cap for pen)

*Search formulae are described so as to be available in JPO's search system

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---- (Slide 16) ----

Next, I will explain how to determine and create a search formula.

A search formula is determined based on the search scope and database.

The search scope determines the content of search formulae.

For example, if the search scope is "pen AND cap AND clip", the search formula is

"(pen*cap*clip)/tx" (* means logical product, /tx means text search).

The database determines the description method of the search formula.

IPC "B43K9/00" represents "a cap of a pen". Therefore, if IPC symbols are assigned to the documents on database, the search formula "B43K9/00*clip/tx" can be used.



D. Decision of search formulae - 2/3

~ Tips for keyword search ~



*Search formulae are described so as to be available in JPO's search system

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 \cdots (Slide 17) \cdots

Next, I'll explain the keyword search technique.

If the scope of the claim is "A pen having a clip and a cap", the search formula will be "(pen*cap*clip)/tx".

"Pin" is a synonym of "clip", so you can reduce the chance of overlooking prior art by creating the search formula (pen*[clip+pin]*cap)/tx.

Also, you can use the proximity search to search for "pen", "clip", and "cap" that occurs within ten words from each other. This allows you to eliminate irrelevant documents from search results, and increases the odds of yielding search results that include documents you wish to find.



D. Decision of search formulae - 3/3

~ Tips for classification search~



--- (Slide 18) ---

Next, I will explain classification searches.

If the claim is "a pen having a clip and a cap" and no IPC symbols are assigned to the documents on databases, the search formula will be "pen*clip*cap/tx".

IPC symbol "B43K9/00" represents "a cap of a pen". Therefore, if documents are classified according to the IPC, you can also use the search formula "B43K9/00*clip/tx".

Also, FI symbol "B43K9/00@F" represents "a cap of a pen having a clip". Therefore, if documents are classified according to FI, you can use the search formula "B43K9/00@F" as well.



E. Screening of search results - 1/3



--- (Slide 19) ---

Next, I will explain the screening.

After you have conducted the screening and found prior art documents, you are able to judge whether novelty or inventive step can be denied based on the documents, and whether the documents are conflicting applications.

If so, finish the search.

If not, you should judge whether you have already covered most of the relevant technical fields and whether it is likely that you will be able to find other useful documents.

If you have already covered most of the relevant technical fields to the invention and there is only a small possibility of being able to find other useful documents, finish the search.

If other useful documents are likely to be found, review the scope of search, database, search formula, and continue screening.



E. Screening of search results - 2/3

~ When do you finish prior art search ? ~



*The percentage of documents you have searched within the outer border of the search scope 20

--- (Slide 20) ---

Next, I will explain when to finish the search.

This diagram shows that the more time you spend on the search, the higher the cover ratio gets.

The horizontal axis represents the time you spend on the search.

The vertical axis represents the cover ratio, which refers here to the percentage of documents that the examiner reviewed among all of the documents that fall within the outer border of the search scope.

The more time you spend on the search, the closer the cover ratio approaches to 100%. However, the rate at which the ratio increases gradually goes down. This means that the more time you spend on the search, the lower the efficiency becomes. Ideally, the search cover ratio should be as close as possible to 100%, but to do so takes a tremendously long time.



E. Screening of search results - 3/3

~ When do you finish prior art search ? ~



Finish prior art search when an examiner judges that no more useful documents can be found.

✓ The judgment is made based on the examiners' knowledge and experience.

✓ Young examiners are recommended to consult with experienced examiners.

*The percentage of documents you have searched within the outer border of the search scope 21

--- (Slide 21) ---

However, the time for an examiner to do the search is limited.

With that, when you decide that no more useful documents can be found you can end the search even if the cover ratio has not reached 100%.

The judgement as to whether or not you end the search is based on the examiner's knowledge and experience. If you are a less-experienced examiner, therefore, it might be beneficial to consult an experienced examiner.



F. Use of existing examination information - 1/3



--- (Slide 22) ---

Next, let's look at the use of existing information pertaining to the examination. If some kind of existing examination information is available, use it proactively.



F. Use of existing examination information - 2/3

- Examination results of other patent offices > ISR
 - Examination results of JPO, EPO, ...
- Examination results of related applications
 Divisional applications
- Miscellaneous
 Same inventors or applicants

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The following are examples of existing examination information that may be available for use:

Examination results by the ISR, JPO, EPO or other authorities

Examination results of related applications such as divisional applications

Examination results of applications by the same applicant or inventor



F. Use of existing examination information - 3/3



Use of <u>existing examination information</u> can reduce search time

*The percentage of documents you have searched within the outer border of the search scope 24

---- (Slide 24) ----

By utilizing existing examination information, you can avoid the need to start the search from scratch thereby cutting down your search time.



- I. Basics of Prior Art Search
- II. Search Strategy III. Search Tool J-PlatPat
- IV. Search Tool PATENTSCOPE

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Next, I will explain J-PlatPat.

J-PlatPat is useful in searching Japanese documents.

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III. Search Tool - J-PlatPat

A. Basics of J-PlatPat - 1/6



✓ More than <u>100 million</u> accesses per year

✓ 16 years history as of March 2015

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The JPO used to provide IPDL, which is a free search tool.

This popular tool, which was used until March 2015, was accessed more than a hundred million times.



A. Basics of J-PlatPat - 2/6



J-PlatPat took over the role of IPDL from 2015 March

- ✓ Simple and user-friendly interface
- ✓ Easier search of FI/F-term classification

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--- (Slide 27) ---

Since March 2015, J-PlatPat has replaced the role of IPDL.

J-PlatPat is known for its simple, user-friendly interface. You can also do simple searches for FI and F-term classifications.



A. Basics of J-PlatPat - 3/6



J-PlatPat : Japan Platform for Patent Information

---- (Slide 28) ----

This shows an image of the J-PlatPat service.

J-PlatPat, which stands for the Japan Platform for Patent Information, is a service that enables users to search and browse publications owned by the JPO, as well as other related information on the Internet.

Information for approximately one hundred million documents is presently stored in the J-PlatPat database.

Industrial property information on this database has been accessed by individuals, small- and medium-sized businesses, and universities through the Internet.

III. Search Tool - J-PlatPat



A. Basics of J-PlatPat - 4/6

JPO home page http://www.jpo.go.jp/index.htm



--- (Slide 29) ---

You can access J-PlatPat from this page.

First, access JPO's homepage and click the J-PlatPat banner on the right side of the screen. This will take you to the J-PlatPat English top page.



A. Basics of J-PlatPat - 5/6



Search for Patent & Utility Model, Design, and Trademark

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--- (Slide 30) ---

This is what the J-PlatPat English top page looks like.

You can use it to search patents, designs, and trademarks.



A. Basics of J-PlatPat - 6/6

Patent & Utility Model Search

		Number search	Classification search	Text search	Classification
•	Patent & Utility Model	Patent & Ltility Model Number: Search	* EL/F-term Search	* 863	 Patent Map Guidance(PMGS)

4 types of services are available

- ≻PAJ Search
- ➤Number Search
- ➢Patent Map Guidance (PMGS)
- ≻FI/F-term Search

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--- (Slide 31) ---

Now let's look at searching for patents and utility models.

Four types of services are available, they are PAJ Search, Number Search, Patent Map Guidance, and FI/F-term Search.

Let me explain each one.



B. PAJ search - 1/11

 PAJ (Patent Abstracts of Japan) is a set of English abstracts of unexamined patent applications published in Japan

PAJ is searchable by:
 Free keywords

Publication date

≻ IPC

Available data: from 1976

Legal status and machine translation of an application are available for the PAJ published <u>from 1990, and 1993, respectively</u>.

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--- (Slide 32) ---

Now, I will explain PAJ search.

PAJ stands for the Patent Abstract of Japan, and refers to the English abstract of the Japanese patent application publication.

In PAJ searches, you can search for abstracts of Japanese patent application publications and bibliographic information in English.

For example, you can do text searches by using keywords such as technical terms, or search for applicant's or inventor's names. You can also narrow down the information by publication date, or search using the International Patent Classification. or IPC. If you know the application number, publication number, registration number, or appeal or trial number, you can do the search using these numbers.

The target of the search is the English abstract of the Japanese patent application publication issued in or after 1976.

Furthermore, for Japanese patent application publications issued in or after 1990, you can refer to the legal status. Also, for the Japanese patent application publications issued in or after 1993, you can machine-translate and browse the scope of claims or descriptions from Japanese to English.



B. PAJ search - 2/11

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You can access the PAJ search form from the menu on the J-PlatPat top page.





B. PAJ search - 3/11



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--- (Slide 34) ---

This shows the screen for PAJ text searches.

Type the search keywords in English in the entry field on the screen.

There are three entry fields; abstract, title of invention, and applicant. Keywords can also be combined. If you type more than two keywords, enter a space between them. If there are more than 1000 search results, the list cannot be displayed. In this case, narrow down the list by specifying the time period of publication, or enter the International Patent Classification or IPC.





B. PAJ search - 4/11

Abstract tay angula	10.14
Title of invention	"toy", "people"
	for Abstract search
Applicant	I DI ADSTIACT SEALCI
	AND (m)
Publication Date	
from: 20029401 - too 20000101	2002/04/01 - 2002/01/
1PC	2002/04/01 - 2003/01/
	9, Search
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---- (Slide 35) ----

I will now give some examples.

Type the search keywords "toy" and "people" in the abstract field.

Specify the publication date as "2002/04/01 - 2003/01/01".

Click "search".




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B. PAJ search - 5/11

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can retrieve the PAI (Patent Abstracts of Japan) by keywords.		
Publication issues, and updates schedule, please re	effer to the B ² NEWS	
Abstract		
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Title of invention		
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Applicant		
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Publication Date		
From: 20820401 - to: 28038101		
1PC		
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---- (Slide 36) ----

Search results are displayed, showing that two documents were hit. To refer to the list of search results, click "view list".



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B. PAJ search - 6/11

The search results list is displayed.

Click the publication number "2002-233661."



--- (Slide 37) ---

When you click "view list", the list of search results is displayed as shown on the screen. Here, let's click the hyperlink of the first publication number, "2002-233661".





B. PAJ search - 7/11



--- (Slide 38) ---

The PAJ of the first application uses the keywords "toy" and "people".

On the search result screen, the words "toy" and "people" are highlighted in the English abstract.





B. PAJ search - 8/11



--- (Slide 39) ---

Click "legal status" on the upper right corner to obtain current information in this regard.



---- (Slide 40) ----

When you click "full text" on the lower left corner, the result of the machine translation of claims into English is displayed first.



--- (Slide 41) ---

Next, you can also display the machine translation of the detailed description or technical field of the invention in English by clicking those hyperlinks on the screen.





B. PAJ search - 11/11



\cdots (Slide 42) \cdots

You can refer not only to the result of the machine translation, but also to the original Japanese text of Japanese patent documents by clicking "Image Data (Japanese)".



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C. Number search - 1/6

Almost all the Patent & Utility model gazettes issued by the JPO can be searched with any kind of the numbers of gazettes.

- Examples of kinds of numbers
 - Application Number
 - Publication Number
 - Patent Number

≻...

--- (Slide 43) ---

Next, I will explain "number search".

This allows searching for almost all patent and utility model documents issued by the JPO using different kinds of numbers assigned to those documents.

For example, you can do a search with an application number, publication number and/or patent number.



C. Number search - 2/6

Number search Patent & Utility Model Number Search Click!	Patent & Utility Model Number Sec You'r diws o weg yddot o'u diw nab pada	irch 🚥		<u>mant</u> + Lif + 2001
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You can access "number search" from the menu on the J-PlatPat top page.





C. Number search - 3/6



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--- (Slide 45) ---

Select the type of number, such as that for applications publications, enter the document number of the publication you would like to refer to, and click "search".





C. Number search - 4/6

Aublication issued, and upd	<u>t application number</u> "	2002-27300
Document Number	Document Numb	. 7
Patent application number	+-a- 2015-00012X 2015-12X 827-00012X	
APublication of natest audication	★-2. 2015-00012X 2015-12X 827-00012X	
Patent anneal/trial number	(a) 2015-000123 2015-120 827-000123	
	Q. Search	i € Add
Click "Searcl	1″	of Data Coverage
 Wrien you input changes year beginning an 	a seven of less-digit document number, please input in the for	m of "2015-12X"

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--- (Slide 46) ---

Now, I will explain using examples.

Here, select "patent application number" as the kind of number, and enter "2002-273006" as the application number of the publication you would like to refer to. Then, click "search".



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C. Number search - 5/6

The search results list is displayed.

Click the publication number "2004-107736".

Results Display Type	e ®Al Fages (Ofront Page O Claims	ODrawings IE Sp	ecification(unexemined)		
Aesults 1 reco	rds.	Incompleted	P			
NUTION	Number	Publication	Publication Number	Number	Number	outer
1	39,2002-27300	JP.2004-107736.A		39,4180333.8		

---- (Slide 47) ----

The list of search results is displayed. This includes information such as application and publication numbers. Click the hyperlink of the publication number "2004-107736" on the screen to browse the content of the application you would like to refer to.



C. Number search - 6/6



--- (Slide 48) ---

Then you can access the selected document.

There are three tabs to select the display format: "PAJ", "Detail" and "Image".

Selecting the "PAJ" tab also allows the English abstract to be referenced in the case of Japanese patent applications published in or after 1976.

By selecting the "detail" tab, you can access the full text of machine translations into English, such as a description thereof. The full text data of machine translation results, including descriptions, is available only for Japanese patent applications published in or after 1993.

By selecting the "image" tab, you can browse the image data of the original Japanese patent publication.

In cases where you specify multiple documents or numbers, you can display the previous or next document by clicking the hyperlink on the upper right corner.

Also, by clicking "Legal Status", you can access the legal status. The legal status is only available for the Japanese patent applications published in or after 1990.



D. PMGS - 1/11

FI/F-term classification can be retrieved.

- FI and F-term are unique patent classifications developed by the JPO, and they are mainly assigned to JP documents.
- <u>"FI"</u> is organized in a hierarchical structure, and it is the subdivisions of the IPC subgroups.
- <u>"F-term"</u> is organized according to particular technological fields to improve search efficiency from multiple viewpoints; purpose, usage, structure, operation, etc.

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Next, I will explain PMGS, which stands for "Patent Map Guidance System". You can obtain FI and F-term classification information by using PMGS. The FI and F-term are classifications developed by and only used by the JPO, and mainly assigned to patent documents written in the Japanese language. FI is the subdivision of IPC subgroups, and has a hierarchical structure. You can search from various points of view using the F-term classification. Its purpose is to improve search efficiency in a particular technical field.





D. PMGS - 2/11



---- (Slide 50) ----

You can access the PMGS search form from the menu on the J-PlatPat top page.



D. PMGS - 3/11

tent Map Guidance	(PMGS) Tests	Select types of search for	classificatio
Publication issued, and upo Inquiry Search by Ke After seeching the query FI (Classification)	teles schedule, please refer to the U <u>NEWS</u> . www.U <u>DF.H</u> Concordance Search refiny screen, Please click each classification, d	 Inquiry Search by Keyword IPC-FI Concordance Sea 	arch
Query Screen Classification	FI 0 FI Handbeek e-a. 835 8351 8351.08 8351.084	Q, Search	
F-term (<u>Classification</u> Query Screen Classification	Priem List 0 Priem Description (e.g. #016	Q, Search	
Display Type	● List ① Target ② The same Hierarchy		
		To return to the top of this per	24

- ✓ Inquiry : <u>FI/F-term</u> search of specific <u>classification</u>
- ✓ Search by Keyword : <u>FI/F-term</u> search by using <u>keywords</u>
- ✓ IPC-FI Concordance Search : <u>FI</u> search by using <u>IPC</u>

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--- (Slide 51) ---

You can obtain classification information in three different ways using PMGS. The first one is the search function called "inquiry". By specifying FI or F-term using this function, you can obtain classification information related to the FI and F-term that you specified.

The second one is the search function called "search by keyword". With this function, you can obtain the FI and F-term information related to the search keyword that you specified.

The third one is the search function called "IPC-FI concordance search". With this function, you can obtain the FI information that corresponds to the IPC you specified. Now, I will explain one by one.



D. PMGS - 4/11

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an relation run-term and retriev	ne a classification by legivionas.		
Publication issued, and up	dates schedule, please refer to the 🗗 <u>NEWS</u> .		
Inquiry Search by Ki	eyword IPC-PI Concordance Search		
After selecting the quer	y entry screen, Please click each classification, or input a classification int	to an input box and click.	
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---- (Slide 52) ----

First, I will explain the search function called "inquiry".

By specifying an FI or F-term, you can use this function to obtain classification information related to the FI and F-term that you specified.



D. PMGS - 5/11

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Display Type *	Un D'Tarpet D'The same Harsenby	61	Explanation
		+ 100	Datalia not covered by groups GB6F 3/08-G06F 13/08 (anthitectures of general purpose stared programme computers dd8F t5(7%)
	 Transmission 	10.00	310 - Structures
\			311 Structures of areas adjacent to large computers
Go d	own to hierarchical		A Structures of computer rooms
			B . Acoustic or seismic resistant structures
sche	dule of FI		C . Free-access floor structures
			D Seismic resistant structures
-			E Dura march and
Section	Explanation		
ASection	SECTION A - HUMAN NECESSITIES		
BSection	SECTION 8 - PERFORMING OPERATIONS: TRANSP	ORTING	
CSection	SECTION C - CHEMISTRY; METALLURGY		
Direction	SECTION D - TEXTILES: PAPER		
			5

--- (Slide 53) ---

Using the "inquiry" search function, there are two ways to obtain data related to FI. The first one is to click the "classification" link. You can go down the hierarchical schedule from the section level by clicking the "classification" link.

The second one is to enter the FI in the search box, which will take you to the specific point in the hierarchical schedule of the FI that you entered.



D. PMGS - 6/11



--- (Slide 54) ---

There are two ways to obtain data related to F-term using the "Inquiry" search function. The first is to click the "classification" link, which allows you to go down the hierarchical schedule.

The second one is to enter the F-term theme code in the search box, which takes you to the F-term list of the theme code you entered.



D. PMGS - 7/11

ent Map Guidance(PMGS)	Search by Keyword	d search
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After selecting a query screen item, plea Query Screen	control sector [control sector [control sector] control sector]	> F-term
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Display Type	*List ©Target ©The same Herarchy Click "Search"	
		+ To return to the top of th

55

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Next, I will explain the search function called "search by keyword", which allows you to obtain the FI and F-term information related to the search keyword you specified. First, select which "query screen" you will use to do the search (FI or F-term). Then, enter the keyword in the search box and click "search".





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D. PMGS - 8/11

The search results list is displayed.

- Query Screen = FI
- Keyword = toy

Click the FI "A41D11/00@K".

FI	Explanation
A41D11/00@K	. Equipped with a toy
• <u>A47G19/22@5</u>	. having an accessory (toy, etc.)
• <u>A63B69/04</u>	. simulating the movement of ho

--- (Slide 56) ---

This shows the result of the query by selecting FI as a "query screen" and entering "toy" as a keyword. Several search results are shown, so, for example, let's click "A41D11/00@K".

III. Search Tool - J-PlatPat D. PMGS - 9/11 Main group "A41D11/00" FI(List Indication) This screen shows all FIs contained in the main group "A41D11/00". (HB : FI Handbook) · Display Type Elist ◎ Target ◎ The same Hierarchy Explanation FI 11/00 Garments for children A Kinds of clothes for children B. Jackets C . Coverall D . . One-piece dresses E . Lower clothes F . . Lower clothes with chest and shoulder straps G . Overcoats H Functions of clothes for children J . Adjustment of height Clicked FI "A41D11/00@K" K . Equipped with a toy L . for both men and women

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JPO

-- (Slide 57) ---

The screen then shows all FIs included in the main group "A41D11/00". You can see that there are many FIs under "A41D11/00". "A41D11/00@K", which you clicked earlier, is also displayed. You can browse the explanation and see which perspective each FI has for a search key.



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D. PMGS - 10/11

Patent Map Guidance You can refer to FLVF-term and retries	(PMGS) PC-FI Concordance Searcl	Search + List
Publication issued, and up Inquiry Search by Ke Input IPC code to the q	Antes schedule, please refer to the of <u>NEWS</u> . Word IPC-FI Concordance Search very tox and click Search button.	
Classification	e.e. Atta	
Display Type	List © Target © The same Hierarchy Click "Search"	
		To return to the top of this page

--- (Slide 58) ---

Lastly, I will explain the search function "IPC-FI concordance search", which allows you to obtain the FI information that corresponds to the IPC you specified. If you know the IPC to be searched for, enter the IPC in the search box and click "search".



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D. PMGS - 11/11

Concordance List [IPC→FI]		<u></u>
IPC Code	G06T1/00	
Display Type		Hierarchy
Result Hit count is 103.	FI	
IPC	п	
G06T1/00	G06T1/00	
G06T1/00	G06T1/00@A	
G06T1/00	G06T1/00@B	
G06T1/00	G06T1/00@C	
G06T1/00	G06T1/00@Z	
G06T1/00	G06T1/00.200	
G06T1/00	G06T1/00.200@A	
G06T1/00	G06T1/00.200@B	

---- (Slide 59) ---

For example, this is the screen you will see when you enter and search IPC "G06T1/00". Here, you were able to obtain the concordance list for IPC "G06T1/00". IPCs are listed on the left, and FIs that correspond to the listed IPCs are shown on the right.



E. FI/F-term search - 1/5

- All the Patent & Utility model gazettes and PAJ can be searched with the FI/F-term, which is a unique patent classification developed by the JPO.
 - Example of FI: B01J23/56,301A
 - Example of F-term: 4B027 FB21

Search range is from <u>1885 to the present.</u>

Machine Translation is available for the gazettes published <u>in</u> <u>1993 and thereafter.</u>

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--- (Slide 60) ---

Next, I will explain the "FI/F-term search", which enables you to search patent documents published in and after 1885 using the FI or F-term classifications. Also, you can obtain machine-translated English versions of Japanese documents, such as descriptions contained in publications, if the Japanese patent applications were published in or after 1993.



E. FI/F-term search - 2/5

Classification search		
• EI/F-term Search	FI/F-term Search	Suph + Ut + M
Click!	The considered a solution of addition to the considered and the considered addition to the conside	
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---- (Slide 61) ----

You can access "FI/F-term search" from the menu on the J-PlatPat top page.



E. FI/F-term search - 3/5

FI/F-term Search TING	Search + List + Detail
You can retrieve a variety of patient and utility model gazettex by RVF-term.	
Publication issued, and updates schedule, please refer to the dimensional schedule.	
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Orexamined applications(A, U, UI, A1) Oreamined/Granted applications(B, Y)	
Q, Search	Click "Search" !
	of Patent Map Guidance
	Cf Data Coverage
	62
	To return to the top of this page

---- (Slide 62) ---

This is the search screen for the "FI/F-term search".

You can do the search by entering FI or F-term in the "FI/F-term" search box.

You can also create a search formula by combining FI and F-term classifications.

Please note that when you enter the "F-term" in the search formula, you need to specify the "theme code" in a separate box.

After you have entered the search formula, click "search".



--- (Slide 63) ---

I will now explain another example of a case where you conduct a search by combining FI and F-term classifications.

Enter "2C150" in the "Theme code" box.

Enter "A63H15/00*AA01" in the "FI/F-term" box. Here, the asterisk "*" is used to mean "AND" in the search formula.

You can see that there are 25 results. Clicking "view list" displays a list of the search results.

Click one of the document numbers in the list.



E. FI/F-term search - 5/5



--- (Slide 64) ---

You can also browse documents that you have selected, as well as display the PAJ, machine-translated English version of claim or description and the image data or legal status of the Japanese patent document in the same way that the results obtained with the "number search" are displayed.



- I. Basics of Prior Art Search
- II. Search StrategyIII. Search Tool J-PlatPat

 \cdots (Slide 65) \cdots

Next, let me explain PATENTSCOPE.

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A. Basics of PATENTSCOPE - 1/3

- PATENTSCOPE is run by the WIPO
- PATENTSCOPE gives you access to
 - > weekly publication of new PCT applications
 - File inspection for international phase
 - > more than 30 million documents from all over the world
- Four types of search are available
 - Simple Search
 - Advanced Search
 - Field Combination
 - Cross Lingual Expansion

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 \cdots (Slide 66) \cdots

PATENTSCOPE, which is run by WIPO, gives you access to weekly publication of new PCT applications, file information from the international phase, and more than 30 million documents from all over the world.

Four types of searches are available: Simple Search, Advanced Search, Field Combination, and Cross Lingual Expansion.

In this lecture, I would like to explain these four functions for conducting prior art searches.



A. Basics of PATENTSCOPE - 2/3

PATENTSCOPE http://patentscope.wipo.int/search/en/search.jsf

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		Search Internatio	onal and Nation	al Patent Coll	ections			
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Simple Search								1
Using PATENTSCOPE you can search 36 million patent documents including 2.2 million published international patent applications (PCT). Detailed coverage information can be found here (->)								
Front Page	•					0	Office: All	Search

Cited from http://patentscope.wipo.int/search/en/search.jsf 67

---(Slide 67)---

This is the "PATENTSCOPE" top page.



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A. Basics of PATENTSCOPE - 3/3

PATENTSCOPE http://patentscope.wipo.int/search/en/search.jsf

WIPO 🗐	Mobile Deutsch Español Français 日本語 記名(Portugués Pyrocovik 中文 PATENTSCOPE
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Home PIP Services Processon	<u>IOPE</u>
Simple Search	
ompre ovaron	
Using PATENTSCOPE you can Detailed coverage information of Front Page	 Search " and select search type ✓ Simple Search ✓ Advanced Search ✓ Field Combination ✓ Cross Lingual Combination
	Cited from http://patentscope.wipo.int/search/en/search.jsf

 \cdots (Slide 68) \cdots

If you click "search", a list will appear showing four different search functions. Select the search function from the list that you would like to use.





B. Simple Search - 1/3



 \cdots (Slide 69) \cdots

First, I will explain "simple search".

You can do the search by selecting the search object from the search field displayed on the left side, entering a query in the search box, and clicking "search".

Select the search field item from among the following: Front page, Any field, Full text, English text, ID/Number, IPC, Names, and Dates.



 \cdots (Slide 70) \cdots

For example, select the search field "front page", and then enter the query "light" and click "search". The search results will then be displayed, and the word "light" will be highlighted.





B. Simple Search - 3/3

Bibliographic data	uments of interna	nts of international phase				
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Public UCC01400101 International Application Inc. PCT1/F01 CC014075	Own	Tex.	Yes	Econical		
Publication Date: 10.00.2014 International Niley Eater: 10.10.2010	24.08.2016	Hierational Application Datas Report	4736., ROF	89, 365		
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Various types of useful information are available

Cited from http://patentscope.wipo.int/search/en/search.jsf 71

 \cdots (Slide 71) \cdots

If you click "number" in the search result list, you can obtain information such as bibliographic data of the corresponding publication and ISR created in the international phase.


Field Code : http://patentscope.wipo.int/search/en/help/fieldsHelp.jsf Operator : http://patentscope.wipo.int/search/en/help/querySyntaxHelp.jsf

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 $\cdots ({\rm Slide}\ 72) \cdots$

Next, I will explain "advanced search", which allows the use of more complex queries as compared to "simple search". In particular, you can do searches by specifying "field code" or "operator". For details, please refer to the links listed below.



C. Advanced Search - 2/2

~ Examples of search queries ~

Example 1 Cutting NEAR5 trunk

"cutting" and "trunk" are located within 5 words of each other

Example 2 IN(Jobs) AND DP:[2007 TO 2009] AND EN_DE(TOUCH)

Inventions by Steve Jobs published during the period from 2007 to 2009 containing the keyword "touch" in the description

Field Code : http://patentscope.wipo.int/search/en/help/fieldsHelp.jsf Operator : http://patentscope.wipo.int/search/en/help/querySyntaxHelp.jsf

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---(Slide 73)---

I will next give some examples of "advanced search".

"Example 1" is the example of the proximity search, whose search results will list documents where the terms "cutting" and "trunk" occur within five words from each other.

In "Example 2" three search conditions are combined.

One: the invention was made by Steve Jobs.

Two: the publication period was between 2007 and 2009.

Three: the description of the invention includes the term "touch". The search result will list publications that satisfy these three conditions.



IV. Search Tool - PATENTSCOPE

D. Field Combination



Any combinations of the preset search fields are available Cited from http://patentscope.wipo.int/search/en/advancedSearch.jsf 74

 \cdots (Slide 74) \cdots

Next, I will explain "field combination", which allows searches using multiple search fields. This combines "simple search" with AND or OR, and includes more "search field" items to select from as compared to "simple search".



- 1. Select Query Language * Cited from http://patentscope.wipo.int/search/en/clir/clir.jsf
- 2. Enter terms in the selected language in the Query Box.

Query Language

- 3. Automatically, the terms are expanded and then the expanded terms are translated into the other languages.
- 4. Documents in the other languages * are searched.

* Chinese, Dutch, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish, Swedish

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\cdots (Slide 75) \cdots

Lastly, I will explain "cross lingual expansion", which permits Cross Lingual/Language Information Retrieval. To perform a cross lingual query, you simply select the primary query language in the "query language" field and enter the query term in the "query box" in the language you selected. The term you entered will then be expanded and translated into other languages, and the search will be performed using the terms you entered along with the translated terms.



E. Cross Lingual Expansion - 2/2

Search result : Language is "English" and term is "Light"



 \cdots (Slide 76) \cdots

I will now show you an example of "cross lingual expansion".

Here, the screen shows the results of the search when you select "English" in the query Language and enter "light" in the query box. It will display the search queries for the term which is expanded and translated, along with the result of the search using these terms.