Derwent World Patents Index® (DWPI^SM) Overview

Sources covered

47 patent-issuing authorities are now included in Derwent World Patents Index, many of these being added to the service since it commenced in 1963. The date when coverage began is shown in the following table, with both the year and database update (in parentheses) for those authorities added since 1963.

Country/Patent Authority	WIPO Code	Start Date (Appearance in DWPI)
Argentina	AR	1975 only
Australia	AU	1963 - 1969, 1983 (198301)
Austria	AT	1975 (197515)
Belgium	BE	1963
Brazil	BR	1976 (197601)
Canada	CA	1963
China	CN	1987 (198701)
Czechoslovakia[1]	CS	1975 (197520) - 1994
Czech Republic	CZ	1994 (199417)
Denmark	DK	1974 (197445)
European Patents	EP	1978 (197849)
Finland	FI	1974 (197445)
France	FR	1963
Germany (Democratic Republic)	DD	1963
Germany (Federal Republic)	DE	1963
Germany - Utility Models	DE-U	1996 (199626)
Gulf Cooperation Council	GC	2011 (201130)
Hong Kong	HK	2011
Hungary	HU	1975 (197526)
India	IN	2004 (200531)
Ireland	IE	1963 - 1969, 1995 (199521)
Israel	IL	1975 (197515)
Italy	IT	1966 - 1969 Sect. A, 1978 (197801)
Japan	JP	1963
Republic Of Korea (South Korea)	KR	1986 (198640)
Luxembourg	LU	1984 (198443)
Malaysia	MY	2010 (201072)
Mexico	MX	1998 (199816)
Netherlands	NL	1963

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[1] At the start of 1993 Czechoslovakia (CS) divided into the Czech Republic (CZ) and Slovakia (SK), both with their own independent patent systems.

Norway   NO   1974 (197448)
New Zealand   NZ   1993 (199301)

Country/Patent Authority	WIPO Code	Start Date
PCT (World)	WO	1978 (197849)
Philippines	PH	1995 (199511)
Poland	PL	2011 (201142)
Portugal	PT	1974 (197452)
Romania	RO	1975 (197532)
Russian Federation[2]	RU	1994 (199406)
Singapore	SG	1995 (199513)
South Africa	ZA	1963
Soviet Union[2]	SU	1963 - 1994
Slovakia[1]	SK	1994 (199417)
Spain	ES	1983 (198334)
Sweden	SE	1963
Switzerland	CH	1963
Taiwan	TW	1993 (199324)
Thailand	TH	2010 (201072)
United Kingdom	GB	1963
United States	US	1963
Vietnam	VN	2010 (201072)

Plus:

Research Disclosure[3]	RD	1978 (197809) -
International Technology Disclosure	TP	1984 (198408) - 1993 (199351)

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[2] The Soviet Union (SU) patent office closed 1 February 1992 and the new Russian Federation (RU) patent office opened.

[3] © Kenneth Mason Publications Limited [2006] www.researchdisclosure.com

Asian Coverage

Thomson Reuters has extended the coverage of Asian patent publications significantly over time.

Japan

Japanese documents have been covered since 1963. Since the beginning of 1996, Thomson Reuters has covered all unexamined Japanese patent applications issued, irrespective of subject content. Previously coverage was selected as detailed below.

Until 1981, Thomson Reuters only covered chemical Japanese patent documents in CPI (Sections A-M).

From 1982, unexamined specifications having an International Patent Classification (IPC) in Section H (Electricity) have also been included for EPI (Sections S-X).

From update 198527, Japanese patents included in CPI having an IPC in Section G (Physics) have also been classified and given Manual Codes in EPI.

Japanese patent documents corresponding to Sections P and Q (EngPI) only were not included in Derwent World Patents Index before 1995. During 1995, Japanese coverage was increased, in phases, to give complete coverage of all unexamined patents (Kokai) by the end of 1995.

In 1996, Thomson Reuters began covering Toroku documents, which are granted specifications with a post-grant opposition period.

From 2008 Japanese Utility Models are covered with the same level of detail as the patent records with documentation abstracts and deep indexing for records that are classified into Derwent sections A- Polymers and Plastics, B – Pharmaceuticals, C – Agriculture Chemicals, and E – General Chemicals. All other sections have DWPI alerting abstracts with manual coding. Each of the Japanese patents in the DWPI member level (the individual patents in the patent family) also include the machine translation of the author title, author abstract and first claim.

More details of Japanese coverage are available in the full user manual.

China

Coverage of Chinese patent publications commenced in 1985 with re-written English language titles, abstracts and classifications. This was enhanced in October 2007 with the addition of more detailed abstracts. In order to provide broader coverage of China's growing patent activity, also Chinese Utility Model Registration records have been added recently to Derwent World Patents Index (DWPI), initially beginning with documents published on October 3, 2007. These included bibliographic information (patent number, filing dates, IPCs, inventor and assignee names), Patentee codes and English-language translations of the author, title, abstract and first claim (all records human translated). DWPI Deep Indexing was applied to any Chinese Invention Patents or Chinese Utility Models published from 2nd January 2008 onwards for polymer, pharmaceutical, agrochemical and general chemical inventions in classification sections ABCDE. For all Chinese Invention Patents (Unexamined Applications) and Utility Models published from July 9, 2008 English translations of all claims can be searched and displayed. In early 2010 Chinese Utility Model coverage was being extended back to January 2007. Each record includes a full DWPI title, abstract and manual coding. Translations of the 1st claim for all of the Chinese Granted patents published from January 2011 are available since 2011. Hong Kong granted patents, short-term patents and published applications are being covered from 2011.

India

Indian patent publications (both pre-grant applications and granted patents) with a publication date of January 2000 onwards have been covered appearing from update 200531 for all CPI and EPI/EngPI sections.

Korea

Korean patent publications have been covered since 1986 (198640). Korean Patents and Utility Models published from January 2008 (update 200851) include

- DWPI title, abstract, manual coding and deep indexing for records with significant chemistry content.
- Machine translations of all claims for Korean unexamined and examined applications, and Utility Models in the DWPI family can be searched and displayed.
- Machine translations of the author title and abstract for all Korean patents in the DWPI family.
- Full value-add for Korean unexamined and examined applications identified as basics in DWPI. This includes DWPI titles and abstracts (documentation abstract for records with significant chemistry content) written according to the Thomson Reuters editorial rules. Deep indexing is applied to records in sections A, B, C, and E that have significant chemistry coverage.

Taiwan

Taiwanese patent publications have been covered since 1993 (199324). The documents according to the revised patent law for patents published from August 1, 2004 onwards appeared from March 2005.

From DWPI Update 200907 the coverage was increased to comprise Taiwan Unexamined Applications (TW A) and Taiwan Utility Models (TW U)

English language titles and abstracts are provided for the Taiwan Unexamined Applications that are identified as Basics in DWPI, while for the Taiwan Utility Models an English Language title is included for all Basic records. These enhancements provide a more complete coverage of Taiwan in DWPI, as the Granted patents are already been covered, and Unexamined Applications were covered prior to December 2004.

The enhanced coverage started with the Taiwan Unexamined Applications, Granted Patents and Utility Models published from January 2008, with the first records appearing in DWPI from DWPI Update 200907.

- A Examined patent (old law) from 1993 to August 1, 2004
- A Unexamined application (new law) from 200553 for publications from August 1, 2004 to December 16, 2004
- B1 Granted patent (new law) from 200516 for publication from August 1, 2004
- A Unexamined application (new law) from 200907 for publications from January 2008
- U Utility Models appearing from 200907 for publications from January 2000

Philippines

Philippine granted patents have been covered since January 1992. Published patent applications and utility models have been covered since January 2010 appearing from update 201057.

Basics include DWPI titles and abstracts and relevant manual coding.

Malaysia

Malaysian patent granted publications including utility innovations have been covered since 2010.

Basics include DWPI titles and abstracts and relevant manual coding. Sections ABCE have deep indexing applied – polymer indexing, fragmentation codes and/or DCR indexing.

Thailand

Thai granted patent publications have been covered since 2010.

Basics include DWPI titles and abstracts and relevant manual coding. Sections ABCE have deep indexing applied – polymer indexing, fragmentation codes and/or DCR indexing.

Vietnam

Vietnamese publications for published applications and granted patents have been covered since 2010. Basics include DWPI titles and abstracts and relevant manual coding. Sections ABCE have deep indexing applied – polymer indexing, fragmentation codes and/or DCR indexing.

Features

- Provides access to information from more than 48 million patents from 47 patent issuing authorities, giving details of over 22 million inventions.
- Invention documents as well as individual publication records are seamlessly integrated in one database.
- Contains bibliographic data, value-added titles, abstracts, general indexing and, where appropriate, in-depth chemical and polymer indexing.
- Documentation abstracts are available for the period between 1995 and 1999.
- All value-added text data are indexed in the basic index without stopwords.
  Simultaneous left and right truncation is optionally available.
- All first level text data is searchable in the basic index extension.
- Support for searching plurals, abbreviations and spelling variations is available.
- The bibliographic information is extensively standardised.
- The patent office's indexing is periodically revised: IPC, ECLA, FI/F-Terms, NCL
- Extra data is available for individual patent publications like author abstracts and claims or original patent assignee names and addresses.
- All information pertaining to an individual publication is separately searchable.
- Value-added and first level data can be searched in combination.
- Electrical and engineering drawings are present in records dating back to 1988, and chemical structure drawings are present in records dating back to 1992.
- A structure searchable chemical repository now containing more than 1.9 million chemical compounds has been available since 1999.
- Updated every 3 to 4 days (82 updates per year)

DWPI Document Identification

DWPI Accession Number
Secondary Accession Numbers
Cross Reference and Related Accession Numbers
Alternative Accession Numbers

In this topic:

- DWPI Document Identification field codes

The DWPI database contains different document identification keys. Apart from the main accession numbers there are other types like

Alternative Accession Number
Secondary Derwent Accession Number
Cross-Reference/Related Derwent Accession Number

Field codes

In the DWPI database, the following accession number types can be searched.

Field Name	Field Code	Example
Primary DWPI Accession Number	/AN	1999-123456/AN
Secondary Accession Numbers	/DN	C2000-209426/DN
	/DNC	C1990-166672/DNC
	/DNN	N1990-001019/DNN
Cross Reference/Related Accession Numbers	/CR	1990-201216/AN,CR
	/XR	1980-32569C/XR
Alternative Accession Numbers	/ANX	1966-29198F/ANX

DWPI Accession Number

In this topic:

- DWPI Accession Number formats

Primary Accession Number formats

The DWPI Primary Accession Numbers are the basis for the unique and unambiguous document identifiers for the DWPI reference documents.

All new basics are assigned unique accession numbers in the order in which they were added to DWPI. Each number comprises a year element, a hyphen, and a six character serial number, but the format has changed slightly over time.

Beginning with update 200801 the DWPI accession numbers have a letter at the beginning of the serial to allow for more address space to potentially accommodate more documents. Hence the first new format accession number is 2008-A00001.

From 198327 until 200801 each year numbering began at 000001 with the new year-prefix. At update 198327, re-numbering began at 1983-700001.

From update 197001 to 198327 chemical Basics were assigned accession numbers that indicate the year of entry by a letter at the end of the number rather than the two-digit year prefix, e.g. 45982C. In order to standardize the format of these accession numbers online, the year and a hyphen have been inserted before the old format number, e.g. 1975-C7954W.

For non-chemical Basics from update 1970001 to 198327 Basics were assigned accession numbers which also had a letter added at the beginning of each number to distinguish them from chemical records.

The following numbers were used to indicate the year:

R	1970	W	1975	C	1980
S	1971	X	1976	D	1981
T	1972	Y	1977	E	1982 (updates 198201-198246)
U	1973	A	1978	J	1982 (updates 198247-198252)
V	1974	B	1979	K	1983 (updates 198301-198326)

Prior to 1970, accession numbers ended in a letter indicating the printed service where the record appeared. These letters have been assigned artificial year numbers have been added as prefixes to the accession numbers as follows:

F	FARMDOC (DWPI Section B)	1966
G OR H	AGDOC (DWPI SECTION C)	1967
P OR Q	PLASDOC (DWPI SECTION A)	1968

Z	"PRE-CPI" DATA	1969

The following table shows the format of the accession numbers in existing records, for reference.

Year	Update Range	CPI PANs	Non-CPI –PANs
1970	197001-197051	1970-00001R to 1970-95670R	
1971	197101-197151	1971-00001S to 1971-81761S	
1972	197201-197252	1972-00001T to 1972-82958T	
1973	197301-197352	1973-00001U to 1973-81444U	
1974	197401-197452	1974-00001V to 1974-90143V	1974-AOOOIV to 1974-M2941V
1975	197501-197552	1975-00001W to 1975-86863W	1975-AOOOIW to 1975-N8140W
1976	197601-197652	1976-00001X to 1976-98006X	1976-AOOOIX to 1976-M3809X
1977	197701-197751	1977-00001Y to 1977-91815Y	1977-AOO01Y to 1977-L3671Y
1978	197801-197851	1978-00001A to 1978-93189A	1978-AOOOIA to 1978-L2564A
1979	197901-197951	1979-00001B to 1979-92774B	1979-AOOOIB to 1979-L9040B
1980	198001-198051	1980-00001C to 1980-92116C	1980-AOOOIC to 1980-M3105C
1981	198101-198152	1981-00001D to 1981-96934D	1981-AOO01D to 1981-N4167D
1982	198201-198246	1982-00001E to 1982-99800E	1982-AOO01E to 1982-02171E
1982	198247-198251	1982-00002J to 1982-11618J	1982-AOO02J to 1982-B5631J
1983	198301-198326	1983-00001K to 1983-63800K	1983-AOO01K to 1983-J8153K
Single Unified Accession Number Range			
1983	198327-198351	1983-700001 to 1983-850679	
1984	198401-198451	1984-000001 to 1984-318609	
1985	198501-198551	1985-000001 to 1985-323507	
1986	198601-198652	1986-000001 to 1986-346722	
1987	198701-198751	1987-000001 to 1987-362891	
1988	198801-198851	1988-000001 to 1988-368805	

1989	198901-198951	1989-000001 to 1989-378093
1990	199001-199051	1990-000001 to 1990-382907
1991	199101-199151	1991-000001 to 1991-376756
1992	199201-199252	1992-000001 to 1992-433973
1993	199301-199351	1993-000001 to 1993-413704
1994	199401-199445	1994-000001 to 1994-366458
1995	199501-199551	1995-000001 to 1995-404371
1996	199601-199651	1996-000001 to 1996-519026
1997	199701-199751	1997-000001 to 1997-559352
1998	199801-199851	1998-000001 to 1998-956457
1999	199901-199954	1999-000001 to 1999-634401
2000	200001-200067	2000-000001 to 2000-687740
2001	200101-200176	2001-000001 to 2001-663531
2002	200201-200282	2002-000001 to 2002-760196
2003	200301-200382	2003-000001 to 2003-904379
2004	200401-200482	2004-000001 to 2004-834439
2005	200501-200582	2005-000001 to 2005-812455
2006	200601-200682	2006-000001 to 2006-815458
2007	200701-200782	2007-000001 to 2007-896287
2008	200801-200882	2008-A00001 to 2008-O23443
2009	200901-200906	2009-A00001 to 2009-B56000 (DPS)
2009	200907-200982	2009-E00001 to 2009-S72164 (TSPS)
2010	201001-201082	2010-A00001 to 2010-Q86798
2011	201101-	2011-A00001 onwards

As from update 200906, the production of DWPI has have moved over to a new Thomson Reuters Production System (TSPS). While there are no changes to data formats, there are some minor changes to the assignment of both primary accession numbers (PANs) and secondary accession numbers or document numbers (SANs).

PANs and SANs have until update 200906 been assigned to Basic records at the end of the production process. Once the data was extracted for a particular update, it was sorted by patent country and the PANs then assigned to the new Basics. Two series of SANs were originally assigned to Chemical and Non-Chemical patents for the production of some of our legacy microform products.

In the new system, PANs are assigned as soon as each individual Basic is identified rather than after the update extraction. We will no longer sort the data by patent country before assigning the PANs and we have ceased applying SANs as we no longer produce the microform products to which they relate.

From 200907 there is a mixture of records completed in both the old and new production systems and this will continue for some time. Records from the new production system (TSPS) will commence with the PAN 2009-E00001. Records from the old production system (DPS) will follow on from the PANs generated up to 200905 (the last PAN provided in 200905 was 2009-A98116). This in effect means that there is a gap in the accession number sequence which is gradually filled as all the records loaded into the old production system are being completed. Also as a consequence of each Basic being sent as soon as it is ready, there will not be a continuous series of PANs in the range starting 2009-E00001 in each update.

Secondary Accession Numbers

Secondary Accession Numbers (document numbers) have been assigned to all records since the start of 1983 (update 198301) originally for the purpose of identifying records in microfilm series.

Secondary accession numbers of CPI documents (DWPI chemical sections A to M) are indexed with "C" before the year i.e. CYYYY-NNNNNN. Secondary accession numbers of records classified into the electrical and engineering sections (DWPI sections P, Q, S-X) are indexed with an "N" before the year, i.e. NYYYY-NNNNNN. If a record is classified into both chemical and non-chemical sections, it is assigned two document numbers, one in each series.

If a basic is reissued, a new secondary accession number is added within the reissue update. Also if an abstract is added to a record that originally did not have an abstract, a secondary accession number is then added.

From Update 200906 the secondary accession numbers have been discontinued since the microfilm editions they are referencing are no longer produced.

Cross Reference and Related Accession Numbers

In Derwent World Patents Index, the priorities are used as the primary key to determine the equivalency of patent specifications. Basic documents have unique priority data at the time of receipt of the document by Thomson Reuters. A patent document received at a later date which has further but related priorities will usually be made Basic and a new family created. This is not only because of the new priority information but also because there is usually extra information available in the later publications.

Since 1985, when an earlier priority carried by a record has already appeared as unique on a previous basic, all priorities have been cross-referenced in the related records.

Before 1985, relationships with families based on earlier priorities were not directly recorded and do not appear in the Cross Reference field. These relationships can, however, be determined online by searching all of the priorities involved until no additional records are retrieved.

Occasionally, a patent input as a Basic is later found to be equivalent to an existing record. When this occurs, the relevant patent number is added to its correct patent family and the two records involved are both cross-referenced to each other with their respective Accession Numbers.

Prior to 2006 it was possible for related records to contain the same patent number resulting in the patent number appearing more than once within Derwent World Patents Index. This is no longer the case for both the backfile and newly added documents. Instead, if any specific document is related to more than one family then this will be indicated by Cross Reference Accession Number(s). Consequently, this means that any patent number will only appear once within Derwent World Patents Index.

Alternative Accession Numbers

Additional accession numbers applied to pre-1970 data when each printed service had its own accession numbers are available within the Alternative Accession Number field, /ANX.

The pre-CPI data has not appeared in any printed journal and the pre-1970 accession numbers are not associated with any updates - the online file shows these updates with an Update Week as "00".

DWPI Patent Assignee and Inventor Data

Patent Assignee

Patent Assignee Code

Inventors

Patent Assignee

In this topic:

- Person name and organization name formats
- Field codes

Name Formats

The Patent Assignee field consists of the full name of the assignee, up to 40 characters in length, and the assignee code. Prior to update 199216 there was a limit of 24 characters in the assignee name. Both of these limits apply to the overall name, even if the name comprises several words.

Please note that the assignee name may be shortened or individual words abbreviated as necessary to fit the field length restrictions, e.g. "INT" for International. To find variations on assignee names use the Term Explorer.

Until update 199216, up to four assignees from the basic patent were recorded. Since this time, this limit has been removed and any number of assignees may be input. From the end of 1976 (update 197648) additional assignee codes and names appearing on equivalents have also been added.

Approximately 21,000 companies which regularly file a large number of patent applications are regarded as "standard" companies and are assigned a unique four-letter code. For comprehensive retrieval of patents assigned to these standard companies, it is best to search the Patent Assignee Code field.

Field codes

In the DWPI database, the following fields related to Patent Assignees can be searched.

Field Name	Field Code	Example
Patent Assignee	/PA	PFIZER/PA
	/CS	SHELL OIL/CS

Patent Assignee Code

In this topic:

- Patent assignee code formats
- Field codes

Code Formats

Since corporate names are not standardized, but vary widely according to location and subsidiary, a single company code is assigned to patentees that are known to be related and that regularly file a large number of patents ("Standard" Companies).

Until 1992, a maximum of four codes were applied to each basic record. From update 199216 however, this restriction was lifted and any number of assignees are recorded. Also since update 197648, additional assignee codes and names have been added from equivalents if they differ from those of the Basic.

Standard Codes

Approximately 21,000 companies, which regularly file a large number of patent applications, are regarded as "standard" companies and are assigned a unique four letter code. For example BADI-C is the code for BASF AG and associated companies. Standard patent assignee codes appear in the Patent Assignee Codes user guide and are searchable on the Thomson Reuters website (http://scientific.thomsonreuters.com/support/patents/dwpiref/reftools/companycodes/lookup/).

	Suffix	Format
Standard Companies	C	AAAA-C

Although Standard Company codes have the C suffix attached in both the index and displays they can also be searched without the suffix.

If two organisations (with "Standard" patent assignee codes) merge, the usual policy is to continue to apply the standard patent assignee code for each organisation as long as patents filed under the names of the independent organisations continue to appear. For example, following the merger of Sandoz (SANO) and Ciba (CIBA) to form Novartis, the SANO and CIBA codes continued to be applied to those patents filed under the names of Sandoz and Ciba. These codes may ultimately become dormant if ongoing filings are made under the Novartis name for which a new standard code "NOVS" was created.

Note that a new standard company code is not automatically assigned when two large companies merge or are involved in for example, takeovers or demergers. Each case is assessed individually and the most appropriate action taken. So in the case of Novartis (merger) and Zeneca (demerger from ICI) new codes were created, but with SmithKline Beecham, Glaxo Wellcome, and GlaxoSmithKline one existing code was retained and the other abandoned.

Patentee codes are not generally changed retrospectively as the assignment of patent rights from one organisation to another are not tracked in DWPI.

Patent Assignee Code Dictionary

The list of company codes for patent assignees, both standard and non-standard codes, matched with company names is available in field /PACO (Patent Assignee Code). This feature allows easy and

comprehensive identification of the company names associated with a code (both standard and non-standard codes), or the code(s) used for a company name.

Non-standard Codes

Since 1970, "non-standard" codes have been assigned to companies, institutes and individuals that do not file a large number of patents. These codes are allocated using a set of simple rules (see Patent Assignee Codes user guide) and the letters used in the non-standard codes are often the first four letters of the name. Thus these codes are often not unique and their usefulness in searching is limited.

Field codes

In the DWPI database, the following field related to Patent Assignee Codes can be searched.

Field Name	Field Code	Example
Patent Assignee Code	/PACO	EAST-C/PACO

Inventors

In this topic:

- Name format
- Field codes

Name Format

From update 197804 up to three inventor names were indexed from the basic patent, where this information was available. From 1980, up to eight inventors have been added, with the exception of Soviet/Russian basics, for which only three inventor names continue to be indexed. In this time period the family name was limited to 19 characters and the number of initials to 3.

Between 1992 and 2005, up to 99 inventors could be listed per record, but the limit on Russian inventors remains. The number of characters per family name increased to a maximum of 30 characters and there is no limit on initials.

From 2005 onwards this continued except that there is no longer a limit to the number of inventors per record.

Inventor names from Japanese Basics and equivalents have been included since update 200537.

Please note, there will be occasional records pre-197804 that have the IN field populated, however coverage is by no means complete.

Inventor names are searched as complete (bound) phrases in the inverted format:

Surname A B C/AU

where Surname = family name
        A B C = initials (with spaces).

When searching for single-word family names longer than 10 characters, the 10-character version entered into the file before update 199216 and the full name entered thereafter have to be included in the search strategy. Enter both versions of the family name in the search strategy or use the Term Explorer to select the appropriate entries.

Names with prefixes like von, van, le, Mac etc. may appear in various forms.

Punctuation within names, such as a comma or a period, is displayed in names, but it is not used in the index.

Names containing an umlaut should be searched in multiple ways: as an Umlaut characters, as if there were no umlaut and with an "e" following the letter that has the diacritical mark.

It is possible to truncate a name immediately after the family name, when initials are not known, but this may decrease the precision of the search. Truncated names should be combined with other search terms.

Field codes

In the DWPI database, the following fields related to Inventors can be searched.

Field Name	Field Code	Example

| Inventor | /IN | HALE, A H/IN | 17 |
| | /AU | MAYER DALE J/AU | |

Please note that inventors should also be searched as patent assignee, since if an individual is also listed as the patent assignee, the inventor name may appear only in the PA field. Note also that inventors may only use their first initial.

IRWIN J F/IN,PA

DWPI Publication Data

Patent Number
Patent Country
Patent Kind Code
Designated States
Publication Date
Derwent Update
Publication Language
Number of Pages
Number of Drawings
Publication Type

Patent Number

In this topic:

- Content
- Distinguishing marks
- Field codes

Content

The patent publication number is displayed in the STN standard display format.

All data pertaining to one publication can be linked with (U) proximity.

Distinguishing marks

Since some patent countries issue independently running number series and therefore potentially clashing document identifiers, some number series receive distinguishing marks in the index in order to avoid said clashes. These are currently utility model publications from Asia (China, Japan and Korea), but also granted patent publications from China (PRC and Taiwan).

Field codes

In the DWPI database, the following fields related to Patent Number data can be searched.

Field Name	Field Code	Example
Patent Number	/PN	TW286937 B/PN
Patent Number, Basic	/PN.B	WO8301358/PN.B

Patent Number Group	/PATS	GB681465/PATS	19
Patent Number and Kind	/PNK	CA656747 A/PNK	
Patent Number and Kind, Basic	/PNK.B	WO2011050490 A1/PNK.B	

Patent Country

In this topic:

- Content
- Field codes

Content

The patent publication country code is part of the patent number in the form of the two letter WIPO code. Additional codes have been defined by Thomson Reuters like RD (Research Disclosure) or TP (International Technology Disclosure) to supplement the WIPO list. In the corresponding search field the clear text has been additionally indexed. In order to restrict the search to the country of the basic patent only, use the field code /PC.B.

Field codes

In the DWPI database, the following fields related to Patent Country data can be searched.

Field Name	Field Code	Example
Patent Country	/PC	JAPAN/PC
Patent Country, Basic	/PC.B	IN/PC.B
Patent Countries	/PCS	DE/PCS

Patent Kind Code

In this topic:

- Patent kind codes
- Field codes

Patent Kind Codes

The patent kind code is based on the WIPO kind-of-document code and is used to distinguish different types of patent documents published by a single patent issuing authority.

However, interpreting patent kind codes can often require extensive knowledge of the patent laws for the country concerned, and how these have changed over time. The Handbook on Industrial Property Information and Documentation, published by the World Intellectual Property Organization (WIPO) may be of assistance. WIPO lists far more status designations for publications at all stages of the patenting process, and far more countries than are included in the DWPI database.

Until 199223 only the first character of two-character kind codes was input. Now, both characters are available, where applicable.

As patent kind codes have a country-specific meaning they are usually searched with the preceding country code. Only the complete code has been indexed (e.g. country code plus one or from update 199223 two characters kind code). Therefore to retrieve all European kind A publications requires the use of truncation or masking.

Field codes

In the DWPI database, the following fields related to Patent Kind Codes can be searched.

Field Name	Field Code	Example
Patent Kind Code	/PK	INI3/PK
Patent Kind Code, Basic	/PK.B	USA1/PK.B

Designated States

In this topic:

- Content
- Field codes

Content

The designated states are being provided for European (EP) and PCT (WO) documents to indicate which states the applicant has designated for protection of the invention. The designated states are searched using the standard two letter WIPO code. In the corresponding search field the clear text has been additionally indexed.

For comprehensive search results by patent country, both the Designated States field and the Patent Country field have to be searched. Information from both fields is searchable with code /PCS.

Field codes

In the DWPI database, the following fields related to Designated States data can be searched.

Field Name	Field Code	Example
Designated States	/DS	GB/DS
Patent Countries	/PCS	DE/PCS

Publication Date

In this topic:

- Content
- Field codes

Content

Publication dates have been available for both basics and equivalents since the start of 1974 (197401) to the present. For documents published before 1974, the publication date may not be available. The date can be numerically searched in the search field /PD, the year deduced from it in /PY. The dates and years pertaining to the basic patent have additionally been indexed in /PD.B and /PY.B respectively. The publication dates can be linked with (U) proximity to other data pertaining to the same publication.

Field codes

In the DWPI database, the following fields related to Publication Date can be searched.

Field Name	Field Code	Example
Publication Date	/PD	PD>20060101
Publication Date, Basic	/PD.B	19900101-19920101/PD.B
Publication Year	/PY	PY<1985
Publication Year, Basic	/PY.B	2000/PY.B

Derwent Update

In this topic:

- Content
- Field codes

Content

The updates are consecutively numbered in a year (there are currently 82 per year). In DWPI these numbers have been referred to as 'Derwent Update' or previously 'Derwent Week'.

Field codes

In the DWPI database, the following fields related to Derwent Update data can be searched.

Field Name	Field Code	Example
Derwent Update	/DUPD	200801/DUPD
Derwent Week	/DW	201005-201010/DW
Derwent Week, Basic	/DW.B	201005-201010/DW.B

Publication Language

In this topic:

- Content
- Field codes

Content

The language is indicated for all patents. This is particularly useful for countries that accept documents in more than one language such as Canada which accepts applications in both French and English. The language can be searched using either the two-letter ISO standard code or the full name of the language in ISO standard. The language is linked with (U) proximity to the corresponding patent information.

Field codes

In the DWPI database, the following fields related to Publication Language can be searched.

Field Name	Field Code	Example
Publication Language	/LA	CHINESE/LA

Number of Pages

In this topic:

- Content
- Field codes

Content

The number of pages of an original publication can be numerically searched for in /PGN. The number of pages is linked with (U) proximity to the corresponding patent information.

Field codes

In the DWPI database, the following fields related to Number of Pages can be searched.

Field Name	Field Code	Example
Number of Pages	/PGN	500/PGN

Number of Drawings

In this topic:

- Content
- Field codes

Content

The number of drawings of an original publication can be numerically searched for in /DRWN. The number of drawings is linked with (U) proximity to the corresponding patent information.

Field codes

In the DWPI database, the following fields related to Number of Drawings can be searched.

Field Name	Field Code	Example
Number of Drawings	/DRWN	500/DRWN

Publication Type

In this topic:

- Content
- Field codes

Content

Documents containing Equivalents, Equivalents-treated-as-Basic and Non-Conventional Equivalents can easily be searched using the Publication Type field. In the patent information field (PI) Basics are identified by an asterisk "*", Equivalents-Treated-as-Basic are identified with a "B" and Non-Conventional Equivalents are identified with a hash mark "#". For search purposes this translates into "BASIC", "EQUIVALENT", "EQUIVALENTASBASIC" or "EQUIVALENTNONCONVENTION" in the Publication Type search field /PT.

Field codes

In the DWPI database, the following fields related to Publication Type can be searched.

Field Name	Field Code	Example
Publication Type	/PT	EQUIVALENTASBASIC/PT

DWPI Application Data

In this topic:

- Content

Content

Application numbers have been recorded since early 1984 (update 198409) for equivalents from the following sources: BE, DE, EP, GB, JP, SU, WO and NL (examined).

In addition, application numbers have been recorded for the same period for chemical equivalents from: FR, NL (unexamined) and ZA.

Since update 199216 however, all application information is recorded.

Where available, application information appears in the detailed display ADT associated with the patent numbers to which they belong in the expanded patent information table.

Notes giving more information on the type of application may also be available (see Application Type).

All data pertaining to one application can be linked with (U) proximity.

Application Number
Application Country
Application Type
Application Date
Application Number, Year
Application Number in Thomson Reuters Format

Application Number

In this topic:

- Number formats
- Distinguishing marks
- Field codes

Number formats

Application numbers can be searched and displayed in the STN standard format. By and large they follow the following patterns:

STN format: CCYYYY-xxxxnnnnnnnNd (variable length)

Index format: CCYYYY-xxxxnnnnnnnNd (variable length)

YYYY = year

CC = country code

d = distinguishing mark

x = optional alphanumeric character

n = optional numeric character

N = mandatory numeric character

When application and priority application numbers have both to be searched for, the super-search field /APPS is suitable.

Distinguishing marks

Since some patent countries issue independently running number series and therefore potentially clashing document identifiers, some number series receive distinguishing marks in the index in order to avoid said clashes.

US Provisional Applications

All US provisional application numbers are identified with the letter 'P' appended to the end of the serial number. This allows for the differentiation of provisional application numbers from regular application numbers:

US1998-80116P/AP

Utility Model Applications

Utility Model applications are often having a number series running independently from the patent applications potentially inviting number clashes. In order to avoid these ambiguities all utility model applications apart from those having a positive identification already in the front of the serial, e.g. newer German numbers beginning with a '20', are equipped with a 'D' at the end of the number. Due to the coverage of utility models in DWPI this currently mainly applies to Chinese, Korean and Japanese utility model applications.

Field codes

In the DWPI database, the following fields related to Application Number can be searched.

Field Name	Field Code	Example
Application Number	/AP	CN1999-804581/AP
Application Number Group	/APPS	CN2009-10000262/APPS

Application Country

In this topic:

- Content
- Field codes

Content

Application country codes follow the same pattern as the publication country codes: The WIPO or Thomson Reuters's own codes and their textual expressions are indexed in /AC.

Field codes

In the DWPI database, the following fields related to Application Country can be searched.

Field Name	Field Code	Example
Application Country	/AC	Canada/AC

Application Type

In this topic:

- Content
- Field codes

Content

Notes giving more information on the type of application may also be available. Possible values for these application types include:

Add to	Addition to
Application No	Application Number
CIP of	Continuation-in-part of
Cont of	Continuation of
Derived from	Derived from
Div ex	Division from
Div util	Division from Utility
PCT Application	PCT Application
PCT Nat. Entry	PCT National Phase Entry
Previous Appln	Previous Application
Provisional	Provisional
Related to	Related to
Subst for	Substitution for
Supp Discl	Supplementary disclosure

The application types listed above are indexed as bound phrases in the /APT search field. The application type is linked with (U) proximity to the corresponding application information.

Field codes

In the DWPI database, the following fields related to Application Type can be searched.

Field Name	Field Code	Example
Application Type	/APT	derived from/APT

Application Date

In this topic:

- Content
- Field codes

Content

The application date is numerically indexed in /AD and the year on its own in /AY. The application date as well as application year are linked with (U) proximity to the corresponding application information.

Field codes

In the DWPI database, the following fields related to Application Date data can be searched.

Field Name	Field Code	Example
Application Date	/AD	AT/AC (U) AD>20070101
Application Year	/AY	AY>2000

Application Number, Year

In this topic:

- Content
- Field codes

Content

The application year found as part of the application number may be different from the application year above. This is particularly true with continuations etc. where the year in the application date points to the original application year of the parent application while the year in the application number itself points to the current application. Therefore the latter can be searched in /AP.YR.

Field codes

In the DWPI database, the following fields related to Application Number, Year can be searched.

Field Name	Field Code	Example
Application Number, Year	/AP.YR	2006/AP.YR

Application Number in Thomson Reuters Format

In this topic:

- Format
- Content
- Field codes

Format

Application numbers can be searched and displayed in Thomson Reuters standard. By and large they follow the following pattern:

Thomson Reuters display format YYYYCC-xxxxxnnnnnnnnNd

(mostly fixed 9-character length, zero padded if necessary)

Index format: YYYYCC-xxxxxnnnnnnnnNd

Where:

> YYYY = four digit year
>
> CC = two-letter WIPO country code
>
> D = indicates a distinguishing mark
>
> N = number
>
> A = letter
>
> X = number or letter
>
> x = optional alphanumeric character
>
> n = optional numeric character

For German applications published from January 2004 the first two digits of the twelve digit number indicates the IP right (e.g. a patent application or utility model) followed by a 4-digit year and a 6-digit serial number. For the Thomson Scientific standard the year has been removed and a zero inserted. For example 2004DE-102004012346 appears as 2004DE-100012346.

PCT transfers to the Indian Patent Office are identified by a three letter code designating one of the regional offices (DEL = Delhi, KOL = Kolkata, MUM = Mumbai, CHE = Chennai), the letters 'NP' signifying 'National Phase' and a 5-digit serial number, for example, 2004IN-CHENP00010.

Content

Application numbers have been recorded since early 1984 (update 198409) for equivalents from the following sources: BE, DE, EP, GB, JP, SU, WO and NL (examined).

In addition, application numbers have been recorded for the same period for chemical equivalents from: FR, NL (unexamined) and ZA. Since update 199216 however, all application information is recorded.

Gaps in application data coverage have been filled where possible using original data from the following sources:

- German applications, granted patents, and utility models
- European applications and granted patents
- US applications and granted patents
- PCT applications
- Japanese applications

This additional application data is available in a separate search and display field (APTS; Application Number, Thomson Reuters). APTS also contains the application data which has been recorded in DWPI over time and which is available separately within the Application Number (AP) field.

It should be noted however that AP does not contain the additional application data sourced from the above authorities. The AP field therefore remains a reflection of the application data recorded over time within DWPI.

The APTS field contains numbers from the standard Derwent numbers supplemented in particular for older application numbers with numbers from other sources.

Field codes

In the DWPI database, the following fields related to Application Number in Thomson Reuters Format can be searched.

Field Name	Field Code	Example
Application Number in Thomson Reuters Format	/APTS	1999AT-000000007/APTS

DWPI Filing Details

The patent filing details field contains information about patent family members that are not represented in the patent family table. Although the specific data available varies from patent to patent, the types of information that may accompany patent number and kind codes are related patent numbers and filing notes about divisions, continuations and other relationships.

All data pertaining to the filing details may be linked with (U) proximity.

Related Patent Number

Related Patent Type

Related Patent Country

Related Patent Kind Code

Related Patent Number

In this topic:

- Content
- Field codes

Content

The related patent number for the filing details can be searched in the search field /FDT or /FDT.PN (/RLPN is an additional synonym). The format follows the same pattern as in /PN.

Field codes

In the DWPI database, the following fields related to Related Patent Number data can be searched.

Field Name	Field Code	Example
Filing Details, Patent Number	/FDT	WO2001050482/FDT
	/FDT.PN	FI2000000009/FDT.PN
Related Patent Number	/RLPN	FI2000000009/RLPN

Related Patent Type

In this topic:

- Content
- Field codes

Content

The Related Patent Type gives more information on the type of relation between Related Patent Numbers.

It is linked with (U) proximity to the corresponding related patent information.

Possible types include:

Add in	Addition in
Add to	Addition to
Based on	Based on
CIP of	Continuation-in-part of
CMEA No	Council of Mutual Economic Assistance Number
Cont of	Continuation of
Div ex	Division ex
Div in	Division in
Previous Publ	Previously published in
Reissue of	Reissue of
Related to	Related to

Field codes

In the DWPI database, the following fields related to Related Patent Type can be searched.

Field Name	Field Code	Example
Filing Details, Type	/FDT.TP	CIP OF/FDT.TP

Related Patent Country

In this topic:

- Content
- Field codes

Content

Filing detail country codes follow the same pattern as the publication country codes: The WIPO or Thomson Reuters's own codes and their textual expressions are indexed in /FDT.PC.

Field codes

In the DWPI database, the following fields related to Related Patent Country can be searched.

Field Name	Field Code	Example
Filing Details, Patent Country	/FDT.PC	United States/FDT.PC
Related Patent Country	/RLPC	SLOVAKIA/RLPC

Related Patent Kind Code

In this topic:

- Content
- Field codes

Content

Related Patent Kind Codes follow the same pattern as the patent publication kind codes.

Field codes

In the DWPI database, the following fields related to Related Patent Kind Code can be searched.

Field Name	Field Code	Example
Filing Details, Patent Kind Code	/FDT.PK	BGA/FDT.PK
Related Patent Kind Code	/RLPK	AUB/RLPK

DWPI Priority Data

When an inventor applies for a patent in several countries, the first application (the one with the earliest date), regardless of the country in which it was filed, is the priority application. The date of the first application is referred to as the priority date.

All priorities for each patent have been included in DWPI since the middle of 1977 (update 197729). Prior to that date, the number of priorities entered was restricted to ten.

In some cases, a patent in one country has broader coverage than a single patent in another country. This situation can result in a patent family having more than one priority application. Multiple priorities can also result when new work is carried out on an invention during the 12 month period between original application filing and priority-based filing abroad. When there are multiple priority applications, the latest priority of the basic patent displays in the Priority Information field, followed by all related priorities. These related priorities may be indexed from the basic patent, equivalent patents in the family, or patents in related families. The latter category includes patents of additions, continuations, continuations-in-part and divisions that are linked to the patent family through their common priorities. This information displays in the table for each patent where applicable.

Use (U) proximity to link data pertaining to one priority application, e.g. priority country and date/year.

Priority Number

Priority Country

Priority Date

Priority Number, Year

Priority Number in Thomson Reuters Format

Priority Number

In this topic:

- Content
- Field codes

Content

The priority application number format follows the patterns already outlined for the application numbers, yet the number of countries covered is far greater than the 40+ for the application numbers.

Since the coverage is wider more distinguishing marks were required. In particular utility model applications needed additionally to be catered for. Utility Model applications in, for example, Japan, Germany, Spain, Italy, China, and Brazil, are sometimes listed as priority applications when a patent application is filed in another country. All Utility Model applications receive a distinguishing mark in the form of a 'U' appended to the serial number with the exception of the German numbers for which the newer ones have the 'utility mark' already included at the beginning of the serial number.

Note that publications of German Utility Model applications have been covered in DWPI with coverage starting with update 199543. Some French documents came in earlier. Japanese, Korean, Chinese and Taiwanese Utility Models followed more recently (see Asian coverage).

The earliest priority application number is also indexed in /PRNF, the one for the basic publication in /PRN.B.

When application and priority application numbers have both to be searched for, the super-search field /APPS is suitable.

Field codes

In the DWPI database, the following fields related to Priority Number data can be searched.

Field Name	Field Code	Example
Priority Number	/PRN	AT2004-773/PRN
Priority Number, Basic	/PRN.B	AT2004-776U/PRN.B
Priority Number, First	/PRNF	CA2005-2259858/PRNF
Application Number Group	/APPS	CN2009-10000262/APPS

Priority Country

In this topic:

- Content
- Field codes

Content

Priority application country codes follow the same pattern as the publication country codes: The WIPO or Thomson Reuters's own codes and their textual expressions are indexed in /PRC. The earliest priority application country is also indexed in /PRCF. The priority application country of the basic publication is indexed in /PRC.B.

Field codes

In the DWPI database, the following fields related to Priority Country can be searched.

Field Name	Field Code	Example
Priority Country	/PRC	UNITED ARAB EMIRATES/PRC
Priority Country, Basic	/PRC.B	FRANCE/PRC.B
Priority Country, First	/PRCF	IN/PRCF

Priority Date

In this topic:

- Content
- Field codes

Content

The priority application date is numerically indexed in /PRD and the year on its own in /PRY. The earliest priority can be searched with the qualifiers /PRDF and /PRYF. The priority application date (/PRD and /PRDF) as well as the priority application year (/PRY and /PRYF) are linked with (U) proximity to the corresponding priority application information.

Field codes

In the DWPI database, the following fields related to Priority Date can be searched.

Field Name	Field Code	Example
Priority Date	/PRD	PRD>20070101
Priority Date, First	/PRDF	20061222/PRDF
Priority Year	/PRY	2000-2005/PRY
Priority Year, First	/PRYF	PRD>20070101 and PRYF=2006

Priority Number, Year

In this topic:

- Content
- Field codes

Content

The priority application year found as part of the priority application number may be different from the priority application year above. Therefore the former can be searched in /PRN.YR.

Field codes

In the DWPI database, the following fields related to Priority Number, Year can be searched.

Field Name	Field Code	Example
Priority Number, Year	/PRN.YR	2000/PRN.YR (notU) 2000/PRY

Priority Number in Thomson Reuters Format

In this topic:

- Content
- Format
- Field codes

Content

When an inventor applies for a patent in several countries, the first application (the one with the earliest date), regardless of the country in which it was filed, is the priority application. And the date of the first application is referred to as the priority date.

All priorities for each patent have been included in DWPI since the middle of 1977 (update 197729). Prior to that date, the number of priorities entered was restricted to ten.

Gaps in priority data coverage have now been filled where possible using original data from the following sources:

- German applications, granted patents, and utility models
- European applications and granted patents
- US applications and granted patents
- PCT applications
- Japanese applications

This additional priority data is available in a separate search and display field (PRTS; Priority Number, Thomson Reuters). PRTS also contains the priority data which has been recorded in DWPI over time and which is available separately within the Priority Number (PRN) field.

The PRTS field contains numbers from the standard Derwent numbers supplemented in particular for older application numbers with numbers from other sources.

Format

Priority Number Thomson Reuters Format

YYYYCC-xxxxxnnnnnnnnND

(padded with leading zeros to nine digits where necessary)

Where:

YYYY = four digit year

CC = two-letter WIPO country code

D = indicates a distinguishing mark

N = number

n = optional number

A = letter

a = optional letter

X = number or letter

x = optional number or letter

The PRTS format mostly contains nine character serial numbers and always includes the year.

Field codes

In the DWPI database, the following fields related to Priority Number in Thomson Reuters Format can be searched.

Field Name	Field Code	Example
Priority Number in Thomson Reuters Format	/PRTS	1999AT-000000001/PRTS

DWPI Basic Index

In this topic:

- The Basic Index and Basic Index Extension
- Spelling variations
- Plurals/Abbreviations
- Field codes

The Basic Index and Basic Index Extension

The Basic Index (/BI) at STN generally conveniently gathers all words from value-added text into one field and permits general subject searching without the necessity of using search qualifiers. In DWPI it contains single words from the Thomson Reuters value-add title, title terms, additional words, abstracts, technology focus, abstract extensions and documentation abstracts. Punctuation has been removed from the index.

First-level data like the author titles, abstracts and claims have been indexed in a similar, but separate, segment of the index: the basic index extension (/BIEX).

Combine single words with Boolean and/or Proximity operators (W), (A), (S) or (P). (W) is implied if no operator is input. (S) will confine search terms to a single text paragraph, (P) to a section of the abstracts, e.g. USE. (D) or (SDOC) will act like an AND operator in the entire Basic Index, yet it may be useful in order to combine the statement with additional search terms and confining the search to the individual publication level.
The Basic Index contains text parsed at the STN standard parsing characters.

There are no stopwords. This means that words such as A, AN, AND, AS, AT, BY, FOR, FROM, IN, IS, NOT, OF, ON, OR, THE, TO, WHICH and WITH have also been indexed.

Spelling Variations

Prior to 1999, British spelling is generally used in DWPI but American spelling is also present in some of the fields making up the Basic Index. From 1999, American spelling (with British terminology) was adopted. As a precaution, both spellings should be covered in the search strategy to ensure complete retrieval:

ALUMINIUM OR ALUMINUM

The Spelling embellishment can be enabled through the Settings panel.

Plurals/Abbreviations

Many commonly occurring words in titles and abstracts are abbreviated. Further abbreviations like units of measurement, electrical and engineering elements, chemical groups and chemical formulae are used in abstracts. See a list of abbreviations (Appendix I). However, all standard (and non-standard) abbreviations are automatically taken into account with the ABBREVIATIONS embellishment. This is also true for plurals with the PLURALS embellishment function.

The plurals and abbreviations embellishments can be enabled through the Settings panel.

Field codes

In the DWPI database, the following fields related to the Basic Index and Basic Index Extension can be searched.

Field Name	Field Code	Example
Basic Index	None or /BI	Drilling fluid AND emuls*
Basic Index Extension	/BIEX	Nanoclusters/BIEX

DWPI Title Data

Title

Title Terms and Additional Words

Title

In this topic:

- Content
- Special characters
- Field codes

Content

Thomson Reuters value-add titles are written to highlight the content and novelty of the invention disclosed in the patent specification. They are not based on the original title or its exact translation.

Combine single words with Boolean and/or Proximity operators (W), (A), (S) or (P). (W) is implied if no operator is input.

Concerning spelling variations, plurals, abbreviations and stopwords the procedures described for the basic index also apply to the title search field (/TI).

Searching the Title field restricts a search further than by searching the entire Basic Index, but relevance may be higher because of the nature of the Thomson Reuters Title. Use of this field may give more precise results than searching some of the broader Title Terms. When searching for a known original title, users should remember that Thomson Reuters does not input the original title or its exact translation in /TI at the Invention Level, but provides an enhanced more informative title.

The title associated with the Basic patent is available at both the Invention and Patent Publication Levels and so has also been indexed twice, once at each level.

The Title field contains single words without punctuation. Compound words containing periods, commas, etc., are broken into smaller segments at all predefined parsing characters.

Words in the Title field may be searched using Boolean and/or proximity operators. Implied (W) proximity is available and therefore the (W) operator may be omitted in search statements.

FLUORESCENT DYE#/TI

In some of the records entered in the database prior to 1971, the titles may be short. Caution is necessary if a search is restricted to /TI for this period.

Special characters

From update 197804 until the end of 1998 the "*" is used with monomers in Thomson Reuters (Scientific) titles to indicate that the monomer is polymerised. Search terms are indexed twice, with and without the '*' mark.

ETHYLENE*/TI

From update 197804 until the end of 1998 the @ is used to differentiate between an element or its alloys and compounds of the element, for example:

COBALT@   the element or its alloys

COBALT   compounds of cobalt

The @ symbol is also used to differentiate between the unsubstituted, uncompounded polymer and its copolymers, for example:

POLYETHYLENE@   unsubstituted, uncompounded

POLYETHYLENE   copolymers

In TT, terms with @ have been indexed twice, with and without the @ mark.

Field codes

In the DWPI database, the following fields related to the Title can be searched.

Field Name	Field Code	Example
Title	/TI	drilling fluid#/TI
Basic Index	NONE or /BI	*phenylether*/BI

Title Terms and Additional Words

In this topic:

- Content
- Field codes

Content

Title Terms are the preferred forms of words appearing in the Thomson Reuters value-add title. They are generated automatically by a text editing software that converts each title word into a preferred form of the word. For example, the title words PAGE, PAGER, PAGING, etc., are converted into the Title Term "PAGE". A Title Term will only appear once irrespective of the number of title words which may generate this preferred term. (For a listing of title terms see the Title Terms user manual). The following words are ignored when titles are scanned to generate title terms:

AN AND ARE AS AT BE BY FOR FROM HAS IN INTO IS NOT OF ON OR THE THEN WHEN WHERE WHICH

From update 197804 until the end of 1998 additional words have been added to the Title Terms to further enhance the title. Additional words are searchable in /TT as well as in the Title and the Basic Index. These additional words are all included in the Title Terms user guide.

Title Term searching is a very simple and effective way of subject searching. Precision is usually very high, not only because the title terms are controlled forms of the words, but because the specially written Thomson Reuters value-add title is a highly informative, concise summary for rapid scanning. However, inclusion of the much larger number of words in the abstracts, by defaulting to a Basic Index search, will always give higher recall. For best results, all synonyms and every way of expressing the required concept should be considered when formulating the search strategy.

Title Term searching is particularly valuable when searching non-chemical technology where other forms of indexing and classification are not as exhaustive.

Multi-word terms, in use since update 197804, are given in the Title Terms user guide with equal signs linking the individual words, e.g. X=RAY. On STN, replace the "=" with "-" when searching these terms:

x-ray/TT

From update 197804 until the end of 1998 the "*" is used with monomers in titles to indicate that the monomer is polymerised. Automatic generation of title terms converts these words to title terms with the POLY prefix.

From update 197804 to the end of 1998 @ is used to differentiate between an element or its alloys and compounds of the element, for example:

COBALT@   the element or its alloys

COBALT   compounds of cobalt

The @ symbol is also used to differentiate between the unsubstituted, uncompounded polymer and its copolymers, for example:

POLYETHYLENE@   unsubstituted, uncompounded

POLYETHYLENE   copolymers

In TT, terms with @ have been indexed twice, with and without the @ mark.

COBALT@/TT

Field codes

In the DWPI database, the following fields related to the Title Terms and Additional Words can be searched.

Field Name	Field Code	Example
Title Terms	/TT	Drill/TT
Basic Index	NONE or /BI	Osteogenic protein*

DWPI Abstract and Related Text Data

The DWPI value-added Abstract

Technology Focus

Abstract Extension

Documentation Abstracts

The DWPI value-added Abstract

In this topic:

- Content
- Old Style Basic Abstracts
- New Style Alerting Abstracts
- Field codes

Content

The majority of records in DWPI (85%) have an abstract for the basic patent. Novelty and Technology Focus fields became available from update 199908 onwards. At this time the Basic Abstract was renamed the Alerting Abstract.

Basic abstracts for Austria, Brazil, and Denmark are only available for chemical Basics. Abstracts are not included for records where the Basic patent is from Czechoslovakia, Finland, Italy, Luxembourg, and Norway. In all these cases however, an abstract is added to the record when an equivalent from a country with a guaranteed basic abstract is added to the family.

From 1984 to 1997 abstracts were also prepared for many equivalent members of the patent family. These are displayable with the individual patent publication section. However all patent publication abstracts have been indexed within /AB.

Apart from the basic index all words are searchable in /AB. This comprises ALL abstracts, including Original and Equivalent abstracts.

Implied word proximity, simultaneous left and right truncation, PLUrals, ABBreviations and SPElling embellishments all apply.

Old Style Basic Abstracts

Pre-1999 records may contain an abstract section called the First Section which was based on the claims together with a Use, Use/Advantage or Advantage section.

New Style Alerting Abstracts

In 1999 important changes were made to the structure and content of abstracts. As well as containing improved technical content, the abstracts also include several subheadings to make the description of the invention easier to read:

SUBHEADING	DESCRIPTION
Novelty	Outlines the novelty of the invention.
Detailed Description	Optional paragraph included when it is not possible to summarise the main claims of the invention within the novelty field.
Activity	Used to describe the biological activity of chemical or biological entities.
Mechanism of Action	Covers the biological mechanism of action for chemical or biological entities (where given).
Use	This paragraph is always present, and covers all the uses (applications) of the invention in terms of its different technology areas. If there are no disclosed uses, this is stated.
Advantage	Covers the advantages of the invention as described by the author.
Description of Drawing(s)	Explanation of technical drawings included in the record.

Field codes

In the DWPI database, the following fields related to the DWPI value-added Abstract can be searched.

Field Name	Field Code	Example
Abstract	/AB	Osteogenic protein*/AB
Novelty	/NOV	Excitation Light/NOV
Detailed Description	/DETD	Naphthalene*/DETD
Activity	/ACTV	Antibiotic Activity/ACTV
Mechanism of Action	/ACTN	Cytokines/ACTN
Use Section	/USE	(Synthesis and biosynthetic)/USE
Advantage	/ADV	Laser beam*/ADV
Drawing Description	/DRWD	*tangul*/DRWD

Alerting Abstract, First Section	/ALE	monitor* and diagnos*/ALE	57
Use/Advantage Section	/UADV	Treatment/UADV	
Basic Index	NONE or /BI	CARBOXAMIDE	

Technology Focus

In this topic:

- Content
- Field codes

Content

This field, introduced from update 199908 onwards, is designed to enable end-users scientists and engineers, in various sectors, to quickly identify if a patent document is of real interest to them. Separate headed paragraphs describe the invention from different technological viewpoints – immediately bringing home the importance of the patent to a variety of disciplines.

The Technology Focus is used to summarise the dependent claims, i.e. the preferred options for making practical use of the invention, and claims related 'preferred options' taken from the 'disclosure' of the patent. Information from outside the core technology can also be covered, e.g. preferred polymeric materials used in the manufacture of an engineering invention. The text is written using separate titled paragraphs, which are used to summarise the practical content of the invention from different technological viewpoints. The paragraph headings are described below. All the paragraph headings are fully searchable as free text within the Technology Focus field.

Heading	Defintion
Agriculture	Covers pesticides, herbicides, fungicides, fertilisers, etc, but not their preparation. See Organic Chemistry.
Biology	Covers naturally occurring biological materials (i.e. not engineered), immunoassays, etc.
Biotechnology	Covers genetic engineering (recombinant DNA technology), etc.
Ceramics and Glass	Covers glass, refractories, ceramics, cement, etc.
Chemical Engineering	Covers large scale, industrial processing of chemicals.
Computing and Control	Covers automotive, environmental, manufacturing processes, etc.
Electrical Power and Energy	Covers power generation, nuclear power, radioactivity.
Electronics	Covers electronic circuits and devices.
Environment	Covers pollution control, water treatment,

	sewage treatment, etc.
Food	Covers human foodstuffs, brewing, animal feed, etc.
Imaging and Communication	Covers imaging technologies, inks, printing, electrophotography, recording media, broadcasting and telecommunications.
Industrial Standards	Used when comparisons to industrial standards are made.
Inorganic Chemistry	Covers all inorganic materials, except Ceramics and Glass.
Instrumentation and Testing	Covers chemical analysis, testing, and medical equipment.
Mechanical Engineering	Covers polymer processing machinery, mechanical equipment, etc.
Metallurgy	Covers metal treatment/production/refining/working/ finishing, alloys, solders, etc.
Organic Chemistry	Covers the preparation of all organic chemicals, including pharmaceuticals and agrochemicals, but not polymers - see Polymers.
Pharmaceuticals	Covers pharmaceutically active compounds and compositions, including veterinary drugs, but not their preparation - see Organic Chemistry.
Polymers	Covers all polymer types, preparation of polymers, etc.
Textiles and Paper	Covers paper/cardboard, natural/synthetic textiles, and their processing.

Field codes

In the DWPI database, the following fields related to the Technology Focus can be searched.

Field Name	Field Code	Example
Technology Focus	/TECH	Dyeing Agent#/TECH,BI

Abstract Extension

In this topic:

- Content
- Field codes

Content

The Extension Abstract is an optional field introduced from update 199908 onwards, only being present when there is sufficient detail in the original patent document, and it should be read in combination with the Alert Abstract and Technology Focus to make complete sense. Like the Alert and Technology Focus Abstracts, the Extension Abstract has separate titled paragraphs, presenting the content of the patent document in a more easily understood form.

Display of the ABEX field (in file WPIX only) is restricted to subscribers with the appropriate level of subscription. However, the Extension Abstract text does form part of the Basic Index and so is available for all users to search.

When displayed in combination with the Alert and Technology Focus abstracts, the Extension Abstract is ideal for the end-user scientist or engineer who needs a detailed summary of a patent, free from legalistic jargon. This helps the end-user to bridge the gap between the concise Alert Abstract summary, and the often lengthy, difficult-to-read, full text patent document.

The Extension Abstract field also offers additional free text searching possibilities for experienced online searchers. When taken together the Alert, Technology Focus, and Extension Abstract fields represent the current online implementation of the in-depth Documentation Abstracts.

Documentation Abstracts for the period 1995-1999 are available in the ABDT field. The Extension Abstract contains a series of titled paragraphs, as described below, and is only used for inventions classified in the *Chemical Patents Index* (*CPI*).

Heading	Definition
Wider Disclosure	Used when the scope and/or novelty of the invention, as defined in the body of the specification, is broader than that of the main independent claim(s). The paragraph will contain those novel features and/or applications which fall outside the definition of the invention, as described in the legal claims. The wider disclosure paragraph is

	not used for patents which are related to other patents or applications, which have already been published, e.g. United States 'continuation-in-part' documents.
Administration	Used to cover details of dosages and methods of administration for pharmaceutical/veterinary patents, or rates of application and application methods in agrochemical patents.
Specific 'Substances'	This is used for specific substances which relate to, or exemplify, the novel features of the invention, and not to cover all specific substances. The information is grouped together under one or more headings selected from a controlled list, depending on the 'substances' being defined, e.g. specific compounds, specific sequences, specific cells, specific materials, etc.
Example	A summary of an example which provides data in support of the advantages of the claimed invention, or details about how the invention is carried out in practice. The paragraph is not included if it does not add any information to that already reported in the Technology Focus Abstract.
Definitions	This is normally immediately followed by the phrase 'preferred definitions:'. The paragraph is used to detail the preferred options for Markush chemical formulae defined in the Detailed Description paragraph of the Alert Abstract.

As well as being searchable as part of the /ABEX field each constituent sub-section of the Extension Abstract is also specifically searchable.

Subheading	Search Field
Wider Disclosure	/ABEX.WD
Administration	/ABEX.ADM
Specific Substances	/ABEX.SC
Example	/ABEX.EX

Definitions /ABEX.DEF

Field codes

In the DWPI database, the following fields related to the Abstract Extension can be searched.

Field Name	Field Code	Example
Abstract, Extension	/ABEX	*Ferment*/ABEX
Abstract., Ext., Wider Disclosure	/ABEX.WD	Kinase*/ABEX.WD
Abstract, Ext., Administration	/ABEX.ADM	buccal(p)dos*/ABEX.ADM
Abstract, Ext., Specific Compounds	/ABEX.SC	*NITRO*/ABEX.SC
Abstract, Ext., Example	/ABEX.EX	Nuc* and complex*/ABEX.EX
Abstract, Ext., Definition	/ABEX.DEF	*alkyl* and *alkox*/ABEX.DEF

Documentation Abstracts

In this topic:

- Content
- Field codes

Content

The Documentation Abstract is an optional field available for documents - most CPI records - from 1995 to 1999 and provides a more in-depth analysis of the invention than the Basic Abstract. The Documentation Abstract therefore bridges the gap between the concise Basic Abstract summary, and the often lengthy, difficult-to-read, full text patent document.

Display of the ABDT field is restricted to subscribers with the appropriate level of subscription. However the Documentation Abstract text does form part of the Basic Index and so is available for all users to search offering additional free text searching possibilities.

From update 199908 the Documentation Abstract was replaced by the Extension Abstract.

The Documentation Abstract may contain a series of titled paragraphs, as described below, and was only used for inventions classified in the *Chemical Patents Index* (*CPI*).

Heading	Definition
Activity	Used to describe the biological activity of chemical or biological entities.
Mechanism of Action	Covers the biological mechanism of action for chemical or biological entities (where given).
Administration	Used to cover details of dosages and methods of administration for pharmaceutical/veterinary patents, or rates of application and application methods in agrochemical patents.
Advantage	Covers the advantages of the invention as described by the author.
Biology	Contains biological activity and/or biological data relating to the invention.
Claimed	Contains details of the invention disclosed within the Independent Claims. May

comprise a number of "Claimed" headings.

Definitions   This paragraph is used to detail the preferred options for Markush chemical formulae defined in the Detailed Description paragraph of the Basic Abstract.

Description   Included when it was not possible to summarise the main claims elsewhere.

Dosage   Covers pharmaceutical dosages and methods of administration.

Drawing Description   Explanation of technical drawings included in the record.

Embodiment   A more detailed description using information from the disclosure that is not in the claims.

Example   The selected example illustrates the novelty/advantages of the invention.

First Section   Covers all independent claims (except for those dealing with uses and preparations which are covered in their own sections). The novel features of the invention will also be highlighted.

General   Contains information not relating to standard Documentation Abstract sub-sections.

Inorganic Chemistry   Covers inorganic materials.

Starting Materials   When starting materials or their preparation have been claimed or described as new, their preparation is detailed.

More Specifically   Used to narrow chemical Markush definitions that are very broad or vague. This information is available in the claims or disclosure.

Novelty   Outlines the novelty of the invention.

Organic Chemistry   Covers organic materials.

Preferred   Contains a detailed description from the dependent claims. May be split into a number of preferred headings.

Preparation   If the invention contains new compounds, this section is used to describe their preparation.

Specific Substances	When a patent claims a group of compounds covered by a Markush structure, this section is used to give specific examples from this group (claimed examples taking priority).
Technology Focus	Used to summarise the dependent claims, i.e. the preferred options for making practical use of the invention, and claims related 'preferred options' taken from the 'disclosure' of the patent.
Use/Advantage	Some records may contain a combined use/advantage section outlining both the use of the invention and the advantages of the invention as described by the author.
Use	Covers the use of the invention.
Wider Disclosure	Used when the scope and/or novelty of the invention, as defined in the body of the specification, is broader than that of the main independent claim(s). The paragraph will contain those novel features and/or applications which fall outside the definition of the invention, as described in the legal claims.

As well as being searchable as part of the /ABDT field each constituent sub-section of the Documentation Abstract is also specifically searchable.

Field codes

In the DWPI database, the following fields related to Documentation Abstracts can be searched.

Field Name	Field Code	Example
Abstract, Documentation Type	/ABDT	(DNA and protein)/ABDT
Abstract, Documentation Type, Activity	/ABDT.ACTV	*agonist*/ABDT.ACTV
Abstract, Documentation Type, Mechanism of Action	/ABDT.ACTN	Cell*/ABDT.ACTN
Abstract, Documentation Type, Administration	/ABDT.ADM	oral/ABDT.ADM
Abstract, Documentation Type, Advantage	/ABDT.ADV	(strength and (increas* or ris* or gain*))/ABDT.ADV
Abstract, Documentation Type, Biology	/ABDT.BIO	(leukaem* and cell*)/ABDT.BIO

Abstract, Documentation Type, Claimed	/ABDT.CLM	Keton*/ABDT.CLM
Abstract, Documentation Type, Definition	/ABDT.DEF	*cycl*/ABDT.DEF
Abstract, Documentation Type, Description	/ABDT.DES	*ary*/ABDT.DES
Abstract, Documentation Type, Dosage	/ABDT.DOS	(*spray* or aerosol or dust* or powder* or granul*)/ABDT.DOS
Abstract, Documentation Type, Drawing Description	/ABDT.DRWD	Filter*/ABDT.DRWD
Abstract, Documentation Type, Embodiment	/ABDT.EMB	(Polyester and resin*)/ABDT.EMB
Abstract, Documentation Type, Example	/ABDT.EX	biodegrad*/ABDT.EX
Abstract, Documentation Type, First Section	/ABDT.FS	Nylon/ABDT.FS
Abstract, Documentation Type, General	/ABDT.GEN	rare earth/ABDT.GEN
Abstract, Documentation Type, Inorganic Chemistry	/ABDT.INO	(fiber or resin)/ABDT.INO
Abstract, Documentation Type, Specific Materials	/ABDT.MAT	*vinyl*/ABDT.MAT
Abstract, Documentation Type, More Specifically	/ABDT.MS	(F or Cl)/ABDT.MS
Abstract, Documentation Type, Novelty	/ABDT.NOV	(sheet or fabric)/ABDT.NOV
Abstract, Documentation Type, Organic Chemistry	/ABDT.ORG	TETRAHYDROFURAN/ABDT.ORG
Abstract, Documentation Type, Preferred	/ABDT.PRE	butyrolacton*/ABDT.PRE
Abstract, Documentation Type, Preparation	/ABDT.PRP	*imidazol*/ABDTPRP
Abstract, Documentation Type, Specific Substances	/ABDT.SUB	MALEIC/ABDT.SUB
Abstract, Documentation Type, Technology Focus	/ABDT.TECH	(layer* or coat*)/ABDT.TECH
Abstract, Documentation Type, Use/Advantage	/ABDT.UADV	(tast* or eat*)/ABDT.UADV
Abstract, Documentation Type, Use	/ABDT.USE	((DERM* OR SKIN*) AND

Abstract, Documentation Type, Wider Disclosure	/ABDT.WD	Blood*/ABDT.WD
Abstract, Documentation Type, Language	/ABDT.LA	English/ABDT.LA
Abstract, Documentation Type, Patent Number	/ABDT.PN	US1368/ABDT.PN

DWPI Indexing

Patent Office Classifications

Thomson Reuters Indexing

Patent Office Classifications

International Patent Classification

European Patent Classifications (ECLA, ICO)

US National Patent Classification (NCL)

Japanese Patent Classifications (FI-Terms, F-Terms)

International Patent Classification

In this topic:

Content

Searching IPC codes

International Patent Classification, Current, Main and Secondary

IPC, Main

IPC, Secondary

IPC, Additional

IPC, Index (Complementary)

IPC Reform

Content

The International Patent Classification (IPC) system is a patent classification scheme, administered by the World Property Intellectual Organisation (WIPO) that has varied in scope and application through a number of editions.

Edition	Scope
1st Edition	1 September 1968 - 30 June 1974
2nd Edition	1 July 1974 - 31 December 1979
3rd Edition	1 January 1980 - 31 December 1984
4th Edition	1 January 1985 - 31 December 1989
5th Edition	1 January 1990 - 31 December 1994
6th Edition	1 January 1995 - 31 December 1999

7th Edition	1 January 2000 – 31 December 2005
8th Edition	1 January 2006 -

The introduction of the IPC in 1968 saw the availability for the first time of a single classification system for patent literature as before then searches had to be conducted across various national patent classification systems, each with differing codes, structures and indexing philosophies.

Since 1968 the IPC has undergone regular revisions to ensure that the indexing system has kept pace with changing technology, with new codes added to reflect technological advances and existing codes sub-divided or discontinued to reflect changes in patenting activity.

Prior to the introduction of the 8th Edition of the IPC, the IPC Reform, revisions of the IPC only became effective from the date of introduction forwards. This limitation of the IPC was compounded by the fact that different patent authorities may have introduced new codes at varying times. This meant that for a full retrospective search it was necessary to use IPCs from all previous editions.

The 8th Edition of the IPC however introduced a radical reform whereby all the documents held within the European Patent Office's Master Classification Database, MCD, are subject to ongoing reclassification with each future revision of IPC codes. It is therefore more appropriate to call the latest edition of the IPC the IPC Reform rather than the 8th Edition.

This reclassification aspect of the IPC Reform should eventually ensure that only one version of the IPC, the current version of the IPC Reform, is required for complete retrieval of all relevant documents, thereby removing one of the major limitations of Editions 1-7 of the IPC.

Thomson Reuters is applying all IPC Reform reclassifications to IPCs as they become available. The Current IPCs for the patent family will be available at the Invention Level. The current IPCs for each family member will also be available at the Patent Publication Level together with the Original (Initial) IPCs for that document.

The set of IPCs on the invention level of a DWPI document is being collated and deduplicated into a representative set of IPCs for the invention. For this purpose the IPC Reform and IPC version 1-7 data are kept separate and not deduplicated against each other. Certain attribute information available for IPC Reform codes was deemed insignificant on this level of detail in order to avoid having large numbers of codes with little variations in the attributes attached to it.

The IPC version 1-7 codes are being slowly purged from the set of Current IPCs associated with the invention as reclassification progresses. Since the concept of 'main' IPC is alien to IPC Reform data, STN provides a new 'lead' IPC for the entire invention regardless whether there is IPC Reform or IPC version 1-7 data available for the invention. The IPC.F select and sort code and the algorithm it is based on has been described previously, see

http://www.stn-international.de/archive/stnews/2007/news0207.pdf.

The IPC Reform

Two levels of IPC, Core and Advanced, are available for use by the patent offices. Advanced IPC codes are generally applied by the larger patent offices with sufficient resources to apply to an advanced level. Core IPC codes are applied by the remaining smaller offices.

The European, United States, Japanese, German and UK Patent Offices have all indicated that they intend to use the Advanced level. As the EPO maintains PCT minimum documentation within the MCD this collection will be searchable using Advanced level IPCs.

A list of the current use of IPC Reform by the patent offices can be found at

http://www.wipo.int/classifications/ipc/en/reform/table_use_core_adv.pdf

Following the initial release of the reclassified MCD in early 2006, quarterly revisions to the Advanced Level IPCs have been performed, but the frequency was lowered for 2009. A three year revision cycle applies for the Core Level IPCs. The 9th edition is scheduled for January 2009.

News about new versions can be found at

http://www.wipo.int/classifications/ipc/en/news.html

In addition, the complete patent document is now classified, with "Inventive" classes applied to inventive features described within the claims and "Additional/Non-Inventive" classes applied to features described within the body of the patent specification.

The general format of an IPC is ANNANNNN/NNnnnn and it is structured in the order left to right:

Component	Definition
A	Section
NN	Class
A	Sub-class
NNNN	Main Group
NNnnnn	Sub-group

Attributes are associated with each IPC code to provide further details on the application of the IPC:

Attribute	Code	Definition
Version Indicator	YYYYMMDD	IPC version date
Class Level	A	Advanced level
	C	Core level
	S	Subclass level
Position	F	First invention information
	L	Later invention information
Scope	I	Inventive
	N	Non-Inventive/Additional
Action Date	YYYYMMDD	Date the IPC code was /applied
Level	B	Original Classification

	R	Reclassification
	V	Modified/Corrected
	D	Deleted
Applied	H	Intellectual Classification
	M	Machine Propagation across a family
	G	Automatic Generation
Office	CC	The country or office code that delivered the classification

Some attributes may not be populated by certain patent offices.

Note: when searching attributes the level attribute "B" has been indexed as "O" and not "B" to avoid any confusion with "Basic".

Sample IPC Reform Codes of interest can be determined by consulting the World WIPO website at:

http://www.wipo.int/classifications/ipc/en/

http://www.wipo.int/classifications/ipc/ipc8/

IPCs of interest can also be determined by retrieving a few relevant records using a keyword search and then checking the IPCs.

Editions 1-7 of the IPC

The general format of an IPC was ANNANNN/NNnnn and was structured in the order left to right:

Component	Definition
A	Section
NN	Class
A	Sub-class
NNN	Main Group
NNnnn	Sub-group

Main, Secondary, Additional (Supplementary) and Index (Complementary) IPCs were assigned by the patent offices.

These classifications are now deprecated and only available in the current IPC search fields when the corresponding documents have not yet been reclassified. Yet they are available for many documents still when they were attached to the original publications (see chapter on Initial IPCs in DWPI Individual Patent Publication Data).

Searching IPC Codes

The IPC indexing at STN follows a uniform approach as far as possible across all applicable patent data bases. STN provides an IPC index field (/IPC) containing all IPC codes, any version and at any level conveniently normalized to a uniform format. For most searches this will be sufficient to meet the requirements, yet for the discerning searcher a more sophisticated set of tools is available as well.

Thomson Reuters is applying all the IPC Reform reclassifications to IPCs as they become available. This means that the Current IPCs for the patent family will be available at the Invention Level within Derwent World Patents Index facilitating improved retrieval of relevant documents. On the availability of Current IPCs for each constituent family member and on the availability of Original (Initial) IPCs as published on the patent document see DWPI Individual Patent Publication Data.

However due to variations in the publication of the initial IPC Reform reclassifications by the various worldwide patent offices and potential differences in the patent families held within Derwent World Patents Index and the European Patent Office's MDC, it is possible that the Current IPCs for a family at the Invention Level in Derwent World Patents Index may comprise a combination of IPCs from Editions 1-7 and reclassified IPCs from the IPC Reform.

For example, if we consider a patent family comprising patents A, B and C in Derwent World Patents Index, this same family in the MDC may only comprise patents A and B due to the European Patent Office's simple patent family rules. If patents A and B have been reclassified as part of the IPC Reform then these revised codes will be present in Derwent World Patents Index. However, if patent C has not been reclassified then the Current IPCs for patent C remain the IPCs issued under the IPC edition in force when patent C was published. Thus the Current IPCs for the family in Derwent World Patents Index at the Invention Level would comprise the IPC Reform codes for patents A and B and IPC1-7 codes for patent C. The Original (Initial) IPCs as issued under Editions 1-7 of the IPC for patents A and B would be searchable at the Patent Publication Level.

Another scenario is where patents A, B and C were issued with IPC Reform codes. Patents A and B were subsequently reclassified but patent C was not. The Invention Level would consequently comprise the IPC Reform codes with an attribute level of R indicating "reclassification" (from patents A and B) and the IPC Reform codes with an attribute level of B indicating "original/initial classification" (from patent C).

In addition, the availability of attribute information such as "Inventive" and "Non-Inventive" as part of the IPC Reform enables users to focus on inventions with key features described in the claims or elsewhere within the document if required.

When searching the IPC Reform it should also be remembered that some patent offices only classify to the Core Level (or even subclass level) and not down to the Advanced level. On the other hand documents classified at the Advanced level will also receive the closest corresponding Core level by auto-generation but this will only occur as part of one of the regular MCD reclassification releases. IPC classes forming the Core level are also not simply a truncation of classes forming the Advanced level; rather they are a selected sub-set.

This could have serious implications for searches. For example, a search in the Core level gives more complete results but would miss recently issued documents classified at the Advanced level but which have not passed through an MCD reclassification cycle and so are still only classified at the Advanced level, whereas a search in the Advanced level, although more precise, would only retrieve results from those patent offices applying to the Advanced level.

In order to help alleviate this problem Thomson Reuters auto-generates the closest Core level IPC for documents which have been classified to the Advanced level but which do not yet carry the corresponding Core level IPC as they have not been subject to an MCD reclassification cycle. The Core level IPC will be auto-generated using the core predecessor in the IPCR authority file provided by WIPO. To help identify these auto-generated Core level IPCs Thomson Reuters will give them an office attribute (CC) of "98".

It should be noted that Thomson Reuters will only generate a Core level IPC if this Core level code differs from the corresponding Advanced level code i.e. where the Core and Advanced codes are not the same.

Depending on user requirements a potential search strategy could be:

1) Search at Advanced level to retrieve documents (i) within the scope of the PCT minimum documentation plus (ii) documents classified by patent offices applying the Advanced level plus (iii) the converted MCD back file
2) Search the closest Core/Subclass level to retrieve documents classified by patent offices applying the Core/Subclass level only
3) Deduplicate results obtained in (2) from those already obtained in (1).

Thomson Reuters-assigned IPC Codes

If there aren't any IPC codes given by the patent office, or if an invalid IPC is printed, Thomson Reuters will try to assign its own IPC codes to the subclass level.

Historically Thomson Reuters-assigned IPCs were entered with a 000/01 as the main group and subgroup number, e.g. A23L000/01. Occasionally, more specific symbols with digits different from 0 may have been assigned.

IPC codes assigned by Thomson Reuters from January 2006 are given an office attribute (CC) of "99" and are assigned to the subclass level.

Historical Coverage, Editions 1-7

IPCs became available for most basic documents (new inventions) from 1970. They were not available for unexamined Japanese applications published before April 1975 or for Canadian documents published before 1974 (update 197403).

From early 1974 (updates 197403) IPCs from equivalents that differed at the main group level or above from those of the basic were added.

Until 1980 a maximum of 6 IPCs were recorded from a single document. From 1980 (update 198049) this was increased to a maximum of 12. If IPCs only differed at the subgroup level, only one was entered.

From 1992 (update 199216) the full format of IPCs down to the third or fourth digit of the subgroup were entered and since that point these finer divisions became searchable.

Some patent offices only assigned IPCs to the subclass level. Historically these were entered in DWPI with 000/00 as the main group and subgroup number, e.g. A23J000/00. These entries are now being corrected to remove the 000/00.

In addition, there were often inconsistencies at the subgroup level resulting from variations in practice between different patent offices. Consequently more complete, but less specific, retrieval could be obtained by searching at the subclass or main group levels.

With the introduction of the 4th Edition of the IPC at the beginning of 1985, indexing (as opposed to official classification) terms were also assigned by patent offices. These were input in DWPI since update 199216 using a hyphen (-) between the main group and subgroup instead of a slash (/) as in true IPCs.

For IPC subgroups published with more than two digits after the slash, only the first two digits were input in DWPI before update 199216. However, it is only necessary to truncate for IPCs with 3- or 4-digit subgroups as for example A23J001/02 does not have any finer divisions beyond "/02" so a direct search of this 2-digit subgroup IPC would retrieve all examples.

IPC Reform

Reclassifications are assigned in DWPI as and when they become available. At the Invention Level within DWPI all Current IPC Reform codes for the basic document are available.

Current IPC Reform codes from equivalent documents are included at the Invention Level if they are considered unique when compared to other IPC Reform codes for the family based on a combination of the IPC code and the attributes:

Classlevel (Advanced | Core | Subclass), Position (First | Later), Scope (Inventive | Non-Inventive) and Level (Original | Reclassified | Modified | Deleted).

For example an IPC of

F24F1/00   Class level = A, Position = F, Scope = I, Applied = M, Level = R, Office = JP

is considered different from

F24F1/00   Class level = C, Position = F, Scope = I, Applied = G, Level = R, Office = CN

as in the first example the IPC was applied at the Advanced level compared to the Core level in the second example (the differences in issuing office, JP and CN, and application, M and G are ignored), but the same as

F24F1/00   Class level = A, Position = F, Scope = I, Applied = M, Level = R, Office = DE

as the difference in issuing office, JP and DE is ignored.

For this purpose missing attributes are considered significant.

For example an IPC of

F24F1/00   Class level = A, Position = F, Scope = I, Applied = M, Level = R, Office = JP

is considered different from

F24F1/00   Class level = A, Scope = I, Applied = M, Level = R, Office = EP

as the position attribute has not always been populated by the European Patent Office. Several attributes have been omitted from the Current IPCs at the Invention Level as they are meaningless in the context of the compilation rules for Current IPCs from equivalent documents; these are Action Date, Applied, and Office. However all IPCs and their associated attributes are available at the Patent Publication Level. In addition, Original (Initial) IPCs as published on the patent document are available at the Patent Publication Level (subject to the historical availability of IPCs as outlined above).

Truncation

Each IPC code is indexed at the subgroup, main group and subclass levels to avoid the need to use extensive truncation when very generic searches are required. For example, the single IPC code A23J001/02, consists of the following parts:

		Directly Indexed	Search Format
A	Main Section	n	-
A23	Class Level	n	-
A23J	Subclass Level	y	A23J
A23J-001	Main Group Level	y	A23J001
A23J-001/02	Subgroup Level	y	A23J001/02

On STN, there are several fields available for searching Current IPCs at the Invention Level depending on whether the user wishes to search for an Edition 1-7 IPC or an IPC Reform IPC or both at the same time.

IPC index

/IPC is an index containing a normalized version of all IPCs at both the Invention (Current IPCs) and Patent Publication Levels (both Current and Original/Initial IPCs). /IPC can be searched using either a 3 or 4-digit Main Group.

STN Search Qualifier	Content
/IPC	IPCs 1-7 and IPC Reform, Invention and Patent Publication Levels, Current and Original/Initial

IPC Reform Search Fields

STN Search Qualifier	Content
/IPC.REF	IPC Reform codes

Thomson Reuters supplies the Current IPC Reform codes for the family at the Invention Level. These IPCs may comprise a combination of both Original IPC Reform codes (level attribute = B) and reclassified IPC Reform codes (level attribute = R) as a result of the scenario outlined above where the patent families within WPI and the MDC differ. These Current IPCs are subdivided at the Invention Level into two separate display fields according to the level attribute, IPCI (attribute = B, Original Classification) and IPCR (attribute = R, Reclassification).

Editions 1-7 Search Fields

STN Search Qualifier	Content
/IC	IPC, Main and Secondary
/ICM	IPC, Main
/ICS	IPC, Secondary
/ICA	IPC, Additional (Supplementary)
/ICI	IPC, Index (Complementary)

International Patent Classification, Current, Main and Secondary

In this topic:

- Format
- Content
- Field codes

Format

S ANNA/IC	Sub class
S ANNANNN/IC	Group
S ANNANNN/NNnnn/IC	Sub Group

Where: A = letter
              N = number

Content

If available /IC contains the Current Main and Secondary IPCs for the family.

Searching an IPC with the /IC qualifier retrieves patent families with that IPC as a Current IPC (versions 1-7), whether it was assigned as a Main IPC or a Secondary IPC. The Main and Secondary IPCs can be searched on subclass, main group and subgroup level with the specific search formats listed above.

D01B/IC

Please note: searching 'D01B' is equivalent to searching 'D01B*'. However, search format ANNA reduces search time and avoids truncation limits.

D01B001/IC

D01B001/14/IC

When searching on class level, e.g., A01, use the truncation symbol '!' instead of '*'. ANN! uses the up-posted index entries in format ANNA instead of all entries, this reduces search time.

Field codes

In the DWPI database, the following fields related to the IPC, Current, Main and Secondary can be searched.

Field Name	Field Code	Example
IPC, Current, Main and Secondary	/IC	C09K007/IC C09K007/02/IC D01D005/08*/IC

IPC, Main

In this topic:

- Content
- Field codes

Content

If available /ICM contains the Current Main IPCs for the family.

The same search formats as described for field /IC are valid.

The Main IPC of the Basic Patent can be conveniently searched using /ICM in combination with the Patent Type /PT

ANNA/ICM(D)BASIC/PT

In addition, the IPC Keyword field /IPC.KW will be indexed with ICM and MAIN as well as BASIC if applicable.

ANNA/ICM(U2)BASIC/IPC.KW

The concept of a Main IPC was discontinued as part of the IPC Reform. Therefore searches in /ICM are being regarded as deprecated.

Field codes

In the DWPI database, the following fields related to IPC, Main can be searched.

Field Name	Field Code	Example
IPC, Main	/ICM	C09K007/02/ICM
IPC, Current, Main and Secondary	/IC	C09K007/IC C09K007/02/IC D01D005/08*/IC
International Patent Classification	/IPC	C12P021/08/IPC

IPC, Secondary

In this topic:

- Content
- Field codes

Content

If available /ICS contains the Current Secondary IPCs for the family.

The same search formats as described for field /IC are valid.

In addition, the IPC Keyword field /IPC.KW contains the terms ICS and SECONDARY.

Field codes

In the DWPI database, the following fields related to IPC, Secondary can be searched.

Field Name	Field Code	Example
IPC, Secondary	/ICS	D01B001/38/ICS
IPC, Current, Main and Secondary	/IC	C09K007/IC
		C09K007/02/IC
		D01D005/08*/IC
International Patent Classification	/IPC	C12P021/08/IPC

IPC, Additional

In this topic:

- Content
- Field codes

Content

If available /ICA contains the Current Additional IPCs for the family. These not-obligatory IPCs are used to describe facts not contained in the claims but in other parts of the patent document.

The same search formats as described for field /IC are valid.

In addition, the IPC Keyword field /IPC.KW contains the terms ICA and ADDITIONAL.

Field codes

In the DWPI database, the following fields related to IPC, Additional can be searched.

Field Name	Field Code	Example
IPC, Additional	/ICA	A01K067/027/ICA
International Patent Classification	/IPC	C12P021/08/IPC

IPC, Index (Complementary)

In this topic:

- Content and format
- Field codes

Content and format

If available /ICI contains the Current linked and non-linked IPC codes for the family which describe aspects of the claims as well as aspects of the remaining patent document.

In addition, the IPC Keyword field /IPC.KW contains the terms ICI and INDEX.

The IPC codes which include a colon instead of a slash between the main group and the subgroup are associated with various main groups of IPC. These associated codes are indexed using the (U3) proximity operator. Multiple sets of associated codes are separated by semicolon in the display.

For Index IPCs, as for all other IPCs, search formats on subclass, main group and subgroup level are available:

STN format
ANNANNN/NNnnnn
ANNANNN:NNnnnn
ANNANNN
ANNA

Field codes

In the DWPI database, the following fields related to IPC, Index (Complementary) can be searched.

Field Name	Field Code	Example
IPC, Index (Complementary)	/ICI	B03D103:08/ICI
International Patent Classification	/IPC	C12P021:08/IPC

IPC Reform

In this topic:

- Content
- Attributes
- Field codes

Content

If they are available IPCI and IPCR display fields contain the Current IPC Reform codes for the family.

STN splits the Current IPC Reform codes into two display fields, IPCI and IPCR, dependent on the level attribute of the IPC. IPCI contains IPCs with a level attribute of B (Original/Initial Classification). IPCR contains IPCs with a level attribute of R (Reclassification), D (Deletion) or V (Correction). IPCI and IPCR are display fields only.

G02C0005/22/IPC.REF

will search all IPC Reform codes at the Invention and Patent Publication Levels (both Current and Original/Initial).

Attributes

Attributes are searchable using keywords and (U2) proximity.

For example

G02C0007/04/IPC.REF(U2)NON-INVENTION/IPC.KW

will search all Current IPC Reform codes for the family with a Non-Invention scope attribute.

G02C0007/04/IPC.REF(U2)ORIGINAL/IPC.KW

will search all Current IPC Reform codes for the family at the Invention Level with an Original/Initial Classification, 'B' attribute.

The following attributes may be present at the Invention Level:

Attribute	Code	Definition
Version Indicator	YYYYMMDD	IPC version date
Class Level	A	Advanced level
	C	Core level
	S	Subclass level
Position	F	First invention information
	L	Later invention information
Scope	I	Inventive
	N	Non-Inventive/Additional

Level	B	Original Classification
	R	Reclassification
	V	Modified/Corrected
	D	Deleted

The Action Date, Applied and Office attributes are not supplied at the Invention Level as they are meaningless in the context of the compilation rules for Current IPCs from equivalent documents. All available attributes for the IPC are however searchable at the Patent Publication Level.

/IPC.VER is the search field for the IPC Version date.

Note: when searching attributes the level attribute "B" has been indexed as "O" and not "B" to avoid any confusion with "Basic".

Field codes

In the DWPI database, the following fields related to IPC Reform data can be searched.

Field Name	Field Code	Example
IPC, Reform	/IPC.REF	A01B0003/44/IPC.REF
International Patent Classification	/IPC	C12P021/08/IPC
IPC, Keyword Terms	/IPC.KW	ADDITIONAL/IPC.KW
IPC, Action Date	/IPC.ACD	IPC.ACD>20070107
IPC, Version	/IPC.VER	20080101/IPC.VER

European Patent Classifications (ECLA, ICO)

The European Patent Classification is an extension of the International Patent Classification which is being assigned by examiners at the EPO. There are about 134,000 classes in the ECLA vs. 71,000 in the IPC Reform. The ICO classification is an additional classification assigned for internal purposes by the EPO examiners. ICO codes are being used to describe secondary aspects of the invention, e.g. technical realisation. Both classifications are available in DWPI. Reclassifications are being made available in the database on a quarterly basis (the internal database at the EPO is dynamically reclassified).

European Patent Classification (EPC, ECLA)

ICO Index Codes (in-computer-only Classification)

European Patent Classification (EPC, ECLA)

In this topic:

- Format
- Linked EPCs
- The "+M" notation
- Other "+letter" notations
- Processing
- Indexing
- Field codes

Format

The ECLA codes have been indexed in a similar format as the IPC reform codes including a four digit main group. Akin to these the codes have been up-posted to reduce search times. The 'linked' EPCs are being resolved at STN as far as possible. The rules are outlined in the Linked EPC section

ANNA/EPC	Sub class level (Main Classes A to H)
ANNANNNN/EPC	Group level
ANNANNNN/Xxxxxx/EPC	Sub Group level

Where: A = letter
               N = number

               X = letter or number

Linked EPCs

The "+"-notation in ECLA is a way of indicating combinations of subject matter that are individually covered by separate entries in ECLA. This notation is only used in a few technical fields - most of them in organic chemistry. Their meaning is roughly comparable with the linked indexing in the IPC7 . The way this is used, however, differs from field to field.

The "+M" notation

The +M notation is used to indicate additional details about the subject matter classified. For compositions containing one or more known active ingredients, e.g. formulations, synergistic mixtures, the symbol +M is added to the classification symbol, e.g. A01N39/02+M.

Other "+ letter" notations

The use of "+" letters for extended classification has been foreseen for subclass C10G in the ELCA scheme. After the notation of C10G9/00 to C10G69/14 have been separated with a + sign, notations may be added. These notations are selected from the following list:

+ B   Obtained product gasoline

+ D   Obtained product diesel oil

+ G   Obtained product gasoil

+ J   Obtained product Jet fuel

+ L   Obtained product lubricating oil

+ L1   Obtained product electrical isolation oil

+ L2   Obtained product white oil, eating oil

+ R   Starting material Residues

+ S   Obtained product Solvents

+ X1   Obtained product C2-C4 olefins

+ X2   Obtained product higher olefins

+ X3   Obtained product acetylene and homologues

+ Y1   Obtained product fuel gas

+ Y2   Obtained product propane and butane

+ Z   Obtained product aromatics

Extensions can also be combined.

Processing

In order to arrive at a uniform implementation all across STN a standard procedure is employed.

1. The entire term including any slashes is used for display purposes in the display. The main group is padded with zeroes to four digits if needed.

2. The entire term including suffixes is indexed in /EPC.

3. The STN style code (basis code) is indexed without any suffixes (before any plus sign).

4. The usual up-posting to the main group and subclass levels is performed as for the IPCs.

5. Index suffixes are parsed at the plus sign (including any slashes) and indexed in /EPC.KW (ECLA keywords).

6. If there are suffixes including slashes, these are used to build variations of the basis code: The subgroup of the basis code is replaced with the suffix containing a slash code. If there are multiple suffixes containing slashes the procedure is repeated until all combinations of subclass and main group of the basis code and the subgroup suffixes have been built.

For instance, C10G9/00+X1&Z is used to combine X1 and Z. Other variations are C10G9/00+X1+Z and C10G9/38+X1Y1.

Indexing

Here are some examples of codes and their corresponding index terms.

A. C10G9/38+X1&Y1

C10G0009/38+X1&Y1	/EPC
C10G0009/38	/EPC
C10G0009	/EPC
C10G	/EPC

X1	/EPC.KW
Y1	/EPC.KW

B. C10G9/13+/17+3/28

C10G0009/13+/17+3/28	/EPC
C10G0009/13	/EPC
C10G0009/17	/EPC

C10G0003/28	/EPC
C10G0009	/EPC
C10G0003	/EPC
C10G	/EPC
/17	/EPC.KW
3/28	/EPC.KW

C. B01D0009-00B4+/00C6+/00E+/02

is indexed as

B01D0009/00B4+/00C6+/00E+/02	/EPC
B01D0009/00B4	/EPC
B01D0009/00C6	/EPC
B01D0009/00E	/EPC
B01D0009/02	/EPC

and

/00C6	/EPC.KW
/00E	/EPC.KW
/02	/EPC.KW

Field codes

In the DWPI database, the following fields related to European Patent Classification can be searched.

Field Name	Field Code	Example
European Patent Classification	/EPC	A01B0015/20/EPC
	/ECLA	H01L0021/8258/ECLA
	/EPCLA	B01D0009/00B4/EPCLA
EPC, Keyword Terms	/EPC.KW	D2/EPC.KW

ICO Index Codes (in-computer-only Classification)

In this topic:

- Format
- Field codes

Format

The ICO code format matches the EPC format yet the first letters A to H have been replaced by K to T in order to be able to tell them apart.

ANNA/ICO	Sub class level (Main Classes K to T)
ANNANNNN/ICO	Group level
ANNANNNN/Xxxxxx/ICO	Sub Group level

Where: A = letter
         N = number

         X = letter or number

The 'linked' ICOs are being resolved exactly like the EPCs yet with the additional complication that a colon can be used as the separator between main and subgroup.

The colon separators are being retained.

M12Q0001:68A6/ICO

T04N0201:047D5/ICO(U2)D13B/ICO.KW

Field codes

In the DWPI database, the following fields related to ICO Index Codes can be searched.

Field Name	Field Code	Example
ICO (in-computer-only) Classification	/ICO	K61M/ICO
ICO, Keyword Terms	/ICO.KW	D13B/ICO.KW

US National Patent Classification (NCL)

In this topic:

- Format
- Content
- Field codes

Format

The search format follows the uniform approach taken at STN. This includes up-posting of the long codes to reduce search times.

Displayed Classification:

MMM/SSS.DDDAAA

Indexed terms:

1.MMMSSSDDDAAA

2.MMMSSSDDD

3.MMM

The AAA letter section is optional. The delimiters are being automatically removed when the query is being processed.

Content

The United States Patent and Trademark Office (USPTO) uses the US Patent Classifications (USPC) to organize US patent documents into smaller collections based on common subject matter.

U.S. Patent Classification codes in *DWPI* are now updated with any recent changes to classifications made by examiners. Reclassifications made since the original USPTO filing have also been added to the *DWPI* backfile.

The codes have been indexed without delimiters. For your convenience any codes input with delimiters for searching are automatically being edited to remove them.

549330000/NCL

549/330.000/NCL

Field codes

In the DWPI database, the following fields related to US National Patent Classification can be searched.

Field Name	Field Code	Example

US National Patent Classification, Current	/NCL	002006100/NCL	90
US National Patent Classification, Current (main)	/NCLM	002/NCLM	
US National Patent Classification, Current (secondary)	/NCLS	004/NCLS	
US National Patent Classification, Current and Issued	/NCLALL	002006100/NCLALL	

Japanese Patent Classifications (FI-Terms, F-Terms)

The Japanese Patent Office (JPO) employs two different systems for the classification of Japanese patent documents. The FI-Terms which have been derived from the IPC by extension akin to the ECLA codes of the EPO. The FI codes have finer divisions at the sub-group level. The F-Terms have been developed independently of the FI-Terms in order to cope with demanding recent technological developments. The F-Terms are more amenable to computer-assisted searching and allow approaching technologies from various different 'viewpoints'. With the advent of the IPC Reform the FI system has been modified to bring it more into compliance with the reformed system. FI- and F-Terms are being revised once a year.

FI-Terms

F-Terms

FI-Terms

In this topic:

- Format
- Content
- Field codes

Format

The search format resembles the approach taken at STN for the IPCs. This includes normalising the main group to four digits and up-posting of the long codes to reduce search times. There are main, secondary, index and additional FI-Terms available like in the IPC version 6. Linked index terms can be linked with the (U2) proximity operator. There is also an optional three-letter 'broad facet' or 'facet' categorization available which appears in parenthesis in the display next to the corresponding FI term.

Displayed Classification:

ANNANNNN/NNnnnn A or ANNANNNN/NNnnnn NNN or ANNANNNN/NNnnnn NNN D optional: (AAA)

Indexed terms:

1.ANNANNNN/NNnnn a

  or

  ANNANNNN/NNnnn nnn

  or

  ANNANNNN/NNnnn nnn A

2.ANNANNNN/NNnnn

3.ANNANNNN

4.ANNA

The optional facet: AAA

Index terms can have a colon instead of the slash separating main and subgroup.

Content

The File Index or FI Terms are similar in structure to the IPC. In fact, it had originally been based on the IPC version 4 and then being extended with finer divisions on the subgroup level. While the IPC has about 70,000 codes, the FI has about 190,000, the ECLA about 120,000 and the US classifications 160,000 entries.

The FI terms can be searched for like the IPCs at STN. For technology areas where there is F-Term indexing available, this may be preferable. Else both indexing systems can be leveraged side by side and even searched for in unison. A search field edit for reformatting codes incorporating slash delimiters or padding main groups to four digits is available for both search fields.

A61K/IPC,FCL

A61K/FCL NOT A61K/IPC

Field codes

In the DWPI database, the following fields related to FI-Terms can be searched.

Field Name	Field Code	Example
Japanese Patent Office Classification, (FI or File Index)	/FCL	A61K0006/00/FCL
	/JPC	A61K/JPC
Japanese Patent Office Classification, (FI Class) (Main)	/FMCL	H01B0001/02/FMCL
Japanese Patent Office Classification, (FI Class) (Secondary)	/FSCL	H05K0013/08/FSCL
Japanese Patent Office Classification, (FI Class) (Index)	/FICL	A61K0031:045/FICL
Japanese Patent Office Classification, (FI Class) (Additional)	/FACL	A01B001*/FACL

F-Terms

In this topic:

- Format
- Content
- Field codes

Format

The search format is entirely different from the FI-Terms. It consists of two parts: the five character 'theme' code, and a 'term code' consisting of a two-letter 'viewpoint' and a two digit 'figure'. The theme code consists of two characters identifying the JPO examining division followed by three digits for a broad search category. An optional additional (extension) character can also be added in certain areas. Theme code and term code (viewpoint+figure) can be independently searched for and combined into the complete code as required. The entire codes are indexed as well.

Displayed Classification:

NANNN/AANN.A

Indexed terms:

1. NANNN/AANN.A
2. NANNN/AANN
3. NANNN
4. AANN

Content

The File Forming Terms or FTERMS form an independent indexing system in its own right. There are about 1,800 theme codes for FTERMs plus 800 FI theme codes (which don't have a Viewpoint attached to it) and 22,000 viewpoints making up 340,000 codes overall. Since 2000 the F-terms have been printed in full on the unexamined patent applications.

The FTERMs have been designed with the indexing of technical fields in the invention in mind rather than IPCs which classify the main inventive feature. They are assigned in technical areas where the FI-terms don't offer sufficient precision for search purposes. F-terms focus on detailed technical segments viewed under various angles (viewpoints like application or manufacturing process). This can be advantageous when conducting prior art or freedom-to-operate searches. The codes are not only assigned based on the claims on an application, but also on the basic specification.

The F-Terms can be searched for as a complete code or theme and code term independently optionally linked by (U3) proximity.

4B001/AC01/FTRM

4B001/FTRM (U3) AC01/FTRM

Field codes

In the DWPI database, the following fields related to F-Terms can be searched.

Field Name	Field Code	Example
Japanese Patent Office Classification (FTERM or File Forming Term)	/FTRM	5B001/AA01/FTRM
	/FTERM	4B001/AC01/FTERM
	/FTCLA	2B002/AA09/FTCLA
	/JPCLA	3B124/JPCLA

Thomson Reuters Indexing

File Segment

Thomson Reuters Classification

Manual Codes

Polymer Coding and Indexing

Chemical Fragmentation Codes, Sections B, C, E

Derwent Registry Number

Ring Index Number

Derwent Markush and Specific Compound Numbers and Roles

File Segment

In this topic:

- Content
- Field codes

Content

Since 1974, Derwent World Patents Index has included patent specifications irrespective of subject. These are divided into three major subject areas corresponding to the following Derwent Class sections:

Class Section	Full Title and Coverage
CPI	Chemical Patents Index (Sections A-M)
EngPI (GMPI)	Engineering Patents Index (Sections P-Q)
EPI	Electrical Patents Index (Sections S-X)

All references in CPI, EngPI, and EPI have been assigned to the appropriate file segment.

The file segment information can be used in combination with search terms that have alternative meanings in different areas of technology.

PLASMA AND EPI/FS

Because each file segment has a very high number of records, other search criteria should be used to limit the search where possible e.g. the detailed Class.

Field codes

In the DWPI database, the following fields related to File Segment can be searched.

Field Name	Field Code	Example
File Segment	/FS	PLASMA AND EPI/FS

Thomson Reuters Classification

In this topic:

- Format
- Content
- Field codes

Format

Display

ANN/DC

Search

 ANN/DC

Where:

>A = DWPI Section
>NN = Sub-section number

Content

Thomson Reuters classifies all basic patents according to their subject content into one or more of 21 subject areas. These are designated A to M (Chemicals), P to Q (Engineering) and S-X (Electrical) and are further divided into three-character classes.

The classifications for A-M and S-X are applied by Thomson Reuters subject specialists. Classes for the engineering sections P and Q are derived automatically from the International Patent Classification (IPC) assigned by the issuing patent authorities. Consequently, a search of the P and Q series classes is equivalent to a broad IPC search and care should be taken with such searches since IPCs are not consistently applied by the different patent authorities.

For records entered prior to 1970, Classes A (Plasdoc), B (Farmdoc), and C (Agdoc) were assigned at the single-letter section level. From 1970, the full three-character Class codes were assigned. When equivalents were added to pre-1970 records the record was normally reclassified and thus some pre-1970 records do have complete Class codes.

A complete list of the Classes is available in the Classification Guide available from Thomson Reuters Technical Support.

Class R (electrical section) was replaced by classes S, T, U, V, W and X in 1980. Records in the database no longer contain R classes as superior equivalent S-X classes were added at that time.

See also the chapters on File Segment and on Manual Codes.

Truncation may be used for searching at levels more specific than the single-letter level but not as specific as the full class level:

Q3#/DC

Letters E and L are system-reserved on STN. However, in search field /DC, direct search of the Derwent Classes that start with E or L is possible:

E32/DC

Field codes

In the DWPI database, the following fields related to Thomson Reuters Classification or DWPI Class can be searched.

Field Name	Field Code	Example
Thomson Reuters Classification (DWPI Class)	/DC	A25/DC

Manual Codes

In this topic:

- Format
- Content
- Manual Codes and IPCs
- Field codes

Format

ANN-ANNANA/MC

Where:

> A = Manual code letter
> N = Manual code number

CPI manual codes are searchable by eligible subscribers only within the Manual Code field (/MC). If you are an eligible subscriber, you must apply to Thomson Reuters to have the correct access conditions applied to each STN Login ID.

EPI and EngPI (GMPI) manual codes are open access.

Content

Manual codes are similar to broad descriptors and have a hierarchical structure, with section, subsection, group, subgroup, division and subdivision levels. They are more detailed than the Class and are assigned to basic patents in Sections A-M (Chemical Patents Index; CPI), Section Q (Engineering Patents Index; EngPI, Transportation only) and Sections S-X (Electrical Patents Index; EPI).

Manual code assignment is based only on the main inventive features of a basic patent, although both the patented matter and the applications are coded.

Manual codes have been applied from the beginning of coverage of each of the sections with the exception of Section Q Transportation manual codes which were introduced at the beginning of 2006. Manual codes for catalysts, which begin with the letter N, have been in use since 1977.

Each code has one of the following formats:

Code Format	Definition
ANN	section letter and subsection number, e.g. B12
ANN-A	group letter added, e.g. B12-G
ANN-ANN	subgroup number added, e.g. B12-G01
ANN-ANNA	division letter added, e.g. B12-G01B
ANN-ANNAN	subdivision number added, e.g. B12-G01B1

Note the need to insert zeros - the subsection and subgroup must always be two-digit numbers, hence B12-G01, but the subdivision number is always a single-digit.

Since Manual Codes are hierarchical in format, truncation can be used to retrieve all codes assigned to an intermediate level as well as the more specific codes below that level. However, truncation should be used with care because very large sets of records can result if Manual Codes are truncated too far to the left.

There are two types of searches whose results are likely to be enhanced by using Manual Codes:

1. A broad subject search, choosing an appropriate point at which to truncate after studying the CPI or EPI Manual Codes.
2. A specific subject search that will require a specific manual code plus general codes to cope with the cases where the original document was not specific, but could be of interest.

The following search involves using Manual Codes to look for electromagnetic relays (V03-D04):

V03-D04/MC

To facilitate search on subsection level all codes have been up-posted with code ANN. In this case no truncation is necessary (V03: switches, relays):

V03/MC

It should be noted that there are a number of Manual Codes which comprise 3 alphanumeric characters only (ANN) such as E23 (Phthalocyanine Dyes). These have been indexed with a "&" appended so that they can be directly searched without also retrieving associated narrower terms.

E23/MC

E23&/MC

A search on aramid fibres for tyre cords could look as follows (Manual Codes in the example are A05-F05 for aramids, valid from 1986 onwards, A12-T01C for polymeric tyre cords, and F04-E01 for tyre cords with chafer fabric):

(A05-F05 AND (A12-T01C OR F04-E01))/MC

Manual Codes and IPCs

Although manual codes are similar to IPCs in their application and level of specificity, the two differ in a number of important ways:

- IPCs cover a broader range of subject matter than Manual Codes
- IPCs are applied differently by different patent offices around the world, while Manual Codes are assigned consistently by Thomson Reuters Indexers
- Manual Codes have a logical hierarchy
- Manual Codes are only assigned to the Basic member of the DWPI family. IPCs are available for both Basic and equivalent documents.

For further information see the CPI Manual Codes and EPI Manual Codes user guides.

Field codes

In the DWPI database, the following fields related to Manual Codes can be searched.

Field Name	Field Code	Example
Manual Code	/MC	A12-W10A/MC

Polymer Coding and Indexing

In this topic:

- Content
- Year Ranging
- Fragmentation Codes
- Plasdoc Key Serials
- Polymer Indexing Enhanced
- Field codes

Content

Polymer information has been indexed for patents classified in section A: *Polymers and Plastics* since 1966.

The original polymer indexing was the Plasdoc punch code or fragmentation code also known as AM codes (Section A Multipunch). These codes were based upon relative positions on a punch card and concepts were represented by groups of these punch codes. This indexing system was a big step forward, but it still allowed false drops in searches and relevance was not as high as desired.

In 1978, Key Serial numbers (KS) were created from pre-coordinated groups of punch codes. The obvious benefit of these key serials was the ability to search specifically for those concepts to which they had been assigned.

Plasdoc Registry Compounds, with corresponding registry numbers, were incorporated into the system in 1984. These compounds represented the most commonly occurring additives and catalysts in polymers, which, via the registry numbers, could be searched specifically.

In update 199332, a new system for indexing and searching polymer related information was introduced – Enhanced Polymer Indexing. Both polymer coding and indexing were produced side by side for a transition period.

Year Ranging

Modifications in the coding system (normally additions) have been made at various times over the years. Consequently, a search is frequently done in stages in order to use the best strategy available during each time period.

To avoid having to use the accession year parameters, the following control codes have been added to all subfields:

Section A Control Codes	
01&	1966 - mid 1968
01-	mid 1968 – 1971
012	1972 – 1976
010	1977
011	1978 – 1981

013	1982 – 1983
014	1984 - 1993 (Update 199331)
017	1993 (Update 199332) – 1995
018	1996 – 2003
2004	2004 -

Fragmentation Codes

Format

NNX

Where: NN = number
             X = a number, "-" or "&"

Polymer fragmentation codes are searchable by eligible subscribers only. If you are an eligible subscriber you must apply to Thomson Reuters to have the correct access conditions applied to each STN LoginID.

Content

Polymer fragmentation codes describe both specific and generic concepts found in the patent specification. Codes were applied to all concepts disclosed or claimed in the specification. Polymer fragmentation coding was initially assigned to records that included a basic from a major patent-issuing authority and for which an abstract had been published. Basics from other authorities and certain Japanese documents, which had no abstracts, did not have the coding applied until the first appearance of an equivalent from one of the major patent-issuing authorities.

Further details of this coding can be found in the CPI Polymer Coding Systems user guide.

A record often contains more than one distinct fragmentation code subfield, representing a specific aspect of the invention, e.g. one specific copolymer, or all the variants of a specific aspect. Fragmentation codes within one subfield are indexed with (U) proximity. You do not need to specify the (U) operator as implied (U) proximity is active in field /FG.

Polymer fragmentation codes were discontinued as of update 199501, and were replaced by the Enhanced Polymer Indexing system.

Plasdoc Key Serials

Format

NNNN

Where: NNNN = four digit code

The Polymer Key Serials field (/KS) is searchable by eligible subscribers only. If you are an eligible subscriber you must apply to Thomson Reuters to have the correct access conditions applied to each STN LoginID.

Content

Polymer Key Serial Numbers provide a concise mechanism for searching plastics and polymer concepts. Approximately 3,500 key serial numbers are available, e.g. 0248 is used to retrieve polypropylene.

Key serials are present from the beginning of 1978 until the end of 1994. Additional more specific key serials were introduced at the beginning of 1982 and are numbered in the 3,000 series.

Key serial numbers were initially assigned to basics from major patent-issuing authorities that included abstracts. Basics from other authorities and certain Japanese documents that had no abstracts did not have key serials applied until the appearance of an equivalent, with an abstract, from a major patent issuing authority.

Key serials are searched as their 4-digit number.

Indexing with Polymer Key Serials was discontinued from update 199501, having been replaced by the Enhanced Polymer Indexing system.

Polymer Indexing Enhanced

Format

See code formats in the table below.

The Enhanced Polymer Indexing field is searchable by eligible subscribers only. If you are an eligible subscriber you must apply to Thomson Reuters to have the correct access conditions applied to each STN LoginID.

Content

Enhanced Polymer Indexing was introduced in update 199332 to replace the Polymer Fragmentation Codes and Polymer Key Serial Numbers, both of which were discontinued as of update 199501.

The indexing is a hierarchical system divided into facets, each facet containing codes with a specific format:

Facet	Code Format	
Polymer Formers	Gnnnn	Generic Codes
	Rnnnnn	Specific Compound Numbers
Polymer Types	Pnnnn	
Natural Polymers	Gnnnn	Generic Codes
	Rnnnnn	Specific Compound

Modified Polymers	Mnnnn
Chemicals	Gnnnn, Rnnnnn
Chemical Aspects	Dnn, Enn, Fnn, symbols for elements and groups of the periodic table
Novelty Descriptors	NDnn
Universal Terms	Knnnn
Polymer Descriptors	Hnnnn
Shape & Form	Snnnn
Additives	Annnn
Catalysts	Cnnn
Chemical Processes	Lnnnn
Physical Operations	Nnnnn
Equipment	Jnnnn
Properties	Bnnnn
Applications	Qnnnn

Where n represents a single digit

DCR numbers are also available for search and display within the PLE field. These DCR numbers have been auto-generated from the corresponding Specific Compound Numbers present in the Enhanced Polymer Indexing.

Polymer Indexing is applied to all polymer concepts from the claims and claim-related examples in the specification. The indexing is initially assigned to records that include a basic patent from a major patent-issuing authority, and for which an abstract is published. Basics from other authorities which do not have abstracts do not have the indexing applied until the first appearance of an equivalent from one of the major patent-issuing authorities.

For details about the content of and indexing in each facet, please consult the following user guides available from Thomson Reuters:

- Polymer Indexing Dictionary
- Polymer Indexing Hierarchy
- Polymer Indexing Reference Manual
- Polymer Indexing System Description
- Polymer Indexing Thesaurus

Searching G0102 will retrieve all references - actually indexed and autoposted.

Specific compound numbers generate the appropriate chemical aspects. Each specific compound number and its aspects are tightly tied together (see Linking Levels). For the generic concepts some chemical aspects will be autogenerated, more may be applied during indexing if the information is available.

Linking Levels

To improve retrieval, Linking Groups and Linking Levels are used to associate related concepts. Within a record there will be one or more linking groups, each representing a polymer or family of polymers and all concepts related to that polymer or family of polymers.

Within each Linking Group there are three levels of linking each with its own proximity operator:

Level 1	to chemically describe a substance	(U3)
Level 2	to link the substance to its function	(U2)
Level 3	to link other related terms to the substance	(U1)

Level 1

The proximity operator (U3) is used to link chemical aspects to generic terms and to specific compounds. For example, to search for aliphatic diisocyanates:

(G1854 (U3) D10)/PLE

Level 2

The proximity operator (U2) is used to associate a chemical or compound with its function or use, such as homopolymer or additive. For example, to search for vinyl chloride, and its function (binary copolymer):

(R00338 (U2) H0022)/PLE

Level 3

The proximity operator (U1) is used to link concepts such as properties and applications to a compound or group of compounds. At this level additives and catalysts can be, for example, linked to a polymer. For example, to search aramid, tyre cord, and tensile strength

((P0737 (U1) S1672) (U1) B4171)/PLE

In displays, codes tied together on level 1 ((U3) operator) are listed separated by blanks. They define a set. All sets of codes linked together on level 2 ((U2) operator) are listed in one block, sets separated by ";", and preceded by a number. Each linking group ((U1) operator) is grouped together. The digit in front of the full stop indicates the number of the link group, the digit behind the full stop counts the (U1)-links in one link group, e.g.:

Polymer Indexing

```
UPA.PLE 20120716
PLE
      [1.1] 2004 ND01; Q9999 Q7965 Q7885
      [1.2] 2004 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D83 DCN-R00964 DCR-1145; H0000;
            P1150; P1343
      [1.3] 2004 P0884 P1978 P0839 H0293 F41 D01 D11 D10 D19 D18 D31 D50 D63 D76 D90 F90 E21 E00
      [1.4] 2004 H0000
      [1.5] 2004 B9999 B4035 B3930 B3838 B3747
```

Field codes

In the DWPI database, the following fields related to Polymer Coding and Indexing can be searched.

Field Name	Field Code	Example
Fragment Code (PLASDOC)	/FG	503 54& 600 609/FG
	/AM	503 54& 600 609/AM
Plasdoc Key Serials	/KS	2017 2020 2296 2575/KS L10/DCR(U3)DCR-PRD/IT
Polymer Indexing Enhanced	/PLE	(G1854(U3)D10)/PLE ((P0737(U2)S1672)(U1)B4171)/PLE

Chemical Fragmentation Codes, Sections B, C, E

In this topic:

- Format
- Content
- Field codes

Format

ANNN

AN

Where: ANNN = chemical fragmentation code
                 AN = negation code

Fragmentation codes are searchable by eligible subscribers only. If you are an eligible subscriber you must apply to Thomson Reuters to have the correct access conditions applied to each STN LoginID.

Content

Thomson Reuters derived the chemical coding system in 1963, long before the arrival of more precise Markush graphical search systems (ca. 1987). Consequently, chemical code searching is the ONLY method of searching the widest disclosure of many chemical patents published between 1963 and 1987. In many cases, such patents will remain valid well past the year 2000, making chemical code searching an important element in any serious search effort involving chemical patents.

The chemical coding system (applicable to DWPI sections B, C, E) describes both single and Markush compounds found in patent specifications on the basis of the structural fragments found in these compounds. Thus, chemical code indexing is more traditionally known as "fragmentation coding". Fragmentation codes are assigned to disclosed applications and activities of the compounds being indexed, thus they provide an in-depth and comprehensive means of retrieving both structural and non-structural information relating to both specific and generic chemicals.

It is possible for many compounds to be disclosed or claimed in one specification. For specific compounds, the fragments are separately displayed, i.e., one subfield per specific compound. For Markush structures, all the permutations of a core structure are placed in the same subfield. The subfields used for the fragmentation codes are listed below, along with the chemistry classes they are used to describe, and the years of availability.

The Fragmentation Codes are searched using the search qualifiers listed below:

Qualifier	Definition	Year
/M0	Pre-1970 Non-steroid (sections B,C)	1963 – 1969 (B) 1965 – 1969 (C)
/M1	Natural Products and Polymers (sections B,C)	1970 onwards

/M2	General Chemicals (sections B,C)	1970 onwards
/M3	General Chemicals (section E)	1970 onwards
/M4	Dyes (section E)	1970 onwards
/M5	Steroids (sections B, C, E)	1963 onwards (B)
		1965 onwards (C)
		1970 onwards (E)
/M6	Galenical (section B)	1976 onwards

Chemical coding is initially assigned to records that have a basic from a major patent-issuing authority and for which an abstract is published. Basics from other authorities which do not have abstracts do not have the coding applied until the first appearance of an equivalent from one of the major patent-issuing authorities.

Creating search strategies with chemical codes may seem fairly complex, since the searches are looking for chemical fragments that may exist in any of the myriad chemical variations covered by Markush specifications.

For a single record in the database, there is often more than one distinct Fragmentation Codes subfield. Codes of one subfield are linked by (U) proximity. You do not need to specify the (U) operator when searching in /M0, /M1, /M2, /M3, /M4, /M5, /M6 as implied (U) proximity is active in these fields. Use (NOTU) proximity to specify absence of the appropriate codes in a subfield.

The example below shows a simultaneous search of chemical codes in several /Mx search fields with proximity implied.

G040 H342 J431 J451/M0,M2,M3

Chemical codes that shall be searched in Boolean OR logic, have to be attached by (U) proximity (manually) to the query. Please note the correct use of parentheses, especially at the beginning and end of the query:

(G040 H342 J431 J471 (U) (J521 OR J561) (U) J331 J581 J231)/M0

Changes in the chemical codes over the years also tend to make chemical code searches seem more complex than other types of searches. To learn more about Chemical Code searching, consult the Chemical Indexing User Guide and the Chemical Code Guidelines user guide available from Thomson Reuters.

Registry Compounds, Ring Index Numbers and Compound Numbers and Roles can also be searched in combination with the Chemical Codes. For more information, consult the Chemical Indexing User Guide.

Training is essential to use structure retrieval in online files. Contact your nearest Thomson Reuters Technical Support Centre for advice. Thomson Reuters Search Services will also be pleased to handle searches for subscribers who do not yet have the necessary training.

The example below illustrates a search for captan in sections B, C and E from 1970 to date:

C116 D612 H211 H602 H609 J522 M412 M511 M520 M530/M2,M3 (U) (M540 (U) (K530 OR K353))/M2,M3

Field codes

In the DWPI database, the following fields related to Chemical Fragmentation Codes can be searched.

Field Name	Field Code	Example
Chemical Codes	/M0	G040 H342 J431 J451/M0
	/M1	C101/M1
	/M2	C116 D612 H211 H602 H609 J522 M412 M511 M520 M530/M2,M3

	/M3	B713 G012 H600 L399 M903/M3
	/M4	D016/M4
	/M5	G013/M5
	/M6	H401/M6

Derwent Registry Number

In this topic:

- Format
- Content
- Registry Number Thesaurus
- Field codes

Format

NNNN-A

NNNN

Where: NNNN = four digit number
                     A = role letter

The Registry Number field (/DRN) is searchable by eligible subscribers only. If you are an eligible subscriber, you must apply to Thomson Reuters to have the correct access conditions applied to each STN LoginID.

Content

About 2100 commonly occurring chemicals encountered in the claims and examples of patent specifications in DWPI sections B, C, and E have been indexed with unique Registry Numbers since 1981 (update 198127).

From 1984 (update 198401) the use of Registry Numbers was extended to cover DWPI sections A, D and H; and from update 198407, to the remaining chemical sections F, G, and J-M.

Section A (Plasdoc) has a separate list of Registry Numbers for about 750 compounds (or groups of compounds). Of these, approximately 350 are identical to those used in the other CPI sections and have the same numbers. The 400 additional section A compounds have been allocated numbers in the 5,000 series. These numbers in the 5,000 series were discontinued from update 199501 on the introduction of the Enhanced Polymer Indexing system.

The Registry Numbers are indexed with and without the following roles:

Role	Description
S	Starting Material or Reagent
U	Use (other than starting material or reagent)
P	Production of the Chemical

Registry Numbers are searchable with or without the role letter.

Since Registry Numbers are only applied to specific compounds in claims and examples, a search by Registry Number alone does not retrieve unspecified compounds contained within a Markush structure. Registry Numbers do, however, give retrieval of high relevance.

DCR numbers which have been autogenerated from the corresponding Registry Numbers are available in the Chemical Coding field.

Field codes

In the DWPI database, the following fields related to Derwent Registry Number can be searched.

Field Name	Field Code	Example
DWPI Registry Number	/DRN	5107-U/DRN 5107/DRN

Ring Index Number

In this topic:

- Format
- Content
- Markush TOPFRAG
- Field codes

Format

NNNNN

Where: NNNNN = five-digit ring code

Ring index numbers are searchable by eligible subscribers only. If you are an eligible subscriber, you must apply to Thomson Reuters to have the correct access conditions applied to each STN LoginID.

Content

Ring Index Numbers (RINs), available from 1972, are used to index specific ring systems that are not uniquely described by a chemical code. These numbers can be found in the "Patterson Ring Index" (2nd edition, and its supplements). Ring systems encountered in patent documents but not found in the "Patterson Ring Index" are assigned to RINs by Thomson Reuters numbering from 40,000 onwards.

Thomson Reuters has now stopped assigning new RINs (update 199901) but continues to apply existing RINs.

Although the "Patterson Ring Index" is used as a guide, not all of the Ring Index Numbers are used, since Thomson Reuters does not distinguish between levels of unsaturation or different tautomers.

In the same field "Rarer Fragment Numbers" are included. They were used during the period 1972-1975 to describe less common chemical fragments and were given numbers from 70,000 onwards.

Ring Index Numbers should be used in conjunction with chemical codes and are linked by (U) proximity. Since update 198601, they have been specifically linked to the respective code subfield (M0 - M6). Furthermore, the RINs are displayed with the codes in their respective subfield.

For details about searching RINs with chemical codes, consult the Chemical Indexing User Guide.

Field codes

In the DWPI database, the following fields related to Ring Index Number can be searched.

Field Name	Field Code	Example
Ring Index Number	/RIN	RIN-50736/RIN

/Mx

(x=0, 1, 2, 3, …,6)

RIN-10006

Derwent Markush and Specific Compound Numbers and Roles

In this topic:

- Format
- Content
- Field codes

Format

Markush Compound Number

YYWW-CCCSS
YYWW-CCCSS-A

Specific Compound Number

RNNNNN
RNNNNN-A

 Where:

> YY = Two-digit year
> WW = Update number
> CCC = Document identifier
> SS = Number, 01-99, sequentially assigned within a record
> NNNNN = Five-digit serial number
> A = Role letter

During 1999-2000, YYWW became a segmented serial number, rather than representing the year and update number.

Content

A Markush Compound Number is assigned to each structure from a patent that has been graphically indexed for the Merged Markush Service (MMS). Markush indexing began with update 198701 for pharmaceutical, agrochemical and general chemical compounds (Derwent sections B, C and E). The Markush Compound Number is normally given a single role qualifier to express the primary function of the compound(s) in the patent, but may have more than one role.

20,000 Specific Compound Numbers were compiled from 1987 to 1993 (update 199335) which then became a closed set of "common compounds".

The following roles are used with generic and specific compound numbers:

Roles	Description
A	Substance Analysed/Detected
C	Catalyst

D	Detecting Agent
E	Excipient
K	Known Compound
M	Component of a Mixture
N	New Compound
P	Known Compound Produced
Q	Product Defined in Terms of Starting Materials
R	Removing/Purifying Agent
S	Starting Material
T	Therapeutically Active
U	Use of a Single Compound
V	Reagent
X	Substance Removed
Z	Miscellaneous

Compound Numbers are linked by (U) proximity to the relevant M1-M6 chemical codes with which they display, and can be directly searched in the Chemical Codes (/Mx) fields. (The Chemical Codes are discussed in more detail in the Chemical Indexing User Guide.)

M411 MCN-9223-F8401/M3

Chemistry Resource numbers which have been autogenerated from the corresponding Specific Compound Numbers are also linked by (U) proximity to the relevant M1-M6 chemical codes with which they display, and can be directly searched in the Chemical Codes (/Mx) fields.

Records that contain compound numbers have the entry "DCN" in field /FA (Field Availability).

Field codes

In the DWPI database, the following fields related to Derwent Markush and Specific Compound Numbers and Roles can be searched.

Field Name	Field Code	Example
DWPI Compound Number (Specific Compound Number)	/DCN	R10034-M/DCN R10034/DCN

Markush Compound Number	/MCN	8944-01501-P/MCN
Chemical Codes	/Mx (x=0, 1, 2, 3, …,6)	0024-19302-N/MCN

DWPI Individual Patent Publication Data

Apart from the invention documents the database also contains patent publication records which allow users to search and display bibliographic data and general indexing information associated with individual documents that make up the patent family (invention). Additional data elements are also provided for individual publications such as original titles and abstracts, claims, addresses and agent information.

The Invention Level or Patent Family is the traditional view of the data within Derwent World Patents Index meaning that no additional search or display qualifiers are required.

Data elements common between the Invention and Patent Publication Levels, such as Patent Assignees, have the same search qualifiers. To restrict searches to the Patent Publication Level field only requires the use of (D) proximity.

Each individual patent publication record constitutes a single unit of information linked by (D) proximity. This means that searches can be confined to the realm of a patent publication record by use of the document proximity operator (D). For example, we wish to retrieve the following record which comprises two patent publications each with an original English Title (TIEN) by searching for "oil" and "degreasing":

AN   1993-312890 [199340]   WPIX

Member(0001)

TIEN Method and apparatus for removing oil from articles

Member(0002)

TIEN DEGREASING METHOD AND DEVICE

The following search would not yield the document above as, although we are stipulating both "oil" and "degreasing" within TIEN, according to this search these terms have to be within the TIEN of a single member patent whilst in our example "oil" is in Member(0001) and "degreasing" is in Member(0002)

OIL/TIEN(D)DEGREASING/TIEN AND 1993-312890/AN

compared to the following search which does retrieve the document as we have substituted "articles" for "degreasing" so that both search terms are within the same member patent TIEN, Member (0001):

OIL/TIEN(D)ARTICLES/TIEN AND 1993-312890/AN

Employing a Boolean AND for the search for "oil" and "degreasing" would retrieve the document of course:

OIL/TIEN AND DEGREASING/TIEN AND 1993-312890/AN

Potentially any field present at the Invention Level may be present at the Patent Publication Level (e.g. the patent assignee field), apart from the chemical and polymer coding and indexing fields. Additional data elements which are unique to the Patent Publication Level (e.g. original author abstracts) are described in more detail in the following chapters:

Original Titles, Abstracts and Claims

Summary Language

Equivalent Abstracts

Original Inventor, Patent Assignee and Agent Data

Classifications

Original Titles, Abstracts and Claims

Basic Index Extension

In this topic:

- Content
- Field codes

Content

The Basic Index Extension conveniently gathers all subject words from the first level text fields additionally provided at the Patent Publication Level into one category and permits general subject searching without the necessity of using search qualifiers. It contains single words from the following alphanumeric fields:

Subject Word	Field Label	Definition
Title (German)	TIDE	all words from the original title (German language)
Title (English)	TIEN	all words from the original title (English language)
Title (French)	TIFR	all words from the original title (French language)
Title (Spanish)	TIES	all words from the original title (Spanish language)
Abstract (German)	ABDE	all words from the original abstract (German language)
Abstract (English)	ABEN	all words from the original abstract (English language)
Abstract (Spanish)	ABES	all words from the original abstract (Spanish language)
Abstract (French)	ABFR	all words from the original abstract (French language)

Abstract (other language)	ABOL	all words from the original abstract (other language)
Claims (German)	CLMDE	all words from the original first Claim (German language)
Claims (English)	CLMEN	all words from the original first Claim (English language)
Claims (French)	CLMFR	all words from the original first Claim (French language)

The Basic Index Extension contains single words from the fields above without punctuation.

As the Basic Index Extension is not the default search field the /BIEX suffix must be used for searching otherwise the search will default to the standard Basic Index covering the value-added text data. Word proximity is implied if no other Boolean or proximity operator is being provided.

(SURGICAL INFECTION OR VENTILATOR ASSOCIATED PNEUMONIA OR CYSTIC FIBROSIS)/BIEX

LASERANLAGE/BIEX

VOITURE/BIEX

STICKSTOFF/BIEX

Field codes

In the DWPI database, the following fields related to Basic Index Extension can be searched.

Field Name	Field Code	Example
Basic Index Extended (contains single terms from author abstracts, claims, and titles)	/BIEX	Nanoclusters/BIEX

Original Title

In this topic:

- Content
- Field codes

Content

Original author titles in German, English and French may be available at the Patent Publication Level. This data may be available for the following documents:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 1968
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978 (available in English, German and French)
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1975
- PCT applications (WO-A1/A2) since 1978
- Japanese applications, (JP-A) (Machine Assisted Translations) since 1975
  Granted patents and Utility Models from DWPI Update 200824
- Australian applications (AU-A) since 2004
- United Kingdom granted patents (GB-B) since 2004
- Russian granted patents (C1, C2, C9) since 2009
  Russian published applications and utility models (A, A8, A9, U1, U8, U9) since 2010 (Machine Assisted Translation)
- France published applications (A1/A3) since 2009
- Brazil (A2, B1, E2, F1, U2, Y1) since 2010 (Portuguese)
- Spain (A,A1,A2,A6,B,B1,B2, T1,T2,T3,T4,5,T6,U) since 2010
- India (I1-4, P1-4) since 2009
- China (A, Y, B) since June 2007 (Human Translation)
- Taiwan (A, B, U) since 2008
- South Korea (A, B, U, Y1) since 2008 (Machine Translation)
- Malaysia (A, A1) since 2010
- Vietnam (B) since 2010 (Human Translation)
- Thailand granted patents (A) since 2010 (Human Translation)

The TIDE, TIEN, TIES and TIFR fields contain single words without punctuation. Compound words containing hyphens, commas, etc. are broken into single words at all characters according to the parsing character list specified at STN.

As the search qualifiers for original titles are different to the invention title field (TIDE/TIEN/TIES/TIFR compared to TI) they can be searched individually. Word proximity is implied if no other operator is being provided.

COMPUTER/TIEN

MANTEL/TIDE

VOITURE/TIFR

KRAFTFAHRZEUGKAROSSERIE/TIDE(D)WO/PC AND DE/PC NOT EP/PC

It should be remembered that original titles may often be very concise so users should consider searching them in combination with the Thomson Reuters value-add title as an additional means to retrieve relevant subject matter.

Field codes

In the DWPI database, the following fields related to Original Title can be searched.

Field Name	Field Code	Example

Basic Index Extended (contains single terms from author abstracts, claims, and titles)	/BIEX	Nanoclusters/BIEX	
Title, Original, in German	/TIDE	Fruchtfleisch/TIDE	
Title, Original, in English	/TIEN	Plant Product/TIEN	
Title, Original, in Spanish	/TIES	FRUTOS/TIES	
Title, Original, in French	/TIFR	Fruit#/TIFR	

Original Abstract

In this topic:

- Content
- Field codes

Content

Original author abstracts in German, English and French may be available for patent publications. This data may be available for the following documents:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 2000
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978 for applications filed in English and since 2000 for applications filed in German or French
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1975
- PCT applications (WO-A1/A2) since 1978
- Chinese patents and utility models (China Utility Models since November 2007 and Taiwanese Utility Models since 2008)
- Japanese applications, granted patents and utility models since 2008 (200824)
- Korean patents and utility models since 200849
- Russian granted patents since 2009
  Russian published applications since 2010 (Machine Assisted Translation)
- France published applications since 2009
- Brazil (A2, B1, E2, F1, U2, Y1) since 2010 (Portuguese)
- Spain (A,A1,A2,A6,B,B1,B2, T1,T2,T3,T4,5,T6,U) since 2010 (Spanish)
- India (I1-4) since 2009
- Chinese applications, granted patents and utility models since June 2007 (Human Translation)
- South Korea (A, B, U, Y1) since 2008 (Machine Translation)
- Malaysia (A, A1) since 2010
- Vietnam granted patents (B) since 2010 (Human Translation)
- Thailand granted patents (A) since 2010 (Human Translation)

Sometimes language indicators for other languages are given. These abstracts can be searched for in the fields /ABES and /ABOL (Author Abstract, other languages). These may still be in English language due to erroneous language indicators, e.g. for machine aided translation abstracts.

Original patent publication abstracts are indexed in the language-specific individual search fields/ABxx or the Extended Basic Index /BIEX. Please note that /AB only contains the value-added abstract (excluding Documentation /ABDT and Extension Abstracts /ABEX). Word proximity is implied if no other operator is given.

Field codes

In the DWPI database, the following fields related to Original Abstract can be searched.

Field Name	Field Code	Example

Basic Index Extended (contains single terms from author abstracts, claims, and titles)	/BIEX	Nanoclusters/BIEX
Abstract, Original, in German	/ABDE	*automatisiert*/ABDE
Abstract, Original, in English	/ABEN	*conductive material/TIEN
Abstract, Original, in Spanish	/ABES	procedimiento/ABES
Abstract, Original, in French	/ABFR	*mobilis*/ABFR
Abstract, Original, in other language	/ABOL	filament*/ABOL

Claims

In this topic:

- Content
- Field codes

Content

The original first claim in German, English and French may be available for patent publications. This data may be available for the following documents:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 1968
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1991 (1984 for EP-B)
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1993
- United Kingdom granted patents (GB-B; database update 198409 to 199751 only)
- Japanese patents and utility models from 200824 (12th April)
- Russian applications and utility models since 2010 (Machine Assisted Translation)
- Brazil (A2, B1, E2, F1, U2, Y1) since 2010 (Portuguese)
- Spain (A,A1,A2,A6,B,B1,B2, T1,T2,T3,T4,5,T6,U) since 2010 (Spanish)
- Chinese applications and utility models (A, Y) since June 2007 (Human Translation)
  Chinese granted patents since January 2011 (Human Translation)
- South Korea (A, B, U, Y1) since 2008 (Machine Translation)
- Malaysia (A, A1) since 2010
- Vietnam granted patents (B) since 2010 (Human Translation)
- Thailand granted patents (A) since 2010 (Human Translation)

All original claims are available for

- All machine-translated claims for Chinese utility models published after July 9, 2008 (Human Translation) and for published applications since January 2007.
- All machine-translated claims for Korean unexamined and examined patent applications and utility models from January 2008.

Claims information is indexed within the Extended Basic Index /BIEX as well as the claims index /CLM. Word proximity is implied when no other operator is given. If there are multiple claims available, each claim constitutes one paragraph and terms belonging to it can be interrogated by using the (U) proximity operator.

FOODSTUFF/CLM

FUNK/BIEX

RASOIR/CLM

Field codes

In the DWPI database, the following fields related to Claims can be searched.

Field Name	Field Code	Example
Basic Index Extension (contains single terms from author abstracts, claims, and titles)	/BIEX	Nanoclusters/BIEX
Claims	/CLM	office chair/CLM

Summary Language

In this topic:

- Format
- Content
- Field codes

Format

The language of the title, abstract and/or claims at the patent publication level is indexed under /SL.M as either the two letter country code or in full. This allows searches to be restricted to certain languages if required. Some records may contain a combination of English, German and/or French language data. In such cases all applicable languages have been indexed under /SL.M.

Content

The language of the title, abstract and/claims at the Patent Publication Level can be a combination of English, German and/or French depending on the data source.

Original titles:

may be present in German for:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 1968
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978

- PCT applications (WO-A1/A2) since 1978

may be present in French for:

- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978
- PCT applications (WO-A1/A2) since 1978

may be present in Spanish for:

- PCT applications (WO-A1/A2)

Original abstracts:

may be present in German for:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 2000
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 2000
- PCT applications (WO-A1/A2) since 1978

may be present in French for:

- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 2000
- PCT applications (WO-A1/A2) since 1978

Original claims:

may be present in German for:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 1968
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1991

may be present in French for:

- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1991

Search Examples

DE/SL.M

FR/SL.M AND DE/SL.M AND EN/SL.M AND PNC=1

FR/SL.M AND DE/SL.M AND EN/SL.M AND PNC=1

Field codes

In the DWPI database, the following fields related to Summary Language can be searched.

Field Name	Field Code	Example
Summary Language (code and text)	/SL.M	FR/SL.M

Equivalent Abstracts

In this topic:

- Content
- Field codes

Content

Equivalent records from 1984 to 1997 may have a Thomson Reuters value-add abstract available at the patent publication level.

Subheading	Search/Display Field
First Section	/ALE
Novelty	/NOV
Detailed Description	/DETD
Activity	/ACTV
Mechanism of Action	/ACTN
Use	/USE
Advantage	/ADV
Use/Advantage	/UADV

All abstract text can be searched using /AB irrespective of whether the abstract is associated with the invention or a patent publication. All value-added text can also be searched in the abstract subsections if available.

Combine single words with Boolean and/or Proximity operators (W), (A), (S) or (P). (W) is implied if no operator is input. (S) will confine search terms to a single text paragraph, (P) to a section of the abstracts, e.g. USE.

immunosuppressant/actv ran=1996

Field codes

In the DWPI database, the following fields related to Equivalent Abstracts can be searched.

Field Name	Field Code	Example
Abstract	/AB	osteogenic protein*/AB
Basic Index	/BI	Drilling Fluid and Emuls*

Original Inventor, Patent Assignee and Agent Data

Inventor Full Name and Address

Original Patent Assignee and Address

Agent and Address

Inventor Full Name and Address

In this topic:

- Format
- Content
- Field codes

Format

Inventor full, original names (/INO) have been indexed as bound phrases including some alphanumerical characters and single words.

Inventor addresses (/INA) have been indexed as bound phrases and single words. However the inventor country (/INA.CNY) and inventor city (/INA.CTY) have also been indexed separately where it has been possible to isolate this information from the original data. Inventor nationality and residence have been indexed in /IN.NAT and /IN.RES.

The Inventor Total index (/IN.T) contains both inventor full names and addresses indexed as bound phrases and single words. Where it has not been possible to identify component parts of an inventor full name and/or address to populate /INO and /INA respectively then this information will only be present in /IN.T.

Due to the wide variation in formatting and punctuation of original inventor full names and addresses in original author data it is useful to use the Term Explorer to ensure that all relevant data is considered.

Content

Inventor full names and associated address information may be available for the following documents:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 1968
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1975
- PCT applications (WO-A1/A2) since 1978
- Japanese applications, (JP-A) since 1977 (no address information)

Search example

smith/ino (U) milwaukee/ina

Field codes

In the DWPI database, the following fields related to Inventor Full Name and Address data can be searched.

Field Name	Field Code	Example
Inventor, Original	/INO	Mayer Dale J/INO
Inventor, Nationality (WIPO code)	/IN.NAT	AT/IN.NAT
Inventor, residence (WIPO code)	/IN.RES	BE/IN.RES
Inventor, Total	/IN.T	Mayer*/IN.T
Inventor Address	/INA	Heidelberg/INA
Inventor Address, Country (code)	/INA.CNY	DE/INA.CNY
Inventor Address, City	/INA.CTY	Wien/INA.CTY

Original Patent Assignee and Address

In this topic:

- Format
- Content
- Field codes

Format

Original patent assignees (/PAO) have been indexed as bound phrases and single words. /PAO is the non-standardised version of the patent assignee as appearing on the patent document. The Thomson Reuters standardised version of the patent assignee is indexed under /PA.

/PAO is not updated with any subsequent changes in ownership of the invention and so merely reflects the information present on the document at the time of publication.

Original patent assignee addresses (/PAA) have been indexed as bound phrases and single words. However the patent assignee country (/PAA.CNY) and patent assignee city (/PAA.CTY) have also been indexed separately where it has been possible to isolate this information from the original data.

The Original Patent Assignee Total index (/PA.T) contains both patent assignee and associated address indexed as bound phrases and single words. Where it has not been possible to identify component parts of the patent assignee and/or address to populate /PAO and /PAA respectively then this information will only be present in /PA.T.

Due to the wide variation in formatting of patent assignees and addresses in original author data it is useful to use the Term Explorer to ensure that all relevant data is considered.

When creating the standardized version of the patent assignee, /PA, Thomson Reuters does not take into account any country specific limitations on the assignees. This information is, however, present as part of the

individual patent publication section and can be searched using the patent assignee limitation index (/PA.LIM). Patent assignee residence (/PA.RES) and patent assignee nationality (/PA.NAT) information may also be available.

Content

Original patent assignees and associated address information may be available for the following documents:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 1968
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1975
- PCT applications (WO-A1/A2) since 1978
- Japanese applications, (JP-A) since 1977 (no address information)

texas/pao

(TEXA-C) UNIV TEXAS SYSTEM is the Thomson Reuters standardized patent assignee. This appeared on the original PCT document as BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM as shown by the PAO field.

The above example also illustrates the presence of the Patent Assignee Limitation, Residence and Nationality information.

In this case UNIV TEXAS SYSTEM is qualified on the original document as being the patent assignee for all authorities except the US. For the US the individuals are considered to be the assignees. As this limitation is not taken into account when preparing the Thomson Reuters standardized PA field, there is no PA equivalent for these assignees.

The EP document of the family does not however have any country limitations on the patent assignees so there are standardized versions (UNIV TEXAS SYSTEM and DARTMOUTH COLLEGE) of both original patent assignees.

The patent assignee information can be freely connected to other data pertaining to the individual patent publication, e.g. patent country:

DORRINGTON/PAA(D)WO/PC(D)KONOPLEVA/PAO

Occasionally parsing the original patent assignee information was not successful. In these cases a search in the /PA.T field may yield higher recall albeit less precision.

strelow/pa.t not strelow/pao

Field codes

In the DWPI database, the following fields related to Original Patent Assignee and Address data can be searched.

Field Name	Field Code	Example
Patent Assignee, Original	/PAO	3M Company/PAO
Patent Assignee, Nationality (WIPO code)	/PA.NAT	BE/PA.NAT
Patent Assignee, Residence (WIPO code)	/PA.RES	DE/PA.RES
Patent Assignee, Limitation (WIPO code)	/PA.LIM	DE/PA.LIM
Patent Assignee, Total	/PA.T	BASF AG/PA.T
Patent Assignee Address	/PAA	Muenchen*/PAA
Patent Assignee Address, Country (WIPO code)	/PAA.CNY	BE/PAA.CNY
Patent Assignee Addresse, City	/PAA.CTY	Munich/PAA.CTY

Agent and Address

In this topic:

- Format
- Content
- Field codes

Format

Patent agents (/AG) and patent agent addresses (/AGA) have been indexed as bound phrases and single words. However, the patent agent country (/AGA.CNY) and patent agent city (/PAA.CTY) have also been indexed separately where it has been possible to isolate this information from the original data.

The Patent Agent Total index (/AG.T) contains both patent agent and associated address indexed as bound phrases and single words. Where it has not been possible to identify component parts of the patent agent and/or address to populate /AG and /AGA respectively then this information will only be present in /AG.T.

Due to the wide variation in formatting of patent agents and addresses in original author data it is useful to use the Term Explorer to ensure that all relevant data is considered.

Content

Agent and associated address information may be available for the following documents:

- German applications, granted patents and utility models (DE-A1, DE-B1/B2/B3/B4, DE-C1/C2 and DE-U1) since 1968
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1975
- PCT applications (WO-A1/A2) since 1999

MARKS/AG

Patent agent and address information can be linked with (U) proximity within the patent publication.

MARKS & CLERK/AG(U)LIVERPOOL/AGA

Field codes

In the DWPI database, the following fields related to Agent and Address data can be searched.

Field Name	Field Code	Example
Agent	/AG	PFIZER/AG
Agent, Total	/AG.T	PFIZER INC*/AG.T
Agent Address	/AGA	Newcastle/AGA
Agent Address, Country (code)	/AGA.CNY	NL/AGA.CNY
Agent Address, City	/AGA.CTY	(Munich or Muenchen)/AGA.CTY

Classifications

Issued US National Classification

International Patent Classification

Issued US National Classification

In this topic:

- Format
- Content
- Field codes

Format

Both the Main and Secondary Original (Initial) US national classes are indexed in the INCL field. Searches can be restricted to the Main or Secondary Original (Initial) US national class using the separate INCLM or INCLS fields respectively.

Each US national class is indexed at the 3, 9 and 12-character level to avoid the need to use extensive truncation in generic searches. All classifications are indexed without any delimiters.

Content

Original (Initial) US national classes as issued on the US document at the time of publication are available for:

- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1975

Original US national classes are associated with the patent publication. Any delimiters given in the search statement are automatically being removed.

442/INCL

442076000/INCLM

442164000/INCLS

Field codes

In the DWPI database, the following fields related to Issued US National Classification data can be searched.

Field Name	Field Code	Example
National Classification, Issued	/INCL	D01125000/INCL
National Classification, Issued (main)	/INCLM	D24225000/INCLM

International Patent Classification

There is additional IPC data available for the individual publications namely the original classifications lifted from the document and additional details for IPC Reform classifications in general:

Current International Patent Classification (Versions 1-7)

Initial International Patent Classification (Versions 1-7)

IPC Reform Classification

Current International Patent Classification (Versions 1-7)

In this topic:

- Content
- Field codes

Content

The current IPCs pertaining to individual patent publications may be available for the patent publications for each constituent family member. These sets can be different from the collated and deduplicated set of IPCs pertaining to the entire invention, e.g. 'linked' ICI codes.

Field codes

The set of qualifiers is the same as for the collated and deduplicated set of IPCs for the invention.

See: Patent Office Classifications

       International Patent Classification

Initial International Patent Classification (Versions 1-7)

In this topic:

- Content
- Field codes

Content

Original IPCs as published on the patent document may be available for the patent publications for each constituent family member (subject to the historical availability of IPCs). These can be different from the collated and deduplicated set of IPCs pertaining to the entire invention, e.g. 'linked' ICI codes.

The general IPC indexing and search methodology have already been outlined in the chapter for the invention IPCs already, the main difference for the original classifications in the individual publications for IPC versions 1-7 is the different set of fields set aside for these codes. The field codes begin with an 'I' to indicate 'Initial'.

The Original (Initial) Main IPC of the Basic Patent can conveniently be searched using /IICM in combination with the keyword 'BASIC' (e.g. /IICM(U2)BASIC/IPC.KW.

a61k/IICM(U2)BASIC/IPC.KW

Field codes

In the DWPI database, the following fields related to Initial International Patent Classification (Versions 1-7) can be searched.

Field Name	Field Code	Example
IPC, Main and Secondary, Initial	/IIC	A01B000/IIC
IPC, Main, Initial	/IICM	C09K007-02/IICM
IPC, Secondary, Initial	/IICS	A01B001/IICS
IPC, Additional (Supplementary), Initial	/IICA	A01B003-36/IICA
IPC, Index (Complementary), Initial	/IICI	B03D103:08/IICI

IPC Reform Classification

In this topic:

- Content
- Field codes

Content

If available at the Patent Publication Level, IPCI and IPCR contain the Current and Original (Initial) IPC Reform codes for constituent member patents. The codes are associated with all attributes available. STN splits the IPC Reform codes supplied at the Patent Publication Level into two display fields, IPCI and IPCR, dependent on the level attribute of the IPC. There are no separate indices for Current and Original (Initial) IPC Reform codes, but these can be distinguished between using the level attribute. IPCI contains IPCs with a level attribute of B (Original/Initial Classification). IPCR contains IPCs with a level attribute of R (Reclassification), D (Deletion) or V (Correction). In the display current and original IPCs are prefixed with 'Current:' and 'Original'.

Searching for IPC Reform codes in an individual patent publication is not different from the procedure employed for the invention codes – unless one wants to confine the query to the realm of an individual patent publication, but there are more attribute values available for searching. Attributes pertaining to an IPC code are searchable by using keywords or attribute codes in the IPC keyword field linked with (U2) proximity to the IPC code. For the version date and the action date the numerical search fields /IPC.VER and /IPC.ACD apply.

All available attributes are present at the Patent Publication Level:

Attribute	Code	Definition
Version Indicator	YYYYMMDD	IPC version date
Class Level	A	Advanced level
	C	Core level
	S	Subclass level
Position	F	First invention information
	L	Later invention information
Scope	I	Inventive
	N	Non-Inventive/Additional
Action Date	YYYYMMDD	Date the IPC code was applied
Level	B	Original Classification
	R	Reclassification
	V	Modified/Corrected
	D	Deleted
Applied	H	Intellectual Classification
	M	Machine Propagation across a family
	G	Automatic Generation
Office	CC	The country or office code that delivered the classification

Note: when searching attributes the level attribute "B" has been indexed as "O" and not "B" to avoid any confusion with "Basic".

G02C-0007/02/IPC.REF(U2)ORIGINAL/IPC.KW

G02C-0007/02/IPC.REF(U2)NON-INVENTION/IPC.KW

G02C-0007/02/IPC.REF(U2)RECLASSIFICATION/IPC.KW

L2 (U2) mexico/ipc.kw

20080101/IPC.ACD

Field codes

In the DWPI database, the following fields related to IPC Reform Classification data can be searched.

Field Name	Field Code	Example
IPC Reform	/IPC.REF	A01B0003-44/IPC.REF
International Patent Classification	/IPC	C12P021-08/IPC
IPC, Keyword Terms	/IPC.KW	Additional/IPC.KW
IPC, Version	/IPC.VER	20080101/IPC.VER
IPC, Action Date	/IPC.ACD	IPC.ACD>20070107

Application and Priority Details

Application and Priority Application numbers are available associated with the individual patent publications they pertain to rather than the 'pooled' set of priority application data for the invention. This potentially leads to more selective searches if this is required, but these refinements need to be administered with care.

For example, the sets of application and priority application numbers pertaining to the invention are not merely a collation of the numbers lifted from the individual patent publications. In order to increase recall certain application numbers from the individual publications, e.g. national application numbers, have been copied to the set of priority application numbers pertaining to the invention. For instance, a German utility model application number may appear as a priority application number with the invention, but not with the publication.

Application Number (Thomson Reuters)
Priority Number (Thomson Reuters)

Application Number (Thomson Reuters)

In this topic:

- Format
- Content
- Field codes

Format

Application numbers can also be searched and displayed in Thomson Reuters standard. By and large they follow the following pattern:

Thomson Reuters display format YYYYCC-xxxxxnnnnnnnnnNd

(mostly fixed 9-character length, zero padded if necessary)

Index format: YYYYCC-xxxxxnnnnnnnnnNd

Where:

YYYY = four digit year

CC = two-letter WIPO country code

D = indicates a distinguishing mark

N = number

A = letter

X = number or letter

x = optional alphanumeric character

n = optional numeric character

For German applications published from January 2004 the first two digits of the twelve digit number indicates the IP right (e.g. a patent application or utility model) followed by a 4-digit year and a 6-digit serial number. For the Thomson Scientific standard the year has been removed and a zero inserted. For example 2004DE-102004012346 appears as 2004DE-100012346.

PCT transfers to the Indian Patent Office are identified by a three letter code designating one of the regional offices (DEL = Delhi, KOL = Kolkata, MUM = Mumbai, CHE = Chennai), the letters 'NP' signifying 'National Phase' and a 5-digit serial number, for example, 2004IN-CHENP00010.

Also, PCT application numbers include the country code of the patent authority where the application is filed. For applications that are filed directly with the International Bureau of the PCT, the code IB has been used since 1994.

Content

Application numbers have been recorded since early 1984 (update 198409) for equivalents from the following sources: BE, DE, EP, GB, JP, SU, WO and NL (examined).

In addition, application numbers have been recorded for the same period for chemical equivalents from: FR, NL (unexamined) and ZA. Since update 199216 however, all application information is recorded.

Gaps in application data coverage have been filled where possible using original data from the following sources:

- German applications, granted patents, and utility models
- European applications and granted patents
- US applications and granted patents
- PCT applications
- Japanese applications

This additional application data is available in a separate search and display field (APTS; Application Number, Thomson Reuters). APTS also contains the application data which has been recorded in DWPI over time and which is available separately within the Application Number (AP) field.

It should be noted however that AP does not contain the additional application data sourced from the above authorities. The AP field therefore remains a reflection of the application data recorded over time within DWPI.

The APTS field contains numbers from the standard Derwent numbers supplemented in particular for older application numbers with numbers from other sources.

1999AT-000000007/APTS

AT 1999-7/APTS

Field codes

In the DWPI database, the following fields related to Application Number (Thomson Reuters) can be searched.

Field Name	Field Code	Example
Application Number in Thomson Reuters Format	/APTS	1999AT-000000007/APTS

Priority Number (Thomson Reuters)

In this topic:

- Format
- Content
- Field codes

Format

Priority Number Thomson Reuters Format

YYYYCC-xxxxxnnnnnnnnND

(padded with leading zeros to nine digits where necessary)

Where:

YYYY = four digit year

CC = two-letter WIPO country code

D = indicates a distinguishing mark

N = number

n = optional number

A = letter

a = optional letter

X = number or letter

x = optional number or letter

The PRTS format mostly contains nine character serial numbers and always includes the year.

Content

When an inventor applies for a patent in several countries, the first application (the one with the earliest date), regardless of the country in which it was filed, is the priority application. And the date of the first application is referred to as the priority date.

All priorities for each patent have been included in DWPI since the middle of 1977 (update 197729). Prior to that date, the number of priorities entered was restricted to ten.

Gaps in priority data coverage have now been filled where possible using original data from the following sources:

- German applications, granted patents, and utility models
- European applications and granted patents
- US applications and granted patents
- PCT applications
- Japanese applications

This additional priority data is available in a separate search and display field (PRTS; Priority Number, Thomson Reuters). PRTS also contains the priority data which has been recorded in DWPI over time and which is available separately within the Priority Number (PRN) field.

Field codes

In the DWPI database, the following fields related to Priority Number (Thomson Reuters) can be searched.

Field Name	Field Code	Example
Priority Application Number in Thomson Reuters Format	/PRTS	1998AR-000100591/PRTS

Publication Level Field Availability

In this topic:

- Content
- Field codes

Content

The field /FA contains the following codes indicating the availability of the respective fields at the Patent Publication Level in a given record:

- AB   Abstract
- ABDE   Author Abstract, German language
- ABDT   Documentation Abstract
- ABEN   Author Abstract, English language
- ABES   Author Abstract, Spanish language
- ABEX   Extension Abstract
- ABFR   Author Abstract, French language
- ABOL   Author Abstract, other language
- AG   Agent
- AI   Application Information
- ALE   Alerting Abstract
- ANX   Alternative Accession Number
- APTS   Application Number, Thomson Scientific Format
- AW   Additional Words
- CLMDE   Claim, German language
- CLMEN   Claim(s), English language
- CLMFR   Claim, French language
- CR   Cross Reference/Related Accession Number
- DCR   Chemical Resource
- DNC   Secondary Accession Number (Chemical Sections A-M)
- DNN   Secondary Accession Number (Non-Chemical Sections P, Q, S-X)
- DRN   Registry Number
- EPC   European Patent Classification
- FDT   Filing Details
- FTERM   Japanese Patent Classification
- GI   Graphic Information
- IN   Inventor
- INCL   Issued US National Patent Classification
- INO   Inventor, original
- IPC   International Patent Classification
- IPCI   Reform IPC, initial
- IPCR   Reform IPC, reclassified
- MC   Manual Codes
- NCL   Current US National Patent Classifications
- PA   Patent Assignee
- PACO   Patent Assignee Code
- PAO   Patent Assignee, original
- PLC   Polymer Coding
- PN   Patent Number
- PRAI   Priority Information

- PRTS   Priority Information, Thomason Scientific Format
- TECH   Technology Focus
- TI   Title
- TIDE   Author title, German language
- TIEN   Author title, English language
- TIES   Author title, Spanish language
- TIFR   Author title, French language
- TT   Title Terms

The codes can be searched individually or confined to a single publication.

clmde/fa

Siemens' publications having German language claims:

clmde/fa (D) siei/paco ran=2008

Field codes

In the DWPI database, the following fields related to Publication Level Field Availability can be searched.

Field Name	Field Code	Example
Field Availability (Publication Level)	/FA.M	ABDT/FA.M

Publication Level Update Dates

In this topic:

- Content
- Field codes

Content

Update codes are assigned to all records to indicate when a new record is added to the database or when information is added to an existing record.

Update Date Author Abstract (/UPAA)

The Author Abstract update code /UPAA is assigned to a record whenever an author abstract is added at the Patent Publication Level.

Update Date Author Title (/UPAT)

The Author Title update code /UPAT is assigned to a record whenever an author title is added at the Patent Publication Level.

Update Date Claims (/UPCL)

The Claims update code /UPCL is assigned to a record whenever a claims field is added at the Patent Publication Level.

Update Date International Patent Classification, Original (/UPIO)

The /UPIO update code is assigned to a record upon the addition of Original IPCs at the Patent Publication Level.

Update Date USPTO Classification, Original (/UPNO)

The /UPNO update code is assigned to a record upon the addition of Original USPTO Classifications at the Patent Publication Level.

Field codes

In the DWPI database, the following fields related to Publication Level Update Dates can be searched.

Field Name	Field Code	Example
Update Date, Author Abstract	/UPAA	MAR 2006/UPAA
Update Date, Author Title	/UPAT	16 Apr 2005/UPAT
Update Date, Claims	/UPCL	20050509/UPCL
Update Date, International Patent Classification, Original	/UPIO	UPIO=12 Apr 2005

DWPI Field Availability

In this topic:

- Content
- Field codes

Content

The field /FA contains the following codes indicating the availability of the respective fields at the Invention Level in a given record:

- AB   Abstract
- ABDT   Documentation Abstract
- ABEX   Extension Abstract
- AI   Application Information
- ALE   Alerting Abstract
- ANX   Alternative Accession Number
- AW   Additional Words
- CMC   Chemical Coding
- CR   Cross Reference/Related Accession Number
- DCN   Derwent Compound Number
- DCR   Chemical Resource Number
- DNC   Secondary Accession Number
             (Chemical Sections A-M)
- DNN   Secondary Accession Number
             (Non-Chemical Sections P,Q, S-X)
- DRN   Registry Number
- EPC   European Patent Classification
- FDT   Filing Details
- FTERM   Japanese Patent Classification
- GI   Graphic Information
- IN   Inventor
- IPC   International Patent Classification
- IPCI   International Patent Classification, Initial
- IPCR   International Patent Classification, Reclassified
- IT   Keyword Indexing (incl. Chemistry Resource numbers)
- MC   Manual Codes
- MCN   Markush Compound Number
- NCL   US National Patent Classification
- NOAB   No Abstract available
- PA   Patent Asssignee
- PACO   Patent Assignee Code
- PLC   Polymer Coding
- PLE   Enhanced Polymer Coding
- PN   Patent Number
- PRAI   Priority Application Information
- RIN   Ring Index Number
- TECH   Technology Focus
- TI   Title
- TT   Title Terms

NOAB has been indexed for your convenience, if no abstract is available.

Field codes

In the DWPI database, the following fields related to DWPI Field Availability can be searched.

Field Name	Field Code	Example
Field Availability	/FA	L7 NOT NOAB/FA L11 AND GI/FA

DWPI Update Dates

In this topic:

- Content
- Field codes

Content

Update codes are assigned to all records to indicate when a new record is added to the database or when information is added to an existing record. The minimum granularity for the data is the logical unit. Generally all logical units have an update date attached, although not all are listed below for clarity.

The DWPI is updated approximately every three to four days and records may include all of the update codes.

The Entry Date field and all the Update fields are searched using the formats YYMMDD or YYYYMMDD or one of the other STN Date Edit formats. The YYYYMMDD format is indexed and available via the Term Explorer. The Entry Date field and the Update fields are range searchable.

Entry Date or Basic Update (/ED)

All new documents – mostly basics - added to DWPI receive a 'time stamp' to indicate the date they were added to the file. Use the /ED field code to restrict a search to new inventions only.

20080101/ED

Basic and Equivalents Update (/UPP)

All family members have an update date (UPP) assigned to indicate the date they were added to the file. This includes the initial creation of the record. A basic will therefore be attributed both an ED and an UPP update date. Subsequent equivalents are then given additional UPP update dates.

In order to be able to provide some 'history' of the patent family from the old DWPI file, the initial set of UPP data had been transferred from the old DWPI database as far as possible until regular updates commenced. From update 200610 onwards /UPP has been populated with 'real' family update dates for DWPI.

20080101/UPP

Equivalents Update (/UPEQ)

The Equivalents Update Date UPEQ is written whenever an equivalent is added to the family.

Abstract Update (/UPAB)

The Abstract Update code UPAB is written when the basic abstract or equivalent abstracts are added to a record. They display in the headlines of the AB or ABEQ fields next to the patent number the abstract derives from.

Section A Polymer Indexing Update (/UPA)

The Section A update date UPA is assigned to records that have had new Section A fragmentation codes and key serial numbers or Enhanced Polymer Indexing data added to them. Use the /UPA field to restrict a Section A coding search to the latest references.

Chemical Code or Section B, C, E Coding Update (/UPB)

The Chemical Indexing update date UPB is added to records that have had new B, C, E (M0 - M6) Fragmentation Codes assigned to them.

Graphic Image Update (/UPGI)

The Graphic Image update date UPGI is added to records that have had a new image assigned to them.

Patent Assignee Update (/UPPA)

The Patent Assignee update date UPPA is written whenever patent assignee information is added to a record.

Priority Information Update (UPPR)

The Priority Information update date UPPR is added to records whenever additional priority information is assigned to them.

Enhanced Title Update (/UPTI)

The Enhanced Title update code UPTI is assigned to records whenever the Thomson Reuters value-add title is generated or updated. This may be particularly useful for tracking Equivalents-Treated-As-Basic records where the initial title from the minor country is replaced by a title from the major country equivalent.

Index Terms Update (/UPIT, /UPKW)

The Index Terms update date UPIT (UPKW) is added to a document whenever Chemistry Resource indexing numbers are assigned to it.

General Update Date (/UP)

If a new record is created or an existing one is updated, i.e. if any of the update dates described above are generated, an entry in the Update Date (/UP) field is also generated.

Chemical Resource Update (/UPCR, /UPWX) and Entry Date (/EDCR)

Additional update dates from the Chemistry Resource segment are UPCR/EDCR (Update Date/Entry Date Chemistry Resource) and UPWX (Update Date DWPI Cross Reference) which are assigned to the Chemical Resource structure records rather than the bibliographic records.

An entry in /UPCR and /EDCR is created when new compounds enter the Chemistry Resource (DCR) segment, /UPCR only when structures are corrected. An entry in /UPWX is created when Chemistry Resource compounds are cited in bibliographic records.

Field codes

In the DWPI database, the following fields related to DWPI Update Dates can be searched.

Field Name	Field Code	Example
Entry Date	/ED	ED>19940201 and L10
Update Date	/UP	Jan 2007/UP
Update Date, Polymer Indexing	/UPA	UPA=APR 2005
Update Date, Abstract	/UPAB	FEB 2009/UPAB
Update Date, Chemical Code	/UPB	UPB=APR 2005
Update Date, Equivalent	/UPEQ	UPEQ=AUG 2006
Update Date, Graphic Image	/UPGI	UPGI=APR 2005
Update Date, Index Terms	/UPIT	20050412/UPIT
	/UPKW	20061010/UPKW
Update Date, Patent Family	/UPP	FEB 1994-APR 1994/UPP
Update Date, Patent Assignee	/UPPA	20050426/UPPA and L15
Update Date, Priority Information	/UPPR	UPPR>=APR 2008
Update Date, Enhanced Title	/UPTI	20050422/UPTI and L2
Update Date, DWPI Chemistry Resource	/UPCR	Jan 2000/UPCR
Update Date, DWPI Cross Reference	/UPWX	19990719/UPWX
Entry Date, DWPI Chemistry Resource	/EDCR	19 JUL 1999/EDCR

DWPI Appendices

Appendix I – Thomson Reuters Standard Abbreviations

Thomson Reuters has abbreviated many commonly occurring words in titles and abstracts (Basic Index) over time. Since 1998 it has been policy not to abbreviate where possible and thus, for comprehensive results, the abbreviation should be searched together with the corresponding full term.

Term	Abbreviation	Term	Abbreviation
addition(s)	addn./addns.	melting point	m.pt.
administration	admin.	minimum	min.
amount(s)	amt./amts.	mixture(s)	mixt./mixts.
apparatus	appts.	molecule(s)	mol./mols.
aqueous	aq.	obtained	obtd.
atmosphere	atmos.	optionally	opt.
boiling point	b.pt.	oxidation	oxidn.
coefficient(s)	coefft./coeffts.	particularly	partic.
composition(s)	compsn./compsns.	parts by weight	pts. wt.
compound(s)	cpd./cpds.	parts per million	ppm.
concentrated	conc.	precipitate(s)	ppte./pptes.
concentration(s)	concn./concns.	precipitated	pptd.
condensation	condensn.	precipitation	pptn.
containing	contg.	preferably	pref.
continuation	cont.	preparation	prepn.
continuation in part	c.i.p.	prepared	prepd.
corresponding	corresp.	primary	prim.
derivative(s)	deriv./derivs.	product(s)	prod./prods.
determination	determn.	production	prodn.
diameter	dia.	purification	purificn.

dilute	dil.	quaternary	quat.
distillation	distn.	reduction	redn.
divided/division	div.	saturated	satd.
divided out of	div. ex	secondary	sec.
equivalent(s)	equiv./equivs.	separated	sepd.
especially	esp.	separating	sepg.
evaporation	evapn.	separation	sepn.
extraction	extn.	solution(s)	soln./solns.
for example	e.g.	substituent(s)	substit./substits.
gram molecule(s)	mole./moles.	substituted	substd.
group(s)	gp./gps.	temperature(s)	temp./temps.
insoluble	insol.	tertiary	tert.
liquid	liq.	that is	i.e.
manufacture	mfr.	volume	vol.
manufactured	mfd.	weight	wt.
manufacturing	mfg.	with respect to	w.r.t.
maximum	max.		

Other standard abbreviations for units of measurement, electrical and engineering elements, chemical groups, and chemical formulae are also used in abstracts.