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## STN Database Summary Sheet

The **IFIREF File (IFI Uniterm and US Class Reference File)** is a reference database for the other IFI databases. IFIREF contains US Patent and Trademark Office (USPTO) classification codes and titles as well as authority data for general, fragment, and compound uniterms.

Classification records contain US Classifications with their titles, controlled terms, the level number of classifications within their hierarchies, and the complete hierarchy.

General uniterm records contain Uniterm codes, the associated controlled term text, used for terms, broader terms, narrower terms, and related terms.

Compound uniterm records contain uniterm codes, molecular formulas, controlled terms, chemical names, and fragment codes with associated text.

Three thesauri are available: Controlled Terms (/CT), Fragment Code (/FG), and Uniterm (/UN).

### Subject Coverage

IFIREF contains indexing UNITERMS and USPTO Classifications for US patents in the following subject areas:

- Aerospace and Aeronautical Engineering
- Agricultural Engineering
- Biomedical Technology
- Chemical Engineering
- Chemistry
- Civil Engineering
- Electrical and Electronics Engineering
- Electromagnetic Technology
- Mechanical Engineering
- Medicine
- Nuclear Science
- Telecommunications

### Sources

- USPTO Manual of Classification
- Uniterm Authority Lists
- IFI Compound Term Vocabulary

### File Data

- More than 434,700 records (3/08)
- More than 234,300 classes (3/08)
- More than 59,900 Uniterms (3/08)
- Classes and index records are reloaded semiannually
- Uniterms are reloaded quarterly
- Automatic current-awareness searches (SDIs) are not available

### User Aids

- IFIREF Database Description
- USPTO Manual of Classification (available from the producer)
- Index to the USPTO Classification Manual (available from the producer)
- Classification Definitions (available from the producer)
- IFI General Term List (available from the producer)
- IFI Compound Term List (available from the producer)
- IFI Fragment Term List (available from the producer)
- IFI Thesaurus of General Terms (available from the producer)
- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

### Database Producer

IFI Patent Intelligence  
A Wolters Kluwer business  
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#### In North America

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Phone: 800-753-4227 (North America)  
614-447-3700 (worldwide)  
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E-mail: [help@cas.org](mailto:help@cas.org)  
Internet: [www.cas.org](http://www.cas.org)

#### In Europe

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Internet: [www.stn-international.de](http://www.stn-international.de)

#### In Japan

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International Chemical Information)  
STN Japan  
Nakai Building  
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**IFIREF****Search and Display Field Codes**

Fields that allow left and simultaneous left and right truncation (SLART) are indicated with an asterisk(\*).

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index * (contains single words from the broader (BT), controlled (CT), narrower (NT), related (RT), and used for (UF) terms, chemical name (CN), fragment codes (FG), national patent classification code (NCL), and uniterms (UN), as well as molecular formulas (MF))	None (or /BI)	S HYDROCARBON# S PHYSICAL PROCESSES S 008636000 S AI2H8Sr S "10001"/BI	BT, CN, CT, FG, MF, NCL, NT, RT, UF, UN
Chemical Name Controlled Term (1)	/CN /CT	S ISODURENE/CN S 'CARBON, 9-26 (M)'/CT S CARBON?/CT	CN CT
Controlled Word	/CW	S SINGLE BOND?/CW S CARBON?/CW	CT
Element Count (2)	/Element Symbols	S 1-4/S AND K>1	MF
File Segment	/FS	S CLASS/FS	Not displayed
Formula Weight (2)	/FW	S 33-45/FW	Not displayed
Fragment Code (1)	/FG	S 30036/FG	FG
International Patent Classification Level	/IPC /LV	S A61K/IPC S 4/LV	IPC LV
Molecular Formula	/MF	S ALH4LI/MF	MF
Patent Assignee	/PA	S BP/PA	PA
US Patent Classification Code	/NCL	S 002002500/NCL	NCL
US Patent Classification Range Searchable (2)	/NCLR	S 002002000-002064000/NCLR	NCL
Uniterms (1)	/UN	S 50098/UN	UN

(1) There is a thesaurus associated with this field.

(2) Numeric search field that may be searched with numeric operators or ranges.

**Controlled Term (/CT) Thesaurus**

A thesaurus is present for the Controlled Term (/CT) field in IFIREF. When you search a code or text term in this field, the system automatically echoes the code and its definition.

You may also use the thesaurus to find a particular code or its definition. To display code definitions, use the EXPAND command with a code followed by +ALL and the field code. To display the corresponding code, use EXPAND with text followed by +ALL and the field code.

Only the relationship code +ALL may be used.

Relationship Code	Content	Example
ALL	Code and its definition (SELF, UN, CT)	S POLYISOBUTYLENE/CT E 04220+ALL/CT

## Fragment Code (/FG) Thesaurus

A thesaurus is present for the Fragment Code (/FG) field in IFIREF. When you search a code or text term in this field, the system automatically echoes the code and its definition.

You may also use the thesaurus to find a particular code or its definition. To display code definitions, use the EXPAND command with a code followed by +ALL and the field code. To display the corresponding code, use EXPAND with text followed by +ALL and the field code.

Only the relationship code +ALL may be used.

Relationship Code	Content	Example
ALL	Code and its definition (SELF, UN, CT)	S 30038/FG E CARBON, 1-8 (M) (STO)+ALL/FG

## Uniterm (/UN) Thesaurus

A thesaurus is present for the Uniterm (/UN) field in IFIREF. When you search a code or text term in this field, the system automatically echoes the code and its definition.

You may also use the thesaurus to find a particular code or its definition. To display code definitions, use the EXPAND command with a code followed by +ALL and the field code. To display the corresponding code, use EXPAND with text followed by +ALL and the field code.

Only the relationship code +ALL may be used.

Relationship Code	Content	Example
ALL	Code and its definition (SELF, UN, CT)	S 51567/UN E ALUMINUM, CHLORODIETHYL-+ALL/UN

## DISPLAY and PRINT Formats

Any combination of formats may be used to display or print answers. Multiple codes must be separated by commas or spaces, e.g., D L3 1-10 REF RT. The fields are displayed in the order requested.

Hit-term highlighting is available in all fields except AN. Highlighting must be on during SEARCH in order to use the HIT, KWIC, and OCC display formats.

Format	Content	Examples
AN	Accession Number	D L4 5 AN
BT	Broader Term	D BT 1-3
CN	Chemical Name	D L2 1,5 CN
CT	Controlled Term	D CT L4 1-10
FG	Fragment Code	D 1, 4-5 FG L3
IPC	International Patent Classification	D IPC
LV	Level	D LV
MF	Molecular Formula	D MF 3,6 8-9
NCL	US Patent Classification Code	D L2 NCL
NT	Narrower Term	D 1-5 NT L4
PA	Patent Assignee	D PA
RT	Related Term	D 1-5 L4 RT
UF	Used For Term	D L4 UF 1-5
UN	Uniterms	D UN L4 1-5

**IFIREF****DISPLAY and PRINT Formats (cont'd)**

Format	Content	Examples
ALL	Classification: AN, NCL, LV, CT, hierarchy display Compound: AN, UN, MF, CT, CN, FG Fragment: AN, UN, FG, CT General: AN, UN, CT, UF, BT, NT, RT	D 1 7 ALL
REF	Classification: AN, NCL, LV, CT Compound: AN, UN, MF, CT Fragment: AN, UN, FG, CT General: AN, UN, CT (REF is the default)	D 2-7 REF
HIT KWIC OCC (1)	Fields containing hit terms Hit terms plus 20 words on either side (KeyWord-In-Context) Number of occurrences of hit terms and fields in which they occur	D HIT 1,3,10 D KWIC NOH D OCC

(1) No online display fee for this format.

**SELECT, ANALYZE, and SORT Fields**

The SELECT command is used to create E-numbers containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Accession Number	AN	Y (2)	N
Broader Term	BT	Y (3)	N
Chemical Name	CN	Y	Y
Controlled Term	CT	Y (default)	Y
Fragment Code	FG	Y	N
International Patent Classification	IPC	Y	Y
Level	LV	Y	N
Molecular Formula	MF	Y	N
Narrower Term	NT	Y (3)	N
Patent Assignee	PA	Y	Y
Related Term	RT	Y (3)	N
Uniterm Code	UN	Y	Y
US Patent Classification Code	NCL	Y	Y
Used For Term	UF	Y	N

(1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT CN.

(2) SELECT HIT and ANALYZE HIT are not valid with this field.

(3) Appends /BI to the terms created by SELECT.

## Sample Records

### EXPAND in /CT Thesaurus

```
=> E POLYISOBUTYLENE+ALL/CT
E1          1  --> POLYISOBUTYLENE/CT
              UN  04220
***** END *****
```

### EXPAND in /UN Thesaurus

```
=> E 04220+ALL/UN
E1          1  --> 04220/UN
              CT  POLYISOBUTYLENE
***** END *****
```

### SEARCH in /FG

```
=> S 30038/FG
30038 CARBON
L4          2 30038/FG
```

### DISPLAY ALL (Classification)

```
AN 3004148 IFIREF
NCL 019056000 LV 6
CT With boll hullers
019000000 1 TEXTILES: FIBER PREPARATION
019001000 2 LIBERATING
019039000 3 Ginning
019048000R 4 Gins
019055000R 5 Saw
019056000 6 With boll hullers
```

### DISPLAY ALL (Compound)

```
AN 79288 IFIREF
UN 50098
MF C10H14
CT BENZENE, 1,2,3,5-TETRAMETHYL-
NOTE New Term 1951 (Approx.)
DBN Uniterm
CN ISODURENE
   TETRAMETHYLBENZENE/1,2,3,5-/
```

### DISPLAY ALL (General)

```
AN 188011 IFIREF
UN 03981
CT PETROLEUM SULFONATES
NOTE Roles - New Term 1950 (Approx.)
     Also search Petroleum and Sulfonic Acids, Sul-Fonates/STO/.
     Also covered by collection term: HYDROCARBON FRACTION/CT/.
DBN Uniterm
UF AMMONIUM PETROLEUM SULFONATES; BARIUM SULFONATES; CALCIUM SULFONATES;
   MAHOGANY PETROLEUM SULFONATES; METAL PETROLEUM SULFONATES; SODIUM PETROLEUM
   SULFONATE
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