
DERWENT
WORLD PATENTS INDEX®

Dialog online user guide

Copyright © 2007 The Thomson Corporation

Edition 3

ISBN: 1 903836 84 9

Copyright © 2007 The Thomson Corporation

Visit the Thomson Scientific web site at <http://scientific.thomson.com>

First edition published 1992

Second edition published June 1998

Second edition (revised) published March 2002

Third edition published July 2006

ISBN: 0 901157 06 6 (Second edition)

ISBN: 1 903836 31 5 (Second edition revised)

ISBN: 1 903836 84 9 (Third edition)

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, recording, photocopying or otherwise – without express written permission from the copyright owner.

Contents

1	Introduction	1
2	Customer Service Information	3
2.1	Customer Technical Support	3
2.2	Dialog Addresses	5
2.3	Other Sources of Help and Information	6
2.4	Customer Training	7
2.5	Patents Copy Service – Online Ordering	7
2.6	Thomson Scientific Search Services	8
3	Content and Coverage of the Database	11
3.1	Subject Coverage	12
3.2	Japanese Patents	13
3.3	Sources Covered	14
3.4	DWPI Database Record Structure	16
3.5	Other Thomson Scientific databases available on Dialog	18
4	Accessing <i>Derwent World Patents Index (DWPI)</i> On DIALOG	19
5	DWPI Record	21
6	DIALOG Search Features	27
6.1	Truncation	27
6.2	Proximity Operators	28
6.3	Chemical Name Segmentation and (T) Proximity	29
6.4	LIMIT Qualifiers	31
6.5	MAP	31
6.6	RANK and Statistical Analysis	32
6.7	SORT	33
6.8	Images	34
6.9	Country Code (CC=) Super Search Qualifier	34
6.10	IDPAT	35

7	Word Searching	37
7.1	Basic Index	37
7.2	Titles	42
7.3	Abstracts	48
7.4	Claim	61
8	Company and Inventor Searching.....	63
8.1	Patent Assignee	63
8.2	Company Name	69
8.3	Patent Assignee/Company Code	72
8.4	Assignee Status	79
8.5	Inventor (Author)	82
8.6	Agent and Address	91
9	Patent and Application Details Searching	93
9.1	Patent Number	93
9.2	Patent Country and Kind	104
9.3	Designated States	107
9.4	Country Code	108
9.5	Application Number	110
9.6	Application Country and Kind	113
9.7	Priority Application Information	116
9.8	Filing Details	119
9.9	Language	122
9.10	Number of Countries	124
9.11	Number of Patents	126
10	Date Searching	129
10.1	Publication Date	129
10.2	Publication Month	132
10.3	Publication Year	134
10.4	Application Date	135
10.5	Application Month	137
10.6	Application Year	139
10.7	Database Update (<i>DWPI</i> Update)	141

11	Classification Searching	143
11.1	Accession Numbers	143
11.2	DWPI Classification	149
11.3	Original (Initial) US National Classification	152
11.4	International Patent Classification (IPC)	155
11.5	Type of Family Member	171
11.6	Record Type	173
11.7	File Segment	174
11.8	Document Type	175
12	Thomson Scientific Indexing	177
12.1	Manual Codes	177
12.2	Polymer Indexing	182
12.3	Chemical Indexing	189
13	Updates	203
14	Display Options	209
14.1	Predefined Formats	209
14.2	User-Defined Formats	211
14.3	TAG Format	213
14.4	Delivery of Prints and Alerts	217
14.5	REPORT	218
14.6	Images	219
15	Appendices	221
15.1	Qualifiers	221
15.2	DWPI Classification	224
15.3	Thomson Scientific Standard Abbreviations	225
15.4	WIPO Country Codes	227
15.5	Patent Number Formats and Kind Codes	231
15.6	Application/Priority Number Formats	244
15.7	Japanese Coverage	247
16	Index	251

1 Introduction

For over fifty years, Thomson Scientific, the world's leading patent information publisher, has been foremost in providing scientific and technical intelligence to business, industry, government and research institutes throughout the world.

Derwent World Patents Index[®] gives you the chance to keep abreast of technological advances by offering you access to thousands of patent documents - issued each week from all over the world in numerous languages - in one database, in one language. Studies have shown that over 70% of the information contained within patents is never published anywhere else, so patents provide a unique source of information on new technology.

Dialog, headquartered in Cary, North Carolina, USA, and a business of The Thomson Corporation, is a global leader in providing integrated information solutions to business and professional customers. Dialog offers a wide range of databases, amongst others *Derwent World Patents Index First View*SM, and *Patents Citation Index*. Dialog is accessed via the internet or using communications software packages such as DialogLink.

This User Guide describes the content, coverage and search capabilities of *Derwent World Patents Index* as it is implemented on Dialog[®]. Following detailed information on database content, separate chapters detail each of the search and display fields available.

For further information concerning *Derwent World Patents Index* and other information services offered by Thomson Scientific, please contact your local office.

2 Customer Service Information

2.1 Customer Technical Support

Expert advice and support is available via our Customer Technical Support staff, to provide a fast and efficient response to all your enquiries. Our experienced Technical Support staff has an in-depth knowledge of the products and services offered by Thomson Scientific and are familiar with the various command languages.

From general customer queries through to technical questions, the Technical Support department is there to help you.

Email (all regions)

Please use the Feedback Form on the following Web page:

scientific.thomson.com/support

Your message will automatically be directed to your nearest Support Center.

Europe, Middle East and Africa

Thomson Scientific
77 Hatton Garden
London EC1N 8JS
United Kingdom

Phone: +44 (0)2074334999

Americas

Thomson Scientific
3501 Market Street
Philadelphia
PA 19104
USA

Phone: +1 800 336 4474 ext. 1591

+1 215 386 0100

Fax: +1 215 386 6362

Japan

Thomson Corporation K.K.
Palaceside Building
5F East
1-1-1 Hitotsubashi 1-Chome
Chiyoda-ku
Tokyo 100-0003
Japan

Phone: 0800 888 8855 (from Japan only)
+81 3 5218 6500
Fax: +81 3 5218 6536

Asia Pacific (Singapore)

Thomson Scientific
16 Collyer Quay
22nd Floor
Hitachi Tower
Singapore 049318

Phone: +65 6879 4118
Fax: +65 6223 2634

China

Thomson Scientific
Room 407, Raycom Info Tech Park Tower A
No. 2 Kexueyuan South Road
Haidian District
Beijing 100080
P.R.China

Phone: +86 10 8286 2099
Fax: +86 10 8286 2088

Korea

Thomson Scientific
13F Hungkuk Life Insurance Bldg. 226
Shinmunro 1-ga, Jongro-gu
Seoul 110-786
Korea

Phone: 0800108100
+82 2 2076 8100
Fax: +82 2 2076 8122

Australia and New Zealand

Thomson Scientific
Level 5
1000 Harris Street
Pyrmont, NSW 2009
Australia

Phone: Australia 1800 007 214
New Zealand 0800 443 162
Fax: +65 6223 2634

Customer Support Center

Optimize your use of Thomson Scientific products and services. In our comprehensive Support Center you are just a click away from the reference materials you need.

scientific.thomson.com/support

2.2 Dialog Addresses

Europe

Thomson Scientific
77 Hatton Garden
London EC1N 8JS
United Kingdom

Phone: 00 800 3334 2564
Email: dialogcustomer@thomson.com

North America

Thomson Scientific
11000 Regency Parkway
Suite 10
Cary North Carolina 27511
USA

Phone: +1 800 334 2564
Email: dialogcustomer@thomson.com

Japan

G-Search Ltd
LOOP-X_Bldg, 3-9-15 Kaigan
Minato-ku
Tokyo 163-0722
Japan

Phone: +81 3 3343 5200
Fax: +81 3 3343 6860

2.3 Other Sources of Help and Information

User Guides

To help you search *Derwent World Patents Index* more effectively, Thomson Scientific provides a comprehensive range of user guides, all written by specialists in their field. The user guides listed below include topics relevant to searching the database. The majority of these are available as PDF files on our web site at scientific.thomson.com/support/userguides/

User Guide

Global Patent Sources
Guide to Patent Expiries
Tools of the Trade on Dialog
Title Terms
Patentee Codes
CPI Manual Codes
EPI Manual Codes
CPI Chemical Indexing User Guide
CPI Chemical Indexing Guidelines
CPI Chemical Code Dictionary
CPI Plasdac Coding Systems
Polymer Indexing Dictionary
Polymer Indexing Reference Manual
Polymer Indexing System Description
Polymer Indexing Thesaurus
Polymer Indexing Hierarchy

Online Sources

Dialog provides two sources of online help for *Derwent World Patents Index*:

Help	Description
Bluesheets	Available online by typing B 415; S 351/TI; T S1/9 or via the web page at www.dialog.com
Online Help	Accessed online by typing HELP followed by a topic. For information about HELP, type HELP HELP .

Thomson Scientific Website

The Thomson Scientific website (scientific.thomson.com) provides comprehensive reference material for patent information searchers, and is updated daily with product and patent news. The website includes searchable databases for the Patentee and Manual codes, and hundreds of downloadable product samples and user guides. You can also reserve your place on our product training classes, check dispatch details for our printed and CD-ROM products, and monitor country coverage and latest update information for *Derwent World Patents Index*. Visitors can also sign up to receive a monthly email which highlights new additions to the website.

For the most up-to-date versions of all our available user guides, please go to scientific.thomson.com/support/userguides

2.4 Customer Training

Thomson Scientific provides a selection of face-to-face and web-based training for both novice and advanced users of our databases. Our expert trainers can help you get more from your information resources.

2.5 Patents Copy and Translation Service

Having completed your search you can order quality copies of patent documents issued around the globe. As holders of the world's largest private collection of international patents, Thomson Scientific provides a fast and efficient service. In addition, through a global network of contacts, Thomson Scientific regularly locates and supplies old and unusual patents.

When you need a patent to be translated into your preferred language, Thomson Scientific provides a full range of services for the IP and legal user.

To make use of these services, simply contact Thomson Scientific Global Document Services.

Thomson Scientific
77 Hatton Garden
London EC1N 8JS
United Kingdom

Phone: +44 (0)20 7433 4433

Fax: +44 (0)20 7433 4401

Email: ts.globaldocservices@thomson.com

scientific.thomson.com/products/patenttranslations

2.6 Thomson Scientific Search Services

Our expert searchers have extensive experience in extracting key information from the world's information databases. They possess the skills and know how to quickly and effectively search multiple databases to find precisely what you need. Whether examining our unrivalled, global patents database - *Derwent World Patents Index (DWPI)*, using our proprietary indexing, or other relevant information rich databases, our searchers are dedicated to providing you with complete and accurate results.

Our Search Services is completely tailored to your specific search needs. Our experts will work with you continuously, making sure they look for and uncover the exact data you require. This partnership, along with our searcher's extensive searching expertise, is what makes Thomson Scientific Search Services the pre-eminent source for research assistance.

Thomson Scientific understands that you want research information fast and in a format that best suits your needs. This is why we deliver your precise search results in print, by fax, or via email in three days or less (depending on search complexity). You decide how and when you want your information, and we'll deliver it. It's that simple.

Rely on our global search expertise for:

- Patentability/Novelty
- State-of-the-art
- Validity/Infringement
- Patent assignee
- Patent citation
- Current awareness
- Patent family/English language equivalents

Thomson Scientific Search Services covers these industries:

- Pharmaceutical
- Polymer
- Chemical
- Biotechnology
- Electrical
- Engineering

For further information on this important Thomson Scientific service, or to request a search or quotation please contact:

Thomson Scientific
1800 Diagonal Road
Suite 250
Alexandria, VA 22314
USA

Phone: +1 703 521 1010
+1 800 233 9697
Fax: +1 703 486 0030
E-mail: ts.searchservices@thomson.com
scientific.thomson.com/searchservices

3 Content and Coverage of the Database

Derwent World Patents Index provides access to information from more than 30 million patents, giving details of over 14 million inventions. Each week data is added from more than 20,000 documents from 41 patent-issuing authorities, including the European Patent Office and the World Intellectual Property Organization. Technology Disclosures and Research Disclosures (© Kenneth Mason Publications Limited [2006] (www.researchdisclosure.com)) are also included.

Each record describes a patent family, starting with the new invention (Basic Patent) and adding information about the same invention issued in other countries (Equivalent Patents). The records contain bibliographic data, titles, abstracts, general indexing and, where appropriate, in-depth chemical and polymer indexing assigned by Thomson Scientific. Additionally, electrical and engineering drawings are present in records dating back to 1988, and chemical structure drawings are present in records dating back to 1992.

Each week Thomson Scientific checks the specifications issued to determine whether the inventions described in them are new to Thomson Scientific. If the document relates to an entirely new invention not previously seen by Thomson Scientific, the document is designated as being 'Basic', and a new record is created in *Derwent World Patents Index*. If the document covers the same invention as a Basic that has already been published in another country and has been entered into *Derwent World Patents Index*, the document is designated as being 'Equivalent'. The corresponding Basic record is updated with additional information from the Equivalent document. Together, the Basic and the Equivalent patents form a 'Patent Family' where available.

Two levels of data are available within *Derwent World Patents Index* on Dialog. The Invention Level comprises the 'Patent Family' information such as bibliographic data, value-add title and abstracts and general indexing and, where appropriate, in-depth indexing. The Member Patent Level allows users to search and display bibliographic data and general indexing information associated with individual documents that make up the patent family Invention Level. This can allow very specific searching of individual documents. Additional data elements such as original titles and abstracts, claims and agent information are also present at the Member Patent Level.

See 3.4 for further details of the *Derwent World Patents Index* record structure. See 7 for details of the Member Patent Level data where available.

3.1 Subject Coverage

The subject coverage of *Derwent World Patents Index* has increased with time. The graph on the next page shows how this coverage has expanded over the years and the increase in the number of inventions (records) added annually.

In 1963, Thomson Scientific launched its FARMDOC service covering pharmaceutical and veterinary patents. This now corresponds to Section B as part of the Chemical Patents Index (CPI).

Coverage increased in 1965 to include patents relevant to agriculture and veterinary medicine with the launch of the AGDOC service (now Section C), and further still in 1966 to include plastics and polymers (the PLASDOC service, now Section A).

In 1970, the Chemical Patents Index was introduced, and the service was expanded to include all chemical and chemically-related patents (Sections A-M).

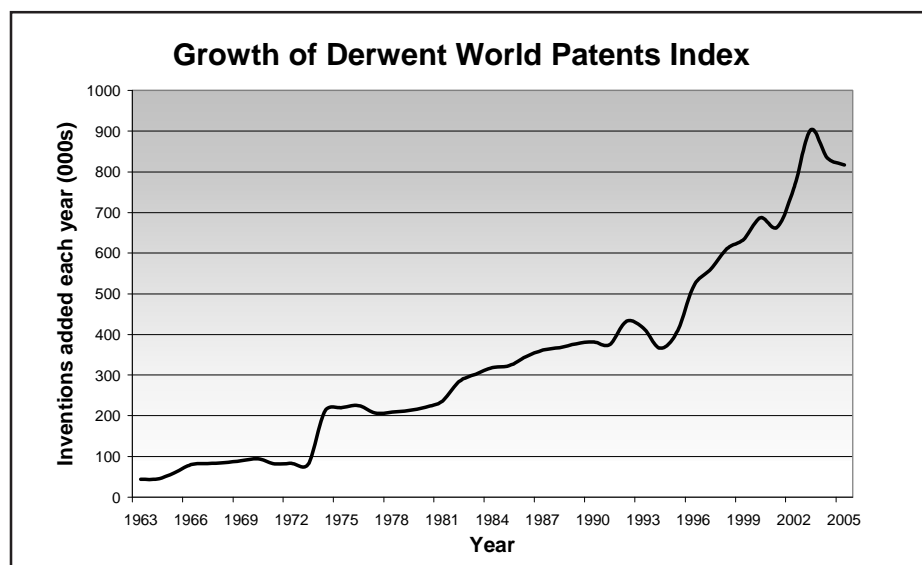
Subject Coverage (1963-1974)

1963	FARMDOC - Section B
1965	AGDOC - Section C
1966	PLASDOC - Section A
1970	Chemical Patents Index (CPI)
1974	<i>Derwent World Patents Index (DWPI)</i>

Since 1974, *Derwent World Patents Index* has included patent specifications irrespective of subject content, and these are divided into three major subject areas:

Subject Coverage (1974 onwards)

CPI	Chemical Patents Index	Sections A-M
EngPI	Engineering Patents Index	Sections P and Q
EPI	Electrical Patents Index	Sections S-X



3.2 Japanese Patents

Since the beginning of 1996, Thomson Scientific has covered all unexamined Japanese patents issued, irrespective of subject content. Previously coverage was selected as detailed below.

Until 1981, Thomson Scientific 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 *DWPI* 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 Scientific began covering Toroku documents, which are granted specifications with a post-grant opposition period. Exact details of Japanese coverage are given in Appendix 15.7

3.3 Sources Covered

41 patent-issuing authorities are now included in the *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
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 ¹	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)
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)
Mexico	MX	1998 (199816)
Netherlands	NL	1963
Norway	NO	1974 (197448)
New Zealand	NZ	1993 (199301)
PCT (World)	WO	1978 (197849)

cont'd

Country/Patent Authority	WIPO Code	Start Date
Philippines	PH	1995 (199511)
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)
United Kingdom	GB	1963
United States	US	1963
Plus:		
Research Disclosures ³	RD	1978 (197809)- 2001
International Technology Disclosure	TP	1984 (198408) - 1993 (199351)

Notes

- 1 At the start of 1993 Czechoslovakia (CS) divided into the Czech Republic (CZ) and Slovakia (SK), both with their own independent patent systems.
- 2 The Soviet Union (SU) patent office closed 1 February 1992 and the new Russian Federation (RU) patent office opened.
- 3 Research Disclosures © Kenneth Mason Publications Limited [2006]
www.researchdisclosure.com

3.4 DWPI Database Record Structure

As a result of the enhancements and the inclusion of additional content, *DWPI* database records now have a two-part structure.

- Invention Level – traditional *DWPI* content such as patent family, value-add title, abstract and indexing
- Member Patent Level – new additional data from each member (publication) listed in the invention (patent family) part of the record.

Invention Level

The traditional *DWPI* family record makes up the Invention Level. Records are created using Thomson Scientific's existing practises to consistently collate and de-duplicate data from the individual member (publication) documents.

The Invention Level record comprises bibliographic data and value-add title, abstract and indexing, including the newly-available documentation abstracts backfile. The majority of existing display formats and search options remain unchanged, to provide continuity for existing searchers.

Member Patent Level

The Member Patent Level contains selected 'First Level' data, including original titles, abstracts and main (1st) claim (where available). Additional valuable bibliographic data will also be available, comprising full inventor names and addresses, original assignee names and addresses and attorney/agent names and addresses.

Original (initial) USPTO national classifications will be added to *DWPI* at the Member Patent Level (see the following table for coverage details):

Coverage varies by data element, patent kind (e.g. applications, granted patents and utility models) and time:

Original title	Australia	from 2004
	EPO	from 1978
	Germany	from 1968
	Japan	from 1975
	PCT (WO)	from 1978
	UK	from 2004
	US	from 1975
Original abstract	EPO	from 1978 (English) from 2000 (French/ German)
	Germany	from 2000
	PCT	from 1978
	US	from 1975
First claim	EPO	from 1991
	Germany	from 1968
	UK	updates 198409 to 199751
	US	from 1993
Inventor full name and address	EPO	from 1978
	Germany	from 1968
	Japan	from 1977 (no addresses)
	PCT (WO)	from 1978
	US	from 1975
Original patent assignee and address	EPO	from 1978
	Germany	from 1968
	Japan	from 1977 (no addresses)
	PCT (WO)	from 1978
	US	from 1975
Agent name and address	EPO	from 1978
	Germany	from 1968
	PCT	from 1999
	US	from 1975

3.5 Other Thomson Scientific databases available on Dialog

The following additional Thomson Scientific databases are available for searching on Dialog:

- *Biosis Previews* (5; 55)
- *Biosis Toxicology* (157)
- *Chemistry Resource* (355)
- *Current Contents Search* (440)
- *Derwent Biotechnology Abstracts* (357)
- *Derwent Drug File* (376-377; 912-913)
- *Derwent World Patents Index First View* (331)
- *Index Chemicus* (302)
- *International Pharmaceutical Abstracts (IPA)* (74)
- *LitAlert* (670)
- *Patents Citation Index* (342)
- *Science Citation Index (SciSearch)* (34, 434)

For more information on these Thomson Scientific databases, visit www.scientific.thomson.com

4 Accessing *Derwent World Patents Index (DWPI)* On DIALOG

DWPI on DIALOG is available as File 351 and File 352. These two files are identical in coverage; File 351 is available to users everywhere except Japan and File 352 is available to Japanese users only.

DWPI Extended is available to selected subscribers as File 350.

To access the database enter the BEGIN (or B) command followed by the file number, after the '?' DIALOG prompt:

File Name	Description
B 351	Data from 1963 to date (Everywhere except Japan)
B 352	Data from 1963 to date (Japan only)
B 280	ONTAP learning file
B 350	Available to selected subscribers only

For a list of file specific online help messages use the commands:

FILE 350/351 Commands	FILE 352 Commands	Definition
HELP FIELDS 351	HELP FIELDS 352	for searchable fields
HELP FMT 351	HELP FMT 352	for output formats
HELP KIND 351	HELP KIND 352	for document kinds
HELP LIMIT 351	HELP LIMIT 352	for limits
HELP MAP 351	HELP MAP 352	for available MAP fields
HELP RATES 351	HELP RATES 352	for cost information
HELP SORT 351	HELP SORT 352	for available SORT fields
HELP RANK 351	HELP RANK 352	for special RANK fields

Access to *Derwent World Patents Index* is provided by Thomson Scientific via two different pricing structures: rates for Subscribers and a standard rate for all other online customers.

Subscribers may also be entitled to use the following search fields, depending on their level of subscription:

- CPI Manual Codes (Section 12.1)
- Plasdoc Fragmentation Codes (Section 12.2.1)
- Plasdoc Key Serials (Section 12.2.2)
- Enhanced Polymer Indexing (Section 12.2.3)
- Chemical Codes (Section 12.3.2)
- *DWPI* Registry Numbers (Section 12.3.3)
- Ring Index Numbers (Section 12.3.4)
- *DWPI* Compound Numbers (Section 12.3.5)

All Subscribers entitled to preferential rate access and *DWPI* Indexing (where applicable) must provide Thomson Scientific or its agents, with all their DIALOG User Numbers (not passwords), in order to be provided with the correct rates and level of access on DIALOG. If a Subscriber uses *Derwent World Patents Index* on DIALOG with a User Number that has not been reported to Thomson Scientific, or its agents, access will be at the standard rate and access to the in-depth indexing will be restricted.

File 280 is a low cost Online Training and Practice (ONTAP) learning file containing over 100,000 records from selected *Derwent World Patents Index* Updates. This file has all of the search fields and features of the complete database so that users can practice search techniques and learn the best ways to search and display records from *Derwent World Patents Index* at reduced connect and display charges.

DIALOGLINK

The DialogLink software is provided at no charge to Dialog customers. The current version of DialogLink is available for download from the following website:

<http://support.dialog.com/dialoglink/>

Dialog via the Internet

Dialog can be accessed via the internet at:

- www.dialogweb.com
- www.dialogclassic.com
- www.dialogselect.com

5 DWPI Record

WPI Acc no: 2004-581906

XRAM Acc no: C2004-212467

XRPX Acc No: N2004-459753

Syringe for taking samples of body fluid for analysis, especially self-testing in control of diabetes, has connecting system for attaching single-use sampling unit to plunger

Patent Assignee: HOFFMANN LA ROCHE & CO AG F (HOFF); MONCH R (MONC-I); ROCHE DIAGNOSTICS GMBH (HOFF); SACHERER K (SACH-I); SCHABBACH M (SCHA-I); SCHERER J (SCHE-I)

Inventor: MOENCH R; MONCH R; SACHERER K; SCHABBACH M; SCHERER J

Patent Family (7 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
DE 10302501	A1	20040805	DE 10302501	A	20030123	200457	B
WO 2004064636	A1	20040805	WO 2004EP117	A	20040110	200457	E
AU 2004206722	A1	20040805	AU 2004206722	A	20040110	200557	E
EP 1585444	A1	20051019	EP 2004701300	A	20040110	200568	E
			WO 2004EP117	A	20040110		
US 20060008389	A1	20060112	WO 2004EP117	A	20040110	200605	E
			US 2005178810	A	20050711		
BR 200406532	A	20051213	BR 20046532	A	20040110	200624	E
			WO 2004EP117	A	20040110		
JP 2006516723	W	20060706	WO 2004EP117	A	20040110	200645	E
			JP 2006500540	A	20040110		

Priority Applications (no., kind, date): DE 10302501 A 20030123

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
DE 10302501	A1	DE	14	17	
WO 2004064636	A1	DE			
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW				
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW				
AU 2004206722	A1	EN			Based on OPI patent WO 2004064636
EP 1585444	A1	DE			PCT Application WO2004EP117
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				
US 20060008389	A1	EN			Continuation of application WO 2004EP117
BR 200406532	A	PT			PCT Application WO 2004EP117
					Based on OPI patent WO 2004064636
JP 2006516723	W	JA	35		PCT Application WO 2004EP117
					Based on OPI patent WO 2004064636

Alerting Abstract DE A1

NOVELTY - Syringe for taking samples of body fluid for analysis has a connecting system (18) for attaching a single-use sampling unit (14) to the plunger (20).

DESCRIPTION - INDEPENDENT CLAIMS are also included for:

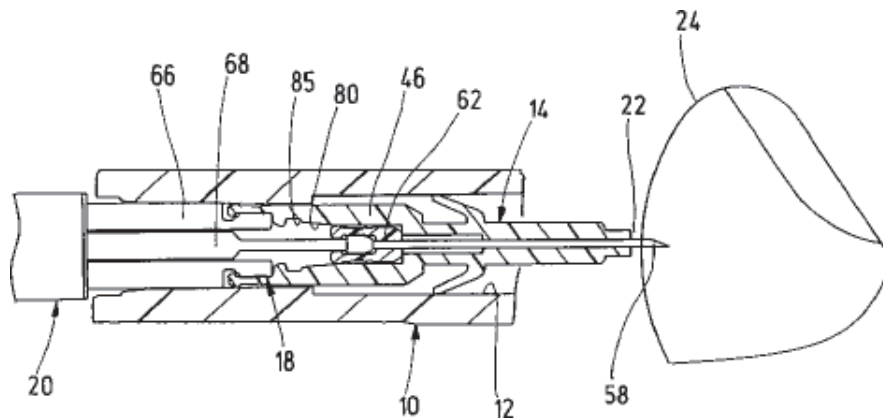
- A. a similar syringe in which the sampling unit is fitted with a sampling needle (58);
- B. a portable diagnostic apparatus incorporating the syringe;
- C. taking samples of body fluid for analysis using the syringe; and
- D. apparatus for taking samples of body fluid for analysis using disposable test units in which the sample is taken using a needle.

USE - The syringe is useful for self-testing in control of diabetes.
 ADVANTAGE - The syringe is easy to use, hygienic and safe to dispose of.
 DESCRIPTION OF DRAWINGS - The drawing shows a cross-section of the syringe in use.
 14 Sampling unit
 18 Connecting system
 20 Plunger
 58 Sampling needle
 66 Outer section of plunger
 68 Inner section of plunger

Technology Focus

PHARMACEUTICALS - Preferred Features: The connecting system comprises claws which engage to hold the plunger and sampling unit together. The plunger comprises an outer section (66) for moving the sampling unit and an inner section (68) for independently moving the needle. The sampling unit contains a capillary-active transport unit for body fluid. The syringe is sealed by a membrane which is punctured by the needle when it is ready for use. The cylinder (10) of the syringe contains a magazine of sampling units.

Main Drawing Sheet(s) or Clipped Structure(s)



Title Terms/Index Terms/Additional Words: SYRINGE; SAMPLE; BODY; FLUID; ANALYSE; SELF; TEST; CONTROL; DIABETES; CONNECT; SYSTEM; ATTACH; SINGLE; UNIT; PLUNGE

Class Codes

IPC	International Patent Classification			Status	Version Date
	Class Level	Scope	Position		
A61B-005/145; A61B-005/15			Main		"Version 7"
G01N-033/48			Secondary		"Version 7"
B01L-0003/00	A	I	F	B	20060101
A61B-0005/15	A	I		R	20060101
A61B-0005/15	A	I	L	B	20060101
G01N-0001/10	A	I	F	B	20060101
G01N-0033/49	A	I	L	B	20060101
G01N-0033/52	A	I	L	B	20060101
A61B-0005/15	C	I		R	20060101

US Classification, Issued: 422102000
 File Segment: CPI; EngPI; EPI
 DWPI Class: B04; S03; P31
 Manual Codes (EPI/S-X): S03-E13B1; S03-E14H1
 Manual Codes (CPI/A-N): B11-C02; B11-C09; B12-K04A

Chemical Indexing

Chemical Fragment Codes (M6):

01 M905 R170 R460 R515 R521 R537

Original Publication Data by Authority

Australia**Publication No.** AU 2004206722 A1 (Update 200557 E)

Publication Date: 20040805

Device and method for receiving a body fluid for analysis

Assignee: HOFFMANN LA ROCHE & CO AG F (HOFF)

Inventor: SACHERER K

MONCH R

SCHABBACH M

SCHERER J

Language: EN

Application: AU 2004206722 A 20040110 (Local application)

Priority: DE 10302501 A 20030123

Related Publication: WO 2004064636 A (Based on OPI patent)

Original IPC: A61B-5/15(A)

Current IPC: A61B-5/15(R,I,M,EP,20060101,20051008,A) A61B-5/15(R,I,M,EP,20060101,20051008,C)

Brazil**Publication No.** BR 200406532 A (Update 200624 E)

Publication Date: 20051213

Assignee: HOFFMANN LA ROCHE & CO AG F (HOFF)

Inventor: SACHERER K

MONCH R

SCHABBACH M

SCHERER J

Language: PT

Application: BR 20046532 A 20040110 (Local application)

WO 2004EP117 A 20040110 (PCT Application)

Priority: DE 10302501 A 20030123

Related Publication: WO 2004064636 A (Based on OPI patent)

Original IPC: A61B-5/15(A)

Current IPC: A61B-5/15(A)

Germany**Publication No.** DE 10302501 A1 (Update 200457 B)

Publication Date: 20040805

Vorrichtung und Verfahren zur Aufnahme einer Körperflüssigkeit für Analysezwecke

Assignee: Roche Diagnostics GmbH, 68305 Mannheim, DE (HOFF)

Inventor: Sacherer, Klaus-Dieter, 67281 Kirchheim, DE

Schabbach, Michael, 69469 Weinheim, DE

Monch, Ronald, 68549 Ilvesheim, DE

Scherer, Jorg, 67069 Ludwigshafen, DE

Agent: Wolf & Lutz, 70193 Stuttgart

Language: DE (14 pages, 17 drawings)

Application: DE 10302501 A 20030123 (Local application)

Original IPC: A61B-5/145(A) G01N-33/48(B)

Current IPC: A61B-5/145(A) G01N-33/48(B)

Original Abstract: Bei einer Vorrichtung zur Aufnahme einer Körperflüssigkeit für Analysezwecke, die ein Behältnis (10) und mindestens eine mittels einer Antriebseinheit (20) aus einer Führungskammer (12) des Behältnisses ausschiebbare und an einer Aufnahmestelle (22) mit der Körperflüssigkeit beaufschlagbare Probenaufnahmeeinheit (14) umfasst, wird eine Kopplungsvorrichtung (18) zum Koppeln der Probenaufnahmeeinheit (14) mit der Antriebseinheit (20) für eine Hin- und Ruckbewegung zwischen der Führungskammer (12) und der Aufnahmestelle (22) vorgeschlagen.

Claim:

1. Vorrichtung zur Aufnahme einer Körperflüssigkeit für Analysezwecke, mit einem Behältnis (10) und mindestens einer mittels einer Antriebseinheit (20) aus einer Führungskammer (12) des Behältnisses ausschiebbaren und an einer Aufnahmestelle (22) mit der Körperflüssigkeit beaufschlagbaren, vorzugsweise für einen Einmaltest bestimmten Probenaufnahmeeinheit (14), gekennzeichnet durch eine Kopplungsvorrichtung (18) zum Koppeln der Probenaufnahmeeinheit (14) mit der Antriebseinheit (20) für eine Hin- und Ruckbewegung zwischen der Führungskammer (12) und der Aufnahmestelle (22).

EPO

Publication No. EP 1585444 A1 (Update 200568 E)

Publication Date: 20051019

VORRICHTUNG UND VERFAHREN ZUR AUFNAHME EINER KORPERFLUSSIGKEIT FUR ANALYSEZWECKE

DEVICE AND METHOD FOR RECEIVING A BODY FLUID FOR ANALYSIS

DISPOSITIF ET PROCEDE POUR RECUEILLIR UN LIQUIDE ORGANIQUE A DES FINS D'ANALYSE

Assignee: F.HOFFMANN-LA ROCHE AG, Grenzacherstrasse 124, 4070 Basel, CH (HOFF)

Roche Diagnostics GmbH, Sandhofer Strasse 116, 68305 Mannheim, DE (HOFF)

Inventor: SACHERER, Klaus-Dieter, Westring 17, 67281 Kirchheim, DE

MONCH, Ronald, Hirschberger weg 17, 68549 Ilvesheim, DE

SCHABBACH, Michael, Talstrasse 61, 69469 Weinheim, DE

SCHERER, Jorg, Wolfhartstrasse 44, 67069 Ludwigshafen, DE

Agent: Pfiz, Thomas, Patentanwalte Wolf & Lutz, Hauptmannsreute 93, 70193 Stuttgart, DE

Language: DE

Application: EP 2004701300 A 20040110 (Local application)

WO 2004EP117 A 20040110 (PCT Application)

Priority: DE 10302501 A 20030123

Related Publication: WO 2004064636 A (Based on OPI patent)

Designated States: (Regional Original) AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

Original IPC: A61B-5/15(A)

Current IPC: A61B-5/15(R,I,M,EP,20060101,20051008,A) A61B-5/15(R,I,M,EP,20060101,20051008,C)

Original Abstract: A device for receiving a body fluid for analysis, comprising a container (10) and at

least one sample-receiving unit (14) which can be impinged upon by the body fluid at a receiving point and which can be extracted from a guide chamber (12) of the container by means of a drive unit (20).

According to the invention, a coupling device (18) is provided in order to couple the sample receiving unit (14) to the drive unit (20) to ensure back and forth movement between the guide chamber (12) and the receiving point (22).

Japan

Publication No. JP 2006516723 W (Update 200645 E)

Publication Date: 20060706

Language: JA (35 pages)

Application: WO 2004EP117 A 20040110 (PCT Application)

JP 2006500540 A 20040110 (Local application)

Priority: DE 10302501 A 20030123

Related Publication: WO 2004064636 A (Based on OPI patent)

Original IPC: A61B-5/15(B,I,H,JP,20060101,20060609,A,L) G01N-1/10(B,I,H,JP,20060101,20060609,A,F)

G01N-33/49(B,I,H,JP,20060101,20060609,A,L) G01N-33/52(B,I,H,JP,20060101,20060609,A,L)

Current IPC: A61B-5/15(B,I,H,JP,20060101,20060609,A,L) G01N-1/10(B,I,H,JP,20060101,20060609,A,F)

G01N-33/49(B,I,H,JP,20060101,20060609,A,L) G01N-33/52(B,I,H,JP,20060101,20060609,A,L)

United States

Publication No. US 20060008389 A1 (Update 200605 E)

Publication Date: 20060112

Magazine for annular capillary lancets

Assignee: Sacherer, Klaus-Dieter, Kirchheim, DE Residence: DE Nationality: DE (SACH-I)

Monch, Ronald, Ilvesheim, DE Residence: DE Nationality: DE (MONC-I)

Schabbach, Michael, Weinheim, DE Residence: DE Nationality: DE (SCHA-I)

Scherer, Jorg, Ludwigshafen, DE Residence: DE Nationality: DE (SCHE-I)

Inventor: Sacherer, Klaus-Dieter, Kirchheim, DE Residence: DE Nationality: DE

Monch, Ronald, Ilvesheim, DE Residence: DE Nationality: DE

Schabbach, Michael, Weinheim, DE Residence: DE Nationality: DE

Scherer, Jorg, Ludwigshafen, DE Residence: DE Nationality: DE

Agent: WOODARD, EMHARDT, MORIARTY, MCNETT & HENRY LLP, BANK ONE TOWER/CENTER, 111 MONUMENT CIRCLE, SUITE 3700, INDIANAPOLIS, IN, US

Language: EN

Application: WO 2004EP117 A 20040110 (Continuation of application)

US 2005178810 A 20050711 (Local application)

Priority: DE 10302501 A 20030123

Original IPC: B01L-3/00(B,I,H,US,20060101,20060112,A,F)

Current IPC: B01L-3/00(B,I,H,US,20060101,20060112,A,F)

Original US Class (secondary): 422102

Original Abstract: A device for receiving a body fluid for analysis, comprising a container and at least one sample-receiving unit which can be impinged upon by the body fluid at a receiving point and which can be extracted from a guide chamber of the container by means of a drive unit. According to the invention, a coupling device is provided in order to couple the sample receiving unit to the drive unit to ensure back and forth movement between the guide chamber and the receiving point.

Claim:

1. Device for receiving a body fluid for analytical purposes comprising a container and at least one sample receiving unit preferably for a single-use test that can be pushed out of a guide chamber of the container by means of a drive unit and to which the body fluid can be applied at a receiving site, characterized by a container that is designed as a magazine for storing a plurality of sample receiving units and a coupling device to couple the sample receiving unit to the drive unit for a forwards and backwards movement between the guide chamber and the receiving site.

WIPO

Publication No. WO 2004064636 A1 (Update 200457 E)

Publication Date: 20040805

VORRICHTUNG UND VERFAHREN ZUR AUFNAHME EINER KORPERFLUSSIGKEIT FUR ANALYSEZWECKE

DEVICE AND METHOD FOR RECEIVING A BODY FLUID FOR ANALYSIS
DISPOSITIF ET PROCEDE POUR RECUEILLIR UN LIQUIDE ORGANIQUE A DES FINS D'ANALYSE

Assignee: (*except DE US*) F.HOFFMANN-LA ROCHE AG, Grenzacherstr. 124, CH-4070 Basel, CH

Residence: CH Nationality: CH (HOFF)

(*only DE*) ROCHE DIAGNOSTICS GMBH, Sandhofer Strasse 116, 68305 Mannheim, DE Residence: DE Nationality: DE (HOFF)

(*only US*) SACHERER, Klaus-Dieter, Westring 17, 67281 Kirchheim, DE Residence: DE Nationality: DE

(*only US*) MONCH, Ronald, Hirschberger weg 17, 68549 Ilvesheim, DE Residence: DE Nationality: DE

(*only US*) SCHABBACH, Michael, Talstrasse 61, 69469 Weinheim, DE Residence: DE Nationality: DE

(*only US*) SCHERER, Jorg, Wolfhartstrasse 44, 67069 Ludwigshafen, DE Residence: DE Nationality: DE

Inventor: SACHERER, Klaus-Dieter, Westring 17, 67281 Kirchheim, DE Residence: DE Nationality: DE

MONCH, Ronald, Hirschberger weg 17, 68549 Ilvesheim, DE Residence: DE Nationality: DE

SCHABBACH, Michael, Talstrasse 61, 69469 Weinheim, DE Residence: DE Nationality: DE

SCHERER, Jorg, Wolfhartstrasse 44, 67069 Ludwigshafen, DE Residence: DE Nationality: DE

Agent: PFIZ, Thomas, Hauptmannsreute 93, 70193 Stuttgart, DE

Language: DE

Application: WO 2004EP117 A 20040110 (Local application)

Priority: DE 10302501 A 20030123

Designated States: (National Original) AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

(Regional Original) AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Original IPC: A61B-5/15(A)

Current IPC: A61B-5/15(R,I,M,EP,20060101,20051008,A) A61B-5/15(R,I,M,EP,20060101,20051008,C)

Original Abstract: Bei einer Vorrichtung zur Aufnahme einer Korperflussigkeit fur Analyse Zwecke, die ein Behaltnis (10) und mindestens eine mittels einer Antriebseinheit (20) aus einer Fuhrungskammer (12) des Behaltnisses ausschiebbare und an einer Aufnahmestelle (22) mit der Korperflussigkeit beaufschlagbare Probenaufnahmeeinheit (14) umfasst, wird eine Kopplungsvorrichtung (18) zum Koppeln der Probenaufnahmeeinheit (14) mit der Antriebseinheit (20) fur eine Hin- und Ruckbewegung zwischen der Fuhrungskammer (12) und der Aufnahmestelle (22) vorgeschlagen.

A device for receiving a body fluid for analysis, comprising a container (10) and at least one sample-receiving unit (14) which can be impinged upon by the body fluid at a receiving point and which can be extracted from a guide chamber (12) of the container by means of a drive unit (20). According to the invention, a coupling device (18) is provided in order to couple the sample receiving unit (14) to the drive unit (20) to ensure back and forth movement between the guide chamber (12) and the receiving point (22).

L'invention concerne un dispositif pour recueillir un liquide organique a des fins d'analyse, ledit dispositif presentant un contenant (10) et au moins une unite de reception d'echantillon (14) pouvant coulisser au moyen d'une unite d'entrainement (20) pour sortir d'une chambre de guidage (12) du contenant et pouvant recevoir le liquide organique en un point de reception (22). Selon l'invention, un dispositif d'accouplement (18) servant a accoupler l'unite de reception d'echantillon (14) avec l'unite d'entrainement (20) permet un mouvement de va-et-vient entre la chambre de guidage (12) et le point de reception (22).

6 DIALOG Search Features

This section gives an overview of some of the search features available on DIALOG. An overview of DIALOG display features can be found in Section 14. Full details of all DIALOG features can be found in documentation available directly from DIALOG, a company of The Thomson Corporation.

6.1 Truncation

Truncation allows terms to be searched with one or more characters missing, for example to take into account variations in spelling or plural forms of words.

Right-hand and internal truncation is available as shown below:

Symbol	Definition	Where	Example	Retrieves
?	Any number of characters including zero	End	S CATALY?	catalytic, catalysis, catalyst, catalysts.....
? ?	One character exactly	End	S DYE? ?	dyes, dyer; but not dyeing, dyeable
???	Maximum number of additional characters equal to the number of ?	End	S PLANT???	plant, plants, planter, planting...; but not plantation
?	Allows character replaced by ? to vary - one character per ?	Internal	S DIS?S	discs, disks

6.2 Proximity Operators

Proximity operators permit the searching of phrases or concepts expressed by positional relationships of words that represent them. The following proximity operators are available on DIALOG:

Proximity Operator	Definition
(W) ¹	terms adjacent to each other in the specified order
(nW) ¹	terms adjacent (with n or fewer intervening words) in the specified order
(N) ¹	terms adjacent to each other in either order
(nN) ¹	terms adjacent (with n or fewer intervening words) in either order
(S) ^{1,2,3,4}	terms occur in the same subfield, in any order
(F) ^{1,4}	terms occur in the same field
(T) ^{1,4,5}	segments occur within the same term
(L) ^{1,6}	terms occur in Title Terms field

In addition, NOT proximity is available in the format: (NOT n OPERATOR),

Where: n = an optional integer allowing inclusion of intervening words

OPERATOR = one of the proximity operators: W, N, S, F, L

Using a NOT proximity operator allows you to exclude a search term potentially related to another search term. For example, search for 'fossil', but not 'fossil fuel':

```
S FOSSIL (NOT W) FUEL
```

Notes

1. A 'term' is a string of alphanumeric characters separated from other terms by blanks and/or non-alphanumeric characters.
 2. The meaning of 'subfield' depends on the field. For example in the Title field the (S) operator searches the entire title and is equivalent to using the (F) operator. In the abstract field, the (S) operator searches an entire paragraph.
 3. The (S) proximity operator is used to link together:
 - all of the patent and application numbers and dates for a single document
 - chemical codes in fields M0-M6
 - polymer indexing codes
 4. The proximity operators (T), (S) and (F) have special functions when used with enhanced polymer indexing codes (see Section 12.2.3 PS=).
 5. The (T) operator is used for searching chemical segments contained in a single word.
For example: S chloro (T) benzene **will retrieve Dichloro methyl benzene.**
- See Section 6.3 for more information on chemical name segmentation and the (T) operator.
6. Searching *term1(L)term2* is the same as searching *term1/DE AND term2/DE*.

? T 2/TI,AB/11

2/TI,AB/11

Derwent WPI

(c) 2006 The Thomson Corporation. All rights reserved

Manufacture of trifluoromethoxycyclohexane derivatives for use as raw material for liquid crystal involves catalytic hydrogenation of trifluoromethoxybenzene derivatives

Alerting Abstract JP A

NOVELTY - Trifluoromethoxycyclohexane derivatives (2) are produced by hydrogenation of trifluoromethoxybenzene derivatives (1), using at least one hydrogenation catalyst selected from metal or alloy of rhodium, ruthenium, platinum, palladium, iridium, osmium and/or Raney nickel, and compounds containing the metals.

DESCRIPTION - Trifluoromethoxycyclohexane derivatives of formula (2) are produced by hydrogenation of

trifluoromethoxybenzene derivatives of formula (1) using at least one hydrogenation catalyst selected from metal or alloy of rhodium, ruthenium, platinum, palladium, iridium, osmium and/or Raney nickel.

3 Use the /FW qualifier to restrict retrieval to the full form of the word only

e.g.	SFLUOROBENZENE/FW	retrieves only	fluorobenzene
	SGLYCOL/FW	retrieves only	glycol
	BUTNOT		diglycol

? S FLUOROBENZENE/FW

S2 687 FLUOROBENZENE/FW

Derwent WPI

(c) 2006 The Thomson Corporation. All rights reserved

Electrolyte, useful for lithium ion secondary battery, comprises a lithium salt, a non-aqueous organic solvent, gamma-butyrolactone and a wettability activator

Alerting Abstract US A1

NOVELTY - Electrolyte (A), for lithium ion secondary battery, comprises a lithium salt, a non-aqueous organic solvent, gamma-butyrolactone and a wettability activator...

Technology Focus

ELECTRICAL POWER AND ENERGY - Preferred Components: The cathode active material is a lithiated intercalation oxide. The anode active material is crystalline carbon, amorphous carbon, carbon composites and lithium metal...The non-aqueous organic solvent further includes an aromatic hydrocarbon-based organic solvent (preferably benzene, fluorobenzene, chlorobenzene, bromobenzene, toluene, xylene and/or mesitylene)...

6.4 LIMIT Qualifiers

LIMIT qualifiers can be used to reduce the size of an answer set, creating a new answer set in the process. The following sections describe the LIMIT qualifiers available in *DWPI*. LIMIT qualifiers apply to sets or terms (prefixed or suffixed) and act as AND.

Presence or Absence of Abstracts (/ABS, /NOABS)

Use the LIMIT qualifier /ABS to restrict a search to those records that have abstracts, or the qualifier /NOABS to restrict the search to records without abstracts. For example:

```
S S3/ABS
```

Language (/ENG)

All patent families in the database that contain a member from a country normally publishing in English are specifically coded for retrieval by the LIMIT suffix /ENG. The countries that generate this code are Australia, Canada (except those documents coded LA=FRENCH), Israel (except those documents coded LA=HEBREW), United Kingdom, United States and South Africa, together with European and PCT (World) documents coded LA=ENGLISH.

The LIMIT qualifier /ENG can be used to restrict a set of documents to English. For example:

```
S FREON/ENG
```

6.5 MAP

MAP creates a SearchSave of terms extracted from a particular field in a record or set of records as defined by the user. The SearchSave can then be executed in the same file or in any other file that contains records with the same types of fields using the EX (EXECUTE) or EXS (EXECUTE STEPS) command with the system-assigned serial number.

Some MAP qualifiers alter the qualifiers of extracted terms as they are stored in the SearchSave.

For more information about the MAP command, issue the online command "HELP MAP", or consult the DIALOG system literature.

A full listing of all the MAP qualifiers in *DWPI* is given in Appendix 15.1

6.6 RANK and Statistical Analysis

DWPI is a highly useful source of competitor information, especially considering that most technical information contained in patents is never published elsewhere. The RANK command provides the ability to perform trend or statistical analysis on an existing DWPI answer set.

To use this command, simply enter RANK and the desired field or multiple fields. (A full listing is given in Appendix 15.1.) The DIALOG system then extracts terms from the specified field in a set of records and lists them in ranked order, with the most highly posted term appearing first. For example to RANK the references in answer set S5 according to the number of occurrences of each patent country:

```
? RANK PC S5
>>>RANK will process the first 50000 records or 50000 terms,
>>>whichever is reached first.
Started processing RANK
...Ranking 100 of 348 records
...Ranking 200 of 348 records
...Ranking 300 of 348 records
Completed Ranking 348 records
DIALOG RANK Results
-----
RANK: S5/1-348      Field: PC= File(s): 351
(Rank fields found in 348 records - 33 unique terms) Page 1 of 5

RANK No.   Items   Term
-----
      1      203    JP
      2       89    DE
      3       84    US
      4       53    EP
      5       36    SU
      6       27    CN
      7       25    CA
      8       22    BR

P= next page      Pn=Jump to page n
P-=previous page  M= More Options      Exit=Leave RANK

To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.

Enter desired option(s) or enter RANK number(s) to save terms.
?
```

Notes:

The maximum number of terms that can be ranked is 50,000 though it is recommended that smaller sets are analysed as processing may take a while for a large set.

There may be a per item charge for the data that is being analysed - please check the current pricing details for further information

For more information about RANK command capabilities, enter the online command “HELP RANK” or “HELP RANK 351” for specific RANK field options.

6.7 SORT

The SORT command is used to rearrange an answer set in alphanumeric order of the specified field(s). The result of a SORT is a new answer set, which can be displayed or printed like any other answer set. SORT can arrange the answer set either in ascending (A) or descending (D) order. For example, to SORT answer set S5 according to Publication Date (PD=), from most recent to oldest:

```
SORT S5/ALL/PD, D
```

A SORT command can also be embedded in a PRINT command, with the resulting offline print output sorted according to the parameters specified. For example, to order an offline print of answer set S7 in display format 5, sorted according to Patent Assignee in ascending order:

```
PRINT S7/5/ALL/PA
```

SORT is performed on Invention level data only and can be used on the following fields:

Code	Field	Section
AA	DWPI Accession Number	(Section 11.1)
AU	Inventor (Author)	(Section 8.5)
CK	Patent Assignee / Company Code	(Section 8.3)
NP	Number of Patents	(Section 9.12)
PA	Patent Assignee and Company Name	(Sections 8.1 and 8.2)
PD	Publication Date of Basic Patent	(Section 10.1)
PN	Patent Number of Basic Patent	(Section 9.1)
TI	Title	(Section 7.2)

6.8 Images

DWPI provides access to over 8 million images of technical patent drawings and chemical structures that best represent the invention.

Electrical and engineering drawings are available from 1988 to present, and show detailed diagrams which help to clarify the meaning of the accompanying abstract. Chemical structure drawings are available from 1992.

Images on DIALOG can be TYPED or DISPLAYED and PRINTED as part of offline output.

The image can be displayed by using a predefined format containing an image (see Section 14.1) or by adding the display qualifier IM to the TYPE or PRINT command. To display in full the first six records of your answer set with their associated images:

```
? T S1/9,IM/1-6  
  
or  
  
? T S1/19/1-6
```

To limit your answer set to records containing images, use the command RT=Image

```
? S S1 AND RT=IMAGE
```

6.9 Country Code (CC=) Super Search Qualifier (See Section 9.5)

To simplify comprehensive searching of patent countries, DIALOG has created a Super field: CC=. When appropriate data is searched with this Super field qualifier, the search includes data from all of the related individual fields.

```
? S CC=DE
```

A country code search using the qualifier CC= searches both the Designated States (DS=) field and the Patent Country (PC=) field, plus country codes associated with the Patent Assignee (PA=) and AU=(Value-add plus original inventor details) fields.

6.10 IDPAT

IDPAT used on search results from *DWPI* can easily pull together continuation or divisions or any records that have a priority or document number in common within the same set.

After a set has been created in a patent search, you can issue one of the following commands to have DIALOG identify patent groups and duplicates:

IDPAT	displays a summary plus a patent group table and defaults to the last set created
IDPAT Sn	displays a summary plus a patent group table for a designated set number
IDPAT SHORT	displays a summary and defaults to the last set created
IDPAT Sn SHORT	displays a summary for a designated set number

IDPAT examines the set of records and generates a summary and a table of patent groups. The summary includes the count of family groups, unique patent records not part of a group, and non-patent records contained in the set. The patent group table identifies each unique group by a G number, indicates the number of records in each group, the file and record numbers for primary records, and the file and record numbers for duplicate records:

```
? IDPAT S2
.
.
Summary:
S2 has 1056 records ordered as follows:
  10 patent groups (records 1-27)
 1029 patent records without duplicates (records 28-1056)

Group Table:
  Groups  Total      Primary  Record  Duplicates  Record
   in Group          Records  Numbers          Numbers
-----
  G1      4          F351    1-4
  G2      2          F351    5-6
  G3      2          F351    7-8
  G4      2          F351    9-10
  G5      5          F351   11-15
  G6      2          F351   16-17
  G7      2          F351   18-19
  G8      3          F351   20-22
  G9      3          F351   23-25
  G10     2          F351   26-27

1.Show Group Table      4.TYPE or PRINT Selected Records
2. Show Summary        5.TYPE or PRINT Primary and Non-Duplicate
3.Quit                  Records

Enter an option (e.g., 4).
```

After the table display (or summary if you used IDPAT SHORT), five options are available:

Display option	Definition
1. Show Group Table	re-displays the patent group table (if IDPAT SHORT is used, the table will display for the first time).
2. Show Summary	re-displays summary information: number of patent groups, patent records without duplicates, and non-patent records in the IDPAT set.
3. Quit	allows you to leave IDPAT and return to command mode.
4. TYPE or PRINT Selected Records	enables the display or delivery (via e-mail, fax, SitePrints, or postal delivery) of specified records. You will be prompted for a record format and the group or record numbers you want to display or deliver.
5. TYPE or PRINT Primary & Non-Duplicate Records	allows you to display or deliver records but creates an additional set that only contains primary and non-duplicate records

IDPAT allows up to 50,000 records in a set or 400,000 patent or application numbers, whichever limit is reached first.

7 Word Searching

7.1 Basic Index

Qualifier

Search Qualifier	-
Display Qualifier	-
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	-

Search Format

S term

Search for single words without the use of search qualifiers, possibly combined with Boolean and/or proximity operators (W), (N), (S), or (F).

Content

The Basic Index conveniently gathers all subject words from both the Invention Level and Member Patent Level into a single index for general subject searching without the necessity of using search qualifiers.

The Basic Index contains single words from the fields listed below, without punctuation.

A “word” is defined as any alphabetic or numeric character(s) separated by a space or non-alphanumeric character.

Subject Word	Definition
Title Words	all words from the value-add <i>DWPI</i> Title, plus all words from the original title, where available (German, French or English language)
Title Terms	standardised forms of words in the value-add <i>DWPI</i> Title
Additional Words	words describing concepts not included in the value-add <i>DWPI</i> Title
Tech Focus	supplementary information to the value-add <i>DWPI</i> Abstract
Novelty Words	words describing the novelty of the invention
Abstract Words	all words from the value-add <i>DWPI</i> Abstract, Extension Abstract and Documentation Abstract, plus all words from the original abstract (where available - German, French or English language)
First Claim Words	all words from the original first Claim, where available (German, French or English language)

Searching

British & American Spelling

In the past British Spelling was used in *DWPI*, however now American spelling is used. As a precaution, both spellings should be covered in the search strategy to ensure complete retrieval:

?	S	ALUMINIUM OR	ALUMINUM
		243541	ALUMINIUM
		146209	ALUMINUM
S1		331191	ALUMINIUM OR ALUMINUM

Stop Words

DIALOG does not apply a ‘stop word’ list in *DWPI*. All words are indexed and searchable. To search a DIALOG system word, such as AND, enclose the word in quotes:

?	S	"AND-GATE"
S2		14461 "AND-GATE"

Details of DIALOG system words can be found at <http://support.dialog.com/>

Abbreviations

Standard abbreviations have been used in the fields that make up the Basic Index. The corresponding non-abbreviated terms are not indexed, and for comprehensive retrieval both the abbreviation and the complete word should be searched.

A listing of all Thomson Scientific standard abbreviations is given in Appendix 15.3.

Chemical Formulae

When searching for linearised chemical formulae within text, e.g. $-(C=O)-CH_2$, non-alphanumeric characters are removed on indexing. Proximity operators should be used to replace them in searching:

?	S C(W) O (W) CH2
	2257004 C
	395206 O
	140095 CH2
S1	2976 S C(W) O (W) CH2
?	T 1/K/1
	1/K/1
	Derwent WPI
	(c) 2006 The Thomson Corporation. All rights reserved.
	Technology Focus ...
	derivative of formula (NC-CH=(R5)(NH2)) with 1,3-dicarbonyl derivative of formula (R2-(C=O)-CH2-(C=O)-R3) and an aldehyde derivative of formula (R1-CHO) in presence of alcoholic...

Proximity Operators

Searching for terms in the Basic Index with proximity operators will retrieve records with the search terms in the same field or subfield, depending on the proximity operator used. For example, to search for computer and chip in the Basic Index with up to 3 words in between, use the (3W) operator:

?	S COMPUTER(3W)CHIP
	592938 COMPUTER
	190061 CHIP
S2	1054 S COMPUTER(3W)CHIP
T	2/7/1
	6/7/1
	Derwent WPI
	(c) 2006 The Thomson Corporation All rights reserved
	0014638881 <i>Drawing available</i>
	WPI Acc no: 2004-820881/200481
	XRFX Acc No: N2004-648123
	Optical odometer system for measuring traveling distance of vehicle e.g. car, has A/D converter converting sensed image to digital form, and processor calculating distance traveled with respect to surface between digital images
	Patent Assignee: GAINSBORO J L (GAIN-I); SINCLAIR K H (SINC-I); WEINSTEIN L D (WEIN-I); WILLISSON P G (WILL-I)
	Inventor: GAINSBORO J L; SINCLAIR K H; WEINSTEIN L D; WILLISSON P G

Patent Family (1 patents, 1 countries)						
Patent Number	Kind	Date	Application Number	Kind	Date	Update Type
US 20040221790	A1	20041111	US 2003467729	P	20030502	200481 B
			US 2004786245	A	20040224	
Priority Applications (no., kind, date): US 2003467729 P 20030502; US 2004786245 A 20040224						
Patent Details						
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20040221790	A1	EN	16	10	Related to Provisional	
US 2003467729						
Alerting Abstract US A1						
NOVELTY - The system has optics (907) coupled to an image sensor (903) to image a portion of a surface onto the sensor. An A/D converter (900) converts a sensed image to digital form. A computer memory (905) stores data derived from sequentially captured digital images. A clock oscillator provides a time reference. A digital processor (901) calculates distance traveled with respect to the surface between digital images.						
DESCRIPTION - An INDEPENDENT CLAIM is also included for a method of optical odometry.						
USE - Used for measuring a traveling distance of a vehicle e.g. car, truck, bulldozer, and snowmobile.						
ADVANTAGE - The system facilitates navigation of autonomous agricultural equipment and sufficient accuracy to derive real-time vehicle velocity with enough precision, thus facilitating highly accurate automated velocity-compensated application of fertilizer, herbicides, and pesticides in agricultural environments. The system provides accurate vehicle odometry information, even under conditions where vehicle wheels are slipping.						
DESCRIPTION OF DRAWINGS - The drawing shows a side view of an optical odometer system mounted underneath a moving vehicle.						
900 A/D converter						
901 Digital processor						
903 Image sensor						
905 Computer memory						
907 Optics						
Title Terms/Index Terms/Additional Words: OPTICAL; ODOMETER; SYSTEM; MEASURE; DISTANCE; VEHICLE; CAR; CONVERTER; CONVERT; SENSE; IMAGE; DIGITAL; FORM; PROCESSOR; CALCULATE; TRAVEL; RESPECT; SURFACE						
Class Codes						
International Patent Classification						
IPC	Class Level	Scope	Position	Status	Version Date	
G01C-003/08			Main		"Version 7"	
US Classification, Issued: 11662.1, 702165, 3564.03						
File Segment: EPI						
DWPI Class: S02; T01; T05; X22						
United States						
Publication No. US 20040221790 A1 (Update 200481 B)						
Publication Date: 20041111						
Method and apparatus for optical odometry						
Assignee: Sinclair, Kenneth H., Newton, MA, US (SINC-I)						
Willisson, Pace Gaillard, Medway, MA, US (WILL-I)						
Gainsboro, Jay Loring, Framingham, MA, US (GAIN-I)						
Weinstein, Lee Davis, Arlington, MA, US (WEIN-I)						
Inventor: Sinclair, Kenneth H., Newton, MA, US						
Willisson, Pace Gaillard, Medway, MA, US						
Gainsboro, Jay Loring, Framingham, MA, US						
Weinstein, Lee Davis, Arlington, MA, US						
Agent: LEE WEINSTEIN, 35 FAIRMONT ST #3, ARLINGTON, MA, US						
Language: EN (16 pages, 10 drawings)						

Application: US 2003467729 P 20030502 (Related to Provisional)
 US 2004786245 A 20040224 (Local application)
 Original IPC: G01C-3/08(A) G01B-3/12(B) G01B-5/02(B) G01B-5/04(B) G01B-7/02(B) G01B-7/14(B) G01B-11/02(B) G01B-11/14(B) G01B-13/02(B) G01B-21/02(B) G01C-22/00(B) G01P-5/00(B) G06F-15/00(B)
 Current IPC: G01C-3/08(A) G01B-3/12(B) G01B-5/02(B) G01B-5/04(B) G01B-7/02(B) G01B-7/14(B) G01B-11/02(B) G01B-11/14(B) G01B-13/02(B) G01B-21/02(B) G01C-22/00(B) G01P-5/00(B) G06F-15/00(B)
 Original US Class (main): 11662.1
 Original US Class (secondary): 702165 3564.03
 Original Abstract: A method and apparatus for optical odometry are disclosed which inexpensively facilitate diverse applications including indoor/outdoor vehicle tracking in secure areas, industrial and home robot navigation, automated steering and navigation of autonomous farm vehicles, shopping cart navigation and tracking, and automotive anti-lock braking systems. In a preferred low-cost embodiment, a telecentric lens is used with an **optical computer mouse chip** and a microprocessor. In a two-sensor embodiment, both rotation and translation are accurately measured.
 Claim: What is claimed is:

- 1.1. An optical odometer system for measuring travel over a surface, comprising:
- an electronic image sensor having freedom of motion parallel to said surface in at least one dimension;
 - optics coupled to said image sensor so as to image a portion of said surface onto said image sensor at a known scale factor;
 - an analog-to-digital converter for converting a sensed image to digital form;
 - computer memory for storing data derived from sequentially captured digital images;
 - a clock oscillator for providing a time reference; and
 - distance calculating means for calculating distance traveled with respect to said surface between sequentially captured digital images.

Restricting Basic Index Searches

It is possible to restrict searches in the Basic Index to specific fields using the following suffixes:

Suffix	Definition
/AB	restricts the search to the original and value-add <i>DWPI</i> Abstracts (see Section 7.3)
/CM	restricts the search to the original first Claim (see Section 7.4)
/DA	restricts the search to the <i>DWPI</i> Abstracts, including Extension Abstracts and Documentation Abstracts
/DO	restricts the search to <i>DWPI</i> Documentation Abstract (see Section 7.3.4)
/NV	restricts the search to <i>DWPI</i> Novelty Terms
/TA	restricts the search to the value-add <i>DWPI</i> Title and <i>DWPI</i> Abstracts, including Extension Abstracts
/TD	restricts the search to the <i>DWPI</i> Title (see Section 7.2.1)
/TF	restricts the search to <i>DWPI</i> Technology Focus terms
/TI	restricts the search to the Titles (all original and value-add <i>DWPI</i> Titles (see Section 7.2)
/TT	restricts the search to Title Terms (see Section 7.2.3)
/XA	restricts the search to the <i>DWPI</i> Extension Abstract terms (see Section 7.3.5)
/TX	restricts the search to all Abstracts except the Extension Abstract

7.2 Titles

Qualifier

Search Qualifier	/TI (/TD)
Display Qualifier	TI (TD)
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	TI

Search Format

S term/TI or S term/TD

TI is a super search index covering both the value-add *DWPI* title and original author titles, where available. See Section 7.2.1 for details of restricting searches to the value-add titles (TD).

7.2.1 Value-add *DWPI* Title (/TD)

Qualifier

Search Qualifier	/TD
Display Qualifier	TD
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	TI

Search Format

S term/TD

Content

DWPI 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.

All words from the Thomson Scientific-assigned titles are searchable in /TI and /TD. Please note that the Title Terms, the preferred forms of title words, are searchable in /TT. However, the additional words (supplementing the title) are indexed in /TI and /TD as well as in /TT.

Searching

Searching the *DWPI* value-add Title field (/TD) restricts a search further than by searching the entire Basic Index (Section 7.1), but relevance may be higher because of the nature of the *DWPI* Title. Use of this field may give more precise results than searching some of the broader Title Terms (see Section 7.2.3). When searching for a known original title, users should remember that Thomson Scientific does not input the original title or its exact translation in /TD at the Invention Level, but provides an enhanced more informative title (see 7.2.2 for further information on the availability of original titles).

Words in the Title field may be searched using Boolean and/or proximity operators. However, as the title is written in two parts separated by a hyphen (-), the (W) proximity operator does not work across the hyphen and will search the two parts of the title separately.

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

From *DWPI* Update 197804 until the end of 1998, the @ symbol was 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 was also used to differentiate between the unsubstituted, uncompounded polymer and its copolymers, for example:

POLYETHYLENE@	unsubstituted, uncompounded
POLYETHYLENE	copolymers

From the beginning of 1978 (*DWPI* Update 197804) until the end of 1998 where a monomer is in polymeric form, for example propylene copolymer, DIALOG indexes this as polypropylene. To search for unpolymerised propylene, search PROPYLENE@.

Search results may be sorted by title. For example, to create a new set in which the records from set S4 are sorted alphabetically by first word of the title:

```
SORT S4/ALL/TI
```

7.2.2 Original Title (/TI)

Content

Original author titles in German, English and French may be available at the Member Patent Level. All words from the original author titles are indexed and searchable, but in /TI only.

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
- Australian applications (AU-A) since 2004
- United Kingdom granted patents (GB-B) since 2004

Compound words containing hyphens, commas, etc. are broken into single words at all non-alphanumeric characters and punctuation is removed.

Searching

Original Titles can only be searched using /TI. Words in the Title field may be searched using Boolean and/or proximity operators.

```
? S COMPUTER/TI
? S MANTEL/TI
? S VOITURE/TI
? S KRAFTFAHRZEUGKAROSSERIE/TI AND PC=DE
```

It should be remembered that original titles may often be very concise so users should consider searching them in combination with the Thomson Scientific value-add title as an additional means to retrieve relevant subject matter (see 7.2.2).

7.2.3 Title Terms and Additional Words

Qualifier

Search Qualifier	/TT
Display Qualifier	TT
MAP Qualifier	-
RANK Qualifier	TT
SORT Qualifier	-

Search Format

S term/TT (possibly combined with AND, OR and NOT)

Content

Title Terms (/TT) are the preferred forms of words appearing in the Thomson Scientific-assigned Titles. They are generated automatically by 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." (For a complete listing see the Title Terms User Guide.)

The following words are ignored when titles are scanned by Thomson Scientific 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		

However, these words are searchable in the Basic Index and Title, (as described in Sections 7.1 and 7.2).

Since DWPI Update 197804, additional words have been added to the title terms to further enhance the title. Additional words are searchable with /TT as well as in the Basic Index without qualification. These additional words are all included in the Title Terms User Guide.

Searching

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 Scientific-assigned 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 /DA or /AB 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.

Since the order of words in the title terms field is not significant, the (W) operator is not available for use in the Title Terms field, unless the terms are hyphenated. Boolean logic is available.

Multi-word terms, in use since *DWPI* Update 197804 until the end of 1998, are given in the *Derwent World Patents Index* Title Terms User Guide with equal signs linking the individual words, e.g. X=RAY. On *DIALOG*, replace the “=” with “-” when searching these terms.

```
?      S  X-RAY/TT
S4     18932      S  X-RAY/TT
```

```
?      T  4/TT/1
```

```
9/TT/1
```

Derwent WPI

(c) 2006 The Thomson Corporation All rights reserved

Title Terms/Index Terms/Additional Words: MOBILE; X-RAY; UNIT; EXTEND; CABLE; CONNECT; IMAGE; DETECT; FIT; PROTECT; SHEATH; CLEAN; SYSTEM; REEL

From *DWPI* Update 197804 until the end of 1998 the @ symbol 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

From the beginning of 1978 (*DWPI* Update 197804) until the end of 1998 where a monomer is in polymeric form, for example propylene copolymer, *DIALOG* indexes as polypropylene. To search for unpolymerised propylene, search PROPYLENE@.

Rank

The RANK command can be used to analyse the most frequent Title Terms applied to a set of known results and give an indication on how to broaden a search in your area of interest.

```
? RANK TT S14/ALL
>>>RANK will process the first 50000 records or 50000 terms,
>>>whichever is reached first.
Started processing RANK
Completed Ranking 60 records
DIALOG RANK Results
-----
RANK: S14/1-60      Field: /TT      File(s): 351
(Rank fields found in 60 records - 381 unique terms) Page 1 of 48

RANK No.      Items      Term
---- ---      -
1              34      SURFACTANT
2              31      POLYMERISE
3              20      CONTAIN
4              13      EMULSION
5              12      USEFUL
6              11      AQUEOUS
7              10      ACID
8              10      COMPOSITION
P = next page      Pn = Jump to page n
P- = previous page  M = More Options      Exit = Leave RANK
```

7.3 Abstracts

Qualifier

Search Qualifiers	/AB
Display Qualifiers	AB
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	-

Search Format

S term/AB

All abstract words are searchable in the basic index without a search qualifier. The /AB index comprises all abstracts at the Invention and Member Patent Levels, searching all First Level and value-add *DWPI* Abstracts.

A display of /AB will return all of these Abstracts. See 7.3.1 and 7.3.3-7.3.5 to restrict searches to the value-add *DWPI* Abstracts.

7.3.1 *DWPI* Alerting Abstract

Qualifier

Search Qualifiers	/DA, /DO, /NV, /TF, /TX, /XA
Display Qualifiers	AB, AE, BA, DA, DO, NV, TF, TX, XA
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	-

Search Format

S term/DA

Content

The majority of records in *DWPI* (88%) 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.

The specific /DA index comprises only the abstracts at the Invention Level – the value-add *DWPI* abstracts.

The /AB index comprises ALL abstracts at the Invention and Member Patent Levels. A display of /DA however will only return the Invention Level Abstract.

Basic Abstracts for Austria, Brazil and Denmark are only available for chemical basics and 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.

Between 1995 and 1999 Documentation Abstracts (an extended form of the Basic Abstract) are available for most CPI records. From update 199908 onwards the Documentation Abstract was replaced by the Extension Abstract. Documentation Abstracts are indexed separately under /DO and so do not form part of the /AB field (see Chapter 7.6 for further details on the Documentation Abstract field). Likewise Extension Abstracts are indexed separately under /XA and so do not form part of the /AB field (see Chapter 7.7 for further details on the Extension Abstract field).

Documentation Abstracts and Extension Abstracts may only be displayed by subscribers in File 350.

From 1984 to 1997 abstracts were also prepared for many equivalent members of the patent family. These form part of the /AB display field (displayable within the Member Patent Level) and the /DA display field.

Full details of the treatment of patent documents from all countries can be found in Global Patent Sources, available from Thomson Scientific Technical Support.

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	Explanation of technical drawings included in the record Drawing(s) .

Searching

All abstract words are searchable in the basic index without a search qualifier. /AB searches all First Level and value-add *DWPI* Abstracts. Using the suffix /DA limits the scope of the search to the Alerting Abstract Field. Using /TF limits the search to the Technology Focus Abstract, /DO to the Documentation Abstract and /XA to the Extension Abstract while /TX will search all abstracts types excluding the Extension Abstract. The search qualifier /NV will search the novelty section of the abstract. It should be remembered however that many key terms may only appear in the *DWPI* assigned title and by restricting to the abstract only, relevant hits may not be retrieved.

? S SPLEEN /AB
S10 5869 S SPLEEN /AB
? T 10/TI,AB/1

10/TI,AB/1

Derwent WPI

(c) 2006 The Thomson Corporation All rights reserved

New nucleic acid encoding a polypeptide associated with regulating cell growth and differentiation, useful for diagnosing or treating cancer, inflammatory, immune, bone, CNS and infectious diseases

Alerting Abstract WO A2

NOVELTY - A nucleic acid (I) comprising one of 123 sequences of 228-7728 base pairs (bp; SEQ ID NO: 1-123), a complement, or a sequence that encodes one 123 sequences of 175-2576 amino acids (SEQ ID NO: 124-246), is new.

DESCRIPTION - INDEPENDENT CLAIMS are included for:

- an animal injected with (I);
- a double-stranded nucleic acid comprising (I) and its complement;
- a second nucleic acid comprising a sequence 70 - 95 % homologous to (I), which hybridises to (I);
- a vector and cell comprising the (I) and a promoter;
- a polypeptide comprising one of SEQ ID NO: 124-246;
- an animal;
- a cell culture medium;
- a cell culture comprising transfected cells that are transfected with (I);
- making a transformed cell;
- making a polypeptide comprising introducing a nucleic acid encoding (5) into an expression system;
- apparatus for producing several hydrophobic polypeptides in a high throughput manner;
- synthesizing several **Nanodiscs** (RTM) simultaneously and synthesizing a series of several simultaneously-synthesized **Nanodiscs** (RTM) sequentially using a dynamic system;
- a hydrophobic protein made by (12);
- a composition comprising several hydrophobic proteins made by (12);
- preparing a hydrophobic protein for determination of crystal structure, by providing a composition of hydrophobic proteins made by (12), and allowing the composition to crystallize;
- determining the crystal structure of the protein;
- immunizing a non-human animal by introducing the protein into it;
- screening for modulators of hydrophobic protein activity using the protein in a binding assay;
- a diagnostic kit comprising a polynucleotide containing a sequence selected from 6, 7, 8 and 9 contiguous nucleotides of the (I), or comprising a polypeptide containing a sequence or its biologically active fragment, derived from (I);
- a genetically modified mouse comprising a deletion, substitution, or modification of one of SEQ ID NO: 1-123;
- determining the presence of (I) using a binding assay;
- determining the presence of an antibody to (5) using a binding assay;
- an antibody recognizing, binding to, and/or modulating the activity of a polypeptide encoded by (I);
- a composition comprising (23);
- a bacteriophage, where (23), or its fragment, is displayed it;
- a bacterial cell comprising (25);
- a non-human animal injected with (26);
- a host cell that secretes (23);
- making an antibody by introducing a polypeptide, polynucleotide encoding the polypeptide, or its fragment into an animal to elicit generation of antibodies specific to the polypeptide, where the polypeptide is encoded by (I), or comprises (4);
- modulating biological activity comprising contacting (27) with a human or a non-human host cell which modulates the activity of a human or non-human animal host cell, or a second host cell;
- diagnosing a disease, disorder, syndrome, or condition of cancer, proliferative, inflammatory, immune, metabolic, bone, CNS, genetic, bacterial, and viral diseases, disorders, syndromes, or conditions in a patient by allowing (27) to contact a sample, and detecting binding between the antibody and an antigen in the sample;

- identifying an agent that modulates the activity of a polypeptide by allowing an agent to contact a polypeptide comprising SEQ ID NO: 124-246, and selecting an agent that binds the polypeptide or affects the biological activity of it;
- a composition comprising a modulator obtained by (32);
- treating a disease, disorder, syndrome, or condition in a subject;
- prophylactic or therapeutic treatment of a subject by administering a vaccine comprising a polynucleotide or a polypeptide selected from SEQ ID NO: 1-246 or a fragment;
- inhibiting transcription or translation of a polynucleotide encoding a polypeptide by providing a second polynucleotide that hybridizes to the first polynucleotide, where the first polynucleotide comprises a sequence selected from SEQ ID NO: 1-123, a polynucleotide encoding a polypeptide comprising a sequence selected from SEQ ID NO: 124-246, and a polynucleotide encoding a fragment of a polypeptide comprising a sequence chosen from SEQ ID NO: 124-246, and allowing the first polynucleotide to contact the second polynucleotide;
- treating a disease, disorder, syndrome or condition comprising administering a modulator that binds to a cell surface molecule that is over-expressed in the disease, disorder, or condition, and is linked to (23);
- an isolated modified cell comprising a heterologous nucleic acid comprising a sequence that encodes a polypeptide chosen from any of the sequences and functions as a first therapeutic, diagnostic or prophylactic molecule for a disease, disorder, syndrome, or condition;
- treating a disease, disorder, syndrome, or condition by administering isolated modified cells, where each cell comprises a heterologous nucleic acid sequence;
- a non-human animal deficient in SEQ ID NO: 124-246;
- isolated tissues derived from (40);
- a non-human animal that over-expresses one of SEQ ID NO: 124-246.

ACTIVITY - Cytostatic; Immunosuppressive; Antiinflammatory; Osteopathic; CNS-Gen.; Cerebroprotective; Nootropic; Neuroprotective; Virucide; Antibacterial; Antidiabetic; Antipsoriatic; Antiulcer; Cardiant; Vasotropic; Anticoagulant; Thrombolytic; Endocrine-Gen; Dermatological; Immunomodulatory; Antianemic; Hepatotropic; Respiratory-Gen; Antiinfertility; Nephrotropic. No biological data given.

MECHANISM OF ACTION - Vaccine; Gene-Therapy.

USE - The methods and compositions are used in the diagnosis, prevention and/or treatment of cancer, a proliferative, inflammatory, immune, metabolic, bone, CNS, genetic, bacterial, and viral disease, disorder, syndrome, and condition, and/or type II diabetes. The transgenic animals are used in the study of gene function and regulation, drug screening, and determining the effects of a candidate drug on a biological activity of a polypeptide.

Original Titles:

METHODS OF USE FOR NOVEL HUMAN POLYPEPTIDES ENCODED BY POLYNUCLEOTIDES
PROCEDES D'UTILISATION POUR DE NOUVEAUX POLYPEPTIDES HUMAINS CODES PAR DES
POLYNUCLEOTIDES

Original Abstracts:

The invention provides novel polynucleotides, related polypeptides, related nucleic acid and polypeptide compositions, and related modulators, such as antibodies and small molecule modulators. The invention also provides methods to make and use these polynucleotides, polypeptides, related compositions, and modulators. These methods include diagnostic, prophylactic and therapeutic applications. The compositions and methods of the invention are useful in diagnosis, prophylaxis, and treatment of proliferative, inflammatory, immune, infectious, metabolic, central nervous system, and bone and cartilage disorders.

L'invention concerne des nouveaux polynucleotides, des polypeptides associes, des compositions de polypeptides et d'acides nucleiques associes, des modulateurs associes, tels que des anticorps et des modulateurs de petites molecules. L'invention concerne egalement des procedes de fabrication et d'utilisation desdits polynucleotides, polypeptides, compositions associes et des modulateurs. Ces procedes comprennent des applications diagnostiques, prophylactiques et therapeutiques. Les compositions et procedes de l'invention sont utilises dans le diagnostic, la prophylaxie et le traitement de troubles chroniques, inflammatoires, immunitaires, infectieux, metaboliques, ainsi que des troubles du systeme nerveux central, des os et des cartilages.

To restrict a search to records that have or do not have abstracts use the LIMIT qualifiers /ABS or /NOABS, or search for the Abstract Field Availability. For example, to restrict answer set S3 to records with abstracts:

```
S S3/ABS
```

and to restrict set S3 to records without abstracts:

```
S S3/NOABS
```

The Field Availability method tends to be more accurate than the LIMIT suffixes /ABS and /NOABS.

Display

The basic (Alerting), equivalent (discontinued at the end of 1998), Technology Focus, Documentation and Extension (both only in file 350) Abstracts can be displayed by selecting one of the formats that include them. Formats include: AB for Original and Alerting Abstracts, DA for Alerting Abstracts, TF for the Technology Focus Abstracts, DO for the Documentation Abstract, XA for the Extension Abstract, or TX for all abstracts types apart from the Extension Abstract. Specific abstracts can be viewed by including the display qualifiers to a TYPE or PRINT statement.

Example: Displaying Titles and DWPI value-add Abstracts

```
? T 1/TI,DA/1
```

```
1/TI,DA/1
```

```
Derwent WPI
```

```
(c) 2006 The Thomson Corporation All rights reserved
```

```
Size-exclusion ion-exchange particle for purifying biomolecules, has core containing ion-exchange material, and shell containing size-exclusion material
```

```
Alerting Abstract US A1
```

```
NOVELTY - A size-exclusion ion-exchange particle comprises a core containing an ion-exchange material, and a shell (20) containing a size-exclusion material.
```

```
DESCRIPTION - INDEPENDENT CLAIMS are also included for:
```

- a mixture comprising ion-exchange materials including the above size-exclusion ion-exchange particle, wherein the mixture includes a cationic ion-exchange material and an anionic ion-exchange material;
- a purification device, comprising a receptacle; and the above size-exclusion ion-exchange particle or above mixture disposed in the receptacle;
- a microfluidic device, comprising one or more columns, and the above particle or above mixture disposed in the columns;
- a method of forming the size-exclusion ion-exchange particle, comprising micro-encapsulating the ion-exchange core with a size-exclusion material; and
- a method of purifying a sample, comprising providing size-exclusion ion-exchange particles, where each particle comprises a core for ion-exchange and a shell for size-exclusion; contacting the sample with the particles to form a purified sample; and separating the purified sample from the particles.

USE - The inventive particle is for purifying biomolecules. It can be used in purifying polymerase chain reaction (PCR) products, in purifying DNA sequencing reaction mixtures, and in purifying RNA. It can also be used for purification and/or separation of, e.g., oligonucleotides, ligase chain reaction products, proteins, antibody binding reaction products, oligonucleotide ligation assay products, hybridization products, and antibodies. It can also be used for desalting of biological products or reaction mixtures.

ADVANTAGE - The inventive particle can enable high quality separation of biomolecules. It can use a size-exclusion shell to restrict the ability of large molecules to interact with the ion-exchange core. It can combine the high selectivity and binding ability of ion-exchange chromatography (IEC) resins with the size-exclusion benefits of size-exclusion chromatography (SEC).

DESCRIPTION OF DRAWINGS - The figure is a schematic diagram of core-shell structures of a size-exclusion ion-exchange core, having cutaways to show a surface and an interior of the core.

12Solid core material

14Cross-linked ion-exchange resin

20Shell

25, 32Pores

Technology Focus

INSTRUMENTATION AND TESTING - Preferred Component: The ion-exchange core comprises a solid core material (12), and an agglomeration. It is surface-activated. The solid core material is capable of ion exchange, and is porous. It is coated with an ion-exchange material. The shell comprises pores (25, 32). At least 50% of the pores are capable of excluding molecules of a size of ≥ 10 nt ssDNA. The size-exclusion ion-exchange particle is cationic. The mixture includes an anionic size-exclusion ion-exchange particle. It is in the form of a mixed bed. The cationic ion-exchange material and the anionic ion-exchange material are present in stoichiometrically equivalent amounts...

ORGANIC CHEMISTRY - Preferred Material: The solid core material comprises tertiary ammonium groups, quaternary ammonium groups, carboxylic acid groups, or sulfonic acid groups.

POLYMERS - Preferred Material: The solid core material comprises macroporous silica, controlled pore glass, microporous polymer microspheres, mesoporous polymer microspheres, or macroporous polymer microspheres.

Preferred Component: The core includes a neutral, water-soluble polymer or an organic soluble polymer; or one or more of a poly(N-vinylpyrrolidone) polymer material, a poly(vinyl acetate-co-vinyl alcohol) material, a polyacrylamide material, a poly(N,N-dimethyl acrylamide) material, a poly(N-vinylamide) material, a poly(ethyleneoxide-co-propyleneoxide) material, an amphiphilic diblock copolymer, and an amphiphilic block copolymer...

Original Titles:

SIZE-EXCLUSION ION-EXCHANGE PARTICLES

DEVICE AND METHOD FOR PURIFICATION OF NUCLEIC ACIDS

PETAL-ARRAY SUPPORT FOR USE WITH MICROPLATES

Size-exclusion ion-exchange particles

SIZE-EXCLUSION ION-EXCHANGE PARTICLES

PARTICULE D'ÉCHANGE IONIQUE A EXCLUSION DE DIMENSION

DEVICE AND METHOD FOR PURIFICATION OF NUCLEIC ACIDS

DISPOSITIF ET PROCÉDE DE PURIFICATION D'ACIDES NUCLEIQUES

PETAL-ARRAY SUPPORT FOR USE WITH MICROPLATES

SUPPORT DE RESEAU DE PETALES POUR MICROPLAQUES

7.3.2 Original Abstract

Original abstracts in German, English and French may be available at the Member Patent 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 2000
- European applications and granted patents (EP-A1/A2, EP-B1/B2) since 1978 (available in English from 1978, German and French from 2000)
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1975
- PCT applications (WO-A1/A2) since 1978

Searching

All words from the original author abstracts are indexed and under /AB only.

7.3.3 Technology Focus

Qualifiers

Search Qualifier	/TF
Display Qualifier	TF
MAP Qualifier	-
RANK Qualifier	-
Sort Qualifier	-

Search Format

Combine single words with Boolean and/or Proximity operators (W), (A) or (S).

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 abstract 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 abstract 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.

Heading	Definition
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 & 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 & Communication	Covers imaging technologies, inks, printing, electrophotography, recording media, broadcasting and telecommunications.
Industrial Standards	Used when comparison to industrial standards are made.
Inorganic Chemistry	Covers all inorganic materials, except Ceramics and Glass.
Instrumentation & Testing	Covers chemical analysis, testing, 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 & Paper	Covers paper/cardboard, natural/synthetic textiles, and their processing.

7.3.4 Documentation Abstract

Qualifiers

Search Qualifier	/DO
Display Qualifier	DO
MAP Qualifier	-
RANK Qualifier	-
Sort Qualifier	-

Search Format

Combine single words with Boolean and/or Proximity operators (W), (A) or (S).

Content

The Documentation Abstract is an optional field available for documents 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 DO field (in file 350 only) 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 (see Section 7.3.5 for further details on the Extension Abstract field).

The Documentation Abstract may contain a series of titled paragraphs, described as follows, and was only used for inventions classified in 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.
Definition	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.

7.3.5 Extension Abstract

Qualifiers

Search Qualifier	/XA
Display Qualifier	XA
MAP Qualifier	-
RANK Qualifier	-
Sort Qualifier	-

Search Format

Combine single words with Boolean and/or Proximity operators (W), (A) or (S).

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 XA field (in file 350 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.

The Extension Abstract contains a series of titled paragraphs, as described overleaf, and is only used for inventions classified in 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.

7.4 Claim

Qualifier

Search Qualifiers	/CM
Display Qualifiers	CM
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	-

Search Format

S term/CM

Content

Original first claims in German, English and French may be available at the Member Patent 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 1991 (available in English, German and French)
- US applications and granted patents (US-A, US-A1, US-B1/B2) since 1993
- Japanese applications, (JP-A) (Machine Assisted Translations) since 1975
- United Kingdom granted patents (GB-B) 1984-1997

Searching

Searching the Claim field restricts a search further than by searching the entire Basic Index (Section 7.1) and so use of this field may give fewer results. Words in the Claim field may be searched using Boolean and/or proximity operators.

```
S SURFACTANT/CM
S TRAGEMATERIAL/CM
S AGENT (W) TENSIOACTIF/CM
S SUBSTRAT/CM AND PC=DE
```


8 Company and Inventor Searching

8.1 Patent Assignee

Qualifier

Search Qualifier	PA=
Display Qualifier	PA
MAP Qualifiers	PA, PANAME, PACODE
RANK Qualifiers	PA, PANAME or CO, PACODE or CK, ASSIGNEE
SORT Qualifier	PA

Search Format

PA=Assignee name	(Phrase-indexed)
PA=Assignee name	(Word-indexed)

Content

1. Thomson Scientific Standardised Patent Assignees

The patent assignee field consists of the full name of the assignee, up to 40 characters in length, and the assignee code. Prior to DWPI 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 and their codes, use the Expand (E) command.

Until DWPI 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 (DWPI 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 (see Section 8.3).

2. Original Patent Assignees

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)

Searching

The Thomson Scientific standardised patent assignees are both word- and phrase-indexed so that any of the single words from a company name can be searched and also so that proximity can be used to link two or more terms from the company name. To see the variations in a Patent Assignee name, it is recommended to use the Expand command as in the example below. This example also shows that more complete retrieval is obtained when using the Company Code (see Section 8.3):

Ref	Items	Index-term
E1	7	PA=DOW CHEM CANADA LTD
E2	7	PA=DOW CHEM CANADA LTD (DOWC)
E3	13291	PA=DOW CHEM CO
E4	13262	PA=DOW CHEM CO (DOWC)
E5	1	PA=DOW CHEM CO AU
E6	1	PA=DOW CHEM CO DE
E7	8	PA=DOW CHEM CO GB
E8	5	PA=DOW CHEM CO JP
E9	1	PA=DOW CHEM CO KR
E10	1	PA=DOW CHEM CO NL
E11	1	PA=DOW CHEM CO NO
E12	156	PA=DOW CHEM CO THE
E13	1473	PA=DOW CHEM CO US
E14	1	PA=DOW CHEM CORP
E15	1	PA=DOW CHEM CORP (DOWC)
E16	11	PA=DOW CHEM EURO SA
E17	11	PA=DOW CHEM EURO SA (DOWC)
E18	375	PA=DOW CHEM GMBH
E19	375	PA=DOW CHEM GMBH (DOWC)
E20	1	PA=DOW CHEM HANDEL
E21	1	PA=DOW CHEM HANDEL (DOWC)
E22	1	PA=DOW CHEM HELLAS AE
E23	1	PA=DOW CHEM HELLAS AE (DOWC)
E24	1	PA=DOW CHEM IBERICA
E25	1	PA=DOW CHEM IBERICA (DOWC)

Enter PAGE for more

```
? S E3
S1      13291  PA='DOW  CHEM  CO'

? S CK=DOWC
S2      15029  S  CK=DOWC
```

To search the whole name as standardised by Thomson Scientific, or a truncated form of the whole name the CO= qualifier may be used (see Section 8.2). Patent Assignee/Company Codes are also included in the Patent Assignee field although it is more precise to search the codes using the CK= qualifier (see Section 8.3).

Original patent assignees have been indexed as bound phrases and single words. These equate to the non-standardised version of the patent assignee as appearing on the patent document. These have been indexed under PA=, alongside the Thomson Scientific standardised version of the patent assignee.

The original patent assignees are not updated with any subsequent changes in ownership of the invention and so merely reflect the information present on the document at the time of publication.

Due to the wide variation in formatting and punctuation of patent assignees and addresses in original author data it is useful to expand the appropriate index to ensure that all relevant data is considered.

```
? e pa=akzo
Ref      Items  Index-term
E1        1    PA=AKZK-R
E2        3    PA=AKZM-R
E3       3953    PA=AKZO
E4        1    PA=AKZO AEROSPACE FINISHES V O F
E5        1    PA=AKZO AEROSPACE FINISHES VOF
E6        1    PA=AKZO AEROSPACE FINISHES VOF (ALKU)
E7        82    PA=AKZO AMERICA INC
E8        74    PA=AKZO AMERICA INC (ALKU)
E9        3    PA=AKZO AMERICA INC US
E10       2    PA=AKZO AMERICA INC 300 SOUTH RIVERSIDE PLAZA CHI
E11       1    PA=AKZO AMERICA INCORPORATED
E12       2    PA=AKZO AMERICAN INC
E13       1    PA=AKZO AMERICAN INC (ALKU)
E14       1    PA=AKZO AV
E15       1    PA=AKZO BELGE S A
E16       1    PA=AKZO BELGE S A BRUESSEL BE
E17       1    PA=AKZO BELGE SA
E18       1    PA=AKZO BELGE SA (ALKU)
E19       1    PA=AKZO BM ARNHEM THE NETHERLANDS
E20       1    PA=AKZO CHEM BV
E21       1    PA=AKZO CHEM BV (ALKU)
E22       3    PA=AKZO CHEM GMBH
E23       3    PA=AKZO CHEM GMBH (ALKU)
E24       3    PA=AKZO CHEM INC
E25       3    PA=AKZO CHEM INC (ALKU)
Enter PAGE for more
```

MAP

There are three MAP qualifiers related to Patent Assignee field.

Qualifier	Definition
MAP PA	Extracts patent assignee names and assignee codes
MAP PACODE	Extracts assignee codes only
MAP PANAME	Extracts patent assignee names only as a phrase

MAP PANAME can be used to extract company information from *DWPI* for subsequent searching of other files on *DIALOG* to get more information. In the following example, company names are MAPped from *DWPI* into *LitAlert* to see if there are any litigations in the US courts for the companies of interest:

```
? MAP PANAME T S2/1-50
Processing MAP

Temp SearchSave "TC018" stored
11 Select Statements, 119 Search Term(s)
SearchSave TC018

1 SearchSave(s), 119 Search Term(s)

? B 670
LitAlert
(c) 2006 Thomson Corporation.

Set          Items  Description
---          -
? EX TC018
           1      CO=DOW AGROSCIENCES LLC
           0      CO=DOW CHEM CO
           0      CO=DOW CHEM NIPPON KK
           0      CO=DOW CORNING ASIA LTD
           11     CO=DOW CORNING CORP
           0      CO=DOW CORNING KK
.....
S1          14     Serial: TC018

? T /9

1/9/1
LitAlert
(c) 2006 The Thomson Corporation All rights reserved.
00054238
LitAlert Number: P2001-09-10
Record (Document) Type: Patent ( Utility )
Patent Title: Fluoroelastomer composition with organo-onium compounds

Patent Number (Date): US 4882390 ( 19891121 )
Patent Assignee: Minnesota Mining & Manufacturing Company, St Paul MN
Inventor: Kolb Robert E, St Paul MN
US Class Titles (Codes): Synthetic resins - natural rubbers — part of the class 520 series ( 525326000 )
Court - Docket Number: Minnesota - 01-211 DWF/SRN
```

Plaintiff: Dyneon LLC
 Defendant: Dupont Dow Elastomers LLC
 Filing Date: 20010202
 Action Taken: A complaint was filed.
 Other Patent Numbers: US 4912171

RANK

RANK can be used to determine the patent leaders in particular fields:

Command	Definition
RANK PA	ranks records according to frequency of patentee names and codes - is of limited value
RANK PANAME (or RANK CO)	ranks records according to frequency of patentee names only
RANK PACODE (or RANK CK)	ranks records according to frequency of patentee codes only
RANK ASSIGNEE	ranks records by code and then by variation in company name

The decision to RANK according to assignee name or assignee code depends on the companies involved and the purpose of the listing. Also the use of the COMBINE option in RANK will group together variant names for the same company:

```
? RANK PANAME S1/ALL DETAIL
>>>RANK will process the first 250000 records or 500000 terms,
>>>whichever is reached first.
Started processing RANK
Completed Ranking 4190 records
DIALOG RANK Results (Detailed Display)
-----
RANK: S1/1-4190 Field: PANAME= File(s): 834
(Rank fields found in 4190 records - 7227 unique terms) Page 1 of 904
RANK No. Items in File Items Ranked %Items Ranked Term
-----
1 21486 68 01.6% BASF AG
2 25254 65 01.6% SUMITOMO CHEM
CO LTD
3 22031 58 01.4% DU PONT DE
NEMOURS &...
4 12326 57 01.4% PROCTER &
GAMBLE CO
5 1819 56 01.3% ASTRAZENECA
AB
6 - 54 01.3% L'OREAL SA
7 21017 52 01.2% BAYER AG
8 4189 50 01.2% PFIZER INC
P = next page Pn = Jump to page n
P- = previous page M = More Options Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

SORT

Patent records may be sorted by the first patent assignee within records of an answer set. For example, to SORT records from answer set S9 according to assignee:

SORT S9/ALL/PA

8.2 Company Name

Qualifier

Search Qualifier	CO=
Display Qualifier	CO
MAP Qualifiers	PANAME or CO
RANK Qualifier	CO
SORT Qualifier	PA

Search Format

S CO=Complete (or truncated) company name as indexed

See also PA= (Section 8.1) and CK= (Section 8.3)

Content

The Company Names field contains the full name of patent assignees, up to 40 characters in length. Prior to *DWPI* update 199216, there was a limit of 24 characters in all. If the name comprises several words, they may be abbreviated.

Until 1992, up to four assignees may be included in a record. From the end of 1976 (*DWPI* update 197648) additional assignee codes and names have been added from equivalents if they differ from those of the basic. From *DWPI* update 199216, the number of assignees input is unrestricted.

Searching

The CO= qualifier is used to search patent assignee names as a complete phrase rather than individual components, as with PA= (see Section 8.1). Thus a search will only retrieve an exact match for the full assignee name input. This format makes *DWPI* compatible with most business files on DIALOG and facilitates multi-file searching (OneSearch) of company names. When using OneSearch with a group of patent-only files, the Patent Assignee index, PA= (see Section 8.1) may be more helpful than the Company Name index.

Company names vary somewhat from database to database, especially when an informal name is frequently used and the standardised, registered name is relatively convoluted. The command "EXPAND CO=" is helpful when using OneSearch with a group of mixed business and patent files, especially when the first word of the standardised name is the most significant and well-known.

MAP

The CO= qualifier can also be used to search for the patents of companies MAPped from other files on DIALOG or to move from *DWPI* into business files.

In the example, the names are MAPped from *DWPI* into *LitAlert* to see if there are any litigations in the US courts for the companies of interest:

```
? MAP CO T S1/1-50
Processing MAP
Temp SearchSave "TC019" stored
51 Select Statements, 532 Search Term(s)
SearchSave TC019

? B 670
LitAlert
(c) 2006 Thomson Corporation

Set          Items  Description
---          -
? EX TC019
           1  CO=DOW  AGROSCIENCES  LLC
           0  CO=DOW  CHEM  CO
           0  CO=DOW  CHEM  NIPPON  KK
           0  CO=DOW  CORNING ASIA  LTD
          11  CO=DOW  CORNING  CORP
           0  CO=DOW  CORNING  KK
.....
S3          14  Serial:  TC019

? T /5

3/5/1
LitAlert
(c) 2006 The Thomson Corporation All rights reserved.
00040821
LitAlert Number: P1995-26-02
Related LitAlert Numbers: P1994-45-08
Record (Document) Type: Patent ( Utility )
Patent Title: Manufacture of Multilayer Film Containing Very Low Density Polyethyle

Patent Number (Date): US 4988465 ( 19910129 )
Patent Assignee: Viskase Corp
Inventor: Lustig Stanley, Park Forest IL; Schuetz Jeffrey, Woodridge IL
US Class Titles (Codes): Plastic & Nonmetallic Article Shaping or Treating: Processes ( 264022000 )
Court - Docket Number: Illinois, Northern Dist., Chicago - 94 C 6080
Plaintiff: Dow Chemical Co, MI
Defendant: Viskase Corp, Chicago IL
Filing Date: 19941006
Subsequent Action Date: 19950525
Action Taken: Memorandum & order entered. Viskase's motion to dismiss for lack of s
Other Patent Numbers: US 4863769; US 4863784; US 4976898; US 5059481; US 5256351; US 5256428
```

RANK

Use of RANK allows analysis of company names as complete phrases (see Section 8.1).

Sort

Patent records may be sorted by the first patent assignee within records of an answer set. For example, to SORT records from answer set S9 according to assignee:

`SORT S9/ALL/PA`

8.3 Patent Assignee/Company Code

Qualifier

Search Qualifier	CK=
Display Qualifier	CK
MAP Qualifier	CK
RANK Qualifiers	PACODE or CK, ASSIGNEE
SORT Qualifier	CK

Search Format

S CK=AAAA	Standard Code
S CK=AAAA-X	Non-standard Code
Where:	AAAA = Company code
	X = Assignee status for non-standard codes (N, I or R)

Content

Since corporate names are not standardized, but rather 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 record. From *DWPI* update 199216 however, this restriction was lifted and any number of assignees are recorded. Also since *DWPI* update 197648, additional assignee codes and names have been added from equivalents if they differ from those of the basic.

Note that Thomson Scientific does not automatically assign a new standard company code when two large companies merge or are involved in takeovers/demergers etc. 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, Bristol-Myers Squibb and Glaxo Wellcome 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*.

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 is the code for *BASF AG* and associated companies.

Standard patent assignee codes are listed in Patent Assignee Codes user guide and are searchable on the Thomson Scientific website (<http://www.scientific.thomson.com>). Other useful sources of standard company codes are online records and the results of a RANK command.

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 Glaxo SmithKline 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*.

Standard codes are also indexed (but not displayed) with an assignee status of “C” (see Section 8.4 on Assignee status, AF=)

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.

Non-standard codes are displayed with a suffix indicating assignee status as follows:

	Suffix	Format
Non-standard Companies	N	AAA-N (197001-197402) AAAA-N (197403 to date)
Russian (Soviet) organisations	R	AAA-R (197001-197402) AAAA-R (197403 to date)
Individuals	I	AAA-I (197001-197402) AAAA-I (197403 to date)

Searching

Standard Patent Assignee/Company codes can be searched in either as Patent Assignee (PA=) or Patent Assignee/Company Code (CK=). However, since the Patent Assignee field contains a mix of company names and company codes, the CK= field gives a more precise search.

The search below compares searching these two fields using the code RHON (Rhone-Poulenc) - the extra hits are obtained in the PA= field from the non-standard code RHON-N:

```

? S PA=rhon
S5          6865 S PA=RHON

? S CK=rhon
S6          6855 S CK=RHON

? S S5 NOT S6
          6865 S5
          6855 S6
S7          10 S S5 NOT S6

? T /PA

7/PA/5
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved

Patent Assignee: RHON-PLASTIK SCHIPP (RHON-N)
Assignee name & address:
Rhoen-Plastik Schipper KG, 8731 Oberthulba, DE, (RHON-N),
Rhoen-Plastik Schipper KG, 8731 Oberthulba, DE,

```

It is also possible to search for non-standard company codes, although this is not recommended as the codes are not unique. Since the Patent Assignee/Company Code field is phrase-indexed, a search on the company code alone does not retrieve records with assignee status “N”, “I”, or “R”. To search non-standard codes the assignee status code must be appended to the assignee code with a hyphen.

The use of the EXPAND command will display the variations in the company names for a specific code. In this example the codes VOLS (Volkswagen) is expanded:

```

?  e  CK=VOLS
Ref      Items  Index-term
E1         1  CK=VOLR-R
E2         1  CK=VOLR-R (VOL RES INNOVATION FIRM CO LTD)
E3        10301  CK=VOLS
E4         1  CK=VOLS (GRP VOLKSWAGEN FRANCE SA)
E5         1  CK=VOLS (KUNSTSTIFTUNG VOLKSWAGEN KUNSTMUSEUM WOL
E6         14  CK=VOLS (SEAT SA)
E7         2  CK=VOLS (VOKSWAGENWERK AG)
E8         1  CK=VOLS (VOKWAGENWERK AG)
E9         1  CK=VOLS (VOLKOWAGFNWERK AG)
E10        7397  CK=VOLS (VOLKSWAGEN AG)
E11         8  CK=VOLS (VOLKSWAGEN BORDNETZE GMBH)
E12         1  CK=VOLS (VOLKSWAGEN BR SA)
E13        20  CK=VOLS (VOLKSWAGEN BRASIL)
E14         1  CK=VOLS (VOLKSWAGEN DO BRASIL LTD)
E15         1  CK=VOLS (VOLKSWAGEN DO BRASIL LTDA OPERACAO CAMIN
E16         4  CK=VOLS (VOLKSWAGEN DO BRASIL LTDA)
E17         1  CK=VOLS (VOLKSWAGEN DO BRASIL SA)
E18         1  CK=VOLS (VOLKSWAGEN GROUP JAPAN KK)
E19        13  CK=VOLS (VOLKSWAGEN MECHATRONIC GMBH & CO KG)
E20         1  CK=VOLS (VOLKSWAGEN PRODUCTS CORP)
E21         1  CK=VOLS (VOLKSWAGEN SOUTH AFRICA)
E22         1  CK=VOLS (VOLKSWAGEN WERKE AG)
E23        23  CK=VOLS (VOLKSWAGEN)
E24         1  CK=VOLS (VOLKSWAGEN-WERK AG)
E25         1  CK=VOLS (VOLKSWAGENUERK GMBH)
Enter PAGE for more

```

MAP

DIALOG MAP is used to create a SearchSave of assignee codes in a specific record or group of records for further searching in *DWPI*. For example, to create a temporary SearchSave of the assignee codes in the third record of set S2:

```

?  MAP CK T S1/3

Temp SearchSave "TC002" stored
1 Select Statement, 1 Search Term(s)
SearchSave TC002

1 SearchSave(s), 1 Search Term(s)

```

The EXS (EXECUTE STEPS) command is used with the DIALOG-assigned serial number to execute the strategy and retrieve other patents of the specified assignee(s).

RANK

There are two RANK options for use on company names and codes:

RANK CK (or PACODE) gives a frequency listing of all the assignee codes appearing in your records and will group related companies together in the listing:

```
? RANK PACODE
Processing
Processing
Started processing RANK
Completed Ranking 887 records
DIALOG RANK Results
-----
RANK: S8/1-887      Field: PACODE=   File(s): 351
(Rank fields found in 887 records - 680 unique terms) Page 1 of 85
RANK No.   Items   Term
-----
1           120   SONY-I
2           51    IBMC
3           15    ADMI
4           15    ITLC
5           10    HEWP
6           9     COPQ
7           9     SGSA
8           9     SUNM
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

RANK ASSIGNEE provides a display consisting of codes with company name attached, but this approach does not group together all entries under the same code:

```
? RANK ASSIGNEE
Started processing RANK
Completed Ranking 887 records
DIALOG RANK Results
-----
RANK: S8/1-887      Field: ASSIGNEE=   File(s): 351
(Rank fields found in 887 records - 806 unique terms) Page 1 of 101
RANK No.   Items   Term
-----
1           120   SONY-I (SON Y S)
2           47    IBMC (INT BUSINESS MACHINES CORP)
3           15    ADMI (ADVANCED MICRO DEVICES INC)
4           15    IBMC (IBM CORP)
5           15    ITLC (INTEL CORP)
6           9     SUNM (SUN MICROSYSTEMS INC)
7           9     TEXI (TEXAS INSTR INC)
8           8     HEWP (HEWLETT-PACKARD CO)
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

SORT

Search results may be sorted by the first assignee code. In the following answer set on patent documents in the area of printing materials and processing (*DWPI* Class G05) published in or designated for Denmark, records are sorted by the patent assignee codes:

```
? S DC=G05 AND CC=DK
      55294 DC=G05
      1345139 CC=DK
S9      4250 S DC=G05 AND CC=DK

? SORT S9/ALL/CK
S11      4250 SORT S9/ALL/CK

? T 2/PA, TI/1, 8, 12
2/PA, TI/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved
New substituted 5 or 6 membered (hetero)aryl compounds, useful for treatment of e.g. autoimmune
disorders or inflammatory conditions, are matrix metalloproteinase inhibitors
Patent Assignee: GLAXO GROUP LTD (GLAX)
Original Titles:
MATRIX METALLOPROTEINASE INHIBITORS
INHIBITEURS DE METALLOPROTEINASES MATRICIELLES
Assignee name & address:
GLAXO GROUP LIMITED, (GLAX), Glaxo Wellcome House, Berkeley Avenue, Greenford Middlesex
UB6 0NN, GB, GB
GAINES, Simon, GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY, GB, GB
HOLMES, Ian, Peter, GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY, GB,
GB
MARTIN, Stephen, Lewis, GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY,
GB, GB
WATSON, Stephen, Paul, GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY,
GB, GB

2/PA, TI/8
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved
Pumping piston for hand pump for viscous fluid material e.g. toothpaste and tooth-cleaning gels
comprises plastics material coated with barrier layer
Patent Assignee: GLAXOSMITHKLINE CONSUMER HEALTHCARE GMBH (GLAX)
Original Titles:
NOVEL DEVICE
NOUVEAU DISPOSITIF
Assignee name & address:
GLAXOSMITHKLINE CONSUMER HEALTHCARE GMBH & CO KG, (GLAX), Bussmatten 1, 77815
Buehl (Baden), DE, DE
KRAEMER, Hans, GlaxoSmithKline, Bussmatten 1, 77815 Buehl (Baden), DE, DE
```

2/PA, TI/12

Derwent WPI

(c) 2006 The Thomson Corporation. All rights reserved

Pharmaceutical formulation useful for treating e.g. atherosclerosis, comprises a pyrimidine-4-one derivative core coated with an enteric polymer

Patent Assignee: GLAXO GROUP LTD (GLAX)

Original Titles:

PHARMACEUTICAL FORMULATION COMPRISING A PYRIMIDINE-A-ONE DERIVATIVE
COATED WITH AN ENTERIC POLYMER

PREPARATION PHARMACEUTIQUE COMPRENANT UN DERIVE DE LA PYRIMIDINE-A-ONE
ENROBE D'UN POLYMERE ENTERIQUE

Assignee name & address:

GLAXO GROUP LIMITED, (GLAX), Glaxo Wellcome House, Berkeley Avenue, Greenford Middlesex
UB6 0NN, GB, GB

VAN SCHIE, Dirk, Marinus, Johannes, c/o GlaxoSmithKline, New Frontiers Science Park South, Third
Avenue, Harlow Essex CM19 5AW, GB, GB

8.4 Assignee Status

Qualifier

Search Qualifier	AF=
Display Qualifier	AF
MAP Qualifier	-
RANK Qualifier	AF
SORT Qualifier	-

Search Format

S AF=X

Where: X = Assignee status (C, N, I or R)

Content

Company Codes (see Section 8.3) are assigned a Status Code based on the nature of the assignee. The four possible values for company code status are:

Status

C	Standard (unique) company code
N	Non-standard (non-unique) company code
R	Russian (Soviet) organisations
I	Individual patent assignee

Searching

Each of the assignee status codes are searchable and are used to restrict searches to assignees of a particular type. In the example below the search locates US patents assigned to Soviet or Russian organisations

?	S AF=R AND PC=US
	657993 AF=R
	3501613 PC=US
S12	3387 S AF=R AND PC=US

1/2/2

Derwent WPI

(c) 2006 The Thomson Corporation. All rights reserved

0014906069

WPI Acc no: 2005-253850/200526

XRAM Acc no: C2005-080378

New vaccine composition for enhancing immune responses comprises a toll-like receptor agonist or its encoding nucleotide a nucleotide encoding granulocyte-macrophage colony stimulating factor and an immunogen component

Patent Assignee: GLAXO GROUP LTD (GLAX)

Inventor: BEMBRIDGE G P; CRAIGEN J L

Basic Patent (1 patents, 106 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2005025614	A2	20050324	WO 2004EP10322	A	20040913	200526	B

Priority Applications (no., kind, date): GB 200321615 A 20030915

National Designated States: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA

CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP

KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW

MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA

UG US UZ VC VN YU ZA ZM ZW

Regional Designated States: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB

GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG

ZM ZW

Alerting Abstract WO A2

NOVELTY - An adjuvant composition comprising (i) a toll-like receptor (TLR) agonist, or nucleotide sequence encoding a TLR agonist; and (ii) a nucleotide sequence encoding granulocyte-macrophage colony stimulating factor (GM-CSF), is new.

DESCRIPTION - INDEPENDENT CLAIMS are also included for:

1. an immunogenic composition or compositions comprising the above adjuvant composition, and (iii) an immunogen component comprising a nucleotide sequence encoding an antigenic peptide or protein;
2. a vaccine or pharmaceutical composition comprising the above immunogenic composition or compositions, and pharmaceutical carrier(s), diluent(s) or excipient(s);
3. a process for manufacturing an immunogenic composition;
4. a kit comprising a pharmaceutical composition comprising the components of the above adjuvant composition, the immunogen component, and a pharmaceutical excipient, diluent or carrier;
5. treating a patient suffering from or susceptible to a tumor; and
6. increasing or raising an immune response of a mammal to an antigen or immunogen, or against a disease state.

ACTIVITY - Cytostatic; Virucide; Antibacterial; Antiparasitic; Antiallergic; Immunostimulant; Immunosuppressive.

No biological data given.

MECHANISM OF ACTION - Gene therapy; Vaccine.

USE - The composition is useful for manufacturing a medicament for use in the treatment or prophylaxis of MUC-1 expressing tumors (claimed). The composition may also be used for manufacturing a medicament for enhancing immune responses initiated by an antigenic peptide or protein, the antigenic peptide or protein being expressed as a result of administration to a mammal of a nucleotide sequence encoding the peptide (claimed). The composition and methods may also be used for treating or preventing other diseases, such as viral, bacterial or parasitic infections, allergies or autoimmune disorders.

Title Terms/Index Terms/Additional Words: NEW; VACCINE; COMPOSITION; ENHANCE; IMMUNE; RESPOND; COMPRISE; TOLL; RECEPTOR; AGONIST; ENCODE; NUCLEOTIDE; GRANULOCYTE; MACROPHAGE; COLONY; STIMULATING; FACTOR; IMMUNOGENIC; COMPONENT

Class Codes

International Patent Classification (Main): A61K-039/39

File Segment: CPI

DWPI Class: B04 D16

Manual Codes (CPI/A-N): B04-B03D; B04-C01G; B04-C02V; B04-E01; B04-E02; B04-E08; B04-F09; B04-F10; B04-H04C; B04-H19; B04-H20A; B04-N03; B04-N05; B04-N06; B04-N09; B05-B01P; B06-D16; B14-A01; B14-A02; B14-B02; B14-G01; B14-G02A; B14-G02D; B14-H01; B14-L01; B14-S03A; B14-S11; D05-H07; D05-H12B; D05-H12C; D05-H12E

RANK

The RANK command is useful in determining the proportion of each type of assignee in a set of results.

8.5 Inventor (Author)

Qualifier

Search Qualifier	AU=
Display Qualifiers	IV
MAP Qualifier	AU
RANK Qualifier	AU
SORT Qualifier	IV

Search Format

S AU=Surname A B C

Where: Surname = family name
A B C = initials (with spaces)

Content

Both *DWPI* standardised format Inventor names and the complete Inventor names from original filings are indexed and searchable using AU=. Using IV will display the data from both the Invention and Member Patent Levels and the AU MAP and RANK qualifiers also cover both types of data.

See 8.5.1 and 8.5.2 for details of restricting search and display of Inventors to Invention or Member Patent Level data.

Searching

AU= searches both *DWPI* standardised format inventor names and inventor full names from original filings. *DWPI* standardised format inventor names are searched as complete (bound) phrases in inverted format ‘Surname Initials’ as shown above.

If entering names directly, it is a good idea to truncate after the first initial.

Ref	Items	Index-term
? E	AU=FUHRMEI	
E1	8	AU=FUHRMANN W D
E2	1	AU=FUHRMANN W J
E3	0	*AU=FUHRMEI
E4	1	AU=FUHRMEISTE H
E5	1	AU=FUHRMEISTE L
E6	2	AU=FUHRMEISTE P
E7	2	AU=FUHRMEISTE R
E8	1	AU=FUHRMEISTE T
E9	1	AU=FUHRMEISTE W
E10	1	AU=FUHRMEISTE W F
E11	2	AU=FUHRMEISTER L
E12	5	AU=FUHRMEISTER R

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

```

? E AU=VANBUREN

Ref      Items  Index-term
E1        1    AU=VANBRUWAE  A
E2        1    AU=VANBUGGENU P H
E3        0    *AU=VANBUREN
E4        1    AU=VANBUREN  A L
E5        1    AU=VANBUREN  C E
E6        1    AU=VANBUREN  D F
E7        1    AU=VANBUREN  F
E8        1    AU=VANBUREN  G E
E9        6    AU=VANBUREN  H S
E10       1    AU=VANBUREN  K E
E11       5    AU=VANBUREN  M F
E12       1    AU=VANBUREN  P D
Enter P or PAGE for more
? E AU=VAN BUREN

Ref      Items  Index-term
E1        1    AU=VAN  BUITEN  J
E2        1    AU=VAN  BUNNEN  B
E3        0    *AU=VAN  BUREN
E4        4    AU=VAN  BUREN  C T
E5        1    AU=VAN  BUREN  E
E6        1    AU=VAN  BUREN  E T
E7        1    AU=VAN  BUREN  F
E8        4    AU=VAN  BUREN  F R
E9        1    AU=VAN  BUREN  G
E10       1    AU=VAN  BUREN  G E
E11       1    AU=VAN  BUREN  J
E12       6    AU=VAN  BUREN  M

```

Punctuation within names, such as an apostrophe or hyphen, is displayed in the index, and is also searchable. It is advisable when searching inventor names that have embedded punctuation to enclose the names in quotes. It is also a good idea to EXPAND the name without apostrophes in case some names have been collapsed.

```

? E AU=D'AGOSTINI
>>>Warning: unmatched quote found

Ref      Items  Index-term
E1        1    AU=D'AGOSTA  R
E2        1    AU=D'AGOSTIN S A
E3        0    *AU=D'AGOSTINI
E4        1    AU=D'AGOSTINI A N
E5        1    AU=D'AGOSTINI  C
E6        2    AU=D'AGOSTINO  A
E7        1    AU=D'AGOSTINO  C L
E8        2    AU=D'AGOSTINO  C T
E9        1    AU=D'AGOSTINO  D
E10       6    AU=D'AGOSTINO  G
E11       1    AU=D'AGOSTINO  J A
E12       2    AU=D'AGOSTINO  M C
Enter P or PAGE for more

```

```
? E AU=DAGOSTINI
```

Ref	Items	Index-term
E1	1	AU=DAGOSTINE K P
E2	3	AU=DAGOSTINE L J
E3	0	*AU=DAGOSTINI
E4	2	AU=DAGOSTINI G
E5	1	AU=DAGOSTINIS G
E6	4	AU=DAGOSTINO A
E7	1	AU=DAGOSTINO A A
E8	1	AU=DAGOSTINO A M
E9	1	AU=DAGOSTINO C T
E10	1	AU=DAGOSTINO E
E11	13	AU=DAGOSTINO G
E12	1	AU=DAGOSTINO G H

Names containing an umlaut should be searched two ways: as if there were no umlaut and with an “e” following the letter that has the umlaut.

```
? S AU=(MUNCH D OR MUENCH D)
```

	2	AU=MUNCH D
	3	AU=MUENCH D
S16	5	AU=(MUNCH D OR MUENCH D)

It is possible to truncate a name immediately after the family name when initials are not known, but this may decrease precision of the search.

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.

```
? S PA,AU=IRWIN J F
```

	24	PA=IRWIN J F
	35	AU=IRWIN J F
S1	35	S PA,AU=IRWIN J F

```
? T 1/3/4
```

1/3/4
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved
0015365102
WPI Acc no: 2005-724921/
Related WPI Acc No: 2005-769436
XRPX Acc No: N2005-596316
Bag accumulating device has second drive mechanism adjacent and downstream of first drive mechanism, and which advances open-mouth portion of bag at second speed less than first speed to accumulate open-mouth portion of bag
Patent Assignee: IRWIN J F (IRWI-I)
Inventor: IRWIN J F

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050241275	A1	20051103	US 2004835327	A	20040428	200574	B

Priority Applications (no., kind, date): US 2004835327 A 20040428

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20050241275	A1	EN	33	19	

RANK

Inventor names that sometimes use several initials and sometimes only the first initial can be combined in RANK if a more precise statistical analysis is required. Combine can be used with RANK to pull together inventors that are the same but may have a different number of initials:

```
? RANK AU
Started processing RANK
Completed Ranking 13 records
DIALOG RANK Results
-----
RANK: S2/1-13      Field: AU=   File(s): 351
(Rank fields found in 13 records - 32 unique terms) Page 1 of 4

RANK No.   Items   Term
-----
1           13     DAGOSTINO G
2           7       DHAINAUT A
3           4       D'AGOSTINO G
4           2       LECLERC H R
5           2       MAILLARD C
6           2       MAILLARD C M J
7           2       TIEPEL A
8           1       AGOSTINO G D'
P = next page           Pn = Jump to page n
P- = previous page     M = More Options       Exit = Leave RANK

To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.

? COMBINE
Enter the Rank Numbers (separated by commas or spaces) for the
terms that you want to merge into a single rank entry.
? 1 3
DIALOG RANK Results
-----
RANK: S2/1-13      Field: AU=   File(s): 351
(Rank fields found in 13 records - 32 unique terms) Page 1 of 4
>>>The * indicates a user-precombined rank term;
>>>use DETAIL option to see which terms are precombined.

RANK No.   Items   Term
-----
1*          17     DAGOSTINO G
2           7       DHAINAUT A
3           2       LECLERC H R
4           2       MAILLARD C
5           2       MAILLARD C M J
6           2       TIEPEL A
7           1       AGOSTINO G D'
8           1       ALARY J D
P = next page           Pn = Jump to page n
P- = previous page     M = More Options       Exit = Leave RANK
```

Both *DWPI* standardised format Inventor names and the complete Inventor names from original filings are indexed and searchable using AU=.

SORT

Records can be sorted by family name of inventor. For example, to sort answer set S5 records by Inventor:

```
SORT S5/ALL/IV
```

8.5.1 Inventor – Thomson Scientific Standardised Format

Qualifier

Search Qualifier	AU=
Display Qualifiers	IV
MAP Qualifier	IVST
RANK Qualifier	IVST
SORT Qualifier	-

Search Format

S AU=Surname A B C

Where: Surname = family name
A B C = initials (with spaces)

Content

From *DWPI* update 197804 Thomson Scientific indexed up to three inventor names from the basic patent. From 1980, up to eight inventors have been added, with the exception of Soviet/Russian basics, for which only three inventor names continued to be indexed. In this time period the family name was limited to 10 characters and the number of initials to 3.

Since *DWPI* update 199216, any number of inventors may be listed, but the limit on Soviet/Russian inventors remains. The number of characters for family name has been increased to a maximum of 30 characters and there is no limit on initials.

Inventor names from Japanese basics and equivalents have been included since *DWPI* update 200537.

Searching

Thomson Scientific standardised format inventor names are searched as complete (bound) phrases in inverted format 'Surname Initials' as shown above.

AU= searches both Thomson Scientific standardised format inventor names and inventor full names from original filings.

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

If entering names directly, it is a good idea to truncate after the first initial.

For details of names with prefixes like von, van, le, Mac etc, searching punctuation within names (such as an apostrophe or hyphen) and names containing an umlaut please see 8.5.

MAP

Thomson Scientific standardised inventor names can be MAPped from answer sets and re-used to find patents with similar subject matter:

```
MAP IVST T S3
```

RANK

RANK IVST will perform the RANK command on Thomson Scientific standardised format inventor names only.

Inventor names that sometimes use several initials and sometimes only the first initial can be combined in RANK if a more precise statistical analysis is required. Combine can be used with RANK to pull together inventors that are the same but may have a different number of initials:

```

? RANK IVST
Started processing RANK
Completed Ranking 3204 records
DIALOG RANK Results
-----
RANK: S1/1-3204      Field: IVST=      File(s): 351
(Rank fields found in 3191 records - 10596 unique terms) Page 1 of
1325
RANK No.    Items    Term
-----
1           17     FEUCHT D
2           16     CHANDRARATNA R A
3           16     WILLMS L
4           15     DREWES M W
5           15     MUELLER K
6           15     MULLER K
7           15     PONTZEN R
8           14     DAHMEN P
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.

```

8.5.2 Inventor Full Name and Address

Qualifier

Search Qualifier	IV=
Display Qualifier	IV
MAP Qualifiers	IV
RANK Qualifiers	IV
SORT Qualifier	-

Content

Original 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)

Searching

IV= restricts searches to the complete inventor name from original filings only. These Inventor full names (IV=) have been indexed as bound phrases including punctuation (Surname First Name) and single words.

Inventor addresses have been indexed as bound phrases and single words.

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

If entering names directly, it is a good idea to truncate after the first initial.

For details of names with prefixes like von, van, le, Mac etc, searching punctuation within names (such as an apostrophe or hyphen) and names containing an umlaut please see 8.5.

```
? S IV=smith j
S1          191 S IV=SMITH J

? T /IV
1/IV/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved.
Inventor: DESROCHERS R; HAVERS J; HOWARD C W; KETELSEN J R; LAFOLLETTE G D; LUKE
T; ROBERTS D; RUUD E J; SMITH J; VAUGHN P J
```

Original Publication Data by Authority

Inventor name & address:

```
SMITH J,
RUUD E J,
DESROCHERS R,
HAVERS J,
ROBERTS D,
VAUGHN P J,
LUKE T,
KETELSEN J R,
LAFOLLETTE G D,
HOWARD C W,
LaFollette, Gary D., Blue Grass, IA, US, Blue Grass, IA, US
Howard, Carey W., Lowden, IA, US, Lowden, IA, US
Ruud, Eric J., Hampton, IL, US, Hampton, IL, US
Ketelsen, Jon R., Port Byron, IL, US, Port Byron, IL, US
Vaughn, Phyllis J., Walcott, IA, US, Walcott, IA, US
Luke, Thomas, Parkville, MO, US, Parkville, MO, US
Havers, James, Chagrin Falls, OH, US, Chagrin Falls, OH, US
Desrochers, Richard, Lyndonville, VT, US, Lyndonville, VT, US
Smith, John, McIndoe Falls, VT, US, McIndoe Falls, VT, US
Roberts, Douglas, Lyndonville, VT, US, Lyndonville, VT, US
```

MAP

Original inventor full names can be MAPped from answer sets and re-used to find patents with similar subject matter:

```
MAP IV T S3
```

RANK

RANK IV will perform the RANK command on original inventor full names only.

```
? RANK IV
Started processing RANK
Completed Ranking 3203 records
DIALOG RANK Results
-----
RANK: S2/1-3203      Field: IV=   File(s): 351
(Rank fields found in 3190 records - 21947 unique terms) Page 1 of
2744
RANK No.   Items   Term
-----
1           17     FEUCHT D
2           17     FEUCHT, DIETER
3           16     CHANDRARATNA, ROSHANTHA A.
4           16     FEUCHT, DIETER, DR., 40789 MONHEIM, DE
5           15     DREWES M W
6           15     MULLER, KLAUS-HELMUT
7           15     PONTZEN R
8           15     PONTZEN, ROLF
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

8.6 Agent and Address

Qualifier

Search Qualifier	LR=
Display Qualifier	LR
Analyze Qualifier	-
MAP Qualifier	-
RANK Qualifier	-

Search Format

LR=Agent name (Phrase-indexed)

Patent agents (LR=) and addresses have been indexed as bound phrases and single words.

Due to the wide variation in formatting and punctuation of patent agents and addresses in original author data it is useful to expand the appropriate index 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

Searching

```

?  E  LR=BELL

Ref      Items  Index-term
E1        237  LR=BELKIN, LEONARD
E2        464  LR=BELKNAP
E3       8601  LR=BELL
E4         9  LR=BELL & ARKIN
E5         17  LR=BELL & ASSOCIATES
E6         15  LR=BELL BOYD & LLOYD
E7        147  LR=BELL BOYD & LLOYD LLC
E8         1  LR=BELL BOYD & LLOYD PLLC
E9         2  LR=BELL BOYD & LLOYD, LLC
E10        1  LR=BELL BOYD & LLOYD, THREE FIRST NATIONAL PLAZA
E11        1  LR=BELL COMMUNICATIONS RESEARCH INC.
E12        1  LR=BELL NEW CERAMICS CO., LTD.
E13        1  LR=BELL SELTZER
E14        1  LR=BELL SELTZER AL
E15        1  LR=BELL SELTZER INTELLECTUAL LAW FIRM OF ALSTON &
E16        1  LR=BELL SELTZER INTELLECTUAL LAW PROPERTY OF ALST
E17        2  LR=BELL SELTZER INTELLECTUAL PROPERTY
E18        1  LR=BELL SELTZER INTELLECTUAL PROPERTY GROUP
E19        57  LR=BELL SELTZER INTELLECTUAL PROPERTY GROUP OF AL
E20        1  LR=BELL SELTZER INTELLECTUAL PROPERTY LAW FIRM OF
E21        14  LR=BELL SELTZER INTELLECTUAL PROPERTY LAW GROUP
E22        15  LR=BELL SELTZER INTELLECTUAL PROPERTY LAW GROUP A
E23       226  LR=BELL SELTZER INTELLECTUAL PROPERTY LAW GROUP O
E24        1  LR=BELL SELTZER INTELLECTUAL PROPERTY LAW OF ALST
E25        1  LR=BELL SELTZER INTELLECTUAL PROPERTY LAW, ALSTON

Enter PAGE for more

?  S  E23
S17       226  LR='BELL SELTZER INTELLECTUAL PROPERTY LAW GROUP
O'

```

Display

Agent full name can be displayed using the LR display format.

```

17/LR/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved.
Agent:
Sherrard-Smith, Hugh, Appleyard, Lees & Co., 15 Clare Road, Halifax, HX1 2HY, West Yorkshire, GB,
Halifax, HX1 2HY, West Yorkshire, GB
Sherrard-Smith, Hugh, Appleyard, Lees & Co., 15 Clare Road, Halifax, HX1 2HY, West Yorkshire, GB,
Halifax, HX1 2HY, West Yorkshire, GB
Bell Seltzer Intellectual Property Law Group of Alston & Bird,
LLP,
ELDERKIN, Charles, B., Alston & Bird LLP, P.O. Box 34009, Charlotte, NC 28234-4009, US, US

```

9 Patent and Application Details Searching

9.1 Patent Number

Qualifier

Search Qualifiers	PN=; PN= /PB
Display Qualifiers	PN, PI (for complete family table)
MAP Qualifiers	PN, PNPB
RANK Qualifiers	PN, PNPB
SORT Qualifier	PN

Search Formats

If you are unsure of the search format for a particular patent, use the EXPAND command, or consult the table of Patent Number Formats in Section 15.5, which lists the number formats for each country and related document kind(s) included in *DWPI*.

Searching Basic Patents Only

Searches can be restricted to basic patent numbers only using the suffix /PB.

Patent (or publication) numbers are searchable in the DIALOG formats as detailed below:

DIALOG Patent Number Format

Format:	PN=CC nnnnnnnnnn PN=CC YYYYnNNNNN
Where:	CC = WIPO Country Code followed by a space nnnnnnnnnn = variable number of digits YYYY= four-digit year nNNNNN = 5 or 6-digit serial number

The addition of leading zeros is not necessary with the DIALOG format for continuous series numbers, but zeros are included in those numbers that incorporate the year:

For example:

S PN=EP 12	no leading zeros
S PN=WO 2000000965	zeros inserted between the year and the serial number

There are three categories of patent numbers and each are formatted in a standard way:

- 9.1.1 Numeric series patent numbers
- 9.1.2 Patent numbers that include a year element
- 9.1.3 Chinese, German and Japanese patent numbers

9.1.1 Numeric series patent numbers

Format:	S PN=CC nnnnnnnnn
Where:	CC = WIPO Country Code followed by a space nnnnnnnnn = variable number of digits

The following example shows a search for EP patent application 158.

```
? s pn=ep 158
S1          1 S PN=EP 158
? t /pi
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved.
```

Patent Family: 9 patents, 7 countries							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 158	A	19790110	EP 1978100176	A	19780616	197902	B
DE 2728818	A	19790104	DE 2728818	A	19770627	197902	E
JP 54012317	A	19790130				197910	E
DE 2728818	B	19790830				197936	E
US 4233234	A	19801111	US 1978914925	A	19780612	198048	E
EP 158	B	19811014	EP 1978100176	A	19780616	198143	E
DE 2861152	G	19811224				198201	E
IT 1096589	B	19850826				198648	E
JP 1987023736	B	19870525				198724	E

Priority Applications (no., kind, date): EP 1978100176 A 19780616; DE 2728818 A 19770627

Some original patent numbers include letters. These letters are omitted in the Dialog format, the type of document being reflected in the status code, for example:

Original format	Dialog format	Status Code
USRE29133	US 29133	E
HUT012790	HU 12790	T
HUH003612	HU 3612	H

The following example shows a search for US patent application H1953.

```

? S PN=US 1953
S6          1 S PN=US 1953

? t /9

10/9/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved
0010664151 Drawing available
WPI Acc no: 2001-272543/200128
XRPX Acc No: N2001-194597
Brake release apparatus for work machine such as tractors, comprises standby pump which is provided in
work machine, in response to whose actuation, brake system and lift cylinders are regulated
Patent Assignee: CATERPILLAR INC (CATE)
Inventor: BURCKHARTZMEYER J J; DEZELAN J E; VOGT B A
Patent Family (1 patents, 1 countries)
Patent Number Kind Date Application Number Kind Date Update Type
US H1953 H 20010403 US 1998173358 A 19981015 200128 B

```

US NTIS patent numbers

US government-owned inventions were covered in *DWPI* from 1983-1996. Issued under the jurisdiction of the National Technical Information Service (NTIS), the patent numbers of these inventions comprise the letter “N” between the serial number and the country code. They also have the kind code “N”. For example, USN6142951N.

Original Format	Dialog Format	Kind Code
US06142951	US 6142951	N

Searching

```

? s pn=us 6142951
S2          2 S PN=US 6142951

? t 2/pi/1-2

```

2/PI/1 Links
 Derwent WPI
 (c) 2006 The Thomson Corporation. All rights reserved.
 Patent Family: 1 patents, 1 countries

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6142951	A	20001107	US 1999299120	A	19990424	200111	B

Priority Applications (no., kind, date): US 1999299120 A 19990424

2/PI/2 Links
 Derwent WPI
 (c) 2006 The Thomson Corporation. All rights reserved.
 Patent Family: 2 patents, 1 countries

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US N6142951	N	19830816	US 1980142951	A	19800423	198345	B
US 4483582	A	19841120	US 1980142951	A	19800423	198449	E
Priority Applications	A	19841120	US 1980142951	A	19800423	198449	E

Applications
 (no., kind, date):
 US 1980142951
 19800423
 US 4483582

9.1.2 Patent numbers that include a year element

Format: SPN=CC YYYYNNNNNN
 Where: CC = WIPO Country Code followed by a space
 YYYY = four-digit year
 nNNNNN = 5 or 6-digit serial number with zero front fill where necessary

When a year element is included as part of the patent number, the serial number must be front zero-filled to 5 or 6 digits (see Appendix 15.5 for full details by country).

For example Austrian patent 2000/8020 is searched as follows:

?	S	PN=AT	200008020
S3		1	S PN=AT 200008020

? T /3							
3/3/1							
Derwent WPI							
(c) 2006 The Thomson Corporation. All rights reserved							
0010706095							
WPI Acc no: 2001-316537/200134							
Load-bearing support, especially for supporting a bathtub							
Patent Assignee: LAGER K (LAGE-I)							
Patent Family (2 patents, 1 countries)							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
AT 200008020	A	20010515	AT 20008020	A	20000404	200134	B
AT 408510	B	20011115	AT 20008020	A	20000404	200176	E
Priority Applications (no., kind, date): AT 20008020 A 20000404							
Patent Details							
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes		
AT 200008020	A	DE		0			
AT 408510	B	DE			Previously issued patent	AT 200008020	

9.1.3 Chinese, German and Japanese Patent numbers

Chinese patent numbers

Before 1989, Chinese patent numbers were derived from an 8-digit application number consisting of a 2-digit year, followed by 1, followed by the 5-digit serial number (e.g. CN88100168)

Since the beginning of 1989 patent numbers have been a numeric series.

In addition Chinese A and C documents have independently running number series which can potentially lead to number clashes. It is advisable to use the patent kind in your search in these cases (see Section 9.2)

German patent numbers

October 1968 to December 1996

Patent applications comprise 7-digit serial numbers prefixed by the letter 'P' (indicating a patent application), followed by a decimal point and a computer check digit.

The first two digits of the 7 digit serial number represent the year of application (obtained by adding 50), and the remaining 5 digits are a serial number beginning at 1 annually. The DWPI on DIALOG patent number is derived from this application number by omitting the 'P' and the check digit.

Original

DEP4229047.3

DialogFormat

DE4229047

January 1995 to 2004

Patent applications comprise 8-digit serial numbers, followed by a decimal point and a computer check digit. The first digit of the serial number is 1, indicating a patent application, the next two digits are the year and the remaining 5 digits are a serial number beginning at 1 annually. The DWPI on DIALOG patent number is derived from the application number by omitting the check digit.

Original	DE 19813012.0	DialogFormat	DE 19813012
----------	---------------	--------------	-------------

From January 2004

Patent applications comprise a 12-digit number. The first two digits indicate the IP right (10 = patent, 20 = utility model etc.) and are followed by a 4-digit year and a 6-digit serial number.

Original	DE102004035364	DialogFormat	DE 102004035364
----------	----------------	--------------	-----------------

Japanese patent numbers

Special formats are used to distinguish between Japanese documents that are unexamined applications (Kokai), old law examined patents (Kokoku), and new law granted patents (Toroku).

Unexamined Japanese applications (Kokai)

Format:	PN=JPEENNNNNN or PN=JPYYYYNNNNNN
Where:	JP = WIPO Country Code for Japan
	EE = Two-digit Emperor year
	YYYY= four-digit western year (for 2000+ publication years)
	NNNNNN = 6-digit serial number with zero front fill where necessary

Before 2000 all are searched using the Japanese Imperial Year (Year of the Emperor) which is derived from the Western year as shown below:

Western Year	Japanese Year of the Emperor
1963 – 1988	Western year minus 25 e.g. PN=JP62014858
1989* – 1999	Western year minus 88 e.g. PN=JP02089643

* The first 3200 documents of 1989 were processed as Western Year minus 25

For Japanese numbers where the Year of the Emperor is less than 10 (from 1988 to 1997) the leading zero of the year is omitted:

Unexamined documents applied for in Japan have status code (patent kind) A. Unexamined documents transferred from PCT (World) applications have status code W, X, Y, or Z, (see table of Patent Number Formats in Section 15.5).

The search below is for a Japanese PCT transfer:

```
? S PN=JP 09511815
S4          1 S PN=JP 09511815

? T /PI

4/PI/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved
```

Patent Family: 6 patents, 22 countries

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 1997010659	A1	19970320	WO 1995JP1815	A	19950913	199718	B
AU 199534844	A	19970401	AU 199534844	A	19950913	199730	E
			WO 1995JP1815	A	19950913		
EP 851627	A1	19980701	EP 1995931399	A	19950913	199830	E
			WO 1995JP1815	A	19950913		
JP 09511815	X	19981124	WO 1995JP1815	A	19950913	199906	E
			JP 1997511815	A	19950913		
US 6122378	A	20000919	WO 1995JP1815	A	19950913	200048	E
			US 199829547	A	19980305		
US 6411714	B1	20020625	WO 1995JP1815	A	19950913	200246	E
			US 199829547	A	19980305		
			US 2000645605	A	20000825		

Priority Applications (no., kind, date): WO 1995JP1815 A 19950913

Examined Japanese specifications (Kokoku)

Format: PN=JPYYYYNNNNNN

Where: JP = WIPO Country Code for Japan

YYYY = 4-digit Western year

NNNNNN = 6-digit serial number with zero front fill where necessary

These documents have status code B (see table of Patent Number Formats in Section 15.5).

This search is for an examined specification from 1992, number 54390 (note the need to zero front fill after the year):

```
? S PN=JP 1992054390
```

```

S7          1  PN=JP  1992054390
? T 7/PN/1

7/PN/1

Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved

Patent Number      Kind      Date      Update Type
JP 59052879        A         19840327  198418 B
JP 1992054390      B         19920831  199239 E

```

New Law Granted Japanese specifications (Toroku)

Format: PN=JP NNNNNNNN
Where: JP = WIPO Country Code for Japan
NNNNNNNN = 7-digit serial number with hyphen front fill where necessary

These documents have status code B2 (see table of Patent Number Formats in Section 15.5).

```

? S PN=JP 2720871
S10          1  S  PN=JP  2720871

? t /PN

10/PN/1

Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved

Patent Number      Kind      Date      Update Type
JP 10018006        A         19980120  199813 B
JP 2720871         B2        19980304  199814 E

```

Display

Patent numbers are always displayed in a patent table together with other related information.

The patent family table contains the following data:

Definition

Patent Number, Kind, Publication Date, Application Number, Application Kind, Application Date, Main IPC, and *DWPI* Update.

The display qualifier PI can be included in a PRINT or TYPE statement to display the full version of the patent family table. For example, to display the full patent table for the Toroku patent JP 2654733:

```

? S PN=JP 2654733
S1          1 S PN=JP 2654733

? T /PI

1/PI/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved

Patent Family: 2 patents, 1 countries
Patent Number Kind Date Application Number Kind Date Update Type
JP 2654733 B2 19970917 JP 1992146636 A 19920512 199742 B
JP 5309088 A 19931122 JP 1992146636 A 19920512 199742 E

Priority Applications (no., kind, date): JP 1992146636 A 19920512

```

The patent details table presents information about patent family members that cannot be represented in the patent family table (see Section 9.9, Filing Details).

MAP

The DIALOG MAP command can be used to create a SearchSave of patent numbers in a specific record or group of records for further searching in *DWPI* or other DIALOG databases. There are several MAP options on the Patent Number field:

MAP Option	Definition
PN	to create a temporary SearchSave of all patent numbers
PNPB	to create a temporary SearchSave of all basic patent numbers

There is also a custom MAP formats for transferring patent numbers into *DWPI*'s companion file, the *Patents Citation Index* (File 342). They are:

Custom Format	Definition
PNCG	For searching patent numbers as citing patents. The patent number qualifier is converted automatically from PN= to CG= as shown in the example below.

? **MAP PNCG T S3**

Temp SearchSave "TC006" stored
 51 Select Statements, 628 Search Term(s)
 SearchSave TC006

? **B 342**

Patents Citation Indx

(c)2006 The Thomson Corporation. All rights reserved.
 ? EX TC006

? **T 1/5/1**

1/5/1
 Patents Citation Indx
 (c)2006 The Thomson Corporation. All rights reserved.
 06879621 WPI Acc No: 73-30319U/22
 Anti-caking additives for inorg salts - mono-and di-saccharides

Patent Assignee: (ALLC) ALLIED CHEM CORPORATION
 Patent Family:

Patent No	Kind	Date	Examiner	Field of Search
CA 926110	A	000000	(BASIC)	
US 3777007	A	000000		

Derwent Week (Basic): 7322
 Priority Data: US 862028 (690929)
 Derwent Class: B05; D13; E13; E34; E35
 Number of Patents: 002
 Number of Countries: 002
 Number of Cited Patents: 000
 Number of Cited Literature References: 000
 Number of Citing Patents: 005

CITING PATENTS

Family Member	Citing Patent	Cat	WPI Acc No	Assignee/Inventor
By Examiner: US 3777007 A	EP 156573	A	85-244158/41	(NATY) NABISCO BRANDS INC/BANKS L J; THULIN R R; ROSS R E; SCHAEDE R W E
US 3777007 A	EP 401550	A	90-369641/51	(KALS) KALI & SALZ AG/SINGEWALD A; WOTSCHKE R; WERDELMANN F
US 3777007 A	EP 1546038	B1	04-248044/22	(ALKU) AKZO NOBEL NV/ GEERTMAN R M
US 3777007 A	WO 9322912	A Y	93-386088/41	(CHUR-) CHURCH & DWIGHT CO INC/JONES K A; WINSTON A E; LAJOIE M S; JOSEPH A L
US 3777007 A	WO 9322912	A1	93-386088/41	(CHUR-) CHURCH & DWIGHT CO INC/JONES K A; WINSTON A E; LAJOIE M S; JOSEPH A L

SORT

Search results may be sorted by the patent number of the basic. For example, to sort all records in set S3 by basic patent number alphanumerically in ascending order:

```
SORT S3/ALL/PN
```

9.2 Patent Country and Kind

Qualifier

Search Qualifiers	PC=, PC= /PB
Display Qualifier	PC
MAP Qualifier	-
RANK Qualifiers	PC, PCPB, PK, PKPB
SORT Qualifier	-

Search Format

S PC=CC
S PC=CC An

Where: CC = WIPO Country Code
An = One or two-digit Patent Kind Code

Content

This field contains the 2-letter WIPO standard country code for the patent country (see Appendix 15.4) and the one- or two-letter Patent Kind code (see Appendix 15.5). The country code is part of the patent number and has been indexed additionally to facilitate limiting the scope of a search and for statistical purposes.

An explanation of Patent Kind codes is also available as online help (HELP KIND 351).

Searching

The patent country can be searched alone or together with its code. The following example shows the various options in searching unexamined European applications. .

?	S PC=EP A		
S43	480706	PC=EP A	(OPI APPLICATION)
?	S PC=EP A1		
S44	780989	PC=EP A1	(OPI APPLICAT. WITH SEARCH REPORT (FROM 199220))
?	S PC=EP A2		
S45	384363	PC=EP A2	(OPI APPLI. WITHOUT SEARCH REPORT (FROM 199221))
?	S PC=EP A3		
S46	86646	PC=EP A3	(SEARCH REPORT ONLY FOR A2 (FROM 199221))
?	S PC=EP A4		
S47	32060	PC=EP A4	(SUPPLEMENTARY SEARCH REPORT)

Truncation is needed to search for all variations e.g. S PC=EP A?

To restrict the search to basic patents only, use the suffix /PB:

```
? S PC=BE
S48      178156  PC=BE  (BELGIUM)

? s PC=BE/PB
S49      127543  PC=BE/PB (BELGIUM)
```

The patent country is linked by (S) proximity to the other corresponding patent and application information. The example below illustrates how to find the number of British patents published in 1990 - 1991.

```
? S PC=GB(S)PY=1990:1991
      777328  PC=GB  (UNITED KINGDOM)
      1016632 PY=1990 : PY=1991
S50   41940  S PC=GB(S)PY=1990:1991

? T 1/3/1

1/3/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved

0014477504 Drawing available
WPI Acc no: 2004-001425/200401
XRAM Acc no: C2004-000460
XRPX Acc No: N2004-001295
A preformed reusable nappy that can be fastened around the body of a baby using Velcro strips to form a region of increased absorbency
Patent Assignee: DAPPERS LTD (DAPP-N)
Inventor: MCNALLY N J

Patent Family (2 patents, 1 countries)
Patent Number Kind Date Application Number Kind Date Update Type
GB 2194878 A 19880323 GB 198712583 A 19870528 200401 B
GB 2194878 B 19900815 200405 E

Priority Applications (no., kind, date): GB 198621738 A 19860910

Patent Details
Patent Number Kind Lan Pgs Draw Filing Notes
GB 2194878 A EN 6 3
```

Comprehensive Country Code Searches

For comprehensive searches for patent countries the CC= qualifier should be used since it includes designated states (see Section 9.5).

If the Priority Application Country (see Section 9.8) is also included in the search, additional records will be retrieved where the first filing (priority) is in the country required but where the patent document for that country has not yet issued but has been published by another country.

The example below shows the difference in results using the various options:

?	S PC=FR		
S1	793513	PC=FR	(FRANCE)
?	S CC=FR		
S2	2736690	CC=FR	(FRANCE)
?	S CC, PR=FR		
	2736690	CC=FR	(FRANCE)
	309720	PR=FR	
S3	2747974	S CC, PR=FR	

RANK

There are four options for RANK:

Option	Definition
PC	Analyses all the patent countries in the record set
PCPB	Analyses the Basic patent countries in the record set
PK	Analyses the patent kind in the record set
PKPB	Analyses the patent kind of the Basics in the record set

9.3 Designated States

Qualifier

Search Qualifiers	DS=, DS=/NA, DS=/RN
Display Qualifier	DS
MAP Qualifier	-
RANK Qualifier	DS
SORT Qualifier	-

Search Format

S DS=CC

Where: CC = WIPO Standard Country Code

Content

The Designated States field is included for European (EP) and PCT (WO) documents to indicate which states the applicant has designated for protection of the invention. On PCT applications, states are designated as *national* (the application will proceed via a national patent authority) and/or *regional* (the application will proceed via a regional authority, i.e., through the European Patent Office or the African Industrial Property Office). For EP documents, the designated states are always indexed as regional.

Searching

Designated states are searched using the WIPO standard country code (see Appendix 15.4).

For PCT (World) documents, national and regional designated states are both searched with the DS= qualifier. To restrict a search to one or the other, the appropriate suffix qualifier should be used:

National DS=CC/NA e.g. S DS=GB/NA

Regional DS=CC/RN e.g. S DS=DE/RN

The DS= qualifier cannot be used to link designated states to the corresponding patent and application information. This can be achieved using the broader Country Code qualifier, CC= (see Section 9.4).

9.4 Country Code

Qualifier

Search Qualifier	CC=
Display Qualifier	CC
MAP Qualifier	-
RANK Qualifier	CC
SORT Qualifier	-

Search Format

S CC=XX

Where: XX = WIPO Standard Country Code

Content

The Country Code field searches both the Patent Country and Designated States fields together and is thus useful for comprehensive searches on patent countries.

For example, the following search retrieves all patent families that have a French patent family member, an EP document designating France and/or a PCT (WO) document designating France. The patents retrieved by the search are further restricted to those that were published in August, 1990.

```

?   S   CC=FR(S) PM=199008
      2715810   CC=FR   (FRANCE)
      55982    PM=199008
S4   9609     S   CC=FR(S) PM=199008

?   T   4/3/1

4/3/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved

0006608269 Drawing available
WPI Acc no: 1993-135822/199317
Related WPI Acc No: 1990-255164
XRPX Acc No: N1993-103575
Transporter for pressed parts, in multiple die press - has variable horizontal stroke allowing large parts
to be moved through full step and small parts through half step
Patent Assignee: MASCHFAB MUELLER WEINGARTEN AG (MAWE)
Inventor: HARSCH E; REICHENBACH R
          Patent Family (4 patents, 4 countries)
Patent Number Kind Date Application Number Kind Date Update Type
EP 383169 A1 19900822 EP 1990102360 A 19900207 199317 B
EP 383169 B1 19930421 EP 1990102360 A 19900207 199318 E
DE 59001218 G 19930527 DE 59001218 A 19900207 199322 E
EP 1990102360 A 19900207
ES 2040518 T3 19931016 EP 1990102360 A 19900207 199346 E

Priority Applications (no., kind, date): DE 3904465 A 19890215; DE 4001591 A 19900120
...

```

RANK

A RANK analysis of the country code gives details on the countries where protection is being sought in a search set:

```
? RANK CC
Started processing RANK
Completed Ranking 15 records
DIALOG RANK Results
-----
RANK: S2/1-15      Field: CC=   File(s): 351
(Rank fields found in 15 records - 25 unique terms) Page 1 of 4

RANK No.      Items      Term
-----
1              13        US
2              5         FR
3              5         GB
4              4         DE
5              4         EP
6              4         IT
7              4         JP
8              4         NL
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
```

9.5 Application Number

Qualifier

Search Qualifiers	AN=, AN= /PR
Display Qualifier	AN
MAP Qualifiers	AN, ANPR, ANPRYY, ANYY,
RANK Qualifiers	AN, ANPR,
SORT Qualifier	-

Search Formats

Application numbers are searchable either DWPI or DIALOG formats as detailed under the Searching section. For details on priority application numbers see Section 9.7.

Content

Historically application numbers have been recorded in *DWPI* 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 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

Where available, application information appears on the same line as the patent numbers to which they belong in the expanded patent data table (see Section 9.8). Application kind codes are also recorded as some countries accept both regular and utility model applications, and use identical numeric series differentiated only by the application kind. The application kind code is either A for an application, or U for a utility model application. US provisional applications are indicated with a code P.

Searching

If you are unsure of the application number format, use the EXPAND command or consult the table of application countries and their application number formats in Section 15.6.

DWPI Format

S AN=YYYYCC-NNNNNNNNNnnn

Where: YYYY= four-digit year
 CC = Two-letter WIPO code
 NNNNNNNNnnn = Nine or twelve-digit serial possibly containing
 letters (made up to nine digits with leading zeros where necessary)

DIALOG Format

S AN=CC YYYYNNNNNNN or

S AN=CC NNNNNNNNN

Where: CC = Two-letter WIPO code
 YYYY=four-digit publication years
 NNNNNNNNN = Serial number possibly containing letters (with no
 zero fill)

United States application numbers in DIALOG format are indexed in further ways so that entries are unique, and so they are compatible with the formats in other databases on DIALOG:

- US YYNNNNNN (actual digits -no zero fill), e.g. US 1987100; US2005641304
- US NNNNNN-YYYY (actual digits-no zero fill) e.g. US 100-1987; US 641304-2005
- US ss-NNNNNN ss=2-digit series number (actual digits-no zero fill) e.g. US 07-100; US 60-641304

MAP

All application numbers listed in a record or group of records can be automatically saved for further searching in *DWPI* using the MAP command. MAP qualifiers related to application numbers include:

Qualifier	Definition
AN	Application Number
ANPR	Priority Application Number
ANPRYY	Priority Application Number with 4-digit year appended to US applications
ANYY	Application Number with 4-digit year appended to US applications

For example, to create a temporary SearchSave of all application numbers, including priorities, in the third record of set S9 and immediately execute the strategy to retrieve any existing family members and related documents in other records:

```
? MAP ANYY T EX S9/3

Temp SearchSave "TC089" stored
1 Select Statement, 2 Search Term(s)
SearchSave TC089

Executing TC089
          1 AN=DE 1992524
          1 AN=DE 4219579
          1 AN=DE 1992524 + AN=DE 4219579
S2       1 Serial: TC089
1 SearchSave(s), 2 Search Term(s)
```

Note that the above search used MAP ANYY to ensure that any US applications would be MAPped accurately with an appended year.

To MAP priority application numbers only, use MAP ANPRYY. This is an important step in finding all of the pre-1985 records that reference priorities associated with a single invention (see Section 11.1.3). Before 1985, the relationship with families based on earlier priorities was not directly recorded. These relationships can be determined online, however, by searching all of the priorities involved. To do so, begin with the patent(s) that reference the priority application(s) known to be relevant. Then MAP the priority numbers and execute the saved search. Repeat the MAP and execute search process until no new priorities appear.

```
? MAP ANPRYY T EX S11/1
1 Select Statement(s), 2 Search Term(s)
Serial#TD060

Executing TD060
          4 AN=US 556083-1983
          1 AN=US 759604-1985
          4 AN=US 556083-1983 + AN=US 759604-1985
S12     4 Serial: TD060
Serial#TD014
...
```

9.6 Application Country and Kind

Qualifier

Search Qualifiers	AC=, AC= /PR
Display Qualifier	AC
MAP Qualifier	-
RANK Qualifiers	ACPR, AK, AC
SORT Qualifier	-

Search Formats

S AC=CC

S AC=CC K

Where: CC = Two-letter WIPO country code
K = Code for kind of application

Content

The Application Country field contains two-character codes (WIPO-standard) for application country names. It also contains the code for the kind of application.

The country code is part of the application number for every country, but the application country is indexed additionally in a separate field to ease limiting the scope of a search and for statistical purposes. (A full listing of WIPO standard country codes is given in Appendix 15.4.) Non-priority application data is included from *DWPI* Update 198409.

Some countries have several levels of publication of a document or kinds of document. (A full listing of the kind codes covered in *DWPI* and their definitions are given in Appendix 15.5.)

Searching

The application country is searched using its WIPO standard country code:

```
? S AC=DE
S21      2273777 AC=DE (GERMANY)
```

Kind codes can also be searched using AC=. For example, to search for German utility model applications:

```
? S AC=DE U
S22      215726 S AC=DE U
```

The application country is tied by (S) proximity to the application number and date and also patent number and date.

```
? S AC=DE(S)AD=19910101:19910121
      2273777 AC=DE (GERMANY)
      22875 AD=19910101 : AD=19910121
S20      2801 S AC=DE(S)AD=19910101:19910121
```

Priority Application Country and Kind

On DIALOG, all priority application countries are indexed with all other application countries in the AC= index. To indicate that the country being searched is a priority country, the AC= prefix can be used with the country code followed by the suffix /PR. For example, to retrieve families with a Danish priority:

```
? S AC=DK/PR
S19      17685 AC=DK/PR (DENMARK)
```

The /PR suffix can also be applied to the kind codes e.g. s AC=DK A/PR.

Alternatively, the qualifier PR= can be used to search for priority countries and kinds.

RANK

The RANK command can be used to obtain a frequency listing of the application countries in an answer set. In this example an analysis is conducted on the application countries for patents concerning Internet showing where the technology is being protected:

```
? S SMARTCARD
      S24      521 SMARTCARD
? RANK AC
Started processing RANK
Completed Ranking 521 records
DIALOG RANK Results
-----
RANK: S18/1-521      Field: AC=      File(s): 351
(Rank fields found in 521 records - 37 unique terms) Page 1 of 5

RANK No.      Items      Term
-----
1              367      US
2              235      EP
3              228      WO
4              152      AU
5              118      DE
6              118      JP
7              76       CN
8              54       GB

P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK

To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

Use of RANK AK will analyse the 2-letter country code in association with the kind code.

By analysing the priority application country (ACPR) it is possible to identify the countries where the research into Smartcard is being conducted:

```
? RANK ACPR
Started processing RANK
Completed Ranking 57 records
DIALOG RANK Results
-----
RANK: S24/1-57      Field: ACPR=   File(s): 351
(Rank fields found in 57 records - 11 unique terms) Page 1 of 2

RANK No.      Items      Term
-----      -
1              22        US
2              14        GB
3              5         EP
4              5         SE
5              3         DE
6              2         AU
7              2         FR
8              2         JP
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
```

9.7 Priority Application Information

Qualifier

Search Qualifiers	PR=,
Display Qualifier	PR
MAP Qualifiers	ANPR, ANPRYY
RANK Qualifiers	ANPR,
SORT Qualifier	-

Note: searching of priority data can also be carried out in the following fields with /PR applied

- AN= (Section 9.5)
- AC= (Section 9.6)
- AD= (Section 10.4)
- AY= (Section 10.6)

PR= is an optional field in which this information can be searched with a single qualifier.

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. The date of the first application is referred to as the priority date.

The Priority Application field contains the priority application number, kind, and date of all priority applications for a specific family of patents. All priorities for each patent in the family have been included since the middle of 1977 (*DWPI 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.

Utility Model Applications as Priorities

Japanese, German, Spanish, Italian, Chinese and Brazilian Utility Model applications are sometimes listed as priority applications when a patent application is filed in another country. Note that only German Utility Model applications themselves have been covered in *DWPI*, with coverage starting in *DWPI* Update 199543.

Searching

The qualifier PR= is used to search for all priority application data. Searching an application number with the PR=qualifier is equivalent to searching the same number with the qualifier AN=and the suffix /PR (discussed in Section 9.6).

?	S PR=US 02-564443		
S15	1	S PR=US	02-564443
?	S AN=US 02-564443/PR		
S16	1	S AN=US	02-564443/PR
?	S S15 or S16		
	1	S15	
	1	S16	
S17	1	S S15 OR S16	

Priority application information is segmented so that priority country, number, kind, and date can be searched individually using PR=. The priority country and kind are searched using standard WIPO codes (listed in Appendix 15.4). Priority numbers can be searched and displayed using the identical formats to Application Number formats. (For more information on Application Number formats, see Section 9.5 or consult the table in Appendix 15.6, that lists application number formats by country.) Priority dates are searched like Application Dates (described in Section 10.4).

Each element of the priority application field is linked by (S) proximity to the other priority information concerning the same application.

?	S PR=US(S)PR=19920901:19920930		
	2562774	PR=US	
	38002	PR=19920901	: PR=19920930
S15	9083	S PR=US(S)PR=19920901:19920930	

Comprehensive Patent Family Searching

When conducting a comprehensive extended patent family search, it is essential to search for all records with related priorities, as these may yield related families.

To link patent applications together into patent families, the priority information is used as the primary key to determine equivalency. Related families, based on earlier priorities and arising from divisions or continuations of applications, have been recorded directly by cross-referencing accession numbers since 1985 (see Section 11.1.3 for details on extended patent families). Prior to this, the relationships were not recorded directly. All these relationships can, however, be determined online by iterative searching of all of the priorities involved, until no additional records are retrieved. This process is illustrated in Section 9.5 (AN=), under the MAP heading.

Priority Dates

The priority application date information is segmented so that no truncation is necessary when searching for priority day, month or year. The following example shows two equivalent methods for searching the priority year.

```

? S PR=1994
S11      548746 S PR=1994

? S AY=1994/PR
S12      548746 S AY=1994/PR

```

MAP

Priority application information can be MAPped from an answer set using the following qualifiers:

Qualifier

ANPR	Priority Application Number without year
ANPRYY	Priority Application Number with year (more precise for US priorities)

RANK

RANK ANPR analyses the numbers as complete phrases. RANK PR is also possible but is not recommended as each element in the field is broken down into its components.

9.8 Filing Details

Qualifier

Search Qualifier	FD=
Display Qualifiers	FD
MAP Qualifier	-
RANK Qualifier	FD
SORT Qualifier	-

Search Format

FD=filing detail data (see list of data elements below)

Content

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 are:

- Related application number
- Related patent number
- Designated states
- Document language
- Number of pages
- Filing notes about divisions, continuations and other relationships

Possible values for Filing Notes include:

Filing Note	Definition
add in	addition in
add to	addition to
application no.	application number
based on	based on
cip of	continuation-in-part of
cmca no	Council of Mutual Economic Assistance Number
cont of	continuation of
derived from	derived from
div ex	division from
div in	division in
previous publ.	previously published as
provisional	provisional publication
reissue of	reissue of
related to	related to
suppl discl	supplementary disclosure

Searching

All of the data elements in the Filing Details field, including any patent numbers, are searchable using the FD= qualifier. Patent numbers are searchable in DIALOG formats (see Section 9.1).

Patent numbers in the Filing Details field are linked by (S) proximity to the corresponding patent and application information.

```

?   S  PN=WO  9632289 (S) DS=AU
      1      PN=WO  9632289
      839555 DS=AU    (AUSTRALIA)
S18      1      S  PN=WO  9632289 (S) DS=AU
  
```

Display

Filing Details text can be displayed using the display qualifier FD.

```
? T 2/FD/1

2/FD/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved.
```

Patent Number	Kind	Lan	Patent Details		Filing Notes
			Pgs	Draw	
WO 1996032289	A1	EN	109	23	
National Designated States,Original					
	AU BR CA CN JP KR MX US				
Regional Designated States,Original					
AU 199654474	A	EN			Based on OPI patent
EP 765244	A1	EN	1		PCT Application
					Based on OPI patent
Regional Designated States,Original					
BR 199606316	A	DE FR GB IT			PCT Application
					Based on OPI patent
JP 10501486	W	JA	113		PCT Application
					Based on OPI patent
KR 1997703860	A	KO			PCT Application
					Based on OPI patent
US 5892524	A	EN			PCT Application
					Based on OPI patent

RANK

The RANK command can be used to analyse the filing details in a set of results.

9.9 Language

Qualifier

Search Qualifier	LA=
Display Qualifier	LA
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	-

Search Format

LA=two-letter language code

Content

Any family containing a European and/or PCT (World) document, which may be published in a number of languages, contains a language code. In addition, from *DWPI* Update 199216, documents published in countries that accept documents in more than one language, list the language, if it is not the major language of the country.

For example, for Canadian documents, the language code is provided from 199216 forward if the document is in French but not if it is in English.

Searching

The language of the document can be searched using one of the following two-letter codes.

Code	Language	Code	Language
AF	AFRIKAANS	IT	ITALIAN
ZH	CHINESE	JA	JAPANESE
CS	CZECH	KO	KOREAN
DA	DANISH	MI	MAORI
DE	GERMAN	NL	DUTCH
EN	ENGLISH	NO	NORWEGIAN
ES	SPANISH	PT	PORTUGUESE
FI	FINNISH	RO	ROMANIAN
FR	FRENCH	RU	RUSSIAN
HE	HEBREW	SK	SLOVAKIAN
HU	HUNGARIAN	SV	SWEDISH

LIMITing Search Results to English

All patent families in the database that contain a member from a country normally publishing in English are specifically coded for retrieval by the LIMIT suffix /ENG. The countries that generate this code are Australia, Canada (except those documents coded LA=FR), Israel (except those documents coded LA=HE), United Kingdom, United States and South Africa, together with English-language European and PCT (World) documents coded LA=EN.

The LIMIT qualifier /ENG can be used to restrict a set of documents to English, creating a new set in the process.

```
? S COMPUTER(W)CHIP? ?
      600738 COMPUTER
      214830 CHIP? ?
S4      847 S COMPUTER(W)CHIP? ?

? S S4/ENG
S5      634 S S64/ENG
```

Language Linked to Other Data

In records that have been entered or updated from DWPI Update 199216, the Language field is in (S) proximity to the other corresponding patent and application information (belonging to the same patent document). For example, to locate European patents published in French:

```
? S LA=FR(S)PC=EP
      859751 LA=FR (FRENCH)
      1637114 PC=EP (EUROPEAN PATENT)
S9      122773 S LA=FR(S)PC=EP

T 9/PN,LA/1
9/PN,LA/1
Derwent WPI
(c) 2006 The Thomson Corporation. All rights reserved.
Patent Number Kind Date Update Type
US 20060126709 A1 20060615 200645 B
EP 1672901 A1 20060621 200645 E
FR 2879379 A1 20060616 200645 E

Patent Number Kind Lan Pgs Draw
US 20060126709 A1 EN 10 9
EP 1672901 A1 FR
```

9.10 Number of Countries

Qualifier

Search Qualifier	NC=
Display Qualifier	NC
MAP Qualifier	-
RANK Qualifier	NC
SORT Qualifier	-

Search Format

NC=nnn

Where: nnn = three-digit number

Content

The number of countries in a patent family is calculated by summing the number of countries represented by the documents listed in the family, including the designated states in EP and PCT (WO) documents. EP and PCT are not themselves counted as countries. As equivalents from new countries are added to a record, the NC field is incremented accordingly. Should there be more than one document from a single country, e.g. DE-A and DE-C, the country is only counted once.

Searching

Range-searching and relational operators (=, <, >, <=, and >=) are available for searching the number of countries represented in a family.

?	S	CK=RHON	AND	NC>=020
		6923		CK=RHON
		1321556		NC>=020
S6		1820	S	CK=RHON AND NC>=020

RANK

An analysis of the number of countries covered by records can give an indication as to the significance of the invention. Those with the most comprehensive coverage could be assumed to be the most significant:

```
? RANK NC
Started processing RANK
Completed Ranking 57 records
DIALOG RANK Results
-----
RANK: S10/1-57      Field: NC=   File(s): 351
(Rank fields found in 57 records - 29 unique terms) Page 1 of 4

RANK No.    Items    Term
-----
1           12     001
2            4     019
3            4     020
4            4     025
5            3     018
6            2     002
7            2     006
8            2     007
P = next page          Pn = Jump to page n
P- = previous page    M = More Options      Exit = Leave RANK
```

9.11 Number of Patents

Qualifier

Search Qualifier	NP=
Display Qualifier	NP
MAP Qualifier	-
RANK Qualifier	NP
SORT Qualifier	NP

Search Format

NP=nnn

Where: nnn = three-digit number

Content

The Number of Patents field gives a count of the number of documents in the family including EP and PCT (WO). The NP field is incremented accordingly as new equivalents are added to a record, including individual counts for different document kinds, e.g. EP-A2, -A3, and -A4.

Searching

Range-searching and relational operators are available for searching the number of patents in a family.

```

? S NP=003:004
S8      1047924 S NP=003:004
? T 58/PI,DS/1

      8/PI,DS/1
      Derwent WPI
      (c) 2006 The Thomson Corporation. All rights reserved

Patent Family: 3 patents, 110 countries
Patent Number Kind Date Application Number Kind Date Update Type
WO 2006065103 A1 20060622 WO 2005KR4351 A 20051216 200643 B
JP 2006166903 A 20060629 JP 2005181204 A 20050621 200643 E
US 20060134788 A1 20060622 US 2005157741 A 20050621 200643 E

Priority Applications (no., kind, date): KR 2004107077 A 20041216

National Designated States: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KM KN KP KZ LC LK LR LS LT LU LV LY MA MD MG MK
MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD
SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Regional Designated States: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB
GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ
TR TZ UG ZM ZW

```

RANK

An analysis of the number of countries covered by records can give an indication as to the significance of the invention. It will also take into account all the various publication stages of the documents.

SORT

Search results may be sorted by the number of patents in the family. For example, to sort all records in set S3 by the number of patents in the family in descending order:

```
SORT S3/ALL/NP,D  
0507
```


10 Date Searching

10.1 Publication Date

Qualifier

Search Qualifier	PD=, PD= /PB
Display Qualifier	PD
MAP Qualifier	-
RANK Qualifier	PD
SORT Qualifier	PD

Search Format

PD=YYYYMMDD

Where:

- YYYY = four-digit year
- MM = two-digit month
- DD = two-digit day

Content

Publication dates have been available for both basics and equivalents since the start of 1974 (*DWPI* Update 197401). For documents added to *DWPI* before 1974, the publication date may not be available.

Searching

The publication date field is range searchable, as shown in the following example.

```
? S PD=19920101:19920131
S1      65517      S PD=19920101:19920131
```

When time ranges larger than one year have to be searched, the publication year (PY=) field is preferable to publication date, to reduce processing time (see Section 10.3). When searching for publications from a particular month or range of months, use the publication month (PM=) field (see Section 10.2).

The publication date is linked by (S) proximity to the other corresponding patent and application information.

```

? S CC=FR(S) PD=19940101:19940115
    2715810 CC=FR (FRANCE)
        27155 PD=19940101 : PD=19940115
S2      5085 S CC=FR(S) PD=19940101:19940115

? T 2/3/3
2/3/3
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved
0006967557 Drawing available
WPI Acc no: 1994-050671/199407
XRPX Acc No: N1994-039895
Door cooling appts. for domestic oven - uses double wall door panel with cooling air drawn through space between door panels by extractor fan.
Patent Assignee: MERLONI ELECTROMENAGER (MERL-N); SCHOLTES (SCHO-N); SOC SCHOLTES (SCHO-N)
Inventor: BICKEL S

Patent Family (6 patents, 16 countries)

```

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
FR 2693538	A1	19940114	FR 19928382	A	19920707	199407	B
EP 583180	A1	19940216	EP 1993401740	A	19930705	199407	E
ES 2048698	T1	19940401	EP 1993401740	A	19930705	199417	E
EP 583180	B1	19960925	EP 1993401740	A	19930705	199643	E
DE 69305030	E	19961031	DE 69305030	A	19930705	199649	E
			EP 1993401740	A	19930705		
ES 2048698	T3	19961201	EP 1993401740	A	19930705	199704	E

Priority Applications (no., kind, date): FR 19928382 A 19920707

Patent Number	Kind	Lan	Patent Details		Filing Notes
			Pgs	Draw	
FR 2693538	A1	FR	15	6	
EP 583180	A1	FR	8	6	
Regional Designated States, Original					
ES 2048698	T1	ES			Application EP 1993401740 Based on OPI patent EP 583180
EP 583180	B1	FR	9	6	
Regional Designated States, Original					
DE 69305030	E	DE			Application EP 1993401740 Based on OPI patent EP 583180
ES 2048698	T3	ES			Application EP 1993401740 Based on OPI patent EP 583180

Searches can be restricted to the publication date of basic patents only by appending the suffix /PB. For example, to retrieve records with patent Basics published on 30 October 1984:

? S PD=19841030/PB
S3 2120 S PD=19841030/PB

? T 3/2/2

3/2/2

Derwent WPI

(c) 2006 The Thomson Corporation All rights reserved

0003551147

WPI Acc no: 1985-121375/198520

XRAM Acc no: C1985-052934

Blast furnace operation regulating process - including reducing blast humidity in stages as product is let out of furnace

Patent Assignee: MAGN METAL COMPLEX (MAMD); URALS KIROV POLY (URKI)

Inventor: FEDULOV Y U V; KITAEV B I; OVCHINNIKO Y U N

Basic Patent (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
SU 1121292	A	19841030	SU 3581231	A	19830420	198520	B

Priority Applications (no., kind, date): SU 3581231 A 19830420

Alerting Abstract SU A

The process comprises periodically loading doses of charge into the furnace, melting them, checking the melt parameters with transducers and altering as required the humidified blast, which is hot and oxygen-enriched, with cyclic increase of natural gas consumption up to 20% from initial set mean gas level during letting the melt products out of the furnace.

The consumption of natural gas is increased within these limits, at the same time reducing the humidity of the blast by up to 5 g/m³ in the period of letting out the product in stages, with interval of alteration ever 1-2 feeds of charge, at a rate directly and inversely proportional to the rate of reduction of intensity of the magnetic field of the furnace hearth during the emission period, beginning from moment of reduction of intensity from max. by 10% and continuing to end of emission. A comparable opposite process takes place while the products are accumulating in the hearth.

ADVANTAGE - Saves coke, improves the quality of the pig-iron produced and raises the productivity of the furnace. Bul.40/30.10.84

Title Terms/Index Terms/Additional Words: BLAST; FURNACE; OPERATE; REGULATE; PROCESS; REDUCE; HUMIDITY; STAGE; PRODUCT

Class Codes (Additional/Secondary): C21B-005/00

File Segment: CPI

DWPI Class: M24

Manual Codes (CPI/A-N): M24-A02

RANK

Analyses can be conducted on all publication dates.

SORT

Search results may be sorted by the date of the basic patent in the family. For example, to sort all records in answer set S2 by the date of the basic patent in descending order:

SORT S2/ALL/PD,D

10.2 Publication Month

Qualifier

Search Qualifier	PM=
Display Qualifier	PD
MAP Qualifier	-
RANK Qualifier	PM
SORT Qualifier	-

Search Format

PM=YYYYMM

Where: YYYY = four digit year
 MM = two digit month

Content

The publication month field is a search-only field that permits searching for patent documents published in a particular month or in a series of months. Publication Month data is not available for some patent family members published prior to 1974.

Searching

When searching for large ranges, the PY= (Publication Year) should be used (see Section 10.3) in combination with the publication month to speed up processing online. For example to search for the range May 1970 - April 1979

```
? S PM=197005:197012 OR PY=1971:1978 OR PM=197901:197904
? S PM=197005:197012 OR PY=1971:1978 OR PM=197901:197904
    7072 PM=197005 : PM=197012
    1234988 PY=1971 : PY=1978
    121104 PM=197901 : PM=197904
S1 1313079 S PM=197005:197012 OR PY=1971:1978 OR
    PM=197901:197904
```

The publication month of basic patents can also be searched by appending the LIMIT suffix /PB. For example, to search for basic patents assigned to Imperial Chemical Industries published between June 1992 and September 1992, inclusive:

```
? S CK=ICIL AND PM=199206:199209/PB
    13642 CK=ICIL
    138146 PM=199206/PB : PM=199209/PB
S1 116 S CK=ICIL AND PM=199206:199209/PB
```

Publication month can be linked to other patent data for the same document using the (S) proximity operator:

```
? S PC=EP B?(S)PM=199703
      769720 PC=EP B?
      91917 PM=199703
S4      4507 S PC=EP B?(S)PM=199703
```

RANK

RANK PM will give a listing of all publication months in both YYYYMM and YYMM formats.

10.3 Publication Year

Qualifier

Search Qualifier	PY=
Display Qualifier	PY
MAP Qualifier	-
RANK Qualifier	PY, PYPB
SORT Qualifier	-

Search Format

PY=YYYY

Where YYYY = four-digit year

Content

Publication Year is a search-only field based on the year portion of the Publication Date field (see Section 10.1). It is present for basics and equivalents.

Searching

Searches can be restricted to a single publication year or a range of years. For example, to search for patent documents published in 1991 or 1992:

```
? S PY=1991:1992
S1 1089715 S PY=1991:1992
```

The publication year is linked by (S) proximity to the other corresponding patent and application information (belonging to the same patent document). For example, to find patents published in 1990 that were either published in The Netherlands or that include The Netherlands as a designated state:

```
? S CC=NL(S)PY=1990
      2024887 CC=NL (NETHERLANDS)
      539690 PY=1990
S12 65946 S CC=NL(S)PY=1990
```

Searches can also be restricted to the publication year of the basic only by appending the suffix /PB to the search. For example, to retrieve Basic patents that were published in 1992 and that were indexed with the *DWPI* Class A13:

```
? S DC=A13 AND PY=1992/PB
      38331 DC=A13 (AROMATIC MONO-OLEFINS - INCL.
      POLYSTYRENE)
      433604 PY=1992/PB
S13 1159 S DC=A13 AND PY=1992/PB
```

10.4 Application Date

Qualifier

Search Qualifiers	AD= ; AD= /PR
Display Qualifiers	AD, PR
MAP Qualifier	-
RANK Qualifiers	AD, ADPR
SORT Qualifiers	-

Search Format

S AD=YYYYMMDD

Where:

- YYYY = Four-digit year
- MM = Two-digit month
- DD = Two-digit day

Content

Application dates for priority and non-priority applications are entered as a four digit year, a two-digit month, and a two-digit day (YYYYMMDD).

Where in some cases the full date is unknown, or not given on the specification, which may happen when divisional application numbers are added, the day and month are recorded as zeros, e.g., AD=19760000

Searching

The application date is tied by (S) proximity to the other information belonging to the same patent document.

```

?   S  PC=EP  B?(S)AD=19890627
      699442  PC=EP  B?
      2469   AD=19890627
S2      168   S  PC=EP  B?(S)AD=19890627

```

To search for an application date with less specificity, use Application Month (AM=, Section 10.5) or Application Year (AY=, Section 10.6).

Application dates can be range-searched, as shown in the example below.

```

?   S  AC=US/PR(S)AD=19960101:19960630
      2248650  AC=US/PR
      384653  AD=19960101 : AD=19960630
S5      61880  S  AC=US/PR(S)AD=19960101:19960630

```

Priority Date

On DIALOG, all priority dates are recorded with all other application dates in the AD= index. To indicate that the date being searched is a priority date, the AD= prefix can be used with the date followed by the suffix /PR (indicating priority). Alternatively, priority application dates can be searched with the qualifier PR=.

RANK

The RANK command can be used to obtain a frequency listing of the application dates in an answer set. RANKing AD analyses all dates, whereas ADPR will only analyse the first filing date (the priority):

```
? RANK ADPR
Started processing RANK
Completed Ranking 2034 records
DIALOG RANK Results
-----
RANK: S14/1-2034      Field: ADPR=   File(s): 834
(Rank fields found in 2034 records - 1714 unique terms) Page 1 of 215
RANK No.  Items  Term
-----
      1      22   20040702
      2      19   20041013
      3      18   20021220
      4      15   20040930
      5      14   20021212
      6      14   20030421
      7      14   20040630
      8      14   20040827
P = next page          Pn = Jump to page n
P- = previous page    M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

10.5 Application Month

Qualifier

Search Qualifier	AM=
Display Qualifier	AD
MAP Qualifier	-
RANK Qualifier	AM
SORT Qualifier	-

Search Format

S AM=YYYYMM

Where: YYYY = Four-digit year
 MM = Two-digit month

Content

The application month of priority and non-priority applications is entered into the AM field as a four-digit year and a two-digit month (YYYYMM).

Note The field qualifier AM= was previously used to search polymer fragment codes, which are now searched with the qualifier PF=.

Searching

Like the application date field (see Section 10.4), the application month field can be range-searched. It can also be linked to other data pertaining to the same patent by using the (S) proximity operator.

```

?   S  AM=199001:199003 (S) PC=GB
      143355  AM=199001  :  AM=199003
      776004  PC=GB      (UNITED KINGDOM)
S15      3824  S  AM=199001:199003 (S) PC=GB

```

The application month of the priority application can be searched using the LIMIT suffix /PR. For example, to search for priority applications issued in March 1995 with the word "Internet":

```

?   S  AM=199503/PR AND INTERNET
      60045  AM=199503/PR
      118602 INTERNET
S16      35  S  AM=199503/PR AND INTERNET

```

Alternatively, priority application months can be searched with the qualifier PR.

RANK

The RANK command can be used to obtain a frequency listing of the application months in an answer set.

10.6 Application Year

Qualifier

Search Qualifiers	AY=, AY=/PR
Display Qualifier	AY
MAP Qualifier	-
RANK Qualifiers	AY
SORT Qualifier	-

Search Format

SAY=YYYY

Where: YYYY = Four-digit year

Content

The application year search field is based upon the application date information and is entered into the AY field as a four-digit year (YYYY). The field cannot be displayed separately.

Searching

Like the application date field (see Section 10.4), the application year field can be range-searched. It can also be linked to other data pertaining to the same patent by using the (S) proximity operator.

For example, to find patent applications filed in France in 1989 and 1990:

```

?   S  AY=1989:1990(S)AC=FR
      971060  AY=1989  :  AY=1990
      473580  AC=FR    (FRANCE)
S17      26118  S  AY=1989:1990(S)AC=FR

```

The application year of the priority application can be searched using the LIMIT suffix /PR. The example below shows the difference in results when searching for all applications and then priority applications filed in 1992:

```

?   S  AY=1992
S9      535314  S  AY=1992

?   S  AY=1992/PR
S10     430033  S  AY=1992/PR

```

Alternatively, priority application years can be searched with the qualifier PR=.

RANK

The RANK command can be used to analyse the application years within a result set and will show trends in research with time. In the example it shows that patenting activity has increased rapidly since 1996:

```
? S INTRANET
S20          6375   S INTRANET

? RANK AY
Started processing RANK
Completed Ranking 6375 records
DIALOG RANK Results
-----
RANK: S20/1-6375   Field: AY=   File(s): 834
(Rank fields found in 6375 records - 13 unique terms) Page 1 of 2
RANK No.   Items   Term
-----
      1     1724   2003
      2     1612   2001
      3     1440   2002
      4     1427   2000
      5     1410   2004
      6      916   1999
      7      615   1998
      8      449   2005

P = next page           Pn = Jump to page n
P- = previous page     M = More Options           Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

10.7 Database Update (*DWPI* Update)

Qualifier

Search Qualifiers	DW= , DW= /PB
Display Qualifier	DW
MAP Qualifier	-
RANK Qualifier	DW
SORT Qualifier	-

Search Format

SDW=YYYYWW

Where: YYYY = four-digit year
 WW = two-digit week

Content

The *DWPI* Update indicates when a particular patent was added to the database and displays in the patent family table.

From March 1999, the *DWPI* Update represents a production cycle and as such may contain a mixture of publication dates for individual countries.

Searching

The *DWPI* Update field is range searchable, and can be linked by (S) proximity to the corresponding patent information.

Searches can also be restricted to basic patents published in a particular *DWPI* Update by using the suffix /PB.

?	S	CC=DE(S)DW=199103/PB		
		Processing		
		2906857	CC=DE/PB	(GERMANY)
		7466	DW=199103/PB	
S21		1757	S	CC=DE(S)DW=199103/PB

The *DWPI* Update can be used to restrict a search to a particular time period for manual alert (current-awareness) searches, however, the use of Update Codes (Section 13) is preferable.

The DW qualifier can be used to search on accession year, which corresponds to the year in which the record entered the *DWPI* system and not necessarily the publication year of the basic patent.

For example, the following search retrieves basic patents that were entered into the *DWPI* database from 1988 to the end of 1989.

Note: DW=1990/PB appears at the beginning of the index for 1990 and thus no records entered in 1990 will be retrieved.

?	S	DW=1988:1990/PB
S1		745739 S DW=1988:1990/PB

11 Classification Searching

11.1 Accession Numbers

An accession number is an alphanumeric identifier assigned to a record to indicate the order in which it was added to a document collection. There are several types of accession numbers used in *DWPI*:

- 11.1.1 Main *DWPI* Accession Number
- 11.1.2 Secondary *DWPI* Accession Number
- 11.1.3 Cross-Reference/Related *DWPI* Accession Numbers

There are three search qualifiers available for searching the various accession numbers:

Qualifier

AA=	Main <i>DWPI</i> Accession Number only
AX=	Secondary <i>DWPI</i> Accession Numbers
DX=	Main and Related/Cross Reference <i>DWPI</i> Accession Numbers

DIALOG also applies its own accession number to each record.

11.1.1 Main *DWPI* Accession Number

Search Qualifiers	AA=, AX=, DX=
Display Qualifiers	AA, AX, DX
MAP Qualifiers	AA, AX, AXRX, DX, DXRX
RANK Qualifiers	AA, AX, DX
SORT Qualifier	-

Search Formats

S AA=YYYY-NNNNNNN	Main <i>DWPI</i> Accession Number Only
Where:	YYYY=Four-digit year
	NNNNNN = Six-digit serial number

Content

All new basics are assigned unique accession numbers to indicate the order in which they are added to *DWPI*. Each number comprises a year element, a hyphen and a six-digit serial but the format has changed slightly over time as described below. The year element of the accession number must be searched using a four digit format.

Currently each year numbering begins at 000001 with the new year prefix. This format has been in use since *DWPI* update 198327. At *DWPI* update 198327, re-numbering began at 1983-700001.

From *DWPI* update 197001 to 198327 chemical basics were assigned accession numbers that indicated the year of entry by a letter at the end of the number rather than the four-digit year prefix, e.g. 45982C. To standardise the format of these accession numbers online, the four-digit year and a hyphen have been inserted before the old format number, e.g. 1980-45982C.

For electrical and engineering basics in this period, a letter was also added to the beginning of the number to distinguish them from chemical records, e.g. 1975-C7954W.

The following letters were used to indicate the year:

Letter	Year	Letter	Year	Letter	Year
R	1970	W	1975	C	1980
S	1971	X	1976	D	1981
T	1972	Y	1977	E	1982 (<i>DWPI</i> updates 198201-198246)
U	1973	A	1978	J	1982 (<i>DWPI</i> updates 198247-198252)
V	1974	B	1979	K	1983 (<i>DWPI</i> 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 that have been added as prefixes to the accession numbers as follows:

Letter	Service	Year
F	FARMDOC (<i>DWPI</i> Section B)	1966
G or H	AGDOC (<i>DWPI</i> Section C)	1967
P or Q	PLASDOC (<i>DWPI</i> Section A)	1968
Z	'Pre-CPI' Data	1969

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

Searching

To search for the Main *DWPI* Accession number alone, the AA= qualifier should be used. To also retrieve records that may be cross-referenced, the AX= or DX= qualifiers should be used.

Display

Although the Main Accession Number is searched as shown above, it is displayed in standard formats with the *DWPI* update number appended.

MAP

Accession numbers can be MAPped for re-use in other databases that contain accession numbers from *DWPI*. Map will automatically qualify the terms for re-use in other databases. In this example, the Main *DWPI* Accession Numbers are MAPped and re-used in the *Patents Citation Index* database (File 342):

```
? MAP AA T

Temp SearchSave "TC032" stored
20 Select Statements, 244 Search Term(s)
SearchSave TC032

1 SearchSave(s), 244 Search Term(s)

? B 342

Patents Citation Indx
(c)2006 The Thomson Corporation All rights reserved.

? EXS TC032
.....

S6 51 S1:S9
? T 6/9/1
```

6/9/1

Patents Citation Index

(c) 2006 The Thomson Corporation All rights reserved.

04285869 WPI Acc No: 01-102775/11

Intelligent postal storage box -

Patent Assignee: (EXPR-) EXPRESS-PAX LTD

Author (Inventor): STEVENS R J

Patent Family:

Patent No	Kind	Date	Examiner Field of Search
WO 200100069	A2	010104	(BASIC)
AU 200056889	A	010131	
GB 2353068	A	010214	None

DWPI Update (Basic): 0111

Priority Data: GB 9913868 (990616); GB 9920562 (990831); GB 9921401 (990913)

Applications: GB 9921401 (990913); AU 200056889 (000612); WO 2000GB2119 (000612)

Designated States

(National): AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CR; CU; CZ; DE; DK; DM; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW

(Regional): AT; BE; CH; CY; DE; DK; EA; ES; FI; FR; GB; GH; GM; GR; IE; IT; KE; LS; LU; MC; MW; MZ; NL; OA; PT; SD; SE; SL; SZ; TZ; UG; ZW

DWPI Class: P27; T05; X27

Int Pat Class: A47G-029/14

Number of Patents: 003

Number of Countries: 090

Number of Cited Patents: 006

Number of Cited Literature References: 002

Number of Citing Patents: 023

CITED PATENTS

Family Member	Cited Patent	Cat	WPI Acc No	Assignee/Inventor
By Examiner:				
GB 2353068 A	JP 11146829 A		99-379028/32	(TOKS-) TOKYO SEIMITSU KK

... CITED LITERATURE REFERENCES

Family Member	Cat	Citation
WO 200100069A		None
GB 2353068 A		JP2000189311 A

CITING PATENTS

Family Member	Citing Patent	Cat	WPI Acc No	Assignee/Inventor
By Examiner:				
WO 200100069A2	EP 1353588 B1		02-529271/52	(WUEB/) WUEBBE R H; (FOBB/) FOBBE A H; () OKKELS J/FOBBE A H; OKKELS J

...

11.1.2 Secondary DWPI Accession Number

Qualifier

Search Qualifier	AX=
Display Qualifier	AX
MAP Qualifiers	AX, AXRX
RANK Qualifier	AX
SORT Qualifier	-

Search Format

SAX=CYYYY-NNNNNN	(Chemical sections A-M)
SAX=NYYYY-NNNNNN	(Non-chemical sections P, Q, S-X)
Where:	YYYY=four-digit year
	NNNNNN = Six-digit serial number
	C = Chemical section
	N = Non-chemical section

Content

Secondary accession numbers have been assigned to all records with abstracts since the start of 1983 (DWPI update 198301) for the purpose of identifying records in microfilm and CD-ROM series.

Secondary accession numbers of CPI documents (DWPI chemical sections A to M and labeled XRAM) are indexed with a "C" before the year, i.e. CYYYY-NNNNNN. Secondary accession numbers of records classified into the electrical and engineering sections (DWPI sections P, Q and S-X and labeled XRPX) 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.

11.2 DWPI Classification

Qualifier

Search Qualifier	DC=
Display Qualifier	DC
MAP Qualifier	DC
RANK Qualifier	DC
SORT Qualifier	-

Search Format

S DC=A

S DC=ANN

Where: A = DWPI Section
 NN = Sub-section number

Content

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

The classification for A-M and S-X is applied by Thomson Scientific 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, DWPI Classes A (Plasdoc), B (Farmdoc), and C (Agdoc) were assigned at the single-letter section level only. From 1970, the full three-character DWPI Class codes are assigned. When equivalents were added to pre-1970 records, the record was normally reclassified and thus some pre-1970 records do have complete DWPI Class codes.

A complete list of the DWPI Classes is available in the DWPI Classification Guide, and a list of the 21 subject areas is given in Appendix 15.2.

Section R

DWPI 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. R should therefore not be searched.

See also Section 11.6 on File Segments and Section 12.1 on Manual Codes.

Searching

Both the full class and single-letter forms of the *DWPI* Classes are directly indexed. Truncation may also be used for searching at levels more specific than the single-letter level but not as specific as the full class level:

```
? S DC=D AND DC=Q3?
      900570 DC=D
      658978 DC=Q3?
S4    17921 S DC=D AND DC=Q3?

? T 4/TI,DC/1

4/TI,DC/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved
Mineral concentrate for use in preparing mineral water from tap water in site, comprises calcium ions,
magnesium ions, chloride ions, and sulfate ions

Class Codes
DWPI Class: D13 D15 M14 M27 Q39 X25
Original Titles:
MINERAL CONCENTRATE
CONCENTRE MINERAL
```

The *DWPI* Class can be used to differentiate between references retrieved by ambiguous keywords. In this example the word valve is restricted to pharmaceuticals using *DWPI* Class B:

```
? S VALVE? AND DC=B
      538147 VALVE?
      677666 DC=B
S5    8477 S VALVE? AND DC=B
? T 5/TI/1-3

5/TI/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved
Apparatus for generating a secondary isotope from a precursor isotope, comprises a generator system
including a collector vessel, a cold trap, a pump, lines connecting the vessel, the trap and pump, and
valves
Original Titles:
ISOTOPE GENERATOR
GENERATEUR D'ISOTOPES
```

The classification text of *DWPI* Classes is available in abbreviated form for expand, but not, however, for search.

```
? E DC=A83
Ref  Items  Index-term
E1   61309  DC=A81(ADHESIVES AND BINDERS - INCL. CHIPBOARD)
E2   98662  DC=A82(COATINGS,IMPREGNATIONS,NOT TEXTILE FINISH)
E3   18798  DC=A83(CLOTHING, FOOTWEAR)
E4   31048  DC=A84(HOUSEHOLD AND OFFICE FITTINGS)
E5   221924 DC=A85(ELECTRICAL APPLICATIONS)
E6   18975  DC=A86(FANCY GOODS, GAMES, SPORTS, TOYS)
E7   16180  DC=A87(TEXTILE AUXILIARIES)
E8   107534 DC=A88(MECHANICAL ENGINEERING AND TOOLS)
```

```

E9 167488 DC=A89(PHOTOGRAPHIC, LAB & OPTICAL EQUIPMENT)
E10 0 DC=A9(APPLICATIONS)
E12 9020 DC=A91(ION-EXCHANGE RESINS, POLYELECTROLYTES)
E13 83772 DC=A92(PACKAGING & CONTAINERS,INCL. ROPES & NETS)
E14 84579 DC=A93(ROADS, BUILDING, CONSTRUCTION FLOORING)
E15 48323 DC=A94(SEMI-FINISHED MATERIALS-FIBRE, FILMS, FOAMS)
E16 91152 DC=A95(TRANSPORT, VEHICLE PARTS, TYRES, ARMAMENTS)
E17 122834 DC=A96(VETERINARY, MEDICAL, DENTAL & COSMETIC USES)
E18 145660 DC=A97(MISCELLAN. GOODS NOT SPECIFIED ELSEWHERE)
Enter PAGE for more

```

RANK

The *DWPI* Class field can be used with the RANK command to produce statistical analyses giving a comprehensive yet broad form of reliable subject matter indexing. For example, to determine the principal research areas to which Dyson is devoted, Dyson's patents have been RANKed according to *DWPI* Class:

```

? S CK=DYSO
S6 18 S CK=DYSO

?
? RANK DC S6 PERCENT
Started processing RANK
Completed Ranking 18 records
DIALOG RANK Results
-----
RANK: S6/1-18 Field: DC= File(s): 834
(Rank fields found in 18 records - 14 unique terms) Page 1 of 2
RANK No. Items %Ranked Term
-----
1 6 33.3% Q38
2 3 16.7% M22
3 3 16.7% P53
4 2 11.1% Q24
5 2 11.1% Q35
6 2 11.1% Q61
7 1 05.6% A00
8 1 05.6% A15
P = next page Pn = Jump to page n
P- = previous page M = More Options Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.

```

MAP

DWPI Classes can be MAPped from answer sets and re-used to find patents with similar subject matter:

```

MAP DC T S3

```

11.3 Original (Initial) US National Classification

Qualifier

Search Qualifier	CL=
Display Qualifier	CL
MAP Qualifier	CL, CLOR
RANK Qualifier	CL, CLOR
Sort Qualifier	-

Both the Main and Secondary Original (Initial) US national classes are indexed in the CL field and searches will cover both types of classes.

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.

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

At present US national classes within *Derwent World Patents Index* are not updated following the regular reclassification cycles at the US Patent and Trademark Office. When this reclassification data is introduced current US national classes will become available within the National Patent Classification field.

Searching

Original US national classes are searchable using the suffix CL=.

```
? S CL=395148
S8          223   S  CL=395148

? T /CL
8/CL/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved.
US Classification, Issued: 707007000, 707506000, 395148000, 395761000
```

RANK

The US national class field can be used with the RANK command to produce statistical analyses giving an additional form of consistent subject matter indexing.

```
? RANK CL
Started processing RANK
Completed Ranking 133 records
DIALOG RANK Results
-----
RANK: S3/1-133      Field: CL=   File(s): 351
(Rank fields found in 120 records - 789 unique terms) Page 1 of 99

RANK No.   Items   Term
-----
1           8       514568000
2           5       514357000
3           3       252076000
4           3       252299010
5           3       428035700
6           3       510417000
7           3       514002000
8           3       514247000
P = next page          Pn = Jump to page n
P- = previous page    M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

An additional RANK command, CLOR will rank search results by main (as published) US national class.

```
? RANK CLOR
Started processing RANK
Completed Ranking 1476 records
DIALOG RANK Results
-----
RANK: S6/1-1476    Field: CLOR=   File(s): 834
(Rank fields found in 1476 records - 1111 unique terms) Page 1 of 139

RANK No.   Items   Term
-----
1          1476    455566000
2           215    455550100
3           210    455550000
4           187    455575000
5           150    455090000
6           130    455575100
7           115    455466000
8           110    455556000
P = next page          Pn = Jump to page n
P- = previous page    M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

MAP

US National Classes can be MAPped from answer sets and re-used to find patents with similar subject matter:

```
? MAP CL
Processing MAP

Temp SearchSave "TC033" stored
51 Select Statements, 750 Search Term(s)
SearchSave TC033

Processing MAP

Temp SearchSave "TC034" stored
4 Select Statements, 39 Search Term(s)
SearchSave TC034

2 SearchSave(s), 789 Search Term(s)

? MAP CLOR

Temp SearchSave "TC059" stored
7 Select Statements, 88 Search Term(s)
SearchSave TC059

1 SearchSave(s), 88 Search Term(s)
```

11.4 International Patent Classification (IPC)

Content

The International Patent Classification (IPC) system is a patent classification scheme, administered by the World Intellectual Property Office (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.

This reclassification aspect of IPC8 should eventually ensure that only one version of the IPC, the current version of IPC8, is required for complete retrieval of all relevant documents, thereby removing one of the major limitations of Editions 1-7 of the IPC.

Thomson Scientific will be applying all IPC8 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 Member Patent Level together with the Original IPCs for that document (where available due to historical coverage).

Editions 1-7 of the IPC

The general format of an IPC was ANNA-NNN/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.

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.

Following the initial release of the reclassified MCD in early 2006, quarterly revisions to the Advanced Level IPCs are planned for 2006 with increased frequencies of reclassification planned after this. A three year revision cycle is planned for the Core Level IPCs.

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 ANNA-NNNN/NNnnnn and 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.

Sample IPC Reform Entry

IPCs of interest can be determined by consulting the WIPO website at:
<http://www.wipo.int/classifications/ipc/en/>

IPCs of interest can also be determined by retrieving a few relevant records using a keyword search and then checking the IPCs by viewing the records in a free-of-charge format.

Searching

Thomson Scientific will be 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.

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.

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).

The advent of continual reclassification as part of the IPC Reform means that users who maintain Alerts need to consider the impact of potentially frequent changes to the IPC classifications within their area of technological interest to avoid their Alerts becoming redundant.

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 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 autogeneration, 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 would give 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 Scientific will auto-generate 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 Scientific will give them an office attribute (CC) of "98". Users will though still need to use both the Core and Advanced levels to ensure comprehensive worldwide retrieval of relevant subject matter due to the fact that some patent offices will only be applying the Core level.

It should be noted that Thomson Scientific will only generate a Core level IPC if this Core level code differs from the corresponding Advanced level code e.g. 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 level to retrieve documents classified by patent offices applying the Core level only
- (3) Deduplicate results obtained in (2) from those already obtained in (1).

Thomson Scientific-assigned IPC Codes

If no IPCs are given by the patent office, or if an invalid IPC is printed, Thomson Scientific will try to assign its own IPC codes to the subclass level.

Historically Thomson Scientific-assigned IPCs were entered with a 000/01 as the main group and subgroup number, e.g. A23L-000/01. Occasionally, more specific symbols with digits different from 0 may have been assigned. IPCs assigned by Thomson Scientific 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 (*DWPI* update 197403).

From early 1974 (*DWPI* update 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 (*DWPI* update 198049) this was increased to a maximum of 12. If IPCs only differed at the subgroup level, only one was entered.

From 1992 (*DWPI* 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. A23J-000/00. 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 second hyphen, 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 A23J-001-02 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 IPCs for the Basic document are available.

Current IPC Reform IPCs from equivalent documents are included at the Invention Level if they are considered unique when compared to other IPC Reform IPCs 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

(1) F24F-1/00 Class level = A, Position = F, Scope = I, Applied = M, Level = R, Office = JP

is considered different from

(2) F24F-1/00 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

(3) F24F-1/00 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

(1) F24F-1/00 Class level = A, Position = F, Scope = I, Applied = M, Level = R, Office = JP

is considered different from

(2) F24F-1/00 Class level = A, Scope = I, Applied = M, Level = R, Office = EP

as the position attribute has not been populated by the European Patent Office. See 11.4.2 for specific search examples.

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 Member Patent Level. In addition Original (Initial) IPCs as published on the patent document are available at the Member Patent Level (subject to the historical availability of IPCs as outlined above).

Inconsistencies

Some patent offices only assign IPCs to the subclass level. These are entered in *DWPI* with 000/00 as the main group and subgroup number, e.g. A23J-000/00.

There are often inconsistencies at the subgroup level resulting from variations in practice between different patent offices. Consequently more complete, but less specific, retrieval is obtained by searching at the subclass or main group levels.

Patent Office Indexing

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

To search for both kinds of classes, use the truncation symbol “?” between the main group and the subgroup, i.e. ANNA-NNN?NNnnn.

11.4.1 International Patent Classification – all versions

Search Format

Qualifier

Search Qualifier	IC=
Display Qualifier	IC
MAP Qualifiers	IC, ICMA (IPC 7 only), ICXR (IPC v7 only)
RANK Qualifiers	IC, ICMA (IPC 7 only), ICXR (IPC v7 only)
SORT Qualifier	IC

Content

The IC= index contains all IPCs irrespective of their status (e.g. Invention and Member Patent Levels, original and current, IPC Reform and IPC 1-7). The IPC code indexes are created from the Invention Level IPCs only. At the Member Patent Level the current and original IPC Reform IPCs for each constituent member patent will be displayed in the IC field

Searching

To search for 7th (and earlier) Edition IPCs use the existing codes with the IC= prefix.

? **S IC=A01B-001/20**
S2 191 S IC=A01B-001/20

? **T /IC**
2/IC/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved.

Class Codes

International Patent Classification					
IPC	Class Level	Scope	Position	Status	Version Date
A01B-001/20			Main		“Version 7”
A01B-033/00; A01G-001/12			Secondary		“Version 7”

To search for 8th Edition IPCs only, use the new IPC codes within the IC index.

? **S IC=A01B-0001/20**
S3 2 S IC=A01B-0001/20

Use Expand within different areas of the IC index to view and select the appropriate IPC7 and IPC Reform codes.

```

? E IC=A01B
Ref      Items      Index-term
E1         1      IC=A01A-034
E2         1      IC=A01A-034/70
E3        34147      IC=A01B
E4         77      IC=A01B-000
E5         77      IC=A01B-000/01
E6         66      IC=A01B-0001
E7         66      IC=A01B-0001/00
E8         19      IC=A01B-0001/02
E9          1      IC=A01B-0001/04
E10         7      IC=A01B-0001/06
E11         3      IC=A01B-0001/08
E12         1      IC=A01B-0001/10
E13         2      IC=A01B-0001/14
E14         11      IC=A01B-0001/16
E15         4      IC=A01B-0001/18
E16         2      IC=A01B-0001/20
E17         10      IC=A01B-0001/22
E18         3      IC=A01B-0001/24
...
Enter PAGE for more

```

Searches can combine both IPC7 and IPC Reform codes, to ensure maximum retrieval of relevant codes. For example:

```

? S IC=g06k-009/00 and IC=g06k-0009/00
      18717 IC=G06K-009/00
      2435 IC=G06K-0009/00
S1      751 S IC=G06K-009/00 AND IC=G06K-0009/00

? T /IC
3IIC/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved.

Class Codes
International Patent Classification
IPC      Class Level  Scope      Position  Status  Version Date
G06K-009/00      Main
G06K-0009/00  A      I      F      B      20060101

```

The IPCs can be linked using (S) proximity to any of the other data for the same document. Note, however, when linking IPCs with a "/" character to other fields, that quotes or parentheses must be placed around IPCs. However more complete results are achieved with the AND operator as all relevant IPCs are then searched.

```

? S PN=AU 9654474(S) IC=B41J-002/21>>>Invalid syntax

? S PN=AU 9654474(S) IC="B41J-002/21"
      1 PN=AU 9654474
      864 IC=B41J-002/21
S21 PN=AU 9654474(S) IC="B41J-002/21"

```

```
? S PN=AU 9654474 (S) IC= (B41J-002/21)
      1 PN=AU 9654474
      864 IC=B41J-002/21
      S4 1 PN=AU 9654474 (S) IC= (B41J-002/21)
?
```

IPC's are also range-searchable.

```
? E IC=A61K-000/12
Ref      Items      Index-term
E1        1      IC=A61K-000/06
E2        1      IC=A61K-000/08
E3        1      *IC=A61K-000/12
E4        1      IC=A61K-000/23
E5        1      IC=A61K-000/31
E6        1      IC=A61K-000/39
E7        2      IC=A61K-000/753
E8       156      IC=A61K-001
E9        1      IC=A61K-001-645
E10       30      IC=A61K-001/00
E11       6      IC=A61K-001/01
E12      14      IC=A61K-001/02
...
      Enter P or PAGE for more

? S IC=A61K-000/12:A61K-000/75
      S9      11      IC=A61K-000/12:A61K-000/75
?
```

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 A23J-001/02 (obtaining protein compositions from meat), consists of the following parts:

		Directly Indexed	Search Format
A	Main Section	×	-
A23	Class Level	×	-
A23J	Subclass Level	✓	S IC=A23J
A23J-001	Main Group Level	✓	S IC=A23J-001
A23J-001/02	Subgroup Level	✓	S IC=A23J-001/02

For IPC subgroups published with more than two digits after the second hyphen, only the first two digits were input to *DWPI* before *DWPI* update 199216. There are now no such limits, as stated above, but care should be taken to account for the various changes when formulating a search strategy. In the example quoted, A23J-001/02, there are no finer divisions beyond "/02" and a direct search of this 2-digit subgroup IPC will retrieve all examples. It is only necessary to truncate where 3- or 4-digit subgroups exist in the International Patent Classification manual.

Main IPC

Searching an IPC with the IC= qualifier retrieves patent families that have been assigned that IPC, whether it was assigned as a Main IPC, a Secondary IPC, or an Additional IPC. To search for Main IPCs only, append the suffix /MA to the IPC code. This will exclude patent families for which the IPC code in question was a Secondary or Additional IPC.

```
? S IC=D01B-001/14
S11          106  IC=D01B-001/14

? S IC=D01B-001/14/MA
S12          44  IC=D01B-001/14/MA
```

MAP

The DIALOG MAP command can be used to create a SearchSave of IPCs in a specific record or group of records for further searching in *DWPI*, or other DIALOG databases that include IPCs. For example, to create a temporary SearchSave of the IPCs in the first two records of set S3:

```
? MAP IC T S3/1-2

Temp SearchSave "TC035" stored
1 Select Statement, 4 Search Term(s)
SearchSave TC035

1 SearchSave(s), 4 Search Term(s)
```

The MAP qualifier ICMA can be used to extract only the main *version 7* IPC(s) from the specified records. For example, to SearchSave the Main IPCs from the first record of answer set 14.

```
? MAP ICMA T S14/1
1 Select Statement(s), 1 Search Term(s)Serial#TD011
? EXS TD011
S16          667  IC=D06M-011/38
```

To MAP only the secondary *version 7* IPC(s) from the specified records, use the MAP command ICXR.

```
? MAP ICXR
Processing MAP

Temp SearchSave "TC076" stored
51 Select Statements, 596 Search Term(s)
SearchSave TC076
```

For details of MAPping IPC Reform Original and Current classification codes, see Section 11.4.2.

RANK

Use of RANK with IPCs includes the full IPC. If a more general search is required it is possible to restrict RANK to search only the first 4 characters e.g RANK (IC 1-4).

```
? RANK IC
Started processing RANK
Completed Ranking 40 records
DIALOG RANK Results
-----
RANK: S18/1-40      Field: IC=   File(s): 834
(Rank fields found in 40 records - 269 unique terms) Page 1 of 34
RANK No.  Items      Term
-----  -
1          8      A23C-019/00
2          7      A23C-019/05
3          6      A23C-0019/00
4          6      A23J-001/20
5          5      A23C-009/12
6          5      A23C-019/02
7          5      A23J-003/08
8          4      A23C-0019/05
P = next page      Pn = Jump to page n
P- = previous page M = More Options      Exit = Leave RANK
To view records from RANK, enter VIEW followed by RANK number,
format, and item(s) to display, e.g., VIEW 2/9/ALL.
Enter desired option(s) or enter RANK number(s) to save terms.
```

To apply RANK to only the main *version 7* IPC(s), use the following command:

```
RANK ICMA
```

And to restrict the operation to the secondary *version 7* IPC(s), use:

```
RANK ICXR
```

For details of applying RANK to IPC Reform Original and Current classification codes, see Section 11.4.2.

```
2/IC/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved

Class Codes
International Patent Classification (Main): A01C-001/00
(Additional/Secondary): G06K-009/00
International Patent Classification (Current)
IPC          Class Level  Scope      Position  Status      Version Date
G06G-0007/00 C          I          L          B          20060101
A01C-0001/00 A          I          L          20060101
A01H-0004/00 A          I          L          20060101
C12Q-0001/00 A          I          F          B          20060101
G01N-0033/48 A          I          L          20060101
G06F-0019/00 A          I          L          20060101
G06G-0007/48 A          I          L          B          20060101
G06G-0007/58 A          I          L          B          20060101
G06K-0009/00 A          I          F          20060101
G06K-0009/00 A          I          F          20060101
A01H          A          I          F          20051231
```

11.4.2 International Patent Classification, Reform (version 8)

Search Format

Qualifier

Search Qualifier	IC=; ICA=; ICC=; IA
Display Qualifier	IC
MAP Qualifiers	IC, ICOR
RANK Qualifiers	IC, ICOR
SORT Qualifier	IC

Content

Use the new ICA= (Advanced) or ICC= (Core) indexes to search IPCR/8 classification codes only.

A feature of the IPC Reform is the organization of the classification into “core” vs. “advanced” codes. The core codes tend to be more general and are intended for classification use by smaller patent offices. The IPC Reform core codes are searchable using the ICC= prefix.

The advanced codes provide greater classification depth and are generally assigned by large patent offices such as USPTO, EPO, and WIPO. The IPC Reform advanced codes are searchable using the ICA= prefix.

Each IPC Reform classification code is also accompanied by a series of attributes or properties of the classification. The IPC Reform classification attributes can be searched using the IA= prefix.

These IPC code indexes are created from the Invention Level IPCs only. At the Member Patent Level the current and original IPC Reform IPCs for each constituent member patent will again be displayed in the IC field.

Searching

To restrict searches to IPC Reform Core Codes:

```
? S ICC=E01B-0007/00
S1          37 S ICC=E01B-0007/00
```

To restrict searches to IPC Reform Advanced Codes:

```
? S ICA=C12Q
S2          7198 S ICA=C12Q
```

Differences in codes applied at Advanced and Core levels

```

? S ICC=F24F
S1          1037 S ICC=F24F

? T /IC

1/IC/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved

Class Codes
International Patent Classification (Current)
IPC          Class Level  Scope      Position   Status     Version Date
F24F-0006/02 C           I          F          B          20060101
F24F-0006/04 A           I          F          B          20060101

? S ICA=F24F
S2          3460 S ICA=F24F

? T /IC

2/IC/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved

Class Codes
International Patent Classification (Current)
IPC          Class Level  Scope      Position   Status     Version Date
F24F-0013/10 A           I          F          B          20060101

```

Use Expand to view and select the appropriate IPC codes.

```

? E ICA=C12Q
RANK No.  Items  Index-Term
E1          107  ICA=C12P-0041
E2          107  ICA=C12P-0041/00
E3         5593  ICA=C12Q
E4         5587  ICA=C12Q-0001
E5          397  ICA=C12Q-0001/00
E6          637  ICA=C12Q-0001/02
E7          177  ICA=C12Q-0001/04
E8           52  ICA=C12Q-0001/06
E9           3   ICA=C12Q-0001/08
E10         12   ICA=C12Q-0001/10
E11         10   ICA=C12Q-0001/14
E12          1   ICA=C12Q-0001/16
E13         46   ICA=C12Q-0001/18
E14          3   ICA=C12Q-0001/20
...
Enter PAGE for more

```

Attributes

Use the IPC Attribute (IA=) field to search supplemental information about an IPCR/8 class code such as classification level, i.e., advanced or core, whether it is inventive or non-inventive, version date, etc.

The following attributes may be present at the Invention & Member Patent Levels:

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 attributes can be linked to the IPC classification codes (IC=; ICA= or ICC=) using the (S) operator and quotes around the IC= term, e.g.:

```
? S IA=F (S) IC="A61K-0031/198"
      618792 IA=F (POSITION OF SYMBOL - FIRST)
      404 IC=A61K-0031/198
S1 112 S IA=F (S) IC= "A61K-0031/198"
```

It is possible to search for Attributes across all codes that start with the same coding, as in the following examples:

```
? S ICA=C12Q (S) IA=F
      7198 ICA=C12Q
      618792 IA=F (POSITION OF SYMBOL - FIRST)
S2 4063 S ICA=C12Q (S) IA=F

? S IC="D01D-0005" (S) IA=I
      312 IC=D01D-0005
      680291 IA=I (CLASSIFICATION VALUE FOR INVENTION
      INFORMATION)
S3 311 S IC= "D01D-0005" (S) IA=I

? E IA=
Ref Items Index-term
E4 681082 IA=A(CLASSIFICATION LEVEL - ADVANCED)
E5 558423 IA=B(BASIC (ORIGINAL) IPC)
E6 360582 IA=C(CLASSIFICATION LEVEL - CORE)
E7 0 IA=D(DELETED IPC FROM THE MASTER CLASSIF. DATABASE)
E9 618792 IA=F(POSITION OF SYMBOL - FIRST)
E10 0 IA=G(SOURCE - GENERATED BY SOFTWARE AUTOM. ANALYSIS)
E12 6864 IA=H(SOURCE - HUMAN GENERATED (INTELLECTUAL CLASS.))
E13 680291 IA=I(CLASSIFICATION VALUE FOR INVENTION INFORMATION)
...
Enter PAGE for more
```

MAP

Use ICOR to MAP IPC Reform classification codes and create a SearchSave of IPCs in a specific record or group of records for further searching in *DWPI*, or other DIALOG databases that include IPCs.

The MAP qualifier ICOR will extract only the Original IPC Reform classification code(s) from the specified records.

RANK

Use of RANK with IPCs includes the full IPC. If a more general search is required it is possible to restrict RANK to search only the first 4 characters e.g. RANK (IC 1-4)

ICOR restricts the analysis to the original (as published) IPC Reform codes only.

11.5 Type of Family Member

Qualifier

Search Qualifier	TY=
Display Qualifier	-
MAP Qualifier	-
RANK Qualifier	TY
SORT Qualifier	-

Search Format

S TY=family type

Content and Searching

The Type of Family Member field describes the nature of a patent document in *DWPI*. The possible values for TY include:

Family Type	Description	Definition
B	Basic patent	A patent or application relating to an entirely new invention not previously seen by Thomson Scientific
E	Equivalent patent	A patent or application relating to an invention which has previously been seen by Thomson Scientific
NCE	Non-convention Equivalent patent	If an application is filed in another country more than one year after the first filing or priority date, the applicant cannot claim the priority from the first application under the Paris Convention. Thomson Scientific uniquely incorporates these into the same family as the first application
ETAB	Equivalent patent 'Treated as Basic'	A patent or application that is Equivalent but to a Basic which did not receive full abstracting and indexing treatment from Thomson Scientific. A new abstract is written and full indexing added from the Equivalent in this case

Every patent document in a patent family table is indexed with a TY qualifier. However, the only values that are displayed in the patent family table are B and NCE.

```

? S CK=LOCK AND TY=NCE
      3 4 3 2 CK=LOCK
      1 9 8 1 2 7 TY=NCE (NON-CONVENTION PATENT FAMILY MEMBER)
S3      5 0 S CK=LOCK AND TY=NCE

? T 3/PI/1
3/PI/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved

Patent Family: 2 patents, 34 countries
Patent Number Kind Date Application Number Kind Date Update Type
US 20040221762 A1 20041111 US 2003468698 P 20030506 200476 B
EP 1595735 A2 20051116 EP 200476384 A 20040511 200577 NCE

Priority Applications (no., kind, date): EP 200476384 A 20040511; US 2003468698 P 20030506; US
2004839690 A 20040505

```

The TY field can be linked to patent and application number data using the (S) proximity operator.

11.6 Record Type

Qualifier

Search Qualifier	RT=
Display Qualifier	RT
MAP Qualifier	-
RANK Qualifier	RT
SORT Qualifier	-

Search Format

RT=type

Where: type = Abstract or Image

Content

If a record includes an abstract, or an associated image, the record is indexed with an appropriate Record Type (RT=) entry for each. Thus *DWPI* records may have anywhere from 0 to 2 Record Type fields, depending on the record content.

Searching

The Record Type field is most useful for limiting search results to records with images:

```

?  S (BRAIN OR CEREBR?) (S) (IMPROV? OR ENHANC?)
      27191  BRAIN
      29826  CEREBR?
      2138977  IMPROV?
      386991  ENHANC?
S4      8714  S (BRAIN OR CEREBR?) (S) (IMPROV? OR ENHANC?)

?  S S4 AND RT=IMAGE
Processing
      8714  S4
      7827235  RT=IMAGE
S5      3509  S S4 AND RT=IMAGE

```

Please note that searching "RT=Abstract" is equivalent to using the LIMIT suffix "/ABS."

11.7 File Segment

Qualifier

Search Qualifier	FS=
Display Qualifier	FS
MAP Qualifier	-
RANK Qualifier	FS
SORT Qualifier	-

Search Format

S FS=file segment

Content

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

Title	Full Title and Coverage
CPI	Chemical Patents Index (Sections A-M)
EngPI	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.

Searching

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

?	S PLASMA AND FS=EPI
	132397 PLASMA
	6267065 FS=EPI
S13	97067 S PLASMA AND FS=EPI

Because each file segment has a very high number of records, other search criteria should be used to limit the search where possible, for example the more detailed *DWPI* Classes (see Section 11.2.).

11.8 Document Type

Qualifier

Search Qualifier	DT=
Display Qualifier	DT
MAP Qualifier	-
RANK Qualifier	DT
SORT Qualifier	-

Search Format

S DT=PATENT

Content

The Document Type field has only one possible value - Patent.

Searching

The statement “DT=PATENT” is useful in OneSearch, particularly when searching *DWPI* together with other databases that index a variety of document types, including patents.

12 Thomson Scientific Indexing

12.1 Manual Codes

Qualifier

Search Qualifier	MC=
Display Qualifier	MC, DI
MAP Qualifier	MC
RANK Qualifier	MC
SORT Qualifier	-

Search Format

MC=ANN-ANNANA	(see below for variations)
Where:	A = Manual code letter
	N = Manual code number

CPI manual codes are searchable by eligible subscribers only. If you are an eligible subscriber, you must apply to Thomson Scientific to have the correct access conditions applied to each DIALOG User Number.

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 *DWPI* Class (Section 11.2) and are assigned to basic patents in sections A to M (Chemical Patents Index (CPI)), section Q (Engineering Patents Index (EngPI)) and sections S to 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
ANN-ANNANA	10 characters for some new EPI codes from 199201

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 single-digit.

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 Scientific Indexers.
- Manual codes have a logical hierarchy.
- Manual Codes are only assigned to the basic member of the DWPI patent family. IPCs are available for both basic and equivalent documents.

For further information see *DWPI User Guides - CPI Manual Codes and EPI Manual Codes*.

Searching

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 Code Manual.
- 2 A specific subject search that will require a specific manual mode 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).

```
? S MC=V03-D04
```

As the codes are hierarchical, the EXPAND command has been used to see if there are further subdivisions of the code and two searches have been conducted on the code - the second one using truncation to show the extra answers that are retrieved by searching all the subdivisions:

```
? E MC=V03-D04
Ref      Items  Index-term
E1         2    MC=V03-D03L
E2         2    MC=V03-D03X
E3        1666    MC=V03-D04 (ELECTROMAGNETIC RELAYS)
E4         149    MC=V03-D04A (POLARISED AND SEALED RELAYS)
E5         746    MC=V03-D04A1 (1983+ POLARISED)
E6         454    MC=V03-D04A5 (1983+ SEALED)
E7          1    MC=V03-D04A7
E8        1944    MC=V03-D04X (ELECTROMAGNETIC RELAYS - OTHER)
E9         747    MC=V03-D05 (NON-ELECTROMAGNETIC RELAYS)
E10        179    MC=V03-D05A (1987+ PIEZOELECTRIC RELAYS)
E11         2    MC=V03-D05B (1997+ MAGNETOSTRICTIVE RELAYS)
E12         90    MC=V03-D05C (1997+ ELECTROSTATIC RELAYS)
E13        105    MC=V03-D05D (1997+ ELECTROTHERMAL RELAYS)
E14         1    MC=V03-D05E (1997+ DYNAMO-ELECTRIC RELAYS)
E15        416    MC=V03-D06 (CONSTRUCTIONAL DETAILS; MANUFACTURE;
TESTING)
E16        1827    MC=V03-D06A (1983+ CASES, INDICATORS, SHIELDING,
COOLING, TER
E17        1306    MC=V03-D06B (1983+ MANUFACTURE AND TESTING)
E18         19    MC=V03-D06B1 (2005+ MICROMACHINING PROCESS, METHOD
OR APPARATU
E19         82    MC=V03-D06C (1987+ ARC CONTROL)
E20         2    MC=V03-D07
E21        455    MC=V03-D10 (1997+ MICRORELAYS)
E22         8    MC=V03-D10A (2002+ NANORELAYS)
E23         10    MC=V03-D15 (1997+ HYBRID RELAYS)
E24         9    MC=V03-D20 (1997+ SMART RELAYS)
E25        268    MC=V03-E (SELECTORS)
Enter PAGE for more
```

```
? S MC=V03-D04
S1        1666    S MC=V03-D04
```

```
? T 1/TI,MC/1
```

1/TI,MC/1

Derwent WPI

(c) 2006 The Thomson Corporation All rights reserved

Control leads protecting apparatus for electromechanical relay, has conductive shield with openings to receive multiple conductor leads exiting from header base of relay

Class Codes

Manual Codes (EPI/S-X): V03-D04; V03-D06A; V04-Q02A; V04-U

Original Titles:

Radio frequency ground shield

Searching to include all levels below subgroup level, please note truncation with ?

```
? S MC=V03-D04?
S2          4849 S MC=V03-D04?
```

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):

```
? S MC=(A05-F05 AND (A12-T1C OR F04-E01))
          4702 MC=A05-F05
          0 MC=A12-T1C
          2027 MC=F04-E01
S4          62 S MC=(A05-F05 AND (A12-T1C OR F04-E01))
? T 4/TI,MC/1

4/TI,MC/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved
Production of cord made of multifilament aramid yarn for use in tire carcass, comprises treating cord
with curable epoxy compound between conversion of yarn to cord and treatment of cord with coating
adhesive to rubber

Class Codes
Manual Codes (CPI/A-N): A05-A01E; A05-F05; A12-T01C; F01-D03B; F03-E01; F04-E01
Original Titles:
MULTIFILAMENT-ARAMIDGARN MIT HOHER ERMUDUNGSFESTIGKEIT
MULTIFILAMENT ARAMID YARN WITH HIGH FATIGUE RESISTANCE
FIL D'ARAMIDE MULTIFILAMENT A RESISTANCE A LA FATIGUE ELEVEE
MULTIFILAMENT ARAMID YARN WITH HIGH FATIGUE RESISTANCE
FIL D'ARAMIDE MULTIFILAMENT A RESISTANCE A LA FATIGUE ELEVEE
FIL D'ARAMIDE MULTIFILAMENT A RESISTANCE A LA FATIGUE ELEVEE
```

Display

The DI qualifier is used to display all of the *DWPI* subscriber coding only. You need to be an eligible subscriber to have access to these codes, which include Manual Codes, Chemical Fragmentation Codes, Polymer Indexing, *DWPI* Registry Numbers and Specific Compound Numbers.

For TYPE and PRINT formats that include Manual Codes, see Section 14.1.

MAP

The DIALOG MAP command can be used to create a SearchSave of Manual Codes in a specific record or group of records for further searching in *DWPI*.

```
? S FIRE(1N)(RESIST? OR RETARD?) /TI
          49621 FIRE/TI
          406190 RESIST?/TI
          33305 RETARD?/TI
S1          12802 S FIRE(1N)(RESIST? OR RETARD?) /TI

? MAP MC T EXS S1
```

Temp SearchSave "TC031" stored
10 Select Statements, 139 Search Term(s)
SearchSave TC031

Executing TC031

21	MC=A02-A	(POLYMERISATION CONTROLLERS - CATALYSTS AND ACTIV
31	MC=A04-E08	(TETRAFLUOROETHYLENE HOMOPOLYMER (PTFE))
127	MC=A04-G01E	(pre-1970 POLYMERS FROM UNSUBSTITUTED (CYCLO)-ALI
33	MC=A04-G02E4	(1986+ ETHYLENE HOMOPOLYMER USES AS ELECTRICAL AN
24	MC=A04-G03E	(pre-1970 PROPYLENE HOMOPOLYMER USES)
2	MC=A04-G10	(4-METHYLPENTENE-1 (CO) POLYMERS)
4	MC=A05-A01D	(pre-1970 EPOXY RESINS TREATMENT)
41	MC=A05-E01D3	(1986+ SATURATED POLYESTERS USE AS FILMS; PACKAGI
38	MC=A05-E06A	(1986+ POLYCARBONATES; POLY-THIOCARBONATES PRODUC
41	MC=A05-E06B	(1986+ POLYCARBONATES; POLY-THIOCARBONATES USES)
12	MC=A05-G01A	(pre-1970 POLYURETHANES PRODUCTION)
14	MC=A05-G01B	(pre-1970 POLYURETHANES COMPOSITIONS)
8	MC=A06-B	(INORGANIC PHOSPHORUS POLYMERS)
36	MC=A07-A02D	(1977+ MIXTURES OF POLYMERS FROM MONOOLEFINIC ALI
40	MC=A08-B01	(BLOWING AGENTS AND PORE FORMERS)
4	MC=A08-B03	(BLOWING AGENTS AND PORE FORMERS - COMPOUNDS RELE
54	MC=A08-E01	(DYES AND PIGMENTS)
S2	479	MC=A02-A + MC=A04-E08 + MC=A04-G01E + MC=A04-G02E4 + MC=A04-G03E + MC=A04-G10 + MC=A05-A01D + MC=A05-E01D3 + MC=A05-E06A + MC=A05-E06B + MC=A05-G01A + MC=A05-G01B + MC=A06-B + MC=A07-A02D + MC=A08-B01 + MC=A08-B03 + ...

12.2 Polymer Indexing

Since 1966, polymer information has been indexed in *DWPI* for patents classified in Section A: Polymers and Plastics.

The original polymer indexing was the Plasdoc punch code or fragmentation code (qualifier PF=), 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 (qualifier 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 *DWPI* Update 199332, a new system for indexing and searching polymer related information was introduced: Enhanced Polymer Indexing (qualifier PS=).

This replaced the Plasdoc Fragmentation Codes (Chapter 12.2.1) and Plasdoc Key Serial Numbers (Chapter 12.2.2), both of which were discontinued as of update 199501.

Year Ranging

Modifications to the coding system (normally additions) have been made at various times over the years. Consequently, a search frequently is 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 as listed:

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 (DW9331)
017	1993 (DW9332)-1995
018	1996 - 2003
2004	2004 -

12.2.1 Plasdoc Fragmentation Codes

Qualifier

Search Qualifier	PF=
Display Qualifier	PF, DI
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	-

Search Format

PF=NNX

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

Fragmentation codes are searchable by eligible subscribers only. If you are an eligible subscriber you must apply to Thomson Scientific to have the correct access conditions applied to each DIALOG User Number.

Content

Plasdoc fragmentation codes describe both specific and generic concepts found in patent specifications. Codes are applied to all concepts disclosed or claimed in the specification. Plasdoc fragmentation coding was initially assigned to records that included a basic patent 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 *DWPI* Online User Guides - CPI Coding Systems and CPI Plasdoc Code Dictionary.

Plasdoc fragmentation codes were discontinued as of *DWPI* Update 199501, and were replaced by the Enhanced Polymer Indexing system (see Section 12.2.3).

Searching

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 (S) proximity.

Display

The DI qualifier is used to display all of the *DWPI* subscriber coding only. You need to be an eligible subscriber to have access to these codes, which include Manual Codes, Chemical Fragmentation Codes, Polymer Indexing, *DWPI* Registry Numbers and Specific Compound Numbers.

For TYPE and PRINT formats that include Plasdoc Fragmentation Codes, see Section 14.1.

12.2.2 Plasdoc Key Serials

Qualifier

Search Qualifier	KS=
Display Qualifier	KS, DI
MAP Qualifier	KS
RANK Qualifier	KS
SORT Qualifier	-

Search Format

KS=four-digit code

The Plasdoc Key Serials field is searchable by eligible subscribers only. If you are an eligible subscriber you must apply to Thomson Scientific to have the correct access conditions applied to each DIALOG User Number.

Content

Plasdoc Key Serial Numbers provide a concise mechanism for searching plastics and polymers 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.

Indexing with Plasdoc Key Serials was discontinued from *DWPI* Update 199501, having been replaced by Enhanced Polymer Indexing (see Section 12.2.3).

Key serial numbers were initially assigned to basic patents 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.

Searching

Key serials are searched with the qualifier KS= and their respective 4-digit numbers.

```
S KS=3210
```

Display

The DI qualifier is used to display all of the *DWPI* subscriber coding only. For TYPE and PRINT formats that include key serial numbers, see Section 14.1.

12.2.3 Enhanced Polymer Indexing

Qualifier

Search Qualifier	PS=
Display Qualifier	PS, DI
MAP Qualifier	-
RANK Qualifier	-
SORT Qualifier	-

Search Format

PS=polymer indexing (see below)

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

Content

Enhanced Polymer Indexing was introduced in *DWPI* Update 199332 to replace the Plasdoc Fragmentation Codes (Section 12.2.1) and Plasdoc Key Serial Numbers (Section 12.2.2), both of which were discontinued as of *DWPI* Update 199501.

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

Facet	Code Format
Polymer Formers	Generic Codes Gnnnn,
Specific Compound Numbers	Rnnnnn
Polymer Types	Pnnnn
Natural Polymers	Generic Codes Gnnnn,
Specific Compound Numbers	Rnnnnn
Modified Polymers	Mnnnn
Chemicals	Gnnnn, Rnnnnn
Chemical Aspects	Dnn, Enn, Fnn, symbols for elements and groups of periodic table, Dnnn, Fnnn
Novelty Descriptors	NDnn
Universal Terms	Knnnn
Polymer Descriptors	Hnnnn
Shape & Form	Snnnn
Additives	Annn
Catalysts	Cnnn
Chemical Processes	Lnnnn
Physical Operations	Nnnnn
Equipment	Jnnnn
Properties	Bnnnn
Applications	Qnnnn

Where: n represents a single digit

DCR numbers (see Chapter 12.3.1) are also available for search and display within the PS field. These DCR numbers have been autogenerated from the corresponding Specific Compound Numbers present in 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 and certain Japanese documents, 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 see the following User Guides:

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

Searching

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:

	Proximity	Operator
Level 1	to chemically describe a substance	T
Level 2	to link the substance to its function	S
Level 3	to link other related terms to the substance	F

Level 1

The proximity operator (T) is used to link chemical aspects to generic terms and to specific compounds (terms typically found between semicolons). For example, to search for chlorine-containing monoolefinic vinyl ethers:

```
? S PS=(CL(T)G0588)
      92455 PS=CL
      6000 PS=G0588
S1      123 S PS=(CL(T)G0588)

? T /K/1
6/K/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved

Polymer Indexing
(01)
*001* 2004; D01 D19 D18 D18-R D33 D76 D50 D63 D28 D95 F94 F70 F90 F41 G1467 ...
```

Level 2

The proximity operator (S) is used to associate a chemical or compound with its function or use, such as homopolymer or additive. For example, to search for calcium carbonate filler:

?	S PS=(R01278 (S) A237)
	9179 PS=R01278
	54635 PS=A237
S4	7257 S PS=(R01278 (S) A237)

Level 3

The proximity operator (F) 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 for vinyl chloride copolymers containing calcium carbonate filler, used in packaging applications:

?	S PS=((R00338 (S) H0011) (F) (R01278 (S) A237) (F) Q8366)
	30742 PS=R00338
	271574 PS=H0011
	8926 PS=R01278
	52928 PS=A237
	60073 PS=Q8366
S8	28 S PS=((R00338 (S) H0011) (F) (R01278 (S) A237) (F) Q8366)

Since DIALOG processes proximity operators in the order W, N, S, F parentheses should be used to ensure correct processing. The “AND” operator is used to search between linking groups within a record.

In the sample from a record displayed below, (08) and (09) are from different linking groups. Codes shown between semicolons are linked together at level 1 (searchable with the (T) operator). Sets of codes marked *001*, *002* etc. are linked at level 2 (searchable with the (S) operator). The linking groups are marked here as (08) and (09) and the (F) operator searches within each linking group. The AND operator searches across both (08) and (09).

(08)

001 018; R24001 G0282 G0271 G0260 G0022 D01 D12 D10 D26 D51 D53 D58 D61 D83 F36 F35 Na 1A; H0000; A999 A782; A999 A624-R A566; P0088

(09)

001 018; R00123 G1821 D01 D50 D81 F78; H0011-R; P0259-R P0226 D01; A999 A782; A999 A157-R
002 018; R00859 G1809 G1649 D01 D23 D22 D31 D45 D50 D76 D83 F19 F10 F07; H0011-R; P0259-R P0226 D01; A999 A782; A999 A157-R

Display

The DI qualifier is used to display all of the Thomson Scientific subscriber coding only.

12.3 Chemical Indexing

12.3.1 Chemistry Resource

The Chemistry Resource (DCR) is an index of specific structures designed to allow users to search the chemical content of Thomson Scientific online files. The Dialog file number for DCR is File 355.

The indexing of chemical compounds was phased in by technology and by patent country during 1999. This structure-searchable index allows efficient, seamless access to the ongoing *DWPI* Sections B, C and E, complementing the existing Fragmentation Code indexing and enabling both proficient and novice chemical information searchers to obtain precise recall of information within their field of interest.

DCR numbers are also available within the Enhanced Polymer Indexing field. These DCR numbers have been auto-generated from the corresponding Specific Compound Numbers.

The DCR number provides the unique identification label for specific chemical compounds and forms the seamless link between the Chemistry Resource and the corresponding bibliographic record in *DWPI*.

The Chemistry Resource on Dialog also offers a useful text searching facility. These searchable fields include Systematic Chemical Name, Preferred Name and Molecular Weight.

The online DCR record for Nitrazepam

DIALOG(R)File 355: Derwent Chemistry Resource
(c) 2006 Thomson Scientific. All rights reserved.

0000102080

/NA, NA= Preferred Name: NITRAZEPAM
DN= DCR Number: 102080
XD= External DCR Number: 102080-0-0-0
CN= Specific Compound Number: R01158; R07594
ID= DDF Structure ID: NITRAZPAM

/NA, NA= Systematic Chemical Name:

7-Nitro-5-phenyl-1,3-dihydro-benzo[e][1,4]diazepin-2-one

/SY, SY= Synonyms: ALODORM; APODORM; AREM; ATEMPOL; BENZALIN;
CALSMIN; CERSON; DESCANSOL; DORMICUM; DORMIGEN; DORMO-
PUREN; DUMOLID; EATAN-N; EPIBENZALIN; EPINELBON; EUNOCTIN;
GERSON; HIPNAX; HIPNOTAB; HIPSAL; HIRUSUKAMIN; HUBERPLEX;
HYPNOTEX; HYPNOTIN; IBROVEK; IMADORM; IMESON; INSOMA;
INSOMIN; IPERSED; IPNOZEM; LA-1; LA-I; LAGAZEPAM; LIVETAN;
LYLADORM; MAGADON; MEGADON; MITIDIN; MODADAN; MOGADAN;
MOGADON; MP-NITRAZEPAM; NELBON; NELMAT; NELUROLEN;
NEMNAMINE; NEOZEPAM; NEUCLONIC; NEUMAX; NIDIAZEPON;
NIPAM; NITEPAM; NITRADORM; NITRADOS; NITRAVET; NITRAX;
NITRAZEPAM; NITRAZEPAN; NITRAZEPHAR; NITRAZEPOL; NITREDON;
NITREEZE; NITRENPAZ; NITRODIAZEPAM; NOCTEM; NOCTENE;
NOVANOX; NSC-58775; NUMBON; ONIREMA; ORMODON; PACIDRIM;
PACISYN; PADOR; PAXADORM; PAXISYN; PELSON; PELSONFILINA;
PERSOPIR; PROSONNO; QUILL; RADEDORM; RELACT; RELAX; REMNOS;
RO-4-5360; RO-45360; RO-53059; S-2000; SCHLAFTABLETTEN-23; SERENEX;
SINDEPRES; SOLIUM; SOMITRAN; SOMNASED; SOMNIBEL-N; SOMNIPAR;
SOMNITE; SONEBON; SONIPAN; SONNOLIN; SONOTRAT; SUREM;
TAZEPAM; TRAZENIN; TRI; UNISOMMIA; UNISOMNIA

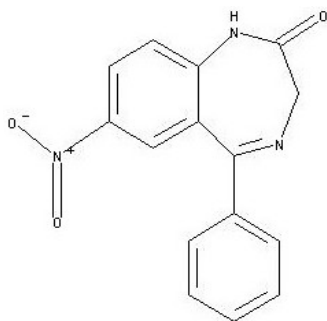
MW= Molecular Weight: 281.2699
/EC, EC=, MF= Molecular Formula (Orig): C15 H11 N3 O3
MF= Molecular Formula (Comp):C15H11N3O3

Structured Molecular Formula

SF= Fragment and Multiplier: C15H11N3O3 1
NG= Number of Fragments: 1
TF= Total Fragments: 1
RR= Ring Index Numbers: 01829
DR= Derwent RN: 1158
/DE Substance Descriptor: BENZODIAZEPINES

DDF Descriptors

/DE Activity: SEDATIVES
/DE Substructure: BENZODIAZEPINE; NITROARENE; BH-LINKED-CC; LACTAM
/DE Mechanism: BENZODIAZEPINE-AGONIST.; GABAMINERGIC



GS displays the graphic structure when DialogLink 5.0 is used.

The Chemistry Resource on Dialog share the same searching features as other Dialog structure-searchable databases and is available to subscribers and non-subscribers within Files 350,351 and 352.

Detailed information on searching the Chemistry Resource can be found in the Chemistry Resource Bluesheet at <http://library.dialog.com/bluesheets/html/bl0355.html>.

Search fields which relate to the Chemistry Resource indexing are detailed below:

CN	Specific Compound Number
DE	Substance Descriptor and DDF Descriptor
DN	DCR Number
DR	DWPI Registry Number
EC	Element Count
FS	File Segment
GN	Periodic Group Number
ID	DDF Structure Identifier
ME	Molecular Elements
MF	Molecular Formula
MW	Molecular Weight
NA	Preferred Name and Systematic Chemical Name
NE	Number of Elements
NG	Number of Fragments
NT	Structure Note
PI	Periodic Index Term
PT	Periodic Table Row
RR	Ring Index Number
SF	Structured Molecular Formula (Fragment and Multiplier)
SY	Synonyms
TF	Total Fragments
UD	Update
XD	External DCR Number

12.3.2 Fragmentation Codes, Sections B, C, E

Qualifier

Search Qualifiers	M0=, M1=, M2=, M3=, M4=, M5=, M6=
Display Qualifiers	MM, M0, M1, M2, M3, M4, M5, M6, DI
MAP Qualifier	-
RANK Qualifiers	M0, M1, M2, M3, M4, M5, M6
SORT Qualifier	-

Search Formats

S Mn=ANNN

S Mn=AN

Where: n = digit from 0 to 6
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 Scientific to have the correct access conditions applied to each DIALOG User Number.

Content

Thomson Scientific devised 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 may still be 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 Chemical (sections B,C)	1970 onwards
M3=	General Chemical (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 and certain Japanese documents, 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.

Searching

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 code subfield. Codes of one subfield are linked by (S) proximity. Use (NOTS) proximity to specify absence of the appropriate codes in a subfield.

For example, a search strategy for penicillin derivatives might look like the following:

```
SM0,M2=(E670(S)H401(S)H481(S)J111(S)J321(S)J521(S)M240(S)M412)
SS1(S)M2=(M511(S)M521(S)M530(S)M540)
SS2(S)M2=(M210(S)M282(S)M311(S)M321(S)M342(S)(M370 OR M371)(S)M391)
SS3(S)M2=(D013(S)D016(S)D019(S)J012(S)L941(S)M211(S)M349)
SS1(S)M0=M900 OR S2(S)M2=M901 OR S3(S)M2=M902 OR S4
SS5(NOTS)M2=(H1+H2+H3+H5+H6+H7+H9+J2+J4+J9+K0)
```

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 Dictionary.

DWPI Registry Compounds (Section 12.3.3), Ring Index Numbers (Section 12.3.4), *DWPI* Compound Numbers (Section 12.3.6) and Roles (Section 12.3.6.) can be searched in combination with the Chemical Codes. For more information, consult the Chemical Indexing User Guide.

A relatively simple and effective way for users to compile complex fragmentation coding search strategies is to use Thomson Scientific's front end software, "Markush TOPFRAG" (for TOPological to FRAGmentation code conversion). This program enables graphic chemical structures to be drawn on-screen. The program then generates the correct codes, putting them together with time ranging parameters to compile a strategy for input to DIALOG.

Training is essential to use structure retrieval in the *DWPI* online files, even with Markush TOPFRAG. Contact Customer Services at your nearest Thomson Scientific Office for advice and information on forthcoming classes. Thomson Scientific's Search Service will be pleased to handle searches for subscribers who do not yet have the necessary training.

Display

The MM qualifier is a display-only code used to display all of the chemical codes in a record. This code is useful when you want to display chemical codes without all of the other subscriber coding; in such cases, the MM qualifier saves you from having to type in all of the individual chemical code fields (i.e. M0, M1, etc.) in the TYPE or PRINT command.

The DI qualifier is used to display all of the *DWPI* subscriber coding only.

For TYPE and PRINT formats that include Chemical Fragmentation Codes, see Section 14.1.

12.3.3 DWPI Registry Numbers

Qualifier

Search Qualifier	DR=
Display Qualifier	DR, DI
MAP Qualifier	DR
RANK Qualifier	DR
SORT Qualifier	-

Search Format

S DR=NNNN

S DR=NNNN-A

Where: NNNN = four-digit number
 A = role letter

The *DWPI* Registry Number field is searchable by eligible Subscribers only. If you are an eligible Subscriber, you must apply to Thomson Scientific to have the correct access conditions applied to each DIALOG User Number.

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 *DWPI* registry numbers since 1981 (*DWPI* Update 198127).

From 1984 (*DWPI* Update 198401) the use of *DWPI* registry numbers was extended to cover *DWPI* sections A, D and H; and from *DWPI* 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

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

A full list of *DWPI* Registry Numbers can be found in the *DWPI* User Guide - CPI Registry Compounds.

Searching

DWPI Registry Numbers are searchable with or without the role letter. Roles are also recorded in the RL=field (see Section 12.3.6) and are searchable with (S) proximity to *DWPI* Registry Numbers.

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

Display

The DI qualifier is used to display all of the *DWPI* subscriber coding only.

For TYPE and PRINT formats that include *DWPI* Registry Numbers, see Section 14.1.

12.3.4 Ring Index Numbers

Qualifier

Search Qualifier	RR=
Display Qualifier	RR, DI
MAP Qualifier	RR
RANK Qualifier	RR
SORT Qualifier	-

Search Format

RR=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 Scientific to have the correct access conditions applied to each DIALOG User Number.

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 *DWPI* numbering from 40,000 onwards.

Although the “Patterson Ring Index” is used as a guide, not all of the Ring Index Numbers are used, since Thomson Scientific 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.

Searching

Ring Index Numbers (RINs) should be used in conjunction with chemical codes and are linked by (S) proximity. Since *DWPI* 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 subfields.

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

Markush TOPFRAG

The most convenient way to look up RINs is to use the Markush TOPFRAG software, which allows graphical chemical structure drawing offline and automatic conversion of the structure(s) to a search strategy.

Display

The DI qualifier is used to display all of the *DWPI* subscriber coding only.

For TYPE and PRINT formats that include Ring Index Numbers, see Section 14.1.

MAP

The MAP command can be used to create a SearchSave of Ring Index Numbers in a specific record or group of records for further searching in *DWPI*.

12.3.5 Compound Number

Qualifier

Search Qualifier	CN=
Display Qualifier	CN, DI
MAP Qualifier	CN
RANK Qualifier	CN
SORT Qualifier	-

Search Formats

SCN=YYWW-CCCSS Markush Compound Number

SCN=YYWW-CCCSS-A

S CN=RNNNNN Specific Compound Number

S CN=RNNNNN-A

Where:

YY = Two-digit year

WW = *DWPI* Update

CCC = Document identifier

SS = Number, 01-99, sequentially assigned within a record

NNNNN = Five-digit serial number

A = Role letter

The *DWPI* Compound Number field is searchable by eligible subscribers only. If you are an eligible subscriber, you must apply to Thomson Scientific to have the correct access conditions applied to each DIALOG User Number.

Content

A 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 *DWPI* Update 198701 for pharmaceutical, agrochemical and general chemical compounds (*DWPI* sections B, C and E). The 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.

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

Roles

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

Searching

DWPI Compound Numbers are linked by (S) proximity to the relevant M1-M6 chemical codes with which they display, and can also be directly searched in the Chemical Codes fields (M1 – M6). (The Chemical Codes are discussed briefly in this manual in Section 12.3.6, and in more detail in the Chemical Indexing User Guide.)

DWPI Compound Numbers are searchable with and without the role letter attached. Roles are also recorded in the RL= field (see Section 12.3.6) and are searchable with (S) proximity to Compound Numbers and/or M1-M6 chemical codes

Display

The DI qualifier is used to display all of the *DWPI* subscriber coding only.

For TYPE and PRINT formats that include Compound Numbers, see Section 14.1.

MAP

The MAP command can be used with the Compound Number field. For example, to create a SearchSave of Compound Numbers from answer set S4:

```
MAPCNT S4
```

and execute the created SearchSave to locate other patent documents that cite the same specific compound numbers.

12.3.6 Role

Qualifier

Search Qualifier	RL=
Display Qualifier	DI
MAP Qualifier	-
RANK Qualifier	
SORT Qualifier	-

Search Format

RL=A

Where: A = Role letter

The *DWPI* Compound Numbers and their roles are searchable by eligible subscribers only. If you are an eligible subscriber, you must apply to Thomson Scientific to have the correct access conditions applied to each DIALOG User Number.

Content and Searching

One or more roles may be assigned to a particular generic or specific Compound Number (see Section 12.3.4) or *DWPI* Registry Number (see Section 12.3.2). Normally, only a single role qualifier is used to express the primary function of the compound(s) in a patent.

The following roles are used with generic and specific Compound Numbers:

Roles

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 by 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

The following roles are used with *DWPI* Registry Numbers:

Roles

P	compounds produced (by reaction, purification, extraction etc.)
S	starting materials, reagents (auxiliaries - only in Sections B, C and E)
U	use of a compound (excluding S), ingredient in a composition, compound detected, analysed, tested or removed

Roles can be searched with the RL= qualifier, or as suffixes directly attached to the Compound Numbers (see Section 12.3.3) or *DWPI* Registry Numbers (see Section 12.3.3). They can also be linked by (S) proximity, for example:

```
SCN=R00001 (S) RL=U  
SDR=0001 (S) RL=U  
SDR=0001-U
```

The following example shows how to retrieve all new compounds in the latest update:

```
? S RL=N AND UB=9999  
169110 RL=N  
11112 UB=9999  
S1 182 S RL=N AND UB=9999
```

Display

The DI qualifier is used to display all of the *DWPI* subscriber coding only. You need to be an eligible subscriber to have access to these codes, which include Manual Codes, Chemical Fragmentation Codes, Polymer Indexing, *DWPI* Registry Numbers and Specific Compound Numbers.

13 Updates

Qualifier

Search Qualifiers	UB=, UC=, UD=, UE=, UI=, UM=, UP
Display Qualifiers	UB, UC, UD, UE, UI, UM, UP
MAP Qualifier	-
RANK Qualifiers	UB, UE
SORT Qualifier	-

Search Format

Update code= <i>DWPI</i> Update	(specific update)
Update code=9999	(latest update)

Content

Update codes are assigned to all records to indicate when a new record is added to the database or when additional information is added to an existing record. The latest update codes are displayed in the *DWPI* banner message.

Basic Update (UB=)

All new basics added to *DWPI* are given a code to indicate the update they were added to the file. Use of this code will restrict a search to the most recent references of new inventions only.

Equivalent Update (UE=)

This code is added to a record each time an equivalent family member is added. It is retained even when new equivalents are added with a subsequent update. Equivalents are added to *DWPI* with every update.

If a basic and equivalent are added to a record in the same Update, the record is assigned both UB and UE update codes.

Corrections (UC=)

Thomson Scientific is continually performing quality assurance checks on the data presented in *DWPI*. The UC= qualifier can be used to retrieve all records which were corrected in any way in the update specified in the search.

All Additions and Changes (UD=)

This Update Code is assigned to any record in *DWPI* that is either added to the file or modified in that Update.

Image Update (UI=)

This Update Code is assigned to any record containing an image in *DWPI* that is either added to the file or modified in that Update.

Subscriber Indexing Updates

The following Update Codes are available to subscribers only. If you are a subscriber you must apply to Thomson Scientific to have the correct access conditions applied to each DIALOG User Number.

Until mid-1997 subscriber indexing followed a few weeks after the Basic Update. Since August 1997 indexing has been available simultaneously with the bibliographic data for British patents. Other patent authorities were then phased in and by the end of 1999 all indexing was being updated at the same time as the bibliographic data.

Chemical Indexing Update (UM=)

Chemical Indexing Update Codes are added to records in *DWPI* that have had new B,C, or E (M0-M6) Fragmentation Codes assigned to them. (*DWPI* Registry Numbers and/or Ring Index Numbers are not included with this update code.)

Polymer Indexing Update (UP=)

Polymer Indexing Update Codes are added to records in *DWPI* that have had new Polymer Indexing assigned to them.

Searching

Update codes are useful for manual and automatic update searches (Alerts). The codes can be range searched to restrict a search to a set of several weeks, or the code 9999 can be used to restrict a search to the latest update:

```
?  S  INTERNET AND PC=US
      118602  INTERNET
      3827624 PC=US (UNITED STATES OF AMERICA)
S1   49929  S INTERNET AND PC=US
?  s  s1 and ub=9999
      49929  S1
      9439   UB=9999
      S2     74  S1 AND UB=9999
?
```

DIALOG AlertSM Service

The DIALOG Alert Service is a current awareness service that helps you track information on a particular topic, track a patent family's growth or track a company's patent activity. At a frequency of your choice (e.g. each time the database is updated or on a weekly, biweekly, or monthly basis) your search is run automatically.

You receive the new information by email, fax or regular mail and the results can also be delivered to other individuals (see Section 14.4).

You can create a DIALOG Alert profile using commands or use the Alerts Manager in DIALOG Web for an easy-to-use graphical interface. (<http://www.dialogweb.com/>)

Use the following sequence of steps to create a current awareness profile on DIALOG:

- 1 Devise your search strategy in the normal way.
- 2 Combine the appropriate special update code with your search using the value 9999 for the latest update. If this stage is omitted, DIALOG will assume the default update code of UD=, which will result in a hit every time a record that matches the saved strategy is modified in any way. To restrict the Alert results to only new inventions added to the database, use UB=9999. To restrict the Alert results to new inventions or new equivalents added to existing inventions, use UB,UE=9999.
- 3 Enter an optional PRINT TITLE to assign a title to the search. Titles may be up to 80 characters in length. The title will appear on the subject line of your email or on each page of your postal prints.
- 4 Enter the required PRINT command to identify the set of records to be delivered each time the Alert is run. (If you omit this command you will be prompted for this at a later stage.) If you wish to send the results directly by email, or to another person you will need to include this in the PRINT command line.

e.g.

```
PRINT S1/9/ALL ADDRESS ADEMAIL.
```

- 5 Enter Y to confirm the address or N to decline the alternate address.
- 6 DIALOG will then display the estimated cost of current records in the file. If you DO NOT wish to receive records already in the file, enter N when prompted. If you DO want the current records, enter Y. The records will be delivered and your account number will be billed.
- 7 Enter the SAVE ALERT command. Using DialogLink 5, a window pops-up showing the choice of receiving the Alert by update (82 times a year) or by a customer-chosen custom schedule. The custom schedule permits weekly, biweekly, or monthly Alerts delivered on a specified day and time. The command can be followed with an optional one- to six-character name (e.g. SAVE ALERT NEWPAT), otherwise, a serial number will be assigned automatically.

A typical Alert example is shown below:

```

? S INTERNET AND COMMUNICAT?
      119726 INTERNET
      783324 COMMUNICAT?
S1    47677 S INTERNET AND COMMUNICAT?

? S S1 AND UB=9999
      47677 S1
      11470 UB=9999
S2    63 S S1 AND UB=9999

? PRINT 2/19/ALL

P009: PRINT 2/19/ALL (items 1-63) estimated cost of $327.60
      Estimated postal surcharge ($0.10 per record per copy) is $6.30.

The PRINT command can be cancelled within 30 minutes
from the time of request. Type:

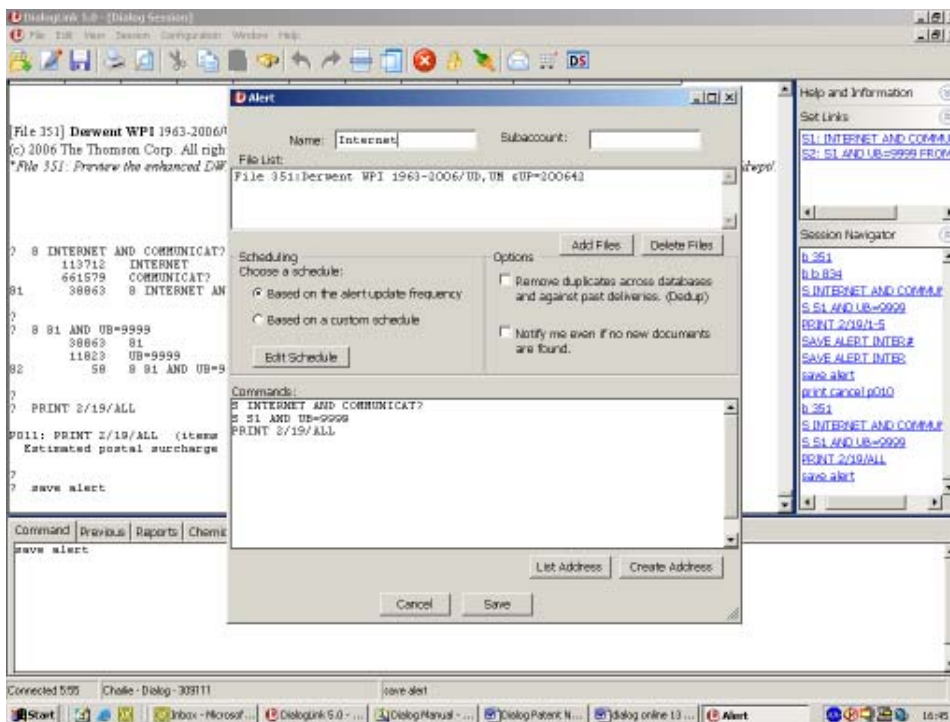
      PRINT CANCEL Pnnn

To see a list of all active print requests and/or verify
the assigned print numbers, type:

      PRINT QUERY ACTIVE
or      PRINT QUERY ACTIVE DETAIL

```

Assign a name to your Alert, select frequency and additional options.



```
Alert "INTERNET" saved
```

To see a list of your alert profiles at any time, enter RECALL ALERT.

To review a specific alert, enter RECALL <<alert name>>.

To cancel an alert, enter RELEASE <<alert name>>.

```
?  RELEASE INTERNET  
Alert internet released
```


14 Display Options

In files 350, 351 and 352 predefined formats can be used to display search results online or print search results offline (for a complete list see below).

14.1 Predefined Formats

Format	
1	DIALOG Accession Number
2	Basic Patent Record plus Basic Abstract, <i>DWPI</i> Title, Patent Assignee, Inventor, Keyword Indexing and Subscriber Codes
3	Patent Family Table, Filing Details Table (long form) plus Title, Patent Assignee and Inventor ^{1,2}
4	Full Record with Tagged Fields, including Manual Codes ³ and IPCs
5	Full Record with Basic Abstract, including all Subscriber Codes ^{1,2} , IPCs and US Classifications
6	Title Index Terms (no Title), Additional Words, and Main <i>DWPI</i> Accession Number
7	Full Record including Technology Focus, excluding Extension & Documentation Abstracts and all Subscriber Codes ^{1,2} , apart from <i>DWPI</i> Class, Manual Codes, plus IPCs, US Classifications and First Level data
8	All <i>DWPI</i> Accession Nos., Title Index Terms (no Title), Additional Words, No. of Patents/Countries, <i>DWPI</i> Class, Manual Codes, IPCs and US Classifications
9	Full (Maximum) Record including all abstracts Subscriber Codes, Filing Details Table (long form) ^{1,2} and First Level data
11	DIALOG Accession Number and Main <i>DWPI</i> Accession Number
14	Full record (Format 4) plus Image
15	Full Record (Format 5) plus Image
17	Full Record (Format 7) plus Image
19	Full (Maximum) Record (Format 9) plus Image
23	Brief Format with Title, Patent Assignee, Basic Abstract, IPCs and US Classifications
25	Full Record with simplified Patent Family Table and Basic Abstract only, excluding Subscriber Codes ¹

cont'd

Format

26	<i>DWPI</i> Title plus Additional Words, and Main <i>DWPI</i> Accession Number
28	All <i>DWPI</i> Accession Nos., Title, Index Terms, Additional Words, <i>DWPI</i> Class, IPC, US Classifications and Subscriber Codes
29	First Level data plus <i>DWPI</i> Accession Number and <i>DWPI</i> Title
34	Full Record plus IPCs, US Classifications & Technology Focus, excluding Subscriber Codes
36	Title and Novelty
49	Master Record – Maximum Record plus all <i>DWPI</i> abstracts, all Subscriber Codes, all First Level data
59	Master Record (Format 49) plus Image
67	Full Record excluding Technology Focus, Extension & Documentation Abstracts and all Subscriber Codes ^{1,2}
69	Full Record including all <i>DWPI</i> abstracts, Subscriber Codes and Filing Details Table (long form) ^{1,2}
K	KWIC (KeyWord In Context), displays a window of text

Notes

- 1 The patent family table includes patent country, number, kind and date, application country, number, kind and date, main IPC class (only from 199216) and *DWPI* Update. The simplified table omits application data.
- 2 The long form of the Filing Details table includes filing details for the family, language, pages and designated states.
- 3 Due to the specialised formatting of patent family table in this format, it cannot be used with the TAG option.

14.2 User-Defined Formats

User-Defined Formats (UDFs) can be used in combination with or instead of pre-defined numbered formats to tailor the output of search results. User-defined formats are created from display codes (see Section 15.1) and can be used in the following three ways:

1 Listing one or more codes

Display codes should be input separated by commas. The codes can be entered in any order, but the results will be displayed with the fields in the same order in which they appear in a record.

```
? T 1/PA,PN,TI,DE/1
1/PA,PN,TI,DE/1
Derwent WPI
(c) 2006 The Thomson Corporation All rights reserved
New 2-amino-1-functionalized tetralin derivatives useful as glycogen phosphorylase enzyme inhibitors
for treating, preventing or slowing progression of diseases e.g. diabetes, cardiovascular diseases,
metabolic syndrome and obesity
Patent Assignee: BRISTOL-MYERS SQUIBB CO (BRIM); SHER P M (SHER-I); WU G (WUGG-I)
```

Patent Number	Kind	Date	Update Type
WO 2006053274	A2	20060518	200637 B
US 20060111414	A1	20060525	200637 E

Original Publication Data by Authority

Original Titles:

2-Amino-1-functionalized tetralin derivatives and related glycogen phosphorylase inhibitors
 2-AMINO-1-FUNCTIONALIZED TETRALIN DERIVATIVES AND RELATED GLYCOGEN
 PHOSPHORYLASE INHIBITORS
 DERIVES DE TETRALINE 2-AMINO-1-FONCTIONNALISES ET INHIBITEURS
 CORRESPONDANTS DE GLYCOGENE PHOSPHORYLASE

Assignee name & address:

Wu, Gang, (WUGG-I), Princeton, NJ, US, Princeton, NJ, US
 Sher, Philip M., (SHER-I), Plainsboro, NJ, US, Plainsboro, NJ, US
 BRISTOL-MYERS SQUIBB COMPANY, (BRIM), P.O. BOX 4000, Route 206 And Provinceline Road,
 Princeton, New Jersey 08543-4000, US, US
 WU, Gang, 419 Wendover Drive, Princeton, New Jersey 08540, US, US
 SHER, Philip M., 18 Mifflin Court, Plainsboro, New Jersey 08536, US, US

2 Combining with a numbered format

? T 1/6, TI, AB/6

1/6, TI, AB/6

Derwent WPI

(c) 2006 The Thomson Corporation All rights reserved

0015807541

WPI Acc no: 2006-363821/

New optically active isomers of floxacin compounds e.g. grepafloxacin-l, used to study antibacterial action and cardiac effects e.g. arrhythmogenic activity, and Ikr inhibition

Alerting Abstract WO A2

NOVELTY - Optically active isomers of floxacin compounds (I), are new. (I) Comprises grepafloxacin-l, grepafloxacin-d, moxifloxacin-l, moxifloxacin-d, levofloxacin-l, levofloxacin-d, sparfloxacin-l, sparfloxacin-d, ofloxacin-l, ofloxacin-d, gatifloxacin-l, gatifloxacin-d, lomefloxacin-l, lomefloxacin-d, temafloxacin-l, temafloxacin-d, trovafloxacin-l or trovafloxacin-d.

DESCRIPTION - INDEPENDENT CLAIMS are also included for:

1. preparation of (I)
2. QT internal/dispersion alpha Ikr inhibition studies using e.g. grepafloxacin-l and grepafloxacin-d, where the isolated floxacin isomers have an antibacterial activity and no longer cause QT prolongation/less QT prolongation to reduce the incidence of life-threatening cardiac arrhythmias;
3. chiral isolates of (I) that have equal or greater antibacterial activity to the parent racemate compound but less prolongation of the QT internal/less or no QT dispersion/less or no inhibition of the Ikr potassium chiral/less or no risk of cardiac arrhythmias, and
4. a floxacin chiral isolate with less antibacterial activity but with a superior therapeutic toxic ratio than the parent floxacin racemate compound.

ACTIVITY - Antibacterial.

No biological data is given.

MECHANISM OF ACTION - None given.

USE - Used to study the antibacterial action and cardiac effects e.g. arrhythmogenic activity, QT internal prolongation and dispersion, and Ikr inhibition in humans.

ADVANTAGE - (I) Are highly potent and broad-spectrum quinolone antibacterial agents, exhibit a good therapeutic effect in urinary tract infection and have a reduced toxicity profile.

Technology Focus

ORGANIC CHEMISTRY - Preparation (Claimed): Preparation of (I) comprises treating a substituted nitrobenzoic acid with thxonyl chloride in sodium hydroxide (NaOH) followed by hydrogenation with palladium/carbon (5%) to produce a methyl benzoate derivative, regioselectively dibrominating the methyl benzoate derivative with bromine and acetic acid to produce dibromomethylbenzoate, photoirradiating the dibromomethylbenzoate with diazomium salt to give a corresponding fluoroarene, hydrolyzing the fluoroarene with NaOH (10%) to form a benzoic acid derivative, treating the benzoic acid derivative with thionyl chloride and conducting a condensation reaction with monoethyl malonate in the presence of magnesium ethoxide to produce a fluorobenzoyl acetate and obtaining the stereochemically desired floxacin by conducting a condensation reaction of the acetate by heating in dimethylsulfoxide.

Title Terms /Index Terms/Additional Words: NEW; OPTICAL; ACTIVE; ISOMER; COMPOUND; STUDY; ANTIBACTERIAL; ACTION; CARDIAC; EFFECT; INHIBIT

...

Note: Format 1 cannot be combined with display codes

14.3 TAG Format

Formats 4 & 14 display records in a TAG format, where each field begins on a new line and is preceded by a two-character display code. The TAG format is particularly suitable for those times when you intend to reformat your search results. Each field ends with a vertical bar (|); a double vertical bar (||) appears at the end of the last field to denote the end of the record.

```
? T 1/4/2
FN- DIALOG(R) File 351: Derwent WPI|
CZ- (c) 2006 The Thomson Corporation All rights reserved.|
AA- 2006-363961|
XR- <XRAM> C2006-118211|
TI- Preparation of rizatriptan used for treating migraine involves
    reacting 4-hydrazinophenylmethyl-1,2,4-triazole dihydrochloride
    with 4-N,N-dimethylaminobutanal dimethylacetal; adsorbing
    resultant rizatriptan base onto silica gel; and eluting|
PA- REDDY'S LAB LTD (REDD-N)|
IV- CHITRE S S; KUMAR S S; REDDY B S; REDDY P P; SARMA P S R;
    SEBASTIAN S|
NC- 111|
NP- 1|
PN- WO 2006053116 A2 20060518 200637 B|
AN- <LOCAL> WO 2005US40718 A 20051109|
AN- <PR> US 2004627720 P 20041110|
FD- WO 2006053116 A2|
FD- National Designated States,Original: AE AG AL AM AT AU AZ BA BB
    BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB
    GD GE GH GM HR HU ID IL IN IS JP KE KG KM KN KP KR KZ LC LK LR LS
    LT LU LV LY MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT
    RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN
    YU ZA ZM ZW|
FD- Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK
    EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU LV MC MW MZ NA
    NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW|
LA- WO 2006053116 A2 EN 23 3|
DS- <NATIONAL> AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO
    CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL
    IN IS JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MD MG MK
    MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL
    SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW|
DS- <NATIONAL> AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR
    HU IE IS IT KE LS LT LU LV MC MW MZ NA NL OA PL PT RO SD SE SI SK
    SL SZ TR TZ UG ZM ZW|
AB- <NV> WO A2
NOVELTY - Preparation of rizatriptan involves reacting 4-
hydrazinophenylmethyl-1,2,4-triazole dihydrochloride with 4-N,N-
dimethylaminobutanal dimethylacetal in presence of hydrochloric
acid to form crude rizatriptan base; adsorbing crude rizatriptan
base onto silica gel; and eluting purified rizatriptan base from
the silica gel with a solvent.|
AB- <BASIC> ACTIVITY - Antimigraine.
MECHANISM OF ACTION - 5-Hydroxytryptamine 1B/1BD (5-HT1B/1D)
receptor agonist.
USE - For preparation of rizatriptan (claimed) useful for
treating migraine and associated conditions.
ADVANTAGE - The purified rizatriptan base product contains
(area%): 3-[2-(N,N-dimethylamino)ethyl-2-[[3-[2-(N,N-
dimethylamino)ethyl]-1H-indol-5-yl]methyl]-1H-indol-5-yl]methyl-
1H-1,2,4-triazole impurity (less than 0.15, preferably 0.1 or
0.05), N,N-dimethyl-5-(1H-1,2,4-triazol-1-yl-methyl)-1H-indole-3-
```

ethanamine N-oxide impurity (less than 0.15), 4-hydrazinophenylmethyl-1,2,4-triazole dihydrochloride impurity (less than 0.15) or 1-(4-(2-(4-(dimethylamino)butylidene)hydrazino)phenyl)methyl-1,2,4-triazole impurity (less than 0.15) as determined by high performance liquid chromatography. The process is simple, efficient and ecofriendly process resulting in rizatriptan substantially free of the dimer impurity; hence the resultant rizatriptan has high purity.]

AB- <TF> ORGANIC CHEMISTRY - Preferred Process: The process additionally involves reacting purified rizatriptan base with benzoic acid to form rizatriptan benzoate; and recrystallizing rizatriptan benzoate. The recrystallization is from n-butanol. Preferred Components: The hydrochloric acid is present in an aqueous solution and comprises 4-hydrazinophenylmethyl-1,2,4-triazole dihydrochloride (4 - 20%). The silica gel is in present an amount of 4 - 10 (preferably 4 - 6) times a weight of crude rizatriptan base. The rizatriptan base is eluted with a solvent comprising an ester, ketone, an alcohol and hydrocarbon (preferably ethyl acetate and/or an alcohol).]

AB- <XA> EXAMPLE - To a solution of 1-(4-aminophenyl)-methyl-1,2,4-triazole dihydrochloride (200 g) in water (2000 ml), concentrated hydrochloric acid (158 ml) and 4-dimethyl-amino-butanal-dimethyl-acetal (180 g) were added, and the mixture was maintained for 1 or 2 hours at 0 - 5(deg)C. Another concentrated hydrochloric acid (158 ml) was added to the mixture and the mixture was heated to 70 - 75(deg)C for 2 hours. The mixture was cooled to 25 - 30(deg)C, quenched by adding 40% aqueous sodium hypoxide solution (265 ml) and the product was extracted with ethyl acetate (3000 ml) three times. Combined organic layer was passed through silica gel (950 g) and the silica gel was eluted with isopropanol (8000 ml). After worked up rizatriptan base (IA) having dimer impurity of 0.055 area% was obtained. To a solution of (IA) (99 g) in isopropanol (495 ml), a solution of benzoic acid (45 g) was added. The precipitated salt was filtered and washed with isopropanol (99 ml). The wet product was dried at 50 - 60(deg)C for 4 or 5 hours to get desired rizatriptan benzoate (IB) (80 g) having dimer impurity content of 0.045 area%. (IB) (80 g) Was suspended in n-butanol (400 ml). The suspension was heated to 115 - 120(deg)C to get clear solution. The hot solution was filtered, and the filtrate was cooled to 25 - 30(deg)C and maintained for 2 or 3 hours. The precipitated product was worked to obtain purified rizatriptan benzoate (purity: 99.6 area%).]

TT- PREPARATION; TREAT; MIGRAINE; REACT; TRIAZOLE; N; ADSORB; RESULT; BASE; SILICA; GEL; ELUTION|

DC- B02|

IC- <CURRENT> C07D-0403/02 A I F B 20060101 |

IC- <CURRENT> C07D-0403/00 C I F B 20060101 |

MC- <CPI> B06-D01 B14-C01 B14-F02C B14-J03|

FS- CPI||

With user-defined formats (UDFs), you can display records in a TAG format by including the word TAG at the end of your TYPE, DISPLAY, or PRINT command. However, the punctuation used to denote fields in Format 4 & 14 differs from that used when you specify TAG at the end of a TYPE, DISPLAY, or PRINT command as shown below:

```
? T 1/TI,PI,AB/6 TAG

FN- DIALOG(R) File 351: Derwent WPI|
CZ- . (c) 2006 The Thomson Corporation All rights reserved.|
TI- New optically active isomers of floxacins e.g.
    grepafloxacin-l, used to study antibacterial action and cardiac
    effects e.g. arrhythmogenic activity, and Ikr inhibition|
TI- <AS PUBLISHED> Synthesis, characterization and biological action
    of optically active isomers of floxacins^SYNTHESIS,
    CHARACTERIZATION AND BIOLOGICAL ACTION OF OPTICALLY ACTIVE
    ISOMERS OF FLOXACINS^SYNTHESE, CARACTERISATION ET ACTION
    BIOLOGIQUE D'ISOMERES ACTIFS SUR LE PLAN OPTIQUE DE FLOXACINES|
PI- <NO. PATENTS> 2|
PI- <PB> WO 2006052264 _A2_20060518_WO 2005US49
    _A_20050103_200637_B|
PI- US 20060111369 _A1_20060525_US 2004984773 _A_20041110_200637_E|
PI- <PRIORITY> US 2004984773 _A_20041110|
AB- <BA> DESCRIPTION - INDEPENDENT CLAIMS are also included
    for:<ol><li>preparation of (I) </li><li>QT internal/dispersion
    alpha Ikr inhibition studies using e.g. grepafloxacin-l and
    grepafloxacin-d, where the isolated floxacins have an
    antibacterial activity and no longer cause QT prolongation/less
    QT prolongation to reduce the incidence of life-threatening
    cardiac arrhythmias; </li><li>chiral isolates of (I) that have
    equal or greater antibacterial activity to the parent racemate
    compound but less prolongation of the QT internal/less or no QT
    dispersion/less or no inhibition of the Ikr potassium chiral/less
    or no risk of cardiac arrhythmias, and </li><li>a floxacins chiral
    isolate with less antibacterial activity but with a superior
    therapeutic toxic ratio than the parent floxacins racemate
    compound. </li> </ol>_ACTIVITY - Antibacterial.No biological
    data is given._MECHANISM OF ACTION - None given._USE - Used to
    study the antibacterial action and cardiac effects e.g.
    arrhythmogenic activity, QT internal prolongation and dispersion,
    and Ikr inhibition in humans._ADVANTAGE - (I) Are highly potent
    and broad-spectrum quinolone antibacterial agents, exhibit a good
    therapeutic effect in urinary tract infection and have a reduced
    toxicity profile.|
AB- <NV> WO A2_NOVELTY - Optically active isomers of floxacins
    compounds (I), are new. (I) Comprises grepafloxacin-l,
    grepafloxacin-d, moxifloxacin-l, moxifloxacin-d, levofloxacin-l,
    levofloxacin-d, sparfloxacin-l, sparfloxacin-d, ofloxacin-l,
    ofloxacin-d, gatifloxacin-l, gatifloxacin-d, lomefloxacin-l,
    lomefloxacin-d, temafloxacin-l, temafloxacin-d, trovafloxacin-l
    or trovafloxacin-d.|
AB- <TF> ORGANIC CHEMISTRY - Preparation (Claimed): Preparation of
    (I) comprises treating a substituted nitrobenzoic acid with
    thionyl chloride in sodium hydroxide (NaOH) followed by
    hydrogenation with palladium/carbon (5%) to produce a methyl
    benzoate derivative, regioselectively dibrominating the methyl
    benzoate derivative with bromine and acetic acid to produce
    dibromomethylbenzoate, photoirradiating the dibromomethylbenzoate
    with diazomium salt to give a corresponding fluoroarene,
    hydrolyzing the fluoroarene with NaOH (10%) to form a benzoic
```

acid derivative, treating the benzoic acid derivative with thionyl chloride and conducting a condensation reaction with monoethyl malonate in the presence of magnesium ethoxide to produce a fluorobenzoyl acetate and obtaining the stereochemically desired floxacins by conducting a condensation reaction of the acetate by heating in dimethylsulfoxide.

AB- <OR> <div xhtml:class="paragraph">Disclosed herein is the method for synthesis and separation of enantiospecific isomers of floxacins. These isomers can be used to study the antibacterial action, as well as cardiac effects, such as arrhythmogenic activity, QT interval prolongation and dispersion, and Ikr inhibition in humans. A method for the identification of chiral isolates of the floxacins that are devoid or possess less QT prolonging action and thus cause less arthropathy especially of the Torsades de pointes variety. Also disclosed are methods for assaying these isomeric compounds present in the biological fluids. </div>^<div:class="paragraph">Disclosed herein is the method for synthesis and separation of enantiospecific isomers of floxacins. These isomers can be used to study the antibacterial action, as well as cardiac effects, such as arrhythmogenic activity, QT interval prolongation and dispersion, and Ikr inhibition in humans. A method for the identification of chiral isolates of the floxacins that are devoid or possess less QT prolonging action and thus cause less arthropathy especially of the Torsades de pointes variety. Also disclosed are methods for assaying these isomeric compounds present in the biological fluids. </div>^<div xhtml:class="paragraph">L'invention concerne un procede destine a la synthese et a la separation d'isomeres enantio-specifiques de floxacines. Ces isomeres peuvent etre utilises pour l'etude de l'action antibacterienne, ainsi que des effets cardiaques, tels que l'activite arythmogene, la prolongation et la dispersion interne de QT et l'inhibition de Ikr chez des etres humains. L'invention concerne egalement un procede d'identification d'isolats chiraux des floxacines exempts d'action de prolongation de QT ou possedant une action de prolongation de QT inferieure et engendrant, par consequent, moins d'arthropathie, notamment de la variete des Torsades de pointes. L'invention concerne egalement des procedes permettant d'analyser ces composees isomeres presents dans les fluides biologiques. </div>|||

14.4 Delivery of Prints and Alerts

Alerts or ordinary prints can be delivered via mail or email and for prints also to an on site laser printer (SitePrints). Note that images can only be delivered in printed form.

The basic format of the PRINT command is:

```
PRINT <set number>/<format>/<range of records>
```

Example	Command
PRINT all of the records in set S3 in Format 9.	PRINT S3/9/ALL
PRINT the first 20 records in set S2 in Format 3.	PRINT S2/3/1-20

DIALOG uses the postal address that is listed on your account as the default address. Therefore, if no delivery information is provided, DIALOG will use your postal address. For any other form of delivery or for other postal addresses, you must create, store, and use an alternate address.

- To request that records be sent to an alternate e-mail address, first use the EDIT ADDRESS EMAIL (or EDIT ADDR EMAIL) command.
- For postal delivery, enter the EDIT ADDRESS (or EDIT ADDR) command.

These commands allow you to create and store your desired address. Once the alternate address is created and stored, you can use it whenever it is needed. There is no storage charge for the addresses.

Once the address is stored, use the PRINT command with the ADDRESS (or ADDR) specification followed by the name or serial number assigned to the saved address.

Example	Command
Send all of the records in set S1 in Format 3 to the address stored as AASMITH.	PRINT S1/3/ALL ADDRESS AASMITH

Cancelling Prints

You have the option of cancelling a PRINT request for up to 30 minutes after entering it. Use the PRINT CANCEL (or PR-) command to cancel a PRINT followed by the print transaction number (e.g., P002), which was assigned at the time the request was entered. (Enter PRINT QUERY ACTIVE for a list of print transactions that can still be cancelled.)

Example	Command
Cancel print transaction P304. PR- P304	PRINT CANCEL P304

You can cancel the request from within any database; however you must be logged on through the same telecommunications network that you were using when you entered the original PRINT command.

NOTE: When the SEND or SEND ALL options are used for SitePrints, e-mail, or mail delivery, the PRINT request is immediately processed and the 30 minute PRINT CANCEL window does not apply. Therefore, you are not able to cancel prints when the SEND or SEND ALL options are used (for more information on the SEND option, enter the HELP SEND command online).

14.5 REPORT

The Reports tab in DialogLink is used to create customized Microsoft® Word or Microsoft® Excel reports from search results.

Creating an Excel Report

The Create Report function in the Excel Reports section of the Reports tab allows you to apply a template your search results and view them as an Excel spreadsheet. This is a useful format when you want to analyze data in a results set.

Creating a Word Report

The Create Report function in the Word Reports section of the Reports tab allows you to apply a template to your search results and view them as a formatted Word document. This is a useful format if you regularly reformat search results in the same way to produce easy-to-read customized output.

Using a Word Report Template to Create a Custom e-Mail Alert

A Word template may also be used to format Dialog Alerts. An Alert is a search that you set up to run automatically at a frequency you specify, such as daily, weekly or monthly. The Alerts results are sent to an e-mail address you designate when setting up the Alert.

14.6 Images

DIALOG offers a variety of predefined formats containing images (see Section 15.1). The display qualifier IM can also be used to display the image alone or in conjunction with other fields such as titles.

See Section 6.8 for further details on images in *DWPI*.

15 Appendices

15.1 Qualifiers

The following table gives an overview of the qualifiers used to search, display, MAP, RANK and SORT information in *DWPI*. These qualifiers are discussed in detail in the individual field descriptions.

Field Name	Search	Display	MAP	RANK	SORT
All Abstracts	/AB	AB, AE, BA,	-	-	-
Accession Numbers					
Main only	AA=	-	AA	AA	-
Main, Secondary, Cross-Reference, and Related	AX=	AX	AX, AXRX	AX	-
Main and Related	DX=	AZ	DX, DXRX	DX	-
DIALOG	-	DX	-	-	-
All Abstracts (exc Extension Abstract)	/TX	TX	-	-	-
All value-add Abstracts (exc Extension Abstract)	DA=	DA	-	-	-
Agent	LR=	LR	-	-	-
Application Country and Kind	AC=	AC	-	AC, ACPR, AK	-
Application Date	AD=	AD, PR	-	AD, ADPR	-
Application Month	AM=	AD	-	AM	-
Application Number	AN=	AN	AN, ANPR, ANPRYY, ANYY	AN, ANPR,	-
Application Year	AY=	AY	-	AY, AYPR	-
Assignee			PANAME	PANAME	
Assignee Status	AF=	AF	-	AF	-
Basic Abstract	-	BA	-	-	-
Claim (Original)	/CM	CM	-	-	-
Compound Number	CN=	CN	CN	CN	
Country Code	CC=	CC	-	CC	-
<i>DWPI</i> Class	DC=	DC	DC	DC	-

cont'd

Field Name	Search	Display	MAP	RANK	SORT
DWPI Registry Numbers	DR=	DR	DR	DR	-
DWPI Week	DW=	DW	-	DW	-
Designated States	DS=	DS	-	DS	-
Document Type	DT=	DT	-	DT	-
Documentation Abstract	/DO	DO	-	-	-
Equivalent Abstract	-	AE	-	-	-
Extension Abstract	/XA	XA	-	-	-
File Segment	FS=	FS	-	FS	-
Filing Details	FD=	FD, FT	-	FD	-
Fragmentation Codes, Sections B, C, E,	M0= to M6=	M0 to M6, MM	-	M0 to M6	-
Image	-	IM	-	-	-
International Patent Classification (IPC),v7	IC=	IC	IC, ICMA, ICXR	IC, ICMA, ICXR	-
IPC, Reform - Advanced (v8)	ICA=	IC	IC, ICOR	IC, ICOR	-
IPC, Reform - Core (v8)	ICA=	IC	IC, ICOR	IC, ICOR	-
IPC, Reform - Attributes (v8)	IA=	IC	-	-	-
Inventor, All	AU=	AU, IV	IVST	IVST	-
Inventor (original only)	IV= IV	IV	IV	-	-
Language	LA=	LA	-	-	-
	DX=	DX	DX, DXRX	DX	-
	AX=	AX	AX, AXRX	AX	-
Manual Codes	MC=	MC	MC	MC	-
Novelty	/NV	NV	-	-	-
Number of Countries	NC=	NC	-	NC	-
Number of Patents	NP=	NP	-	NP	NP
Patent Assignee (Name and Code)	PA=	PA	PA, PANAME, PACODE	PA PANAME or CO, PACODE or CK, ASSIGNEE	PA

cont'd

Field Name	Search	Display	MAP	RANK	SORT
Patent Assignee/ Company Code	CK=	CK	CK	CK or PACODE ASSIGNEE	CK
Patent Country and Kind	PC=	PC	-	PC, PCPB, PK, PKPB	-
Patent Number	PN=	PN,	PN, PNPB, PNCG PNCT	PN, PNPB	PN
Plasdoc Frag. Codes	PF=	PF	-		-
Plasdoc Key Serial Numbers	KS=	KS	KS	KS	-
Polymer Indexing	PS=	PS	-	-	-
Priority Application Information	PR=,	PR	ANPR, ANPRYY	, ANPR	-
Publication Date	PD=	PD	-	PD	PD
Publication Month	PM=	PD	-	PM	-
Publication Year	PY=	PY	-	PY, PYPB	-
Record Type	RT=	RT	-	RT	-
Ring Index Numbers	RR=	RR	RR	RR	-
Role	RL=	-	-	-	-
Technology Focus	/TF	TF	-	-	-
Title (all)	/TI	TI	-	-	TI
Title (DWPI only)	/TD	TD	-	-	TI
Title (DWPI) and Abstracts (DWPI)	/TA	TA	-	-	
Type of Family Member	TY=	-	-	TY	-
US National Classification	CL=CL	CL, CLOR	CL, CLOR	-	
Updates					
Basics	UB=	UB	-	UB	-
Equivalents	UE=	UE	-	UE	-
Corrections	UC=	UC	-	-	-
Polymer Indexing	UP=	UP	-	-	-
Chemical Indexing	UM=	UM	-	-	-
All additions/changes	UD=	UD	-	-	-

15.2 DWPI Classification

Each *DWPI* record is classified according to the subject matter in one or more of the following sections:

A-M: Chemical (CPI)

A Polymers and Plastics
 B Pharmaceuticals
 C Agricultural Chemicals
 D Food; Detergents; Water; Biotechnology
 E General Chemicals
 F Textiles and Paper-Making
 G Printing; Coating; Photography
 H Petroleum
 J Chemical Engineering
 K Nucleonics; Explosives; Protection
 L Refractories; Electro(In)Organics
 M Metallurgy

Q: Mechanical (EngPI)

Q1 Vehicles, general
 Q2 Special vehicles
 Q3 Conveying; packaging; storing
 Q4 Buildings; construction
 Q5 Engines; pumps
 Q6 Engineering elements
 Q7 Lighting; heating

P: General (EngPI)

P1 Agriculture; Food; Tobacco
 P2 Personal; Domestic
 P3 Health; Amusement
 P4 Separating; Mixing
 P5 Shaping Metal
 P6 Shaping Non-Metal
 P7 Pressing; Printing
 P8 Optics; Photography

S-X: Electrical (EPI)

S Instrumentation, Measuring and Testing
 T Computing and Control
 U Semiconductors and Electronic Circuitry
 V Electronic Components
 W Communications
 X Electric Power Engineering

15.3 Thomson Scientific Standard Abbreviations

Thomson Scientific 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.

	Abbreviation		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./concsn.	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.

cont'd

	Abbreviation		Abbreviation
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.

15.4 WIPO Country Codes

Assignment of standard codes is governed by ISO Standard and WIPO committee acceptance.

A

AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania ⁹
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AP	African Regional Ind. Property Organization (ARIPO) ¹
AR	Argentina ⁶
AT	Austria ^{6,8}
AU	Australia ⁶
AW	Aruba
AZ	Azerbaijan

B

BA	Bosnia and Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium ^{6, 8}
BF	Burkina Faso ¹⁰
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin ¹⁰
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil ⁶
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BX	Benelux Trademark Office (BBM) and Benelux Designs Office (BBDM) ²
BY	Belarus
BZ	Belize

C

CA	Canada ⁶
CD	Democratic Republic of the Congo
CF	Central African Republic ¹⁰
CG	Congo ¹⁰
CH	Switzerland ^{6, 8}
CI	Cote d'Ivoire ¹⁰
CK	Cook Islands
CL	Chile
CM	Cameroon ¹⁰
CN	China ⁶
CO	Colombia
CR	Costa Rica
CU	Cuba
CV	Cape Verde
CY	Cyprus ⁸
CZ	Czech Republic ⁶

D

DE	Germany ^{4, 6, 8}
DJ	Djibouti
DK	Denmark ^{6, 8}
DM	Dominica
DO	Dominican Republic
DZ	Algeria

E

EA	Eurasian Patent Organisation ¹
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara ³
EM	Office for Harmonisation in the Internal Market (Trademark and Designs) (OHIM)
EP	European Patent Office ^{1, 6}
ER	Eritrea
ES	Spain ^{6, 8}
ET	Ethiopia

F		IR	Iran (Islamic Republic of)
FI	Finland ^{6, 8}	IS	Iceland
FJ	Fiji	IT	Italy ^{6, 8}
FK	Falkland Islands	J	
FO	Faroe Islands (Malvinas)	JM	Jamaica
FR	France ^{6, 8}	JO	Jordan
G		JP	Japan ⁶
GA	Gabon ¹⁰	K	
GB	United Kingdom ^{6, 8}	KE	Kenya ¹¹
GC	Patent Office for the Cooperation Council for Arab States of the Gulf (GCC)	KG	Kyrgyzstan
GD	Grenada	KH	Cambodia
GE	Georgia	KI	Kiribati
GH	Ghana ¹¹	KM	Comoros
GI	Gibraltar	KN	Saint Kitts and Nevis
GL	Greenland	KP	Democratic People's Republic of Korea
GM	Gambia ¹¹	KR	Republic of Korea ⁶
GN	Guinea ¹⁰	KW	Kuwait
GQ	Equatorial Guinea	KY	Cayman Islands
GR	Greece (Hellenic Republic) ⁹	KZ	Kazakhstan
GS	South Georgia & South Sandwich Islands	L	
GT	Guatemala	LA	Lao People's Democratic Republic
GW	Guinea Bissau	LB	Lebanon
GY	Guyana	LC	Saint Lucia
H		LI	Liechtenstein ⁸
HK	Hong Kong Special Administrative Region of the People's Republic of China	LK	Sri Lanka
HN	Honduras	LR	Liberia
HR	Croatia	LS	Lesotho ¹¹
HT	Haiti	LT	Lithuania ⁹
HU	Hungary ⁶	LU	Luxembourg ^{6, 8}
I		LV	Latvia ⁹
IB	International Bureau of the World Intellectual Property Office (WIPO) ⁵	LY	Libyan Arab Jamahiriya
ID	Indonesia	M	
IE	Ireland ^{6, 8}	MA	Morocco
IL	Israel ⁶	MC	Monaco ⁸
IN	India	MD	Republic of Moldova
IQ	Iraq	MG	Madagascar
		MK	The former Yugoslav republic of Macedonia ⁹
		ML	Mali ¹⁰

MM Myanmar
MN Mongolia
MO Macau
MP Northern Mariana Islands
MR Mauritania ¹⁰
MS Montserrat
MT Malta
MU Mauritius
MV Maldives
MW Malawi ¹¹
MX Mexico ⁶
MY Malaysia
MZ Mozambique

N

NA Namibia
NE Niger ¹⁰
NG Nigeria
NI Nicaragua
NL Netherlands ^{6, 8}
NO Norway ⁶
NP Nepal
NR Nauru
NZ New Zealand ⁶

O

OA African Intellectual Property
Organization (OAPI) ¹
OM Oman

P

PA Panama
PE Peru
PG Papua New Guinea
PH Philippines ⁶
PK Pakistan
PL Poland
PT Portugal ^{6, 8}
PW Palau
PY Paraguay

Q

QA Qatar

R

RO Romania ^{6, 9}
RU Russian Federation ⁶
RW Rwanda

S

SA Saudi Arabia
SB Solomon Islands
SC Seychelles
SD Sudan ¹¹
SE Sweden ^{6, 8}
SG Singapore ⁶
SH St. Helena
SI Slovenia ⁹
SK Slovakia ⁶
SL Sierra Leone
SM San Marino
SN Senegal ¹⁰
SO Somalia
SR Suriname
ST Sao Tome and Principe
SU USSR ⁷
SV El Salvador
SY Syrian Arab Republic
SZ Swaziland¹¹

T

TC Turks and Caicos Islands
TD Chad ¹⁰
TG Togo ¹⁰
TH Thailand
TJ Tajikistan
TM Turkmenistan
TN Tunisia
TO Tonga
TP East Timor ^{3, 12}
TR Turkey
TT Trinidad and Tobago
TV Tuvalu
TW Taiwan, Province of China ⁶
TZ United Republic of Tanzania

U

UA	Ukraine
UG	Uganda
US	United States ⁶
UY	Uruguay
UZ	Uzbekistan

V

VA	Holy See
VC	Saint Vincent and the Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VN	Viet Nam
VU	Vanuatu

W

WO	World Intellectual Property Organization (WIPO) ^{5, 6}
WS	Samoa

Y

YE	Yemen
YU	Yugoslavia

Z

ZA	South Africa ⁶
ZM	Zambia
ZW	Zimbabwe

Additional Codes used by Thomson Scientific:

RD	Research Disclosures ¹²
TP	Technology Disclosure

Notes:

- 1 Intergovernmental organisations (regional patent offices) acting for certain Contracting States under the PCT (Patent Cooperation Treaty). In case of the European Patent Office, it also acts as International Searching Authority and International Preliminary Examining Authority under the PCT.
- 2 The Benelux Trademark and Designs Offices have replaced the national Offices of Belgium, Luxembourg and the Netherlands with regard to actions relating to marks and industrial designs.

- 3 Provisional name
- 4 In the electronic database of the International Register of Marks, the International Bureau of WIPO uses the following additional codes, not part of the active codes: "DD" to designate Germany without the territory that, prior to 03/10/1990, constituted the Federal Republic of Germany; "DT" to designate Germany without the territory that, prior to 03/10/1990, constituted the German Democratic Republic
- 5 The code "WO" is used in relation to the international publication under the Patent Cooperation Treaty (PCT) of international applications filed with any PCT receiving office
- 6 Countries covered in *DWPI*
- 7 Countries covered in *DWPI* that no longer exist
- 8 Member countries of EPO (European Patent Office)
- 9 Extension countries of EPO (will become members)
- 10 Member countries of OAPI (African Intellectual Property Organisation).
- 11 Member countries of ARIPO (African Regional Industrial Property Organisation).
- 12 Research Disclosures © Kenneth Mason Publications Limited[2006] www.researchdisclosure.com

15.5 Patent Number Formats and Kind Codes

Abbreviations used in the table:

NTIS	-	National Technical Information Service
OPI	-	Open for Public Inspection
PCT	-	Patent Cooperation Treaty
CC	-	Country Code

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
AR	AR-----203725	AR 203725	A	Patent [1974 - 1976 only]
AT	AT-----8500819	AT 198500819 AT 8500819	A	OPI application without examination (old law)
	AT---200008020	AT 200008020	A	OPI application without examination (from 1 Jan 2000 (old law))
	AT-----500001	AT 500001	A1	Publication of application with search report (from 200574)
	AT-----500830	AT 500830	A2	Publication of application without search report (from 200574)
	AT-----500880	AT 500880	A4	A2 document published on the same day as the B document with no corresponding A3 (from 200574)
	AT-----395582	AT 395582	B	Granted patent (from 199303) (old law)
	AT-----501079	AT 501079	B1	Patent (from 200574)
AU	AU-----8423025	AU 198423025 AU 8423925	A	OPI application without examination
	AU---200061304	AU 200061304	A	OPI application without examination (from 1 Jan 2000)
	AU--2004212605	AU 2004212605	A1	First publication of an unexamined standard patent application or the divisional standard/petty application of a standard patent/patent application

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
	AU--2004203029	AU 2004203029	A2	Amended first publication
	AU--2005100060	AU 2005100060	A4	Publication of granted Innovation Patent
	AU--2005100111	AU 2005100111	A5	Amended Pre-Grant OPI Innovation Patent
	AU--2001100539	AU 2001100539	A6	Amended Post-Grant OPI Innovation Patent
	AU--2004201523	AU 2004201523	A8	Correction to the bibliographic data of an A level publication
	AU--2001100167	AU 2001100167	A9	Correction to the patent specification of an A level publication
	AU-----634440	AU 634440	B	Examined and accepted patent (from 199308)
	AU--2004208689	AU 2004208689	B1	First publication of the patent application occurring at acceptance of the application (Acceptance notification without previous OPI notification)
	AU--2003208050	AU 2003208050	B2	Second publication of the patent application at acceptance of the application (Acceptance notification following previous OPI notification)
	AU--2004101067	AU 2004101067	B4	Publication of a certified innovation patent
	AU--2003262344	AU 2003262344	B8	Correction to the bibliographic data of a B level publication
	AU--2001100017	AU 2001100017	B9	Correction to the patent specification of a B level publication
BE	BE-----893309	BE 893309	A	Unexamined granted patent
	BE-----1011014	BE 1011014	A0	Unexamined granted patent
	BE-----1003729	BE 1003729	A3	Initial text with search report
	BE-----1003780	BE 1003780	A4	Changed/corrected text with search report
	BE-----1003497	BE 1003497	A5	Text with amended claims and search report
	BE-----1003750	BE 1003750	A6	6-Year patent of invention – not searched or examined
	BE-----1003736	BE 1003736	A7	Corrected 6-year patent of invention

CC	Formats		Status	Covered in DWPI
	DWPI	DIALOG		
	BE-----1005374	BE 1005374	B3	Patent of invention, 2nd publication with search report
	BE-----1005196	BE 1005196	B5	Patent of invention, 2nd publication
	BE-----93	BE 93	T	Transfer to BE national patent from EP application
	BE-----114	BE 114	T7	European Transfer
BR	BR-----8200174	BR 198200174 BR 8200174	A	OPI application - not searched or examined
	BR--200006666	BR 200006666	A	OPI application - not searched or examined (from 1 Jan 2000)
	BR-----1100685	BR 1100685	A3	Pipeline patent application
CA	CA-----1134551	CA 1134551	A	Examined granted patent before 16 Oct 1990/OPI application from 16 Oct 1990
	CA-----1272200	CA 1272200	B	Reissue (old law)
	CA-----1275151	CA 1275151	C	Granted patent (old & new law)
	CA-----1302705	CA 1302705	E	Reissue patents granted after 01.10.89 (old & new law)
CH	CH-----632885	CH 632885	A	Granted unexamined patent or examined application
	CH-----681267	CH 681267	A3	OPI application - searched and preliminary examined (from 1978)
	CH-----681338	CH 681338	A5	Granted without examination
	CH-----630505	CH 630505	B	Examined accepted specification
	CH-----680330	CH 680330	B5	Granted with examination
CN	CN----88105901	CN 1988105901 CN 88105901	A	OPI application (before 1989)
	CN-----1054343	CN 1054343	A	OPI application
	CN-----1026996	CN 1026996	C	Examined patent application
CS	CS-----8101239	CS 198101239 CS 8101239	A	Examined accepted specification
	CS-----9006710	CS 199006710 CS 9006710	A1	Patent application
	CS-----9103400	CS 199103400 CS 9103400	A2	Patent application (from 199232)
	CS-----276791	CS 276791	B	Granted patent (from 199301)

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
CZ	CZ-----9702871	CZ 199702871 CZ 9702871	A3	OPI before examination (from 199417)
	CZ---200100051	CZ 200100051	A3	OPI before examination (from 1 Jan 2000)
	CZ-----283344	CZ 283344	B6	Granted patent (from 199417)
DD	DD-----156461	DD 156461	A	Examined granted patent
	DD-----230532	DD 230532	A3	Patent specification searched and examined (Economic Patent)
	DD-----299844	DD 299844	A4	Economic patent (Wirtschaftspatent), (additional patent) according to paragraph 29(1) patent law50
	DD-----299207	DD 299207	A5	Patent specification (exclusive patent)
	DD-----299147	DD 299147	A7	Patent specification (exclusive and searched)
	DD-----302008	DD 302008	A8	Addition of exclusive patent
	DD-----302031	DD 302031	A9	OPI application (published from 1 May 1992)
	DD-----147014	DD 147014	B	Re-examined after grant
	DD-----271492	DD 271492	B1	Economic patent, searched and examined
	DD-----275484	DD 275484	B3	Exclusive patent, searched and examined
	DD-----302031	DD 302031	B5	Patent specification following an A7 after an objection
	DD-----279420	DD 279420	C	Examined granted patent
	DD-----234470	DD 234470	C2	Economic patent (Wirtschaftspatent), amended according to paragraph 19 patent law 83 or corrected/ amended according to paragraph 23 VerfAO 83
	DD-----294274	DD 294274	C4	Granted examined exclusive patent
DD-----240135	DD 240135	C5	Patent specification, 3 rd publication according to patent law 83 extension act	
DE	DE-----3223281	DE 3223281	A	OPI application before examination (from 1968)
	DE-----2165423	DE 2165423	A	Examined accepted specification (pre 1974)

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
	DE-----4229047	DE 4229047	A1	OPI application before examination (from 199301)
	DE----19813012	DE 19813012	A1	OPI application before examination (from 199526)
	DE102004035364	DE 102004035364	A1	OPI application before examination (applied for after 1 Jan 2004)
	DE102004018847	DE 102004018847	A8	Correction of patent application (bibliographic change)
	DE----10307534	DE 10307534	A9	Correction of patent application (claims, description or drawings)
	DE-----2829631	DE 2829631	B	Examined accepted specification (from 1974 - 1981)
	DE102004025786	DE 102004025786	B3	Examined patent – first publication (from 200404)
	DE----10206286	DE 10206286	B4	Examined patent – second publication (from 200404)
	DE----10346055	DE 10346055	B8	Correction of examined patent (bibliographic change)
	DE----10336941	DE 10336941	B9	Correction of examined patent (claims, description or drawings)
	DE-----3136278	DE 3136278	C	Granted patent from 1981 (from 198138)
	DE-----4119823	DE 4119823	C1	Examined patent – first publication (from 199252)
	DE----19808987	DE 19808987	C1	Examined patent – first publication (from 199526)
	DE----10227513	DE 10227513	C1	Examined patent – first publication (applied for after 1 Jan 2004)
	DE-----4109215	DE 4109215	C2	Examined patent – second publication (from 199252)
	DE----19745773	DE 19745773	C2	Examined patent – second publication (from 199526)
	DE----10131408	DE 10131408	C2	Examined patent – second publication (applied for after 1 Jan 2004)
	DE----10151243	DE 10151243	C5	Modified granted patent (previously kind code C3)
	DE----19523358	DE 19523358	C8	Correction of modified patent (bibliographic change)
	DE----19511788	DE 19511788	C9	Correction of modified patent (claims, description or drawing)

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
	DE602004000825	DE 602004000825	E	Granted EP (English or French) (prior to 1989)
	DE----68902278	DE 68902278	E	Granted EP (English or French) assigned DE number (from 198901; as notified in the PatentBlatt)
	DE602004000001	DE 602004000001	E	Granted EP (English or French) assigned DE number (applied for after 1 Jan 2004; as notified in the PatentBlatt)
	DE-----3161384	DE 3161384	G	Granted EP assigned DE number (prior to 1989)
	DE----58900386	DE 58900386	G	Granted EP in German assigned DE number (from 198901; as notified in the PatentBlatt)
	DE502004000001	DE 502004000001	G	Granted EP in German assigned DE number (applied for after 1 Jan 2004; as notified in the PatentBlatt)
	DE-----3249155	DE 3249155	T	PCT transfer to DE (as notified in the PatentBlatt)
	DE112004000010	DE 112004000010	T	PCT transfer to DE (applied for after 1 Jan 2004; as notified in the PatentBlatt)
	DE----10392170	DE 10392170	T0	PCT transfer to DE published in non-German language (as notified in the PatentBlatt)
	DE----69634325	DE 69634325	T2	Translation of granted EP in English or French with DE assigned serial number (from 2005/34)
	DE112004000029	DE 112004000029	T5	Translation of PCT international announcement (from June 2005)
	DE----10392190	DE 10392190	T8	Correction of EP application (bibliographic change)
	DE----10296848	DE 10296848	T9	Correction of EP application (claims, description or drawings)
	DE----29700012	DE 29700012	U1	Utility Model (from 199626)
	DE202004000001	DE 202004000001	U1	Utility Model (applied for after 1 Jan 2004)
	DE202004008752	DE 202004008752	U8	Correction of Utility Model (bibliographic change)
	DE202004006865	DE202004006865	U9	Correction of Utility Model (claims, description or drawings)

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
DK	DK-----8104311	DK 198104311 DK 8104311	A	OPI application
	DK---200100466	DK 200100466	A	OPI application (from 1 Jan 2000)
	DK-----165583	DK 165583	B	Granted patent (from 199301)
EP	EP-----140267	EP 140267	A	OPI application
	EP-----488479	EP 488479	A1	OPI application with search report (from 199220)
	EP-----500371	EP 500371	A2	OPI application without search report (from 199221)
	EP-----347038	EP 347038	A3	Examiner's search report only for A2 (from 199221)
	EP-----764489	EP 764489	A4	Supplementary search report
	EP-----1079574	EP 1079574	A8	Corrected title page of an A document
	EP-----1076436	EP 1076436	A9	Complete reprint of an A document
	EP-----7694	EP 7694	B	Examined granted specification (pre 199220)
	EP-----308133	EP 308133	B1	Examined granted specification (from 199220)
	EP-----1116432	EP 1116432	B2	Amended specification (from 199220)
	EP-----806304	EP 806304	B8	Corrected title page of a B document
	EP-----997261	EP 997261	B9	Complete reprint of a B document
ES	ES-----8500742	ES 198500742 ES 8500742	A	Unexamined granted patent
	ES-----2018120	ES 2018120	A	OPI application from 1987
	ES-----9200006	ES 199200006 ES 9200006	A1	Patent application published with search report
	ES-----2111447	ES 2111447	A2	Patent application published without search report
	ES-----2027897	ES 2027897	A6	OPI application without search report
	ES-----2020008	ES 2020008	B	Granted patent published with search report
	ES-----2105966	ES 2105966	B1	Granted patent published with search report
	ES-----2026835	ES 2026835	T1	Translation of claims with drawings of EP application

CC	Formats		Status	Covered in DWPI
	DWPI	DIALOG		
	ES-----2028461	ES 2028461	T3	Translation of EP granted
	ES-----2047961	ES 2047961	T4	Corrected translation of a granted European patent
	ES-----2031677	ES 2031677	T5	Modified translation of a granted European patent
FI	FI-----8201863	FI 198201863 FI 8291863	A	OPI application
	FI--200100249	FI 200100249	A	OPI application (from 1 Jan 2000)
	FI-----88240	FI 88240	B	Examined patent application (from 199302)
	FI-----100915	FI 100915	B1	Granted patent (new law) (from 199733)
FR	FR-----1464005	FR 1464005	A	Granted patent (until 1969)
	FR----2504772	FR 2504772	A	OPI application (from 1969)
	FR-----2670849	FR 2670849	A1	OPI application
	FR-----2668972	FR 2668972	A2	Application for certificate of addition
	FR-----2670250	FR 2670250	A3	Application for certificate of utility
	FR-----95386	FR 95386	E	Certificate of addition (until 1969)
	FR-----2435	FR 2435	M	Medicament (until 1979)
	FR-----272	FR 272	M	Medicament addition (until 1979)
GB	GB-----1593412	GB 1593412	A	Examined granted specification (<2000000)
	GB-----2019743	GB 2019743	A	OPI application (2000000+)
	GB-----2403612	GB 2403612	B	Examined granted specification
HU	HU-----213591	HU 213591	A	OPI application – examination requested or deferred
	HU-----9601092	HU 199601092 HU 9601092	A1	Unexamined patent application
	HU-----9601003	HU 199601003 HU 9601003	A2	Examined patent application
	HU---200002481	HU 200002481	A2	Examined patent application (from 2000)
	HU-----59276	HU 59276	T	Examined accepted specification
	HU-----3612	HU 3612	H	OPI application
	HU---200004909	HU 200004909	B	Granted patent with search report (from 199302)
	HU-----223703	HU 223703	B1	Granted patent

CC	Formats		Status	Covered in DWPI
	DWPI	DIALOG		
IE	IE----6900457	IE 196900457 IS 6900457	A	Patent specification (1963 – 1969 only)
	IE-----77149	IE 77149	B	Granted patent (from 199517)
	IE-----77774	IE 77774	B3	Short patent (from 199617)
IL	IL-----61670	IL 61670	A	Application for patent of invention
IN	IN---200502490	IN 200502490	I1	Pre-grant application from Delhi
	IN---200500848	IN 200500848	I2	Pre-grant application from Kolkata
	IN---200501580	IN 200501580	I3	Pre-grant application from Mumbai
	IN---200501562	IN 200501562	I4	Pre-grant application from Chennai
	IN---200301634	IN 200301634	P1	National phase PCT application from Delhi
	IN---200301145	IN 200301145	P2	National phase PCT application from Kolkata
	IN---200300913	IN 200300913	P3	National phase PCT application from Mumbai
	IN---200401796	IN 200401796	P4	National phase PCT application from Chennai
	IN-----195175	IN 195175	B	Pre opposition granted application
IT	IT----1074059	IT 1074059	A	Patent
	IT----1230497	IT 1230497	B	Patent of invention - 2nd publication
JP	JP---63012394	JP 1963012394 JP 88012394	A	OPI application
	JP---04281830	JP 4281830 JP 9281830	A	OPI application
	JP--2001110589	JP 2001110589	A	OPI application (from 1 Jan 2000)
	JP---92074295	JP 1992074295	B	Examined application
	JP-----3624196	JP 3624196	B1	Registered granted patent not published as an A document (199626-)
	JP---94000555	JP 6000555 JP 94000555	B2	Ex. application (199404-199618)
	JP-----3537145	JP 3537145	B2	Registered granted patent (199626-)
	JP---04501316	JP 4501316 JP 92501316	W	PCT transfer (origin abroad)

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
	JP--2000513578	JP 2000513578	W	PCT transfer (origin abroad) (from 1 Jan 2000)
	JP---03513251	JP 03513251 JP 91513251	X	PCT transfer (origin Japan)
	JP---04500003	JP 04500003 JP 92500003	Y	PCT transfer to Utility Model (origin abroad)
	JP---61600004	JP 61600004 JP 86600004	Z	PCT transfer to Utility Model (origin Japan)
KR	KR-----8800853	KR 198800853 KR 8800853	A	Application
	KR--2001000008	KR 2001000008	A	Application (from 1 Jan 2000)
	KR-----9002995	KR 199002995 KR 9002995	B	Examined patent specification (before Sept 1997)
	KR-----321868	KR 321868	B	Examined patent specification (from Sept 1997)
	KR-----9305210	KR 199305210 KR 9305219	B1	Examined patent specification (from 199252)
	KR-----9706779	KR 199706779 KR 9706779	B2	Examined Patent Application (1st publication)
LU	LU-----85505	LU 85505	A	Unexamined granted patent
MX	MX-----183636	MX 183636	A	Patent of invention (from 199816)
	MX-----9602708	MX 199602708 MX 9602708	A1	Published patent application (from 199816)
	MX--2000000073	MX 2000000073	A1	Published patent application (from 1 Jan 2000)
	MX-----9605530	MX 199605530 MX 9605530	A2	Anticipated publication of patent application (from 199816)
	MX--2001000039	MX 2001000039	A2	Anticipated publication of patent application (from 1 Jan 2000)
	MX--2001000022	MX 2001JL000022	A4	Regional filing - Jalisco
	MX--2002000017	MX 2002NL000017	A5	Regional filing - Nuevo Leon
	MX--2003000002	MX 2003YU000002	A6	Regional filing - Yucatan
	MX--2002000002	MX 2002GT000002	A7	Regional filing - Guanajuato
	MX-----183905	MX 183905	B	Granted patent (patent law 1991) (from 199816)
NL	NL-----8501512	NL 198501512 NL 8501512	A	OPI application
	NL-----175138	NL 175138	B	Examined accepted specification
	NL-----1005213	NL 1005213	C2	20-year new law granted patent (from 199608)
	NL-----1007567	NL 1007567	C6	6-year new law petty patent

CC	Formats		Status	Covered in DWPI
	DWPI	DIALOG		
NO	NO-----8901308	NO 198901308 NO 8901308	A	OPI application
	NO---200004853	NO 200004853	A	OPI application (from 1 Jan 2000)
	NO-----171500	NO 171500	B	Granted patent (from 199301)
	NO-----302461	NO 302461	B1	Granted patent
NZ	NZ-----233812	NZ 233812	A	Examined application (from 199301)
PH	PH-----27230	PH 27230	A	Patent application (from 199511)
	PH--1199758504	PH 1199758504	B1	Granted patent (from 200267)
PT	PT-----76934	PT 76934	A	Application for patent of invention
RD	RD-----343123	RD 343123	A	© Kenneth Mason Publications Limited [2006] www.researchdisclosure.com
RO	RO-----86035	RO 86035	A	Examined granted patent
	RO-----112552	RO 112552	B	Granted patent according to 1991 law
	RO-----112553	RO 112553	B1	Granted patent according to 1991 law
RU	RU----1022622	RU 1022622	C	Granted patent of invention
	RU----2090021	RU 2090021	C1	Granted patent of invention
SE	SE----8702558	SE 198702558	A	OPI application
	SE---200100253	SE 200100253	A	OPI application (from 1 Jan 2000)
	SE-----467494	SE 467494	B	Examined accepted specification (from 198701)
	SE-----506689	SE 506689	C2	Granted patent (new law)
SG	SG----9400549	SG 199400549 SG 9400549	A	Registration (from 199513)
	SG-----45465	SG 45465	A1	Patent application (from 199631)
SK	SK----9600868	SK 199600868	A3	Patent application
	SK---200000011	SK 200000011	A3	Patent application (from 1 Jan 2000)
	SK-----278702	SK 278702	B6	Granted patent
SU	SU----1002359	SU 1002359	A	Examined granted patent
	SU----1712770	SU 1712770	A1	Inventor's Certificate
	SU----1712600	SU 1712600	A2	Addition to Inventor's Certificate
	SU----1711687	SU 1711687	A3	Patent

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
	SU-----1679967	SU 1679967	A4	Patent of Addition
	SU-----845271	SU 845271	B	Reissued patent
TP	TP-----119202	TP 119202	A	International Technology Disclosure
TW	TW-----323366	TW 323366	A	Examined - old law
	TW---200300883	TW 200300883	A	Examined – old law
	TW-----220308	TW 220308	B1	Examined - new law (from 1 Aug 2004)
US	US-----4398634	US 4398634	A	Examined granted patent (until December 2000)
	US---N6322144	US 6322144	N	NTIS-published invention application
	US---N7187804	US 7187804	N	NTIS-published invention application
	US-20010031555	US 20010031555	A1	OPI application (from 2 Jan 2001)
	US-20050010008	US 20050010008	A2	2nd / subsequent publication of Patent Application (from 2 Jan 2001)
	US-20050038419	US 20050038419	A9	Corrected published utility patent application
	US-----3713099	US 3713099	B	Re-examination certificate (prior to 2 Jan 2001)
	US-----5579669	US 5579669	B1	Re-examination certificate (prior to 2 Jan 2001)
	US-----4366382	US 4366382	B1	Utility patent grant (from 2 Jan 2001) - no pre-grant publication
	US-----5381524	US 5381524	B2	Re-examination certificate (prior to 2 Jan 2001)
	US-----4366382	US 4366382	B2	Utility patent grant - with pre-grant publication (from 2 Jan 2001)
	US-----4913396	US 4913396	B3	Re-examination certificate (prior to 2 Jan 2001)
	US-----6007003	US 6007003	C1	First re-examination certificate (from 2 Jan 2001)
	US-----4726193	US 4726193	C2	2nd Re-examination publication (from 2 Jan 2001)
	US-----31089	US 31089	E	Reissue

CC	Formats		Status	Covered in <i>DWPI</i>
	<i>DWPI</i>	DIALOG		
	US-----104803	US 104803	H	Defensive specification
	US-----1035	US 1035	H	Statutory Invention Registration
WO	WO--1990001382	WO 1990001382 WO 90001382	A	OPI application
	WO--1992007455	WO 1992007455 WO 92007455	A1	OPI application with search report (from 199220)
	WO--1992013379	WO 1992013379 WO 92013379	A2	OPI application without search report (from 199220)
	WO--1997045996	WO 1997045996 WO 97045996	A3	Search report for A2 (from 199220)
ZA	ZA-----8909975	ZA 198909975 ZA 8909975	A	Unexamined accepted
	ZA---200100168	ZA 200100168	A	Specification
	ZA-----9501302	ZA 199501302 ZA 9501302	AA	Second application with same number
	ZA-----887458	ZA 19887458 ZA 887458	AZ	Second application with same number

15.6 Application/Priority Number Formats

CC	Formats		Notes
	DWPI	DIALOG	
AR	1990AR-000318198	AR 1990318198	
AT	1991AT-000002405	AT 19912405	
	2000AT-000008014	AT 20008014	
AU	1991AU-000004146	AU 19914146	
BE	1992BE-000701101	BE 1992701101	DWPI priority numbers always use the full Belgian priority (not the local town number). This number remains in the record as an associated priority, when available.
BR	1992BR-000000108	BR 1992108	
	1991BR-000000711	BR 1991711	
CA	1990CA-000049485	CA 49485	
	1991CA-002034163	CA 2034163	
CH	1991CH-000003636	CH 19913636	
CN	1991CN-000100015	CN 1991100015	
	1991CN-000225158	CN 1991225158	
	2000CN-000103651	CN 2000103651	
	2003CN-001100020	CN 20031100020	For data filed between 7/10/2003-01/01/2004 a leading "1" is used to avoid clashes with other CN-A application data.
	2004CN-000000043	CN 200443	
CS	1991CS-000002474	CS 19912474	
CZ	1993CZ-000001000	CZ 19931000	
DD	1991DD-000336107	DD 336107	
DE	1970DE-B00087017	DE 1970B87017	
	1992DE-004200008	DE 4200008	
	1992DE-000000524U	DE 1992524	
	1997DE-100033093	DE 19733093	
	2001DE-200000001	DE 20100001	
	2004DE-200401128U	DE 202004401128	The leading "20" indicates that this is a utility model application
	2004DE-210000019U	DE 212004000019	The leading "21" indicates that this is a utility model application via the PCT route

CC	Formats		Notes
	DWPI	DIALOG	
DK	1991DK-000000105	DK 1991105	
EP	1992EP-000904679	EP 1992904679	
	2000EP-000102309	EP 2000102309	
ES	1992ES-000000144	ES 1992144	
	1991ES-000001791	ES 19911791	
FI	1992FI-000002300	FI 1992-2300	
FR	1992FR-000009166	FR 19929166	
	2000FR-000013835	FR 200013835	
GB	1992GB-000000027	GB 199227	Where a filing date is quoted associated with a number from an earlier year, the earlier year is entered, not the filing date.
HU	1991HU-000000306	HU 1991306	
	1979HU-FE0001046	HU 1979FE1046	Numbers assigned prior to 1980 comprise two letters from the patentee's name and up to five digits, entered as such, provided initial letters are known, Current serial numbers comprise only digits.
IE	1979IE-000000339	IE 1979339	
IL	1991IL-000096973	IL 96973	
IN	2002IN-MUM000754	IN 2002MU754	
	2003IN-DEL001086	IN 2003DE1086	
	2003IN-KOL000266	IN 2003KO266	
	2005IN-CHE000042	IN 2005CH42	
	2002IN-DELNP001046	IN 2002DN1046	
	2003IN-KOLNP000765	IN 2003KN765	
	2002IN-MUMNP001571	IN 2002MN1571	
	2004IN-CHENP000010	IN 2004CN10	
IT	1990IT-000093369	IT 199093369	
	1991IT-AN0000011	IT 1991AN11	From 1st January 1991 a two-letter city code is included in the application number.
JP	1992JP-000163744	JP 1992163744	
	2001JP-000000337	JP 2001337	
	1993JP-000033610	JP 199333610	
KR	1992KR-000001382	KR 19921382	

CC	Formats		Notes
	DWPI	DIALOG	
LU	1997LU-000090008	LU 90008	
MX	1995MX-000000286	MX 1995286	
NL	1992NL-000000447	NL 1992447	
NO	1992NO-000000059	NO 199259	
NZ	1996NZ-000280346	NZ 280346	
PH	1996PH-000014494	PH 199614494	
PT	1991PT-000096995	PT 96995	
RD	1992RD-000334012	RD 1992334012	© Kenneth Mason Publications Limited [2006] www.researchdisclosure.com
RO	1992RO-000001434	RO 19921434	
RU	1995RU-000113104	RU 1995113104	
	2000RU-000119226	RU 2000119226	
SE	1992SE-000000031	SE 199231	
SG	1995SG-000000013	SG 199513	
SK	1997SK-000000010	SK 199710	
SU	1989SU-004747284	SU 4747284	
TP	1992TP-000029201	TP 199229201	Technology Disclosure
TW	2003TW-000118606	TW 2003118606	
US	1998US-000080114	US 1998-80114	US Provisional number
	1992US-000493916	US 1992493916	
WO	1992WO-FI0000009	WO 1992FI9	
	1992WO-EP0000011	WO 1992EP11	
	1992WO-IT0000021	WO 1992IT21	
ZA	1990ZA-000008527	ZA 19908527	
	1990ZA-A00007769	ZA 1990-A7769	Occasionally two inventions are given the same application number. These are distinguished from each other by adding a preceding letter A to one of them.

15.7 Japanese Coverage

Since the end of 1995 (*DWPI* Update 199548) *DWPI* has included all Japanese Kokai applications (JP-A documents). Until mid 1995 (*DWPI* Update 199528), coverage was restricted to chemical and electrical technologies based on the International Patent Classification (IPC).

In the period from *DWPI* Update 199528 to *DWPI* Update 199548, coverage was phased in online until complete coverage was attained as indicated below:

Subject Area	International Patent Classification	<i>DWPI</i> Update
Automotive	B60, F01, F02N, F02P, F16, F17, B65-B68	199528
Computing	G06, G11, B02-B09	199532
Machine Tools	B21-B28, B30-B32, B41-B44, F21-F41	199536
Construction	E01-E21, F02-F15, B61-B64	199540
Instrumentation	G01-G12	199544
Agriculture	A01-A47, A61-A63	199548

The coverage of Japanese patents before *DWPI* Update 199528 is shown in the following table by IPC. IPC other than those shown have a coverage of less than 10%.

Those indicated with an asterisk (*) may have abstracts if they have additional IPC's in other groups.

Coverage before *DWPI* Update 199528

IPC Section	IPC Covered	% Covered	Abstracts
A Human Necessities (A01,A21-A24, A41-A47, A61-A63)	A01N,A21,A22,A23,A61K	100	Yes
	A61L,A61M,A62D	50-99	Yes
	A01H, A01J, A01K, A24D, A41B, A41C, A41D, A44B, A47J, A47K, A47L, A61B, A61C, A61F	25-49	Yes
	A01G, A01M, A24B, A41F, A41G, A45D, A61J, A62C	10-24	Yes
B Performing Operations Transporting B01-B09, B21-B32, B41-B44, B60-B68	B01,B29	100	Yes
	B21B, B21H, B21K, B22, B23K	50-99	No*
	B27K, B60C	50-99	Yes
	B03, B04, B05, B07B, B32, B65H	25-49	Yes
	B21C, B21J, B41D, B41M, B41N	10-24	Yes
C Chemistry C01-C14, C21-C23, C25-C30	C	100	Yes
D Textiles and Paper D01-D07, D21	D	100	Yes
E Fixed Constructions E01-E06, E21	E21B	50-99	Yes
F Mechanical, Lighting, Heating, Explosives F01-F04, F15-F17 F21-F28, F41-F42	F17C, F42B	50-99	Yes
	F25,F27	25-49	Yes
	F22B,F26,F28	10-24	Yes
G Physics G01-G12, G21	G21,G01N31-33	100	Yes
	G03C,G03G	50-99	Yes
H Electrical	Just Kokai since 1982	100	No*

16 Index

A

Abbreviations 225
Abstracts 31, 48
Accessing Derwent World Patents Index (DWPI)
 On DI 19
Accession Numbers 143
Additional Words 45
Agent and Address 91
Alerts 217
Application
 Country 113
 Date 135
 Detail Searching 93
 Kind 113
 Month 137
 Number 110
 Formats 244
 Year 139
Applications
 Utility Models 117
Assignee Status 79
Author 82

B

Basic Index 37

C

Chemical Indexing 189
Chemical Name Segmentation 29
Chemistry Resource 189
Claim 61
Classification
 DWPI 224
 Searching 143
Company Code 72
Company Name 69
Company Searching 63
Compound Number 197
Country Code 34, 108

Cross Reference DWPI Accession Number 148
Customer Service Information
 Other Sources of Help and Information 6
 Thomson Scientific Search Services 8

D

Database Update 141
Date Searching 129
Delivery of Prints and Alerts 217
Designated States 107
DIALOG Search Features 27
Dialog via the Internet 20
DialogLink 20
Display Options 209
Document Type 175
Documentation Abstract 57
DWPI
 Accession Number 147
 Cross Reference 148
 Main 144
 Related 148
 Alerting Abstract 48
 Classification 149, 224
 Database Record Structure 16
 Record 21
 Registry Numbers 194
 Update 141

E

Enhanced Polymer Indexing 185
Extension Abstract 59

F

Family Member
 Type 171
File Segment 174
Filing Details 119
Fragmentation Codes 191

H

Help Sources 6

I

IDPAT 35

Images 34, 219

International Patent Classification 155

Reform 167

Invention Level 16

Inventor 82, 86

Address 88

Name 88

Searching 63

IPCs 178

J

Japanese Coverage 247

K

Kind Codes 231

L

Language 31, 122

LIMIT Qualifiers 31

LIMITing Search Results 123

M

Main DWPI Accession Number 144

Main IPC 165

Manual Codes 177, 178

MAP 31

N

Number of Patents 126

O

Original (Initial) US National Classification 152

Original Abstract 55

Original Title 44

P

Patent Assignee 63, 72

Patent Country 104

Patent Detail Searching 93

Patent Family Searching 118

Patent Kind 104

Patent Number 93

Format 231

Patents Copy Service 7

Online Ordering 7

Plasdoc Fragmentation Codes 183

Plasdoc Key Serials 184

Polymer Indexing 182

Predefined Formats 209

Prints 217

Priority

Number Formats 244

Priority Application Information 116

Priority Dates 118

Proximity Operators 28

Publication

Date 129

Month 132

Year 134

Q

Qualifiers 221

R

RANK 32

Record Type 173

Registry Numbers 194

Related DWPI Accession Number 148

REPORT 218

Ring Index Numbers 196

S

Searching

Company 63

Inventor 63

Patent Family 118

Secondary DWPI Accession Number 147

Sections B, C, E 191

SORT 33

Statistical Analysis 32

Super Search Qualifier 34

T

TAG Format 213

Technology Focus 55

Thomson Scientific
 Indexing 177
 Search Services 8
 Standard Abbreviations 225
 Standardised Format 86
Title Terms 45
Titles 42
Truncation 27, 164

U

Updates 203
User Guides 6
User-Defined Formats 211
Utility Model Applications 117

V

Value-add DWPI Title 42

W

WIPO Country Codes 227
Word Searching 37

Y

Year Ranging 182

