

Introduction and update of FI/F-term for CE

March 2024

Japan Patent Office



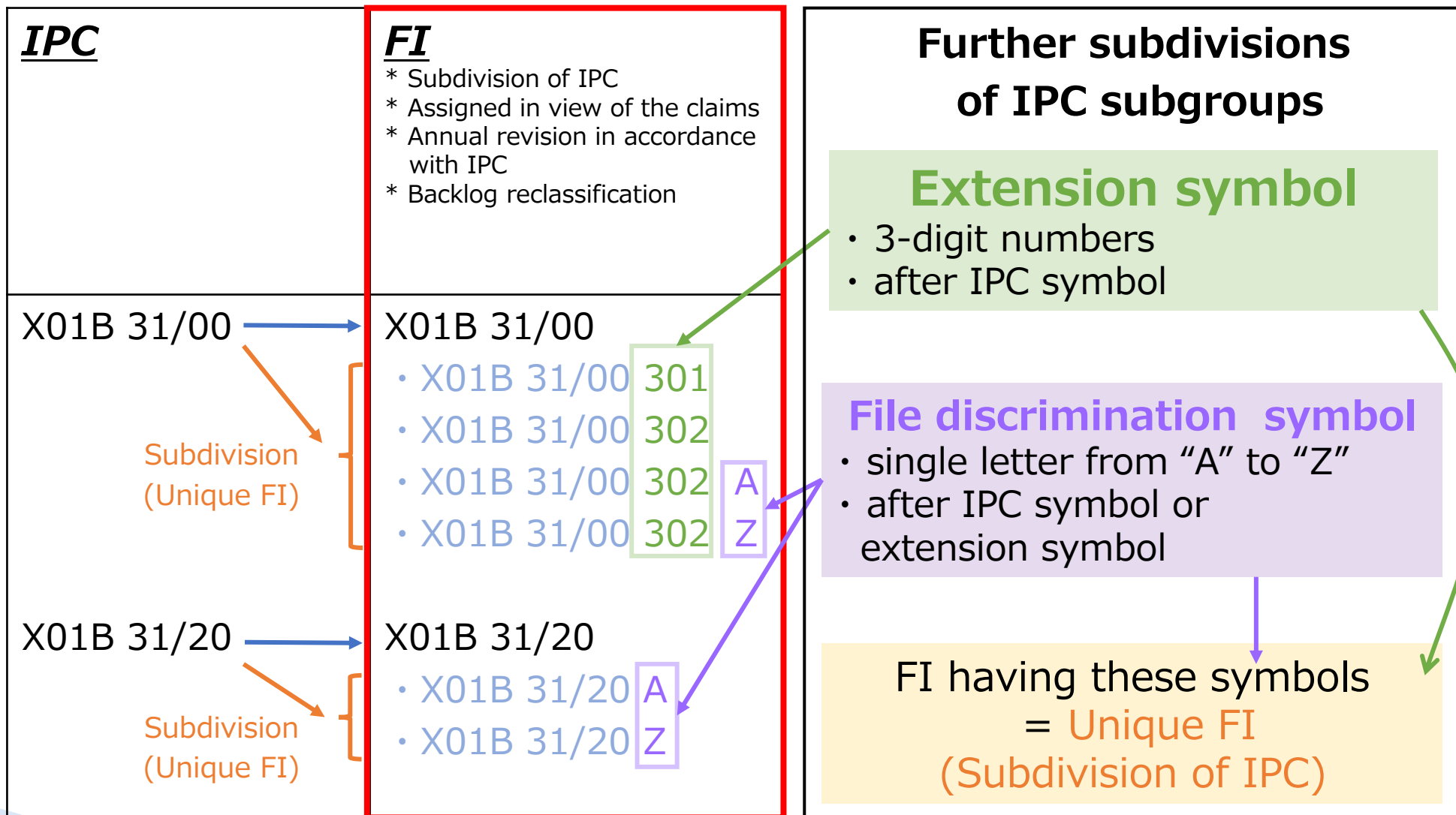
Contents

- Outline of FI/F-term
- Current status of FI/F-term
- Quantitative analysis on FI/F-term

Contents

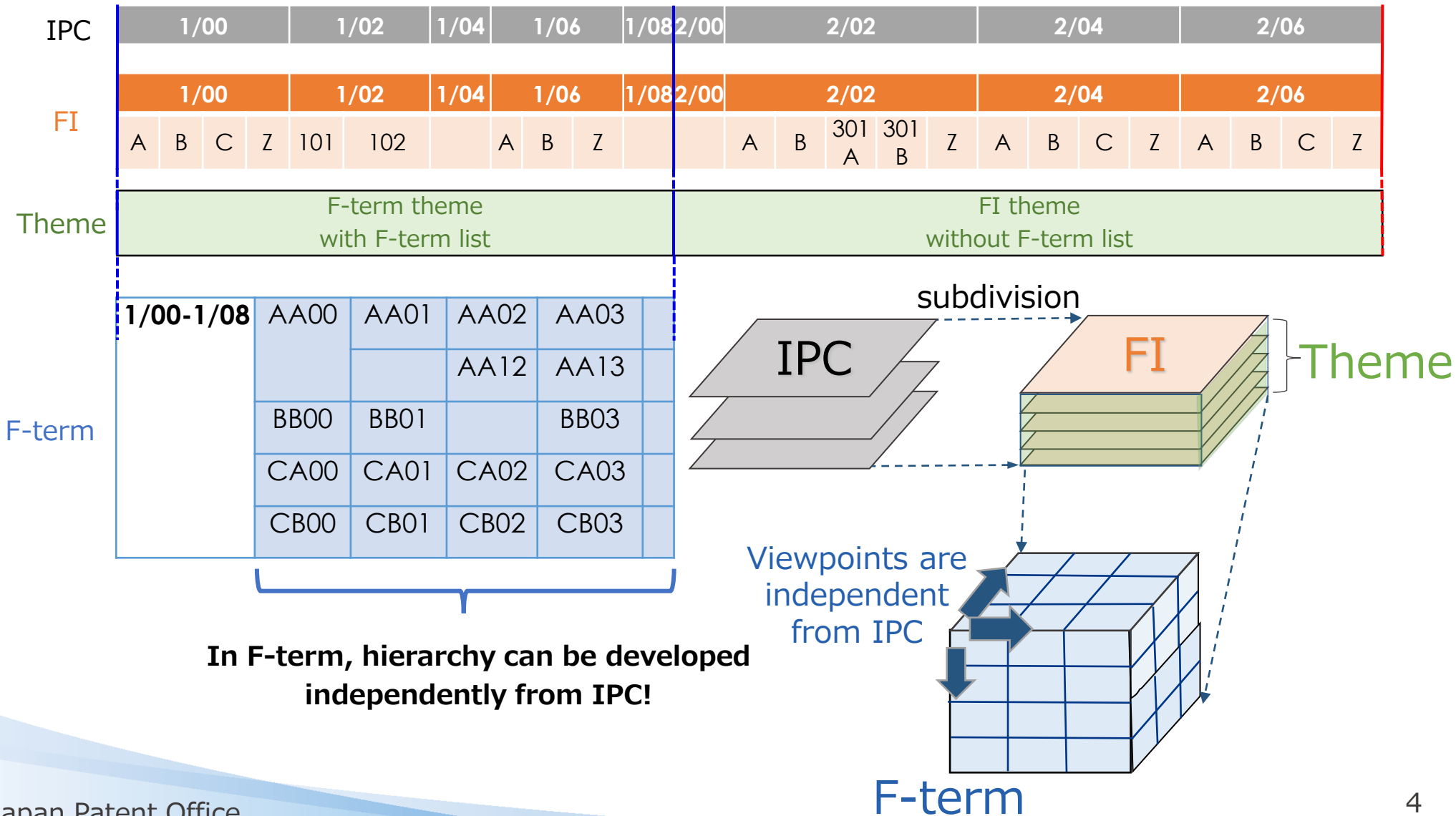
- Outline of FI/F-term
- Current status of FI/F-term
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Introduction of FI



Introduction of Theme and F-term

Relationship among IPC, FI, Theme and F-term



Contents

- Outline of FI/F-term
- Current status of FI/F-term
- Quantitative analysis on FI

FI/F-term revision in FY2023

JPO carries out FI/F-term revision every year.

- New FI and F-terms are created
- Unused FI and F-terms are deleted

➤ FI revision: **287 main groups**(2024.01)

➤ F-term revision: **18 themes**(2023.04)

FI Reclassification Methods

➤ Mechanical method

- Reclassification using search logical expression
(Queries combining classification and text)

➤ Intellectual method

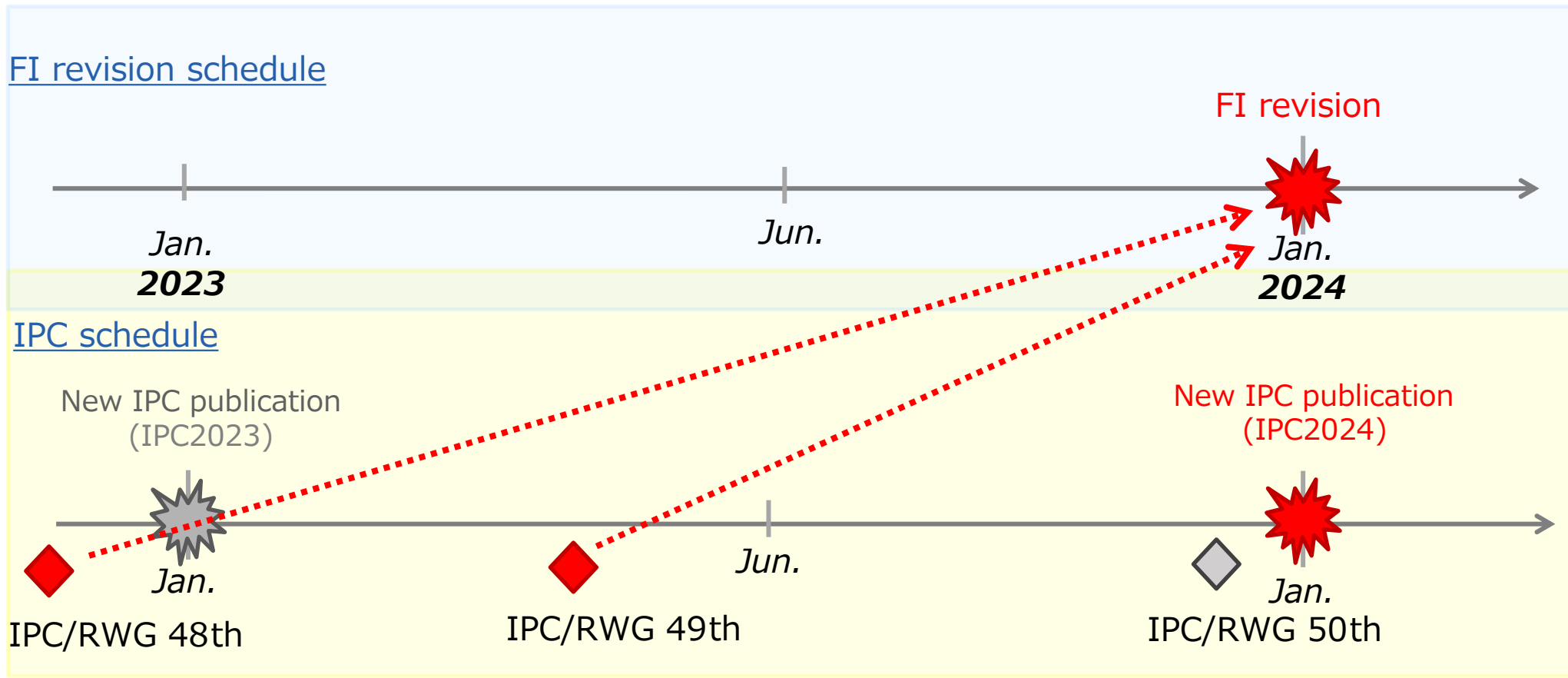
- Reclassification by humans

➤ Machinery classification assignment

- Reclassification by Machine learning

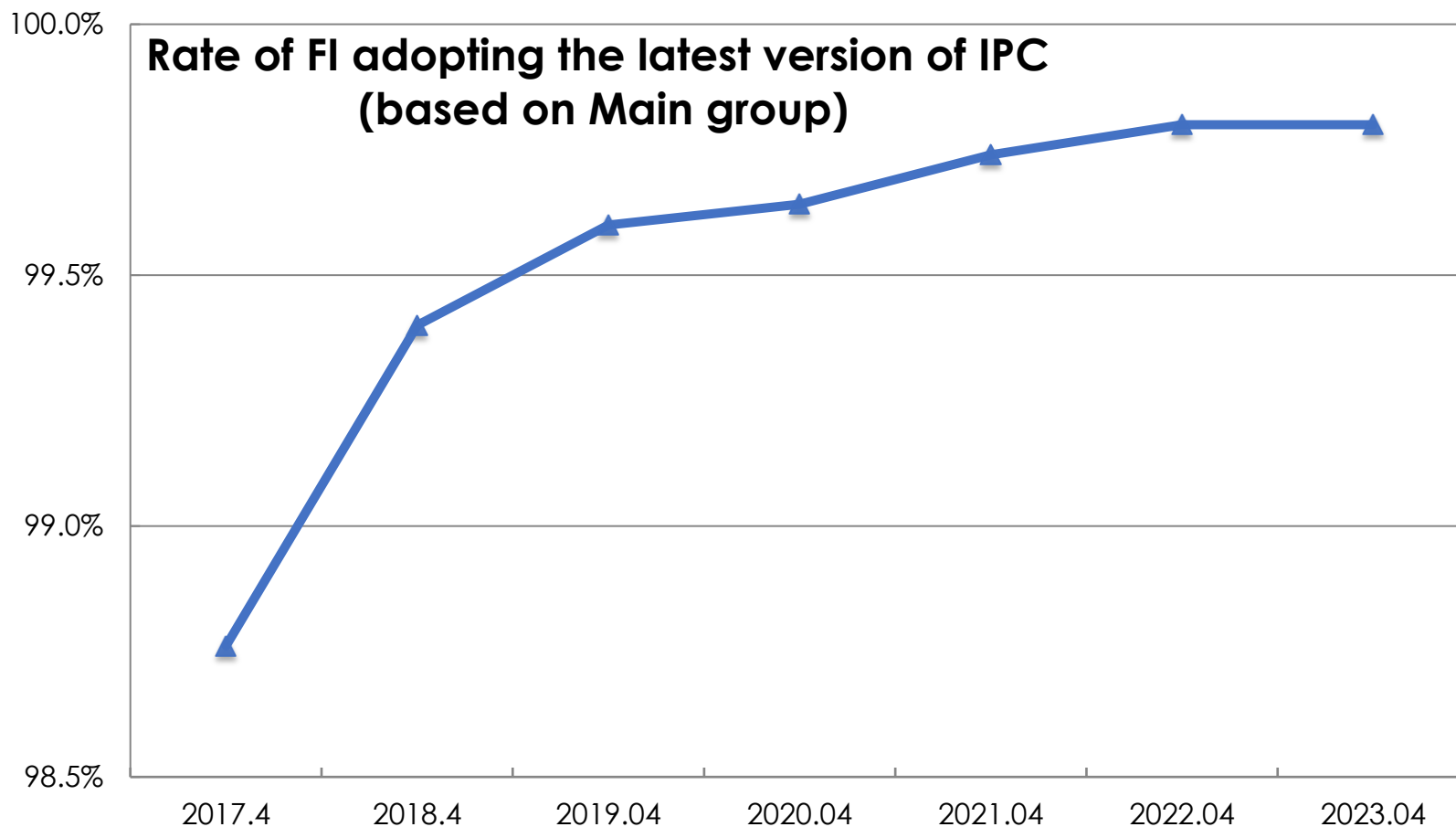
FI revision schedule

From 2023, FI revision and new IPC publication at the same time.



Updating FI scheme according to the latest version of IPC

Upon completion of FI revision in Apr. 2023, rate of FI adopting the latest IPC reached approximately 99.8%.



FI/F-term are available in PATENTSCOPE

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Home > PATENTSCOPE > News > 2023

The Norwegian and Belgian national patent collections and the F-term & FI classifications are now available in PATENTSCOPE

July 12, 2023

The national patent collections of Norway and Belgium are now available in WIPO's global [patent search system PATENTSCOPE](#). The Norwegian collection includes over 225,000 patent documents while the national patent collection of Belgium over 326,500 patent documents.

With the inclusion of these two national collections, PATENTSCOPE now provides access to a total of 78 national and regional collections.

In addition to the aforementioned collections, the Japanese classifications FI and F-terms for the national Japanese collection were also added. This enhancement further enriches the search capabilities within PATENTSCOPE, facilitating more refined and precise exploration of Japanese patents.

https://www.wipo.int/patentscope/en/news/pctdb/2023/news_0004.html

IPC-FI-CPC scheme parallel viewer

☆ Scheme parallel viewer ☆

[concordance ver.](#)

[rawdata download](#)

IPC ▼

B60G17/015

Display

Clear

Sample : G06F3 or G06F3/ or G06F3/00 or G06F3/02 etc...

[help](#)

IPC JP EN Both non-display

Display ipc level only : Off On

ECLA: EN JP Both non-display

FI: JP EN Both non-display

FI without same-symbol IPC : display non-display

ICO: EN JP Both non-display

CPC: EN JP Both non-display

FI dot pattern : pattern1 pattern2

IPC doc number : On Off

FI doc number : On Off

CPC doc number : On Off

Keyword Search

Display

Clear

FI IPC CPC

IPC

FI

CPC

B60G 17/015	• the regulating means comprising electric or electronic elements(B60G17/005 takes precedence)	15675 docs	B60G 17/015	• the regulating means comprising electric or electronic elements (B60G 17/005 takes precedence) [5,8]	3641 docs	3D301	HB	B60G17/015	• the regulating means comprising electric or electronic elements ({B60G17/002}, B60G17/005 take precedence)	2014 docs
			B60G 17/015 A	• • Controlling damping force (controlling damper venturi and the like)	5078 docs	3D301	HB	B60G17/0152	• • {characterised by the action on a particular type of suspension unit (B60G17/01941 takes precedence)}	826 docs
			B60G 17/015 B	• • Controlling working fluid (control of hydro, full active, control of spring constant)	5028 docs	3D301	HB	B60G17/0155	• • • {pneumatic unit}	783 docs
			B60G 17/015 C	• • • controlling air	3040 docs	3D301	HB	B60G17/0157	• • • {non-fluid unit, e.g. electric motor}	602 docs

Already Updated: IPC Ver.2024.01, FI Ver.2024.01, CPC Ver.2024.01

Contents

- Outline of FI/F-term
- Current status of FI/F-term
- Quantitative analysis on FI/F-term
 - ※ Specific FI and F terms presented here may not always be useful, but are likely to be useful

What is the strong point of FI?

- ◆ Of course, you can use IPC when searching for JP documents.
(JP documents have IPC with concordance for assigned FI.)
- ◆ So, FI is useful in searching for JP documents by using **Unique FI**.
(The perspective of **Unique FI** cannot be replaced by IPC)
- ◆ Show the feature of **Unique FI** in each section or main group.
- ◆ Through **Ratio of unique FI-assigned docs (RUF1)**, you can know what technical field is suitable for using FI in searching

How to calculate Ratio of unique FI-assigned docs(RUFI)

$$\text{RUFI} = \frac{\text{Unique FI}}{\text{FI equal to IPC} + \text{Unique FI}}$$


If RUFI is high, Unique FI has high prospects of usefulness!

...For example, for the following case.

FI equal to IPC — X01B 31/00

Unique FI {

- X01B 31/00 301
- X01B 31/00 302
- X01B 31/00 302 A
- X01B 31/00 302 Z

Assigned docs
(for all JP docs)

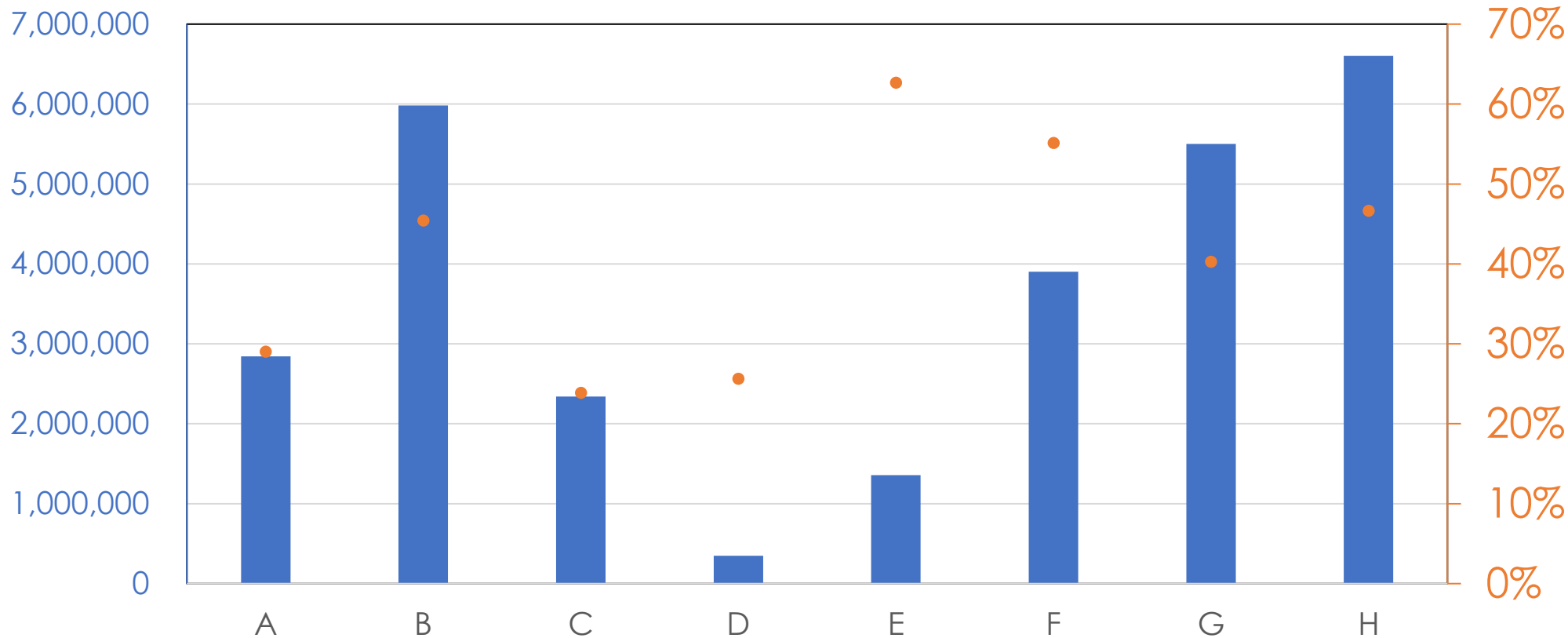
... 10
... 4
... 5
... 2
... 0

$$\text{RUFI} = \frac{\text{Unique FI}}{\text{FI equal to IPC} + \text{Unique FI}} = \frac{4+5+2}{10+4+5+2} = \underline{\underline{52.4\%}}$$

Calculate and compare RUFI in each section and each main group

What is the strong point of FI?

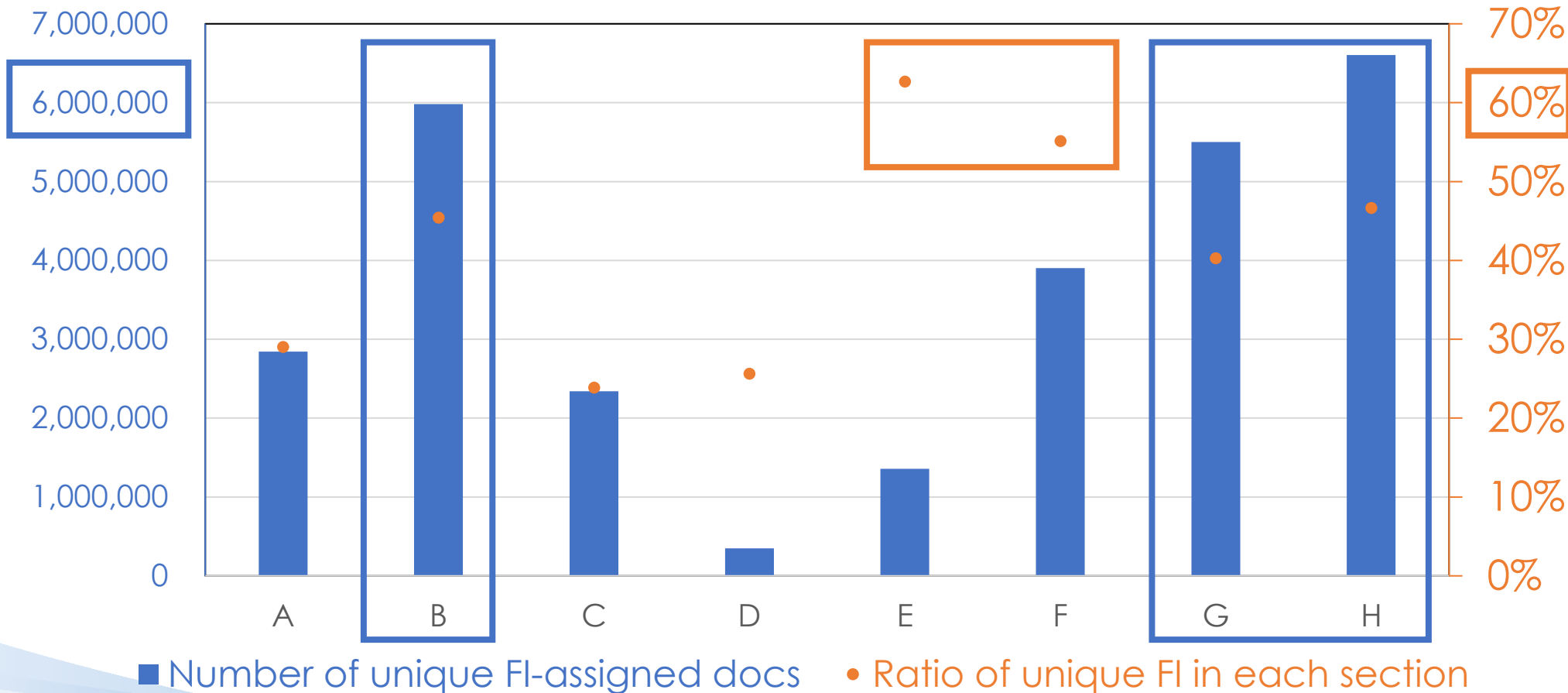
- ◆ E and F section have high **RUF** around 60% (orange dot; right axis).
- ◆ B, G, and H section have lots of **unique FI assigned docs** (blue bar; left axis).



■ Number of unique FI-assigned docs ● Ratio of unique FI in each section

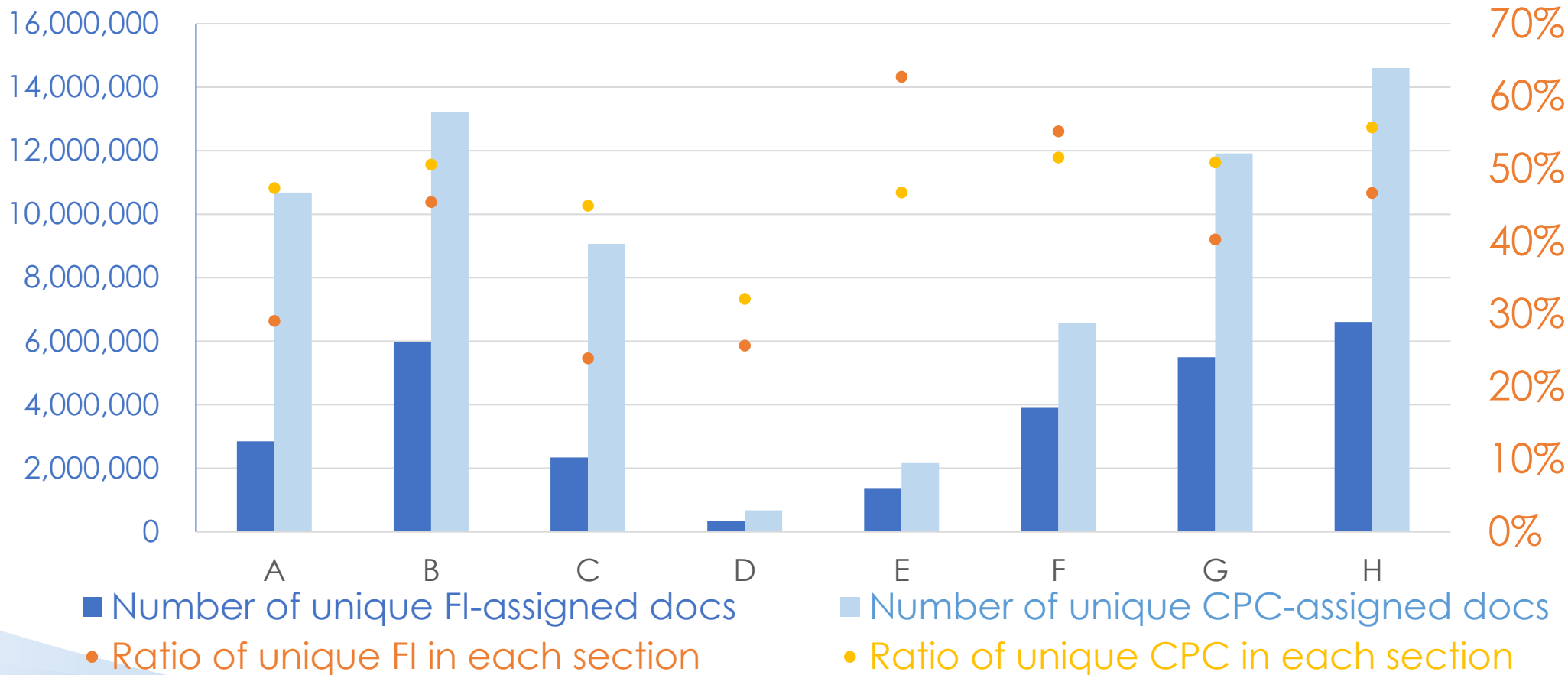
What is the strong point of FI?

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- ◆ B, G, and H section have lots of **unique FI assigned docs** (blue bar; left axis).



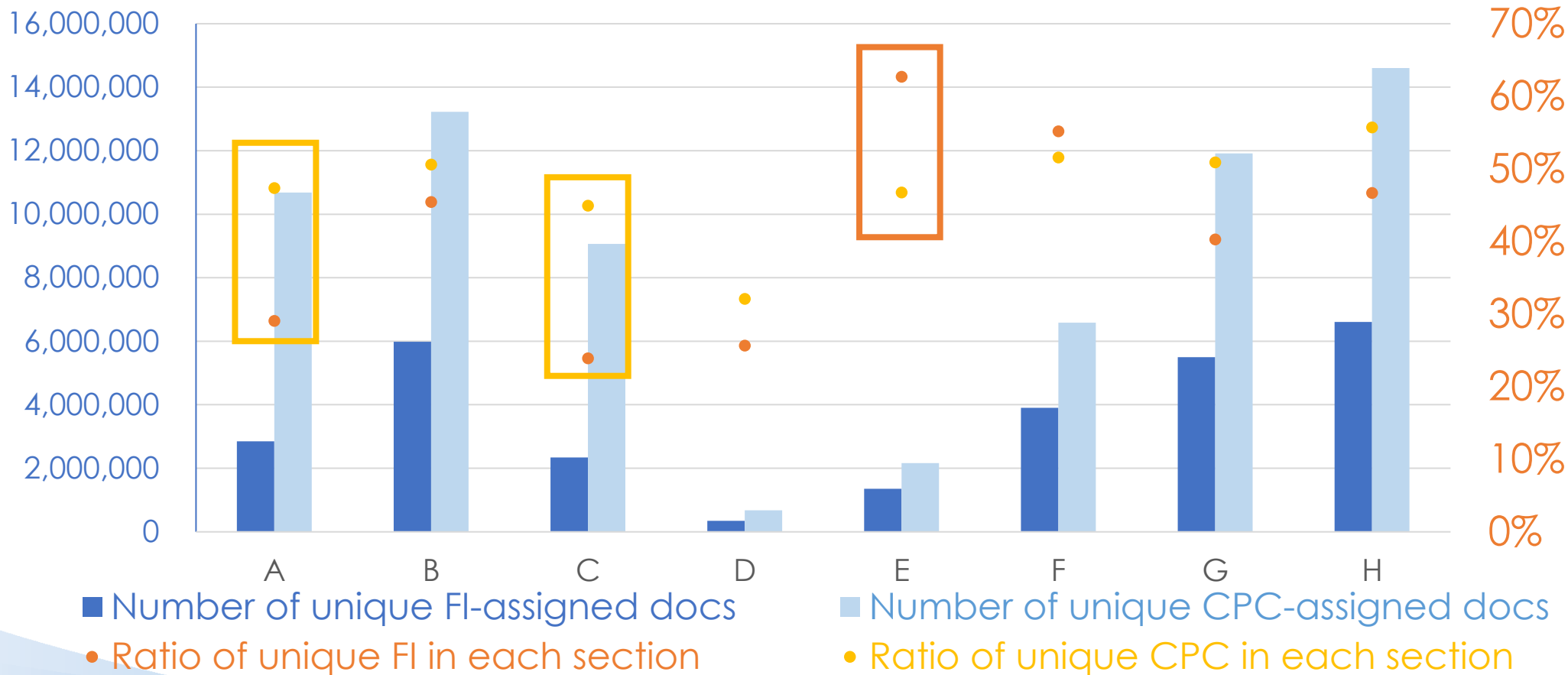
Comparison of CPC and FI

- ◆ **Ratio of unique CPC-assigned docs(RUCPC)** can be calculated in the same way.
- ◆ In E section, **RUFI** is approximately 20% higher than **RUCPC**.
- ◆ In A and C section, **RUCPC** is approximately 20% higher than **RUFI**.



Comparison of CPC and FI

- ◆ **Ratio of unique CPC-assigned docs(RUCPC)** can be calculated in the same way.
- ◆ In E section, **RUFI** is approximately 20% higher than **RUCPC**.
- ◆ In A and C section, **RUCPC** is approximately 20% higher than **RUFI**.



Ranking table for high RUF I in each main group

Main group	Number of docs have Unique FI in Main Group	RUF I in Main group
A01K 23/	2757	99.9637%
A01K 13/	2298	99.9565%
A01K 93/	3412	99.9122%
A01K 11/	755	99.8677%
G01P 13/	5897	99.8645%
B30B 13/	2074	99.8556%
A01K 27/	1907	99.8429%
B23B 15/	1183	99.8312%
F04C 15/	7687	99.8312%
F01M 7/	544	99.8165%
B26B 25/	463	99.7845%
B21H 9/	457	99.7817%
B42D 11/	6707	99.7769%
C07G 99/	1242	99.7590%
A01K 45/	409	99.7561%
F04D 23/	1172	99.7447%
B25H 7/	4550	99.7370%
F23G 1/	1107	99.7297%
G21K 3/	729	99.7264%
G06C 1/	1820	99.7260%
H02B 3/	3145	99.7146%
G04B 43/	679	99.7063%
G21K 4/	5050	99.7038%
G21K 5/	11794	99.6957%
B60M 7/	2902	99.6908%
F04C 29/	34725	99.6899%
A63F 11/	960	99.6885%
B28D 5/	7309	99.6727%
D03C 13/	2946	99.6617%
F16B 41/	3483	99.6567%
B42D 17/	280	99.6441%
B26B 27/	1948	99.6419%
F41B 1/	551	99.6383%
B09B 5/	11452	99.6346%
A63H 5/	5396	99.6307%

Main group	Number of docs have Unique FI in Main Group	RUF I in Main group
F02B 65/	526	99.6212%
G04B 39/	2619	99.6196%
H01L 25/	38820	99.6151%
F16B 23/	2313	99.6124%
F02B 31/	11299	99.6121%
F02F 11/	5993	99.5846%
B23B 1/	1905	99.5818%
H05B 11/	2614	99.5810%
F16J 12/	3311	99.5789%
H01M 14/	5855	99.5748%
B22D 9/	451	99.5585%
F16M 7/	4245	99.5544%
F04D 27/	7590	99.5540%
D04C 7/	221	99.5495%
B24C 9/	2647	99.5487%
E04H 13/	3531	99.5209%
A44B 99/	5398	99.5206%
B23Q 9/	406	99.5098%
F25B 39/	14383	99.5088%
H02J 15/	2377	99.4977%
E04G 19/	1177	99.4928%
F17C 11/	2154	99.4919%
C03C 23/	2138	99.4881%
F16M 3/	773	99.4852%
G11B 19/	22912	99.4790%
B22D 1/	4295	99.4673%
F16H 31/	1296	99.4628%
F25B 43/	8646	99.4593%
H02J 13/	18963	99.4493%
G07C 15/	539	99.4465%
B24B 45/	1793	99.4454%
B23D 36/	1757	99.4341%
B66B 31/	4362	99.4301%
F02M 51/	19276	99.4172%
F02B 53/	4944	99.4169%

Main group	Number of docs have Unique FI in Main Group	RUF I in Main group
B60Q 7/	4062	99.3883%
B62J 37/	1137	99.3881%
B66B 27/	648	99.3865%
F02N 99/	796	99.3758%
B02C 25/	1254	99.3661%
B42F 9/	2489	99.3613%
B25B 21/	10420	99.3516%
B25C 7/	1685	99.3514%
H01H 25/	10392	99.3499%
F02F 5/	5654	99.3499%
B62J 33/	608	99.3464%
B23Q 27/	757	99.3438%
E05B 41/	1644	99.3353%
H01R 35/	3850	99.3292%
H01H 49/	1472	99.3252%
F01K 13/	1607	99.3201%
F02D 43/	28529	99.3142%
F41B 7/	1156	99.3127%
B60Q 11/	10984	99.3039%
F02F 7/	9557	99.3038%
B62J 31/	556	99.2857%
E01D 18/	550	99.2780%
B42F 5/	4637	99.2721%
B23P 21/	16012	99.2684%
D01D 7/	3094	99.2621%
H01M 12/	7321	99.2543%
F15B 5/	1060	99.2509%
F16B 4/	2889	99.2442%
G01N 35/	35475	99.2419%
B62J 23/	4448	99.2414%
F25D 9/	2980	99.2341%
A01K 77/	905	99.2325%
B23B 21/	1012	99.2157%
G01F 17/	989	99.1976%
F04D 7/	4326	99.1974%

Main group	Number of docs have Unique FI in Main Group	RUF I in Main group
H02N 13/	2347	99.1970%
G04B 41/	123	99.1935%
E04D 12/	2809	99.1879%
D06C 25/	847	99.1803%
D05B 23/	1797	99.1722%
H05K 13/	45954	99.1585%
F16D 63/	2472	99.1576%
F16B 11/	2100	99.1501%
B23Q 37/	345	99.1379%
F27D 15/	3204	99.1337%
G01N 22/	5069	99.1201%
D01G 25/	1232	99.1150%
F02M 39/	1224	99.1093%
H01C 13/	4448	99.1087%
B23K 25/	1218	99.1050%
H05K 9/	35750	99.1018%
B09B 1/	3147	99.0869%
G05B 23/	30906	99.0799%
B60Q 5/	12083	99.0653%
H01F 37/	15738	99.0621%
E04D 7/	831	99.0465%
F01K 27/	1451	99.0444%
B60K 23/	13536	99.0342%
F28D 20/	7453	99.0169%
A63B 1/	705	99.0169%
C21D 8/	25464	99.0162%
B01D 5/	2211	99.0148%
F02D 23/	8123	99.0127%
H04J 11/	18705	99.0102%

Please check it out later!

Ranking table for high RUFIs in each main group

Main group	Number of docs have Unique FI in Main Group	RUFI in Main group	Main group	Number of docs have Unique FI in Main Group	RUFI in Main group	Main group	Number of docs have Unique FI in Main Group	RUFI in Main group	Main group	Number of docs have Unique FI in Main Group	RUFI in Main group
A01K 23/	2757	99.9637%	A01K 13/	2298	99.9565%	H02N 13/	2347	99.1970%	G04B 41/	123	99.1935%
A01K 93/	3412	99.9122%	A01K 11/	755	99.8677%	E04D 12/	2809	99.1879%	E04D 12/	2809	99.1879%
G01P 13/	5897	99.8645%	B30B 13/	2074	99.8556%	D06C 25/	847	99.1803%	D06C 25/	847	99.1803%
A01K 27/	1907	99.8429%	F01M 7/	544	99.8165%	D05B 23/	1797	99.1722%	D05B 23/	1797	99.1722%
B23B 15/	1183	99.8312%	B26B 25/	463	99.7845%	H05K 13/	45954	99.1585%	H05K 13/	45954	99.1585%
F04C 15/	7687	99.8312%	B21H 9/	457	99.7817%	F16D 63/	2472	99.1576%	F16D 63/	2472	99.1576%
F01M 7/	544	99.8165%	B42D 11/	6707	99.7769%	F16B 11/	2100	99.1501%	F16B 11/	2100	99.1501%
B26B 25/	463	99.7845%	C07G 99/	1242	99.7590%	B23Q 37/	345	99.1379%	B23Q 37/	345	99.1379%
B21H 9/	457	99.7817%	A01K 45/	409	99.7561%	F27D 15/	3204	99.1337%	F27D 15/	3204	99.1337%
B42D 11/	6707	99.7769%	F04D 23/	1172	99.7447%	G01N 22/	5069	99.1201%	G01N 22/	5069	99.1201%
C07G 99/	1242	99.7590%	B25H 7/	4550	99.7370%	D01G 25/	1232	99.1150%	D01G 25/	1232	99.1150%
A01K 45/	409	99.7561%	F23G 1/	1107	99.7297%	F02M 39/	1224	99.1093%	F02M 39/	1224	99.1093%
F04D 23/	1172	99.7447%	G21K 3/	729	99.7264%	H01C 13/	4448	99.1087%	H01C 13/	4448	99.1087%
B25H 7/	4550	99.7370%	G06C 1/	1820	99.7260%	B23K 25/	1218	99.1050%	B23K 25/	1218	99.1050%
F23G 1/	1107	99.7297%	H02B 3/	3145	99.7146%	H05K 9/	35750	99.1018%	H05K 9/	35750	99.1018%
G21K 3/	729	99.7264%	G04B 43/	679	99.7063%	B09B 1/	3147	99.0869%	B09B 1/	3147	99.0869%
G06C 1/	1820	99.7260%	G21K 4/	5050	99.7038%	G05B 23/	30906	99.0799%	G05B 23/	30906	99.0799%
H02B 3/	3145	99.7146%	G21K 5/	11794	99.6957%	B60Q 5/	12083	99.0653%	B60Q 5/	12083	99.0653%
G04B 43/	679	99.7063%	B60M 7/	2902	99.6908%	H01F 37/	15738	99.0621%	H01F 37/	15738	99.0621%
G21K 4/	5050	99.7038%	F04C 29/	34725	99.6899%	E04D 7/	831	99.0465%	E04D 7/	831	99.0465%
G21K 5/	11794	99.6957%	A63F 11/	960	99.6885%	F01K 27/	1451	99.0444%	F01K 27/	1451	99.0444%
D03C 13/	2946	99.6617%	B28D 5/	7309	99.6727%	B60K 23/	13536	99.0342%	B60K 23/	13536	99.0342%
F16B 41/	3483	99.6567%	D03C 13/	2946	99.6617%	F28D 20/	7453	99.0169%	F28D 20/	7453	99.0169%
B42D 17/	280	99.6441%	F16B 41/	3483	99.6567%	A63B 1/	705	99.0169%	A63B 1/	705	99.0169%
B26B 27/	1948	99.6419%	B42D 17/	280	99.6441%	C21D 8/	25464	99.0162%	C21D 8/	25464	99.0162%
F41B 1/	551	99.6383%	B26B 27/	1948	99.6419%	B01D 5/	2211	99.0148%	B01D 5/	2211	99.0148%
B09B 5/	11452	99.6346%	F41B 1/	551	99.6383%	F02D 23/	8123	99.0127%	F02D 23/	8123	99.0127%
A63H 5/	5396	99.6307%	B09B 5/	11452	99.6346%	H04J 11/	18705	99.0102%	H04J 11/	18705	99.0102%

For example,
Focus on this main group
A01K 23/

Useful example in using FI

Main group : A01K23

☆ Scheme parallel viewer ☆ [concordance ver.](#) [rawdata download](#) [contact Us](#)

IPC Sample : G06F or G06F3 or G06F3/ or G06F3/00 or G06F3/02 etc. [help](#)

IPC JP EN Both non-display symbol only IPC doc number On Off Display IPC level only Off On
 FI JP EN FI doc number On Off FI dot pattern term2
 CPC EN JP CPC doc number On off

IPC

FI

Keyword Search IPC FI CPC

A01K 23/00	Manure or urine pouches	5500 docs
A01K 23/00 A	Pots for keeping dogs' feces	221 docs
A01K 23/00 E	Scooping up from one direction, e.g. scoops	79 docs
A01K 23/00 F	Equipped with sections to house feces	68 docs
A01K 23/00 G	With tools to rake feces into the storage members, [figure]	38 docs
A01K 23/00 H	Pushing feces into storage members by the move of the closing lid, [figure] [figure]	79 docs
A01K 23/00 J	Holding or grabbing and picking up feces from multiple different directions	179 docs
A01K 23/00 K	Wrapping feces in storage members at the both sides, [figure]	150 docs
A01K 23/00 L	Grabbing feces by means of bags or sheets (By means of other members A01K23/00@J)	93 docs
A01K 23/00 M	Containers to house feces picked up with feces collectors	34 docs
A01K 23/00 N	Tools to treat feces and urine passed out onto a road with chemical substances	41 docs
A01K 23/00 B	Portable manure or urine pots e.g. for dogs	517 docs
A01K 23/00 P	Attaching a bag to a frame only with sides and without a flat base	271 docs
A01K 23/00 Q	Two frames without flat bases where an upper frame and a lower frame are connected at two frame connection nodes so that the upper frame can be flipped open and close freely	150 docs
A01K 23/00 R	Using by placing on the ground, not by holding with hands	30 docs
A01K 23/00 D	Urine and feces pouches which animals can wear	165 docs
A01K 23/00 S	Diapers for pets	296 docs
A01K 23/00 Z	Others	346 docs

**5500 docs
in only 1 IPC**

**Many docs are classified
to a single symbol,
leaving room for subdivision**

**Only 1 docs
in FI equal to IPC**

**2347 docs in total
in 17 unique FI**

**You can use FI efficiently
in searching for
this main group**

**The table on the previous
page summarizes the main
groups with these trends**

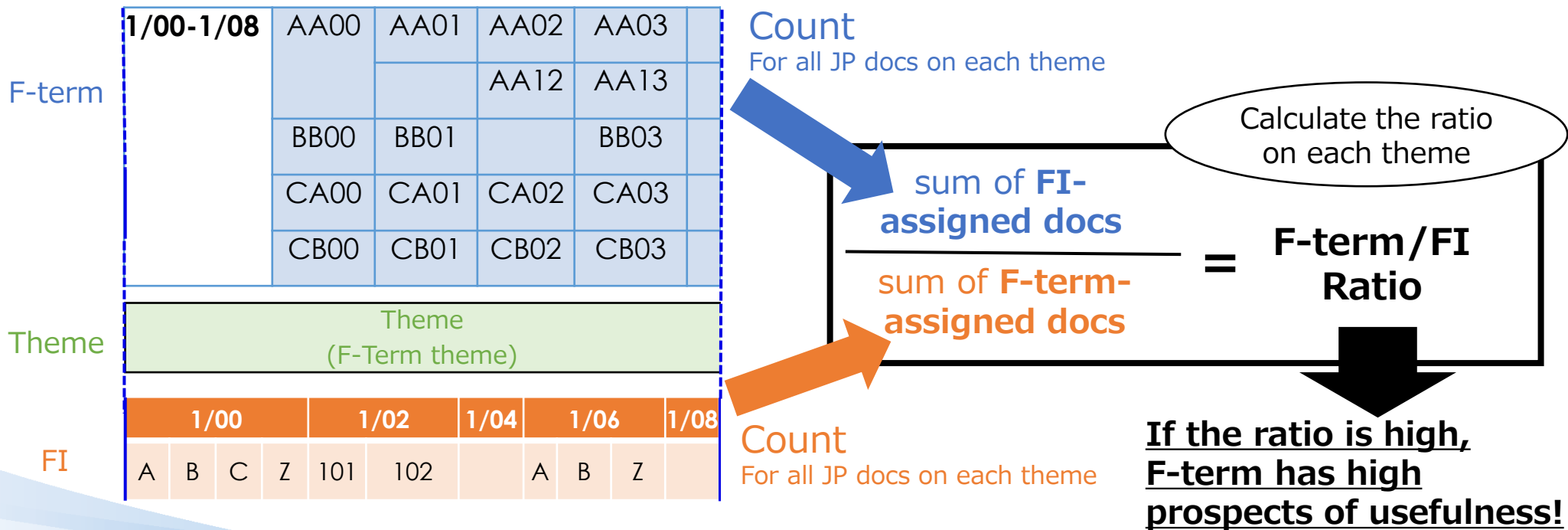
Previous page →

※The number of IPC references is calculated based on the number of simple patent families.

Comparison of F-term and FI

- ◆ In Japan, some technical fields have well-developed FI, while others have well-developed F-term.
- ◆ It is difficult for users outside Japan to decide which to use FI or F-term.
- ◆ F-term is considered useful if F-term is assigned to more docs than FI

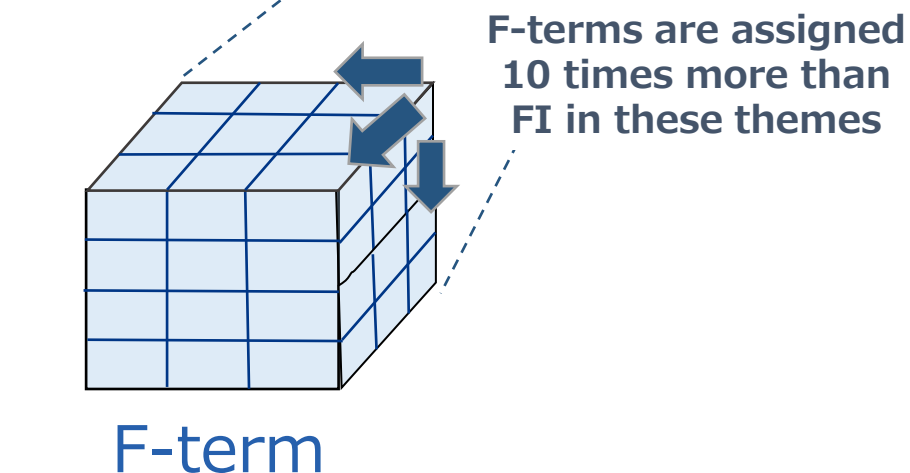
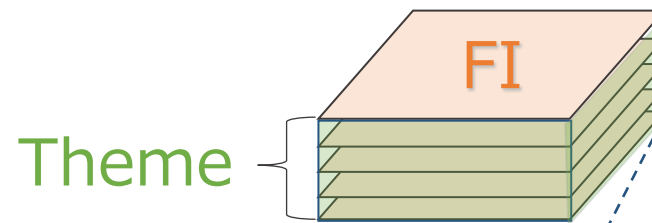
Concepts of F-term/FI ratio



Ranking table for high F-term/FI Ratio in each theme

THEME CODE	Ratio(F-term/FI) of classification assignment	THEME CODE	Ratio(F-term/FI) of classification assignment	THEME CODE	Ratio(F-term/FI) of classification assignment	THEME CODE	Ratio(F-term/FI) of classification assignment
4C093	202.5	5H023	13.2	3G016	11.6	4G073	10.7
5K012	102.0	3K339	13.2	4M119	11.6	5H641	10.7
5E077	48.6	4E353	13.0	2G046	11.6	3E050	10.7
3D344	29.3	2E220	12.9	2E001	11.6	5H571	10.7
4G062	27.2	3J528	12.9	5J500	11.5	4F201	10.7
4J043	24.3	3E068	12.9	3E067	11.5	3J104	10.6
4J128	22.7	2F065	12.8	5H420	11.4	3J103	10.6
2H300	20.6	3J216	12.8	2H149	11.4	3F075	10.6
5G206	20.3	4F100	12.8	4G075	11.4	3B150	10.6
2H200	19.4	4E352	12.8	4D077	11.3	2H291	10.6
4K037	19.4	3D246	12.7	3F080	11.3	2F073	10.6
4J127	18.8	2G040	12.7	2B074	11.3	3H067	10.6
2B396	17.4	5C006	12.6	3G018	11.2	3E054	10.6
3K273	16.8	2B382	12.6	5C084	11.2	3K161	10.6
2E125	16.7	5H323	12.5	5H410	11.2	5E085	10.5
5C056	16.4	3E051	12.5	5C096	11.2	4H049	10.5
4C091	16.4	2H137	12.5	4F055	11.2	2F061	10.5
5B058	16.3	2F069	12.5	3B005	11.2	3E084	10.5
2H092	16.1	4F071	12.5	2H087	11.2	3H057	10.5
5J067	15.8	4G005	12.4	3G301	11.2	3K072	10.5
5G031	15.6	5H601	12.4	4C117	11.1	4C075	10.5
5F152	15.6	3G092	12.4	4J026	11.1	3B154	10.5
4K032	15.5	4G072	12.3	3F048	11.1	4K044	10.4
5H043	15.4	3G031	12.3	5C057	11.0	3H130	10.3
2E110	15.3	4H055	12.3	3E096	11.0	2B043	10.3
2G084	14.7	4E351	12.3	3K082	11.0	2H192	10.3
3C064	14.6	5B057	12.2	4J034	11.0	3D244	10.3
4J246	14.4	5J081	12.1	4L041	11.0	5C087	10.2
2F129	14.3	3K083	12.0	3B166	11.0	4G132	10.2
4G065	14.1	4J029	11.9	5C066	11.0	4D061	10.2
5F110	14.0	2F068	11.8	4F210	11.0	5H316	10.1
5F131	13.7	4C065	11.7	4E084	10.9	5E555	10.1
4G169	13.6	5F045	11.7	3H089	10.9	3D203	10.1
3F522	13.6	5F053	11.7	4G078	10.9	3L122	10.1
3F070	13.6	3H061	11.7	5H572	10.9	3L113	10.1
5F033	13.5	3J022	11.7	5H633	10.9	4D076	10.0
2H171	13.5	5H113	11.6	5H313	10.8	4F056	10.0
3D232	13.4	4F074	11.6	3J217	10.8	4M112	10.0
5H590	13.3	3J102	11.6	3B165	10.8		
4F072	13.3	3F072	11.6	2H141	10.8		

Ranking table for high F-term/FI Ratio in each theme



F-terms are assigned 10 times more than FI in these themes

When you search for these themes, please try to search using the F-term!

Thank you!

If you have any question,
please email me at PA0L10@jpo.go.jp
or ask JPO colleagues!





Appendix

JPO website on classification

The image shows two screenshots of the JPO website. The left screenshot shows the main navigation menu with 'Systems/Procedures' circled in red. Below it, the 'Patents' section is expanded, and 'Overview' is circled in red. A red arrow points from 'Overview' to the right screenshot. The right screenshot shows the 'Overview (Patents)' page with the 'Classification' link circled in red. A red arrow points from the 'Classification' link to the 'Classification' section of the page content.

JPO JAPAN PATENT OFFICE

Japanese | Opinion Box | How to use JPO website | Access

ENHANCED BY Google

Text size S M L

HOME Announcements **Systems/Procedures** Related Services Statistics/References About JPO

Patents

- Overview
- Filing
- Examinations
- PCT International Application

Designs

- Overview
- Filing
- Examination
- Geneva Act (Hague Agreement)

General Procedures

- Filing
- Fee Information
- Precautions for Overseas Applicants

Laws and Policies

- Laws and Guidelines
- Publications
- Information on Foreign Industrial Property Systems
- Policies and Initiatives

Trademarks

- Overview
- Examination
- Madrid Protocol

Trials and Appeals

Utility Models

- Overview
- Filing
- Examination
- PCT International Application

Fee Information **Schedule of fees**

Step-by-step Guide **IP Professionals**

GXTI Green Transformation Technologies Inventory

Japanese | Opinion Box

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HOME Announcements **Systems/Procedures** Related Services Stat Refe

Home > Systems/Procedures > Patents > Overview

Overview (Patents)

Overview of IP system

- System of Industrial Property Rights
- Procedures for Obtaining a Patent Right
- Information of Registration

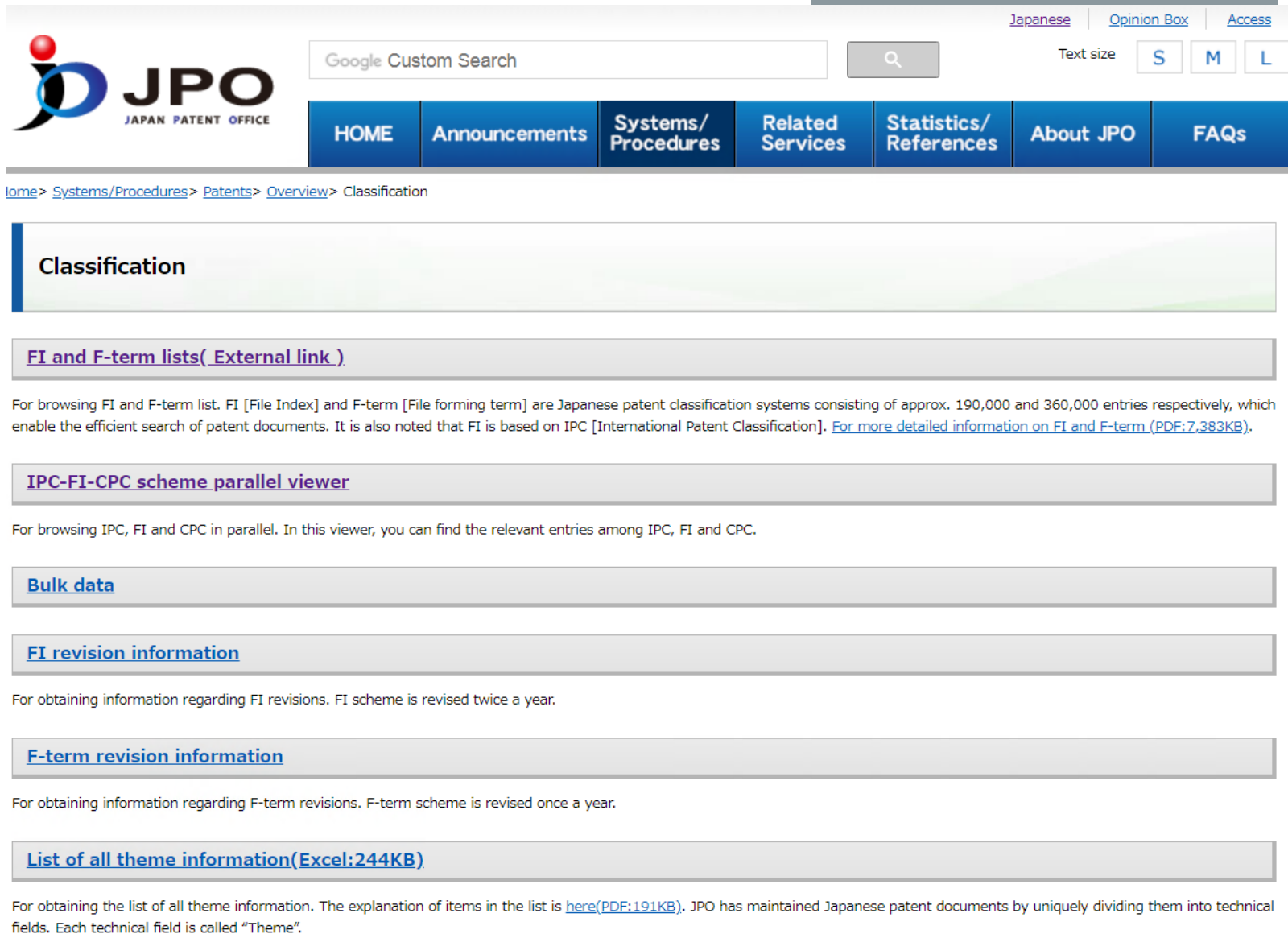
Classification

- Classification**
- Outline of Technology Examined in Examination Departments

Patent Related Policies

- AI-related Inventions
- Recent Trends in Business-related Inventions
- Applicants can obtain high quality search reports before publication
- Revision of the Time Limit for Submitting a Request for Examination

JPO website on classification



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[HOME](#) [Announcements](#) [Systems/Procedures](#) [Related Services](#) [Statistics/References](#) [About JPO](#) [FAQs](#)

[Home](#) > [Systems/Procedures](#) > [Patents](#) > [Overview](#) > Classification

Classification

[FI and F-term lists\(External link \)](#)

For browsing FI and F-term list. FI [File Index] and F-term [File forming term] are Japanese patent classification systems consisting of approx. 190,000 and 360,000 entries respectively, which enable the efficient search of patent documents. It is also noted that FI is based on IPC [International Patent Classification]. [For more detailed information on FI and F-term \(PDF:7,383KB\)](#).

[IPC-FI-CPC scheme parallel viewer](#)

For browsing IPC, FI and CPC in parallel. In this viewer, you can find the relevant entries among IPC, FI and CPC.

[Bulk data](#)

[FI revision information](#)

For obtaining information regarding FI revisions. FI scheme is revised twice a year.

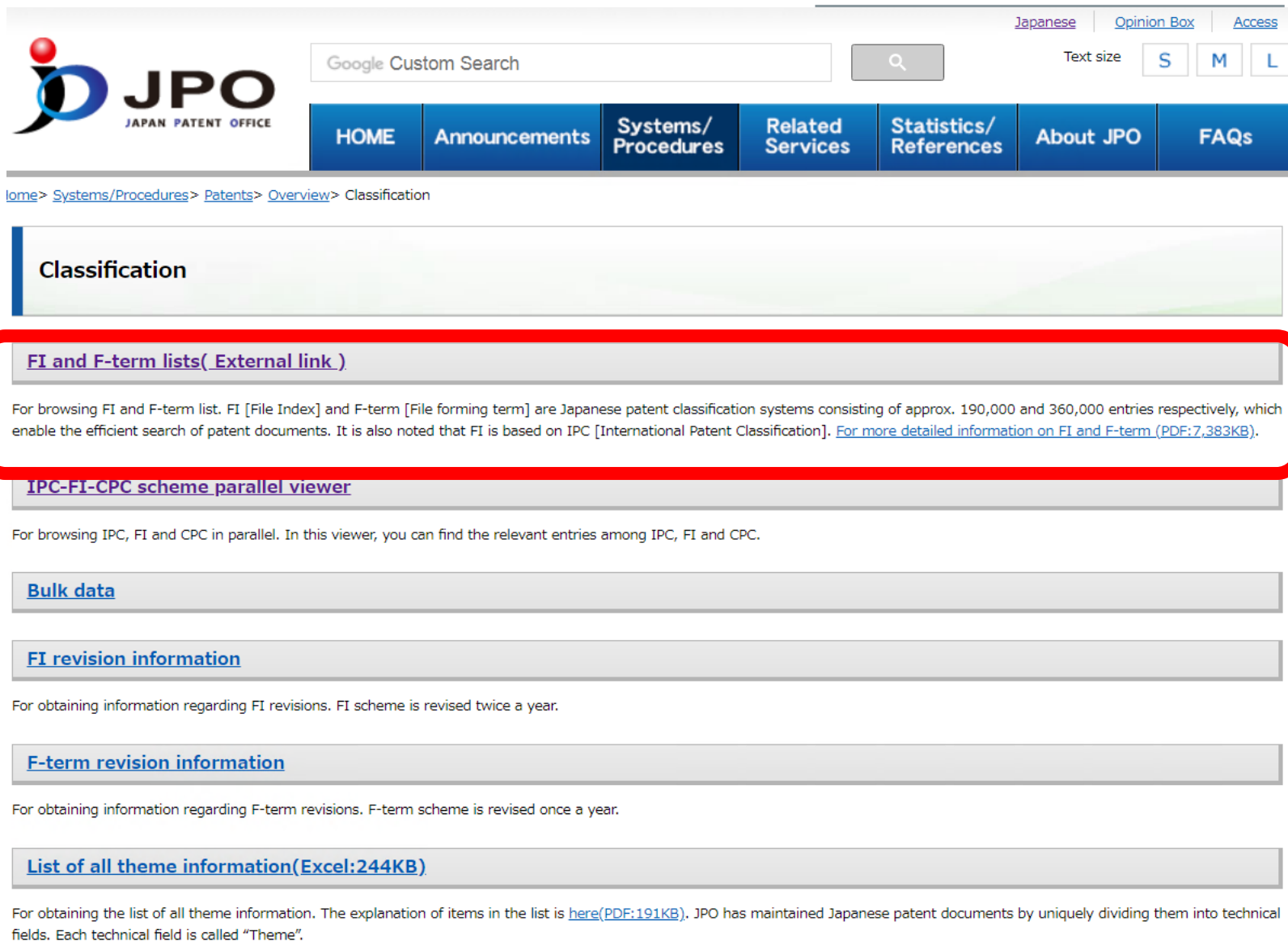
[F-term revision information](#)

For obtaining information regarding F-term revisions. F-term scheme is revised once a year.

[List of all theme information\(Excel:244KB\)](#)

For obtaining the list of all theme information. The explanation of items in the list is [here\(PDF:191KB\)](#). JPO has maintained Japanese patent documents by uniquely dividing them into technical fields. Each technical field is called "Theme".

Patent/Utility Model Classification Search (PMGS)



[Japanese](#) | [Opinion Box](#) | [Access](#)

Google Custom Search

Text size

JPO
JAPAN PATENT OFFICE

[HOME](#) | [Announcements](#) | [Systems/Procedures](#) | [Related Services](#) | [Statistics/References](#) | [About JPO](#) | [FAQs](#)

[Home](#) > [Systems/Procedures](#) > [Patents](#) > [Overview](#) > Classification

Classification

[FI and F-term lists\(External link \)](#)

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Patent/Utility Model Classification Search (PMGS)

The screenshot displays the J-PlatPat website interface. At the top left is the J-PlatPat logo. The main navigation bar includes 'Patents/Utility Models', 'Images', 'Trademarks', and 'Tools & Reports'. A dropdown menu is open under 'Patents/Utility Models', with 'Patent/Utility Model Classification Search (PMGS)' highlighted and circled in red. Below the navigation is a search bar with a 'Clear' button. A modal window titled 'Patent/Utility Model Classification Search (PMGS)' is overlaid on the page. It contains the following text:

Q Patent/Utility Model Classification Search (PMGS) Help

You can retrieve classifications by keywords for FI/F-terms and IPC (latest version). You can also retrieve classifications by code. You can set classifications for patent/utility model searches using the code retrieval.

Simple display (FI/Facet Simple Display, F-term Simple Display, IPC (latest version) Simple Display) is convenient for viewing the listed classifications or printing the listed classifications.

- For revision/abolition information, refer to [FI Revision Information](#), [Theme Revision/Abolition Information](#), [Theme Code Table](#), [IPC Revision Table](#), [IPC Guidelines](#), and [Former IPC Version](#).
- For information related to classification, refer to [Patent Map Guidance \(Former\) Information](#), [IPC Classification Table and Update Information](#), [CPC Information](#), [WIPO-IPC](#), and [Additional code list](#).

Code Inquiry Search by Keyword

Search target

FI/Facet F-term IPC (latest version) [FI/Facet Simple Display](#) [F-term Simple Display](#) [IPC \(latest version\) Simple Display](#)

Classification

Ex: B22F

Patent/Utility Model Classification Search (PMGS)

- Simple display of FI/Facet and F-term is available (newly released on Feb. 1, 2021)



Help desk
(weekdays 9:00-21:00 JST) [\(+81\)3-3588-2751](tel:+81335882751)
helpdesk@j-platpat.inpit.go.jp

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Patents/Utility Models

Designs

Trademark

Trials & Appeals

[Home](#) > Patent/Utility Model Classification Search (PMGS)

🔍 Patent/Utility Model Classification Search (PMGS)

▶ Help

You can retrieve classifications by keywords for FI/F-terms and IPC (latest version). You can also retrieve classifications by code. You can set classifications for patent/utility model searches using the code retrieval.

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- For information related to classification, refer to [Patent Map Guidance \(Former\) Information](#), [IPC Classification Table and Update Information](#), [CPC Information](#), [WIPO-IPC](#), and [Additional code list](#).

Code Inquiry

Search by Keyword

Search target

FI/Facet F-term IPC (latest version)

FI/Facet

F-term

[FI/Facet Simple Display](#)

[F-term Simple Display](#)

[IPC \(latest version\) Simple Display](#)

Classification

Ex: B22F

Patent/Utility Model Classification Search (PMGS)

- Simple display of FI/Facet and F-term is available (newly released on Feb. 1, 2021)

Classification Display

F-term

Highlighted search keywords: **4C117**

(Remarks) (Not Translated)

Theme code	4C117	Explanation
Descriptions	MEASURING AND RECORDING APPARATUS FOR DIAGNOSIS (Category : -)	
Scope of FI	A61B5/00 -5/01,350	

- XA00 OBJECT, E.G. PERSON, MACHINE OR DATA Open +
- XB00 PURPOSE Open +
- XC00 CHARACTERISTIC FEATURE OF MEASURING INSTRUMENT Open +
- XD00 MEASURED PART Open +
- XE00 CHARACTERISTIC FEATURE OF MEASURING PART Open +
- XF00 CHARACTERISTIC FEATURE OF STORAGE UNIT Open +

Classification Display (F-term)

F-Term-List

ReturnTo Theme-Group-Choice Onelevelup

(Not Translated)

4C117	MEASURING AND RECORDING APPARATUS FOR DIAGNOSIS	
	A61B5/00 -5/01,350	

A61B5/00-5/01,350	XA	XA00	OBJECT, E.G. PERSON, MACHINE OR DATA	XA01	One single object	XA02	Measuring for ladies	XA03	Measuring for dementia patients or elderly persons	XA04	measuring patients in hospitals	XA05	measuring able-bodied persons or healthy persons	XA07	Multiple objects	XA10	Others						
		XB	XB00 PURPOSE	YB01	Measuring	YB02	Health care	YB03	Instrument management	YB04	Patient monitoring	YB05	Management in hospitals	YB06	Biometric data management	YB07	Person identification	YB08	Production of diagnostic reports or CAD	YB09	Diagnostic support of medical records	YB10	Clinical trial management or medical tests
	XB11			Telemedicine	XB12	Disease prediction	XB13	Ready diagnosis e.g. cosmetics or esthetic clinics	XB14	Medical teaching	XB15	providing services or information	XB16	Simulation calculation for bodies	XB17	Correlated calculation by data processing	XB18	measuring mental state e.g. degree of stress or sleep	XB20	Others			
	XC	XC00 CHARACTERISTIC FEATURE OF MEASURING INSTRUMENT	XC01	Stationary-type	XC02	Beds	XC03	Chairs	XC04	Toilets	XC05	Baths	XC06	Cars	XC07	Hair washing machines	XC18	XC19	XC20				
			XC11	wearable or mobile	XC12	worn on arms	XC13	Wrist watch type	XC14	with memory or storage	XC15	with data transfer units	XC16	with display units			Separate instruments	measuring units and data processing units being separated	Network type				
			XC21	Implantable type		XC23	Robots	XC24	Robot pets			XC26	Instrumental devices	XC27	Connectors	Cables	Switches	Electric circuits					
			XC31	Functional change	XC32	Program change	XC33	Hardware change													XC40	Others	

F-term-List (simple display)

Theme-Group-Choice web page

https://www.j-platpat.inpit.go.jp/cache/classify/patent/PMGS_HTML/jpp/F_TERM/en/themeGroup/themeGroup_en.html

IPC-FI-CPC scheme parallel viewer

The screenshot shows the JPO website interface. At the top left is the JPO logo (Japan Patent Office). To its right is a search bar labeled "Google Custom Search" with a magnifying glass icon. Further right are links for "Japanese", "Opinion Box", and "Access", and a "Text size" selector with buttons for "S", "M", and "L". Below these are navigation buttons: "HOME", "Announcements", "Systems/Procedures", "Related Services", "Statistics/References", "About JPO", and "FAQs". A breadcrumb trail reads: "Home > Systems/Procedures > Patents > Overview > Classification". The main content area has a "Classification" header. Below it is a link for "FI and F-term lists(External link)". A paragraph explains that FI [File Index] and F-term [File forming term] are Japanese patent classification systems with approximately 190,000 and 360,000 entries respectively, based on IPC. A link for "For more detailed information on FI and F-term (PDF:7,383KB)" is provided. The link "IPC-FI-CPC scheme parallel viewer" is highlighted with a red border. Below it, a paragraph states: "For browsing IPC, FI and CPC in parallel. In this viewer, you can find the relevant entries among IPC, FI and CPC." Other links include "Bulk data", "FI revision information", "F-term revision information", and "List of all theme information(Excel:244KB)". A final paragraph explains that the list of all theme information is available as a PDF (191KB) and that JPO divides patent documents into technical fields called "Theme".

Japanese | Opinion Box | Access

Google Custom Search

Text size S M L

HOME Announcements Systems/Procedures Related Services Statistics/References About JPO FAQs

Home > Systems/Procedures > Patents > Overview > Classification

Classification

[FI and F-term lists\(External link \)](#)

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[IPC-FI-CPC scheme parallel viewer](#)

For browsing IPC, FI and CPC in parallel. In this viewer, you can find the relevant entries among IPC, FI and CPC.

[Bulk data](#)

[FI revision information](#)

For obtaining information regarding FI revisions. FI scheme is revised twice a year.

[F-term revision information](#)

For obtaining information regarding F-term revisions. F-term scheme is revised once a year.

[List of all theme information\(Excel:244KB\)](#)

For obtaining the list of all theme information. The explanation of items in the list is [here\(PDF:191KB\)](#). JPO has maintained Japanese patent documents by uniquely dividing them into technical fields. Each technical field is called "Theme".

IPC-FI-CPC scheme parallel viewer

← → ↻ jpo.go.jp/cgi/cgi-bin/search-portal/narabe_tool_e/narabe_e.cgi 🔍 ☆ ⌂ ⋮

☆ Scheme parallel viewer ☆

[concordance ver.](#)

[rawdata download](#)

IPC ▾

Display

Clear

Sample : G06F3 or G06F3/ or G06F3/00 or G06F3/02 etc...

[help](#)

IPC JP EN Both non-display symbol only

Display ipc level only : Off On

ECLA: EN JP Both non-display

symbol IPC : display non-

ICO: EN JP Both non-display

Keyword search available

pattern1 pattern2

Keyword Search

Display

Clear

IPC doc number : On Off

FI doc number : On Off

CPC doc number : On Off

FI IPC CPC

Keyword : karaoke Classification : FI, IPC, CPC

FI [G09B 15/00 D](#) 2C030 Learning instruments for vocal music, **karaoke** (electronic musical **karaoke** systems : G10)

Link to the scheme

FI [B 20/02 M](#) 5D080 **Karaoke**

FI [H 04R 1/02 107 ¥](#) 5D017 combined with another component e.g. microphone combined with an accessory, e.g. zoom microphone supporting device, **karaoke** microphone {Recording/reproducing of accompaniment for use with an external source, e.g. **karaoke** systems}

CPC [G10H1/361](#)

CPC [G10H2220/011](#) Lyrics displays, e.g. for **karaoke** applications

CPC [G10H2220/145](#) Multiplayer musical games, e.g. **karaoke**-like multiplayer videogames

CPC [G10H2220/211](#) for microphones, i.e. control of musical parameters either directly from microphone signals or by physically associated peripherals, e.g. **karaoke** control switches or rhythm sensing accelerometer within the microphone casing (microphones per seH04R)

CPC [G10H2240/036](#) File multilingual, e.g. multilingual lyrics for **karaoke**

CPC [G10H2240/325](#) Synchronizing two or more audio tracks or files according to musical features or musical timings (synchronised lyrics, e.g. for **karaoke** G10H2220/011)

声楽、カラオケの教習具（電子楽器・カラオケ装置：G 1 0）

カラオケ関係

カラオケ採点

カラオケ

他の機器と組み合わせられて用いられるもの、例。装身具と組み合わせられたマイクロホン（例。ズームマイクロホン支持装置、カラオケマイク）

〔外部音源と共に使用する伴奏を記録／再生するもの、〔例。カラオケ装置〕〕

歌詞表示、例。カラオケ

マルチプレイヤー音楽ゲーム、例。カラオケのようなマルチプレイヤービデオゲーム

マイクロフンのためのもの、例。マイクロホン信号から直接または関連周辺機器を物理的に介在させた音楽パラメータの制御、例。マイクロホンケーシングの中のカラオケ制御スイッチまたはリズム感知加速度計（マイクロホンそれ自体H 0 4 R）

多国語ファイル、例。カラオケ用多国語歌詞

音楽機能や音楽タイミングにより2以上のオーディオトラックやファイルと同期すること（同期歌詞、例。カラオケ用G 1 0 H 2 2 2 0 / 0 1 1）

Bulk data

- FI scheme (in English) and Raw data for IPC-FI-CPC scheme parallel viewer can be downloaded from JPO website.

Japanese | Opinion Box | Access

Google Custom Search

Text size S M L

HOME Announcements Systems/Procedures Related Services Statistics/References About JPO FAQs

ome> Systems/Procedures> Patents> Overview> Classification

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HOME Announcements Systems/Procedures Related Services Statistics/References About JPO FAQs

Home> Systems/Procedures> Patents> Overview> Classification> Bulk data

Bulk data

Bulk data

FI scheme in XML format

[2022-04 version \(ZIP:48.9MB\)](#)

Rawdata for IPC-FI-CPC scheme parallel viewer

[2023-01 version \(ZIP:36.5MB\)](#)

[Last updated 19 January 2023]

[Top of page](#)

FI/F-term revision information

The screenshot shows the JPO website interface. At the top left is the JPO logo (Japan Patent Office). To its right is a search bar labeled "Google Custom Search" with a magnifying glass icon. Further right are links for "Japanese", "Opinion Box", and "Access", and text size options "S", "M", and "L". Below the search bar is a horizontal navigation menu with buttons for "HOME", "Announcements", "Systems/Procedures", "Related Services", "Statistics/References", "About JPO", and "FAQs". Below the menu is a breadcrumb trail: "Home > Systems/Procedures > Patents > Overview > Classification". The main content area has a header "Classification" and several sections: "FI and F-term lists(External link)", "IPC-FI-CPC scheme parallel viewer", "Bulk data", "FI revision information", "F-term revision information", and "List of all theme information(Excel:244KB)". The "FI revision information" and "F-term revision information" sections are highlighted with a red border. The "List of all theme information" section is also highlighted with a red border.

[Japanese](#) | [Opinion Box](#) | [Access](#)

Google Custom Search

Text size

[HOME](#) [Announcements](#) [Systems/Procedures](#) [Related Services](#) [Statistics/References](#) [About JPO](#) [FAQs](#)

[Home](#) > [Systems/Procedures](#) > [Patents](#) > [Overview](#) > Classification

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[Bulk data](#)

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[F-term revision information](#)

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[List of all theme information\(Excel:244KB\)](#)

For obtaining the list of all theme information. The explanation of items in the list is [here\(PDF:191KB\)](#). JPO has maintained Japanese patent documents by uniquely dividing them into technical fields. Each technical field is called "Theme".

Maintenance and utilization of FI/F-term

➤ FI and F-term for useful search indexes

✓ *Expansion of FI and F-term entries*

- - frequently used and assigned FI and F terms
- - NET (New Emerging Technologies)

✓ *Simplification of FI and F-term*

- - less frequently used FI and F-terms and alternative search tools available (e.g. text search, concept search)

✓ *More compliant with IPC*

➤ Useful FI and F-term for IPC revision

- ✓ *Useful FI and F-terms entries will be incorporated as subgroups of IPC as before.* G16Y (IoT-related technologies) was created based on JPO's classification system (Facet).

Simplification of FI and F-term

less frequently used FI and F-term and alternative search tools available (e.g. text search, concept search)

-> Pruning FI and F-term

For the case of FI

	Number of Usage in search				Number of assignment to patent documents						
	2019	2020	2021	2022	2015	2016	2017	2018	2019	2020	2021
X01B45/04	2	0	5	0	0	0	0	0	0	0	0
X01B45/04 @A	0	0	1	0	0	0	0	0	0	0	0
X01A45/04 @B	0	0	0	7	0	0	0	1	0	0	0
X01B45/04 @C	0	0	0	0	0	0	0	0	0	0	0
X01B45/04 @D	21	31	14	0	0	2	4	2	0	3	2
X01A45/04 @E	6	0	0	0	0	1	0	0	0	0	0
X01B45/04 @F	1	0	0	0	0	0	0	0	0	0	0
X01A45/04 @Z	8	0	0	0	0	0	0	0	0	0	0
X01B45/06	0	1	3	0	0	0	0	0	0	0	0
X01B45/06 @A	8	15	9	7	0	0	0	1	1	1	1
X01A45/06 @B	10	8	0	0	5	4	3	1	2	1	2
X01B45/08 @Z	3	9	4	0	3	1	1	0	0	1	0

Useful example in using FI

Main group : A01K23

☆ Scheme parallel viewer ☆ [concordance ver.](#) [rawdata download](#) [contact Us](#)

IPC Sample : G06F or G06F3 or G06F3/ or G06F3/00 or G06F3/02 etc. [help](#)

IPC JP EN Both non-display symbol only IPC doc number On Off Display IPC level only Off On

FI JP EN FI doc number On Off FI dot pattern FI FI term2

CPC EN JP CPC doc number On Off

Keyword Search IPC FI CPC

IPC

FI

CPC

A01K 23/00	Manure or urine pouches	5500 docs
------------	-------------------------	-----------

5500 docs

You can use FI efficiently in searching for this main group

A01K 23/00	Manure or urine pouches	1 docs	2B103: HB
A01K 23/00 A	Pots for keeping dogs' feces	221 docs	2B103: HB
A01K 23/00 E	Scooping up from one direction, e.g. scoops	79 docs	2B103: HB
A01K 23/00 F		68 docs	2B103: HB
A01K 23/00 G		38 docs	2B103: HB
A01K 23/00 H		79 docs	2B103: HB
A01K 23/00 J	Holding or grabbing and picking up feces from multiple different directions	179 docs	2B103: HB
A01K 23/00 K	Wrapping feces in storage members at the both sides, [figure]	150 docs	2B103: HB
A01K 23/00 L	Grabbing feces by means of bags or sheets (By means of other members A01K23/00@J)	93 docs	2B103: HB
A01K 23/00 M	Containers to house feces picked up with feces collectors	34 docs	2B103: HB
A01K 23/00		41 docs	2B103: HB
A01K 23/00		517 docs	2B103: HB
A01K 23/00		271 docs	2B103: HB
A01K 23/00 Q	Two frames without ribs where an upper frame and a lower frame are connected by connection nodes so that the upper frame can be opened and close freely	150 docs	2B103: HB
A01K 23/00 R	Using by holding with hands	30 docs	2B103: HB
A01K 23/00		165 docs	2B103: HB
A01K 23/00		296 docs	2B103: HB
A01K 23/00		346 docs	2B103: HB

Only 1 docs In FI equal to IPC

2347 docs in total in 17 unique FI

You can use FI efficiently in searching for this main group

A01K23/00	Manure or urine pouches	1077 docs
A01K23/005	{Manure or urine collecting devices used independently from the animal, i.e. not worn by the animal but operated by a person}	1019 docs

1077 docs

1019 docs in only 1 unique CPC