

I. IPC

II. FI

III. F-terms

IV. Reference tool

F-term (**File forming term**) is a unique classification system invented and maintained by the JPO. It has the following features.

- Hierarchical tree structure with multi-aspect enables analysis of a patent document from multiple -viewpoints
- Assigned mainly to **MOST** Japanese patent publications and Japanese utility model gazettes
 - JPO recently started to assign F-terms also to some Chinese documents.

III. F-term

Relationship between FI, Theme, and F-term

1/00				1/02		1/04	1/06			1/08	2/00	2/02				2/04				2/06				FI	
A	B	C	Z	101	102		A	B	Z			A	B	301 A	301 B	Z	A	B	C	Z	A	B	C		Z
Theme 1 (with F-term)											Theme 2 (without F-term)						Theme 3 (with F-term)						Theme		
						AA 00	AA 01	AA 02	AA 03	AA 04															
						BB 00	BB 01	BB 02																	
						CC 00	CC 01	CC 02	CC 03																
						DD 00	DD 01	DD 02	DD 03																
																							F-term		

Comparison among FI, F-term, & IPC

	FI	F-term	IPC
Total number of entries	190,000	360,000	70,000
Coverage of patent documents	*Mainly JP documents	*Mainly JP documents	Global
Coverage of technical fields	100%	70%	100%
Function	Categorize	Analyze	Categorize

*JPO started to assign FI / F-term to some Chinese documents

III. F-term

Theme code Subject of theme

5B020

INPUT FROM KEYBOARDS OR THE LIKE

G06F3/02-3/027

The theme 5B020 as a whole covers this range of FIs

Viewpoint	F-term										FI Cover Range
AA	AA00	AA01	AA02	AA03	AA04	AA05		A			G06F3/02-3/027
	INPUT DATA	. Numbers	. Alphanumeric characters	. Kana	. . Japanese syllabaries	. . Roman characters		. Chinese character			
		AA11	AA12	AA13		AA15	AA16	A		AA20	
		. Items	. Commands	. Programmes		. Functions	. . Shift input	. . Curs		. Others	
BB	BB00	BB01	BB02	BB03	BB04	BB05				BB10	
	INCORPORATING	. Electronic	. Terminals	. Point-	. Clocks	. Copiers				. Others	
JJ	JJ00	JJ01	JJ02	JJ03	JJ04						G06F3/02,380@D
	ERROR	. detecting input data errors	. . inputting identical data a plurality of times	. . comparing with registered data	. . compa with input from other means						
		JJ11	JJ12	JJ13	JJ14						
		. Failures of input equipment	. . checking circuits	. . Automatic testing	. . checking during operation						G06F3/02,380@E; 3/02,380@Z
KK	KK00	KK01	KK02	KK03		KK05	KK06	KI			G06F3/02,390@A-

Terms from AA01 through AA20 belong to the Viewpoint AA that means "INPUT DATA"

Terms from JJ11 through JJ14 are assigned only to documents having these FI ranges

Utilizing F-term as a search key

- Specify the F-term theme based on FI or IPC
- Select F-terms that match technical elements of a search target
- Compose search queries by combining these terms

Example of a search target

*“Granular calcium oxide ceramics
with low heat expansion”*

-> Theme 4G031 Composition of oxide ceramics

F-term AA04, BA24, CA05

-> Query 4G031(AA04*BA24*CA05)

III. F-term

Example of a search target
“Granular calcium oxide ceramics with low heat expansion”

4G031		Composition of oxide ceramics					
		C04B35/42-35/51					
Viewpoint							
AA	AA00	AA01	AA02	AA03	AA04	AA05	AA06
	COMPONENTS	. Alkali-metal oxides	. Alkali-earth-metal oxides	. Magnesium oxides	. Calcium oxides	. Strontium oxides	. Barium oxides
BA	BA00	BA01	BA02	BA03	BA04	BA05	BA06
	FUNCTIONS AND USES	. Electric and electrical functions and uses	. Conductivity	. Ion conductivity	. Voltage non-linear resistance bodies	. P-type conduction (PTC) semiconductors	. N-type conduction (NTC) semiconductors
CA	CA00	CA01	CA02	CA03	CA04	CA05	CA06
	STRUCTURES	. Control of the crystal phase	. Arrangement of crystals	. Structures wherein different layers are composed of different compounds	. Crystal grains of characteristic shapes and sizes	. Granularity	

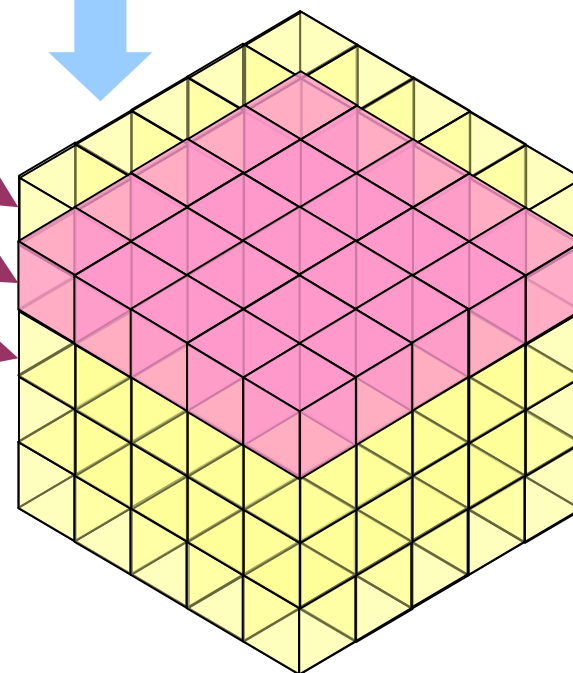
AA04
.. Calcium oxides

viewpoint AA
“components”

AA03

AA04

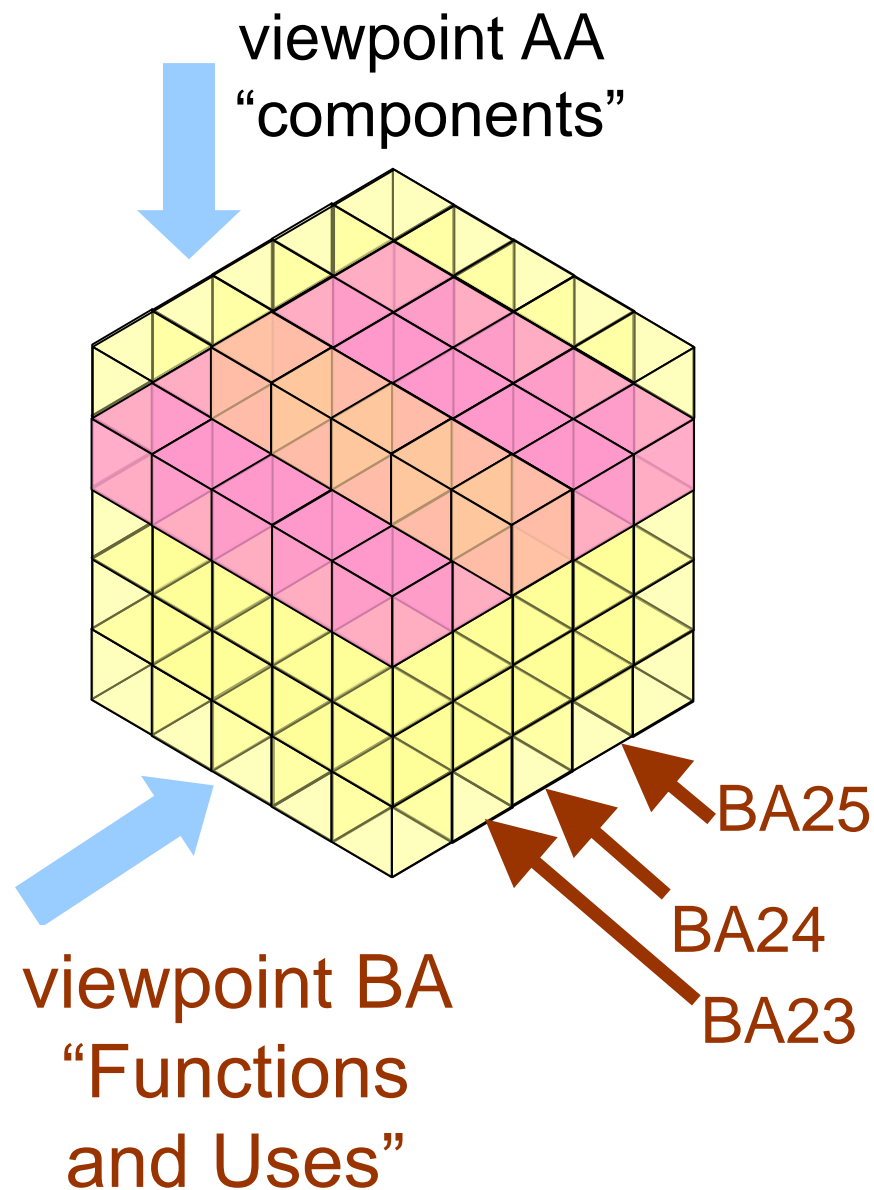
AA05



III. F-term

Example of a search target
*“Granular calcium oxide ceramics
with low heat expansion”*

4G031		Composition of oxide ceramics					
		C04B35/42-35/51					
Viewpoint		F-term					
AA	AA00	AA01	AA02	AA03	AA04	AA05	AA06
	COMPONENTS	Alkali-metal oxides	Alkali-earth-metal oxides	Magnesium oxides	Calcium oxides	Strontium oxides	Barium oxides
BA	BA00	BA01	BA02	BA03	BA04	BA05	BA06
	FUNCTIONS AND USES	Thermal functions and uses	Heat insulation	Heat- and shock-resistance characteristics	Low heat expansion	Fireproof substances	Biological and chemical functions and uses
CA	CA00	CA01	CA02	CA03	CA04	CA05	CA06
	STRUCTURES	Control of the crystal phase	Arrangement of crystals	Structures wherein different layers are composed of different compounds	Crystal grains of characteristic shapes and sizes	Granularity	



III. F-term

Example of a search target
“Granular calcium oxide ceramics with low heat expansion”

4G031	Composition of oxide ceramics
	C04B35/42-35/51

Viewpoint	AA00	AA01	AA02	AA03	AA04	AA05	AA06
AA	COMPONENTS	Alkali-metal oxides	Alkali-earth-metal oxides	Magnesium oxides	Calcium oxides	Strontium oxides	Barium oxides
		AA11	AA12	AA13	AA14	AA15	AA16
		Titanium oxides	Zirconium oxides	Vanadium oxides	Niobic oxides	Tantalum oxides	Chromium oxides
		AA21	AA22	AA23	AA24	AA25	AA26
		Iron oxides	Cobalt oxides	Nickel oxides	Oxides from Group Ib to IIb	Copper oxides	Zinc oxides
		AA31	AA32	AA33	AA34	AA35	AA36
		Tin oxides	Lead oxides	Phosphorus oxides	Antimony oxides	Bismuth oxides	Borides
BA	FUNCTIONS AND USES	BA01	BA02	BA03	BA04	BA05	BA06
		Electric and electrical functions and uses	Conductivity	Ion conductivity	Voltage non-linear resistance bodies	P-type conduction (PTC) semiconductors	N-type conduction (NTC) semiconductors
		BA11	BA12	BA13	BA14	BA15	BA16
		Current-collection characteristics	Insulation characteristics	Magnetic-head support members	Optical functions and uses	Translucency	Electrical and optical characteristics
		BA21	BA22	BA23	BA24	BA25	BA26
		Thermal functions and uses	Heat insulation	Heat- and shock-resistance	Low heat expansion	Fireproof substances	Biological and chemical functions and uses
CA	STRUCTURES	CA00	CA01			CA05	
		Control of crystal phase				Granularity	

CA05
Granularity

