Derwent World Patents Index®



DESCRIPTION

Celebrating its 55th anniversary in 2018, *Derwent World Patents Index*[®] (*DWPI*SM), produced by Clarivate Analytics, provides access to information for over 37.4 million inventions covering more than 100 million patent documents worldwide. Each update adds an average of 46,000 documents from more than 50 worldwide sources including patent-issuing authorities and and defensive publications.

Whether you are interested in patents for their technical content, for business planning and development, or for protecting the innovations within your own organization, *DWPI's* reliable and enhanced patent data contains many key features that distinguish it as the most trusted source of patent research information available and gives you the most complete picture possible.

The *DWPISM* documents go through an extensive editorial process. Raw data is reviewed and corrected for mistakes and missing information. On average, *DWPISM* editors identify and correct 800-1,000 priority errors per week from raw patent data records. Each document represents a single invention or "patent family". The patent family includes the first publication of an invention, also known as the "basic patent", plus later published patents relating to that invention, also known as "equivalents". English language summaries for the patent family along with the original data for each family member are provided:

- Patent family, or invention level, data: Derwent written titles and abstracts written to summarize the novelty, use and advantage of an invention, proprietary Derwent Classes and Derwent Manual Codes, subject indexing and in-depth chemical and polymer indexing, electrical and engineering drawings dating back to 1988, and chemical structure drawings dating back to 1992. Bibliographic information including patent assignees, inventors, classification codes and priority application numbers from the individual patents, which is collated and de-duplicated.
- Original publication, or as-published, data: full author name and address, document title, abstract, claims, patent classification codes, filing details, and legal representative. The amount of original publication data present in each record varies by publishing authority, patent kind, and time, as indicated in the Sources section.

Starting in 1999, additional abstracts and indexing features are provided. The Derwent written abstract is organized into paragraphs with informative, searchable paragraph headings. This abstract also contains a Novelty paragraph describing the non-obvious improvements over previous technology. A Technology Focus section contains separate paragraphs providing different technological viewpoints of the invention. The Extension Abstract and Documentation provide detailed summaries that bridge the gap between the concise abstract summary and the full text patent document.

Also see the ProSheets for *Derwent Chemistry Resource (DCR)*, which provides chemical searching with a link back to the *DWPI* records that include the chemical; and *Patents Citation Index (PCI)*, which details examiner and author citations for patents from 25 patent-issuing authorities.

Subject Coverage

- Pharmaceutical patents from 1963
 - Agricultural patents from 1965
- Chemical patents from 1970
- All patentable technologies from 1974
- Polymer and plastics patents from 1966

Sources

Comprehensive details of the 50+ worldwide sources used to create Derwent World Patents Index® can be downloaded for free at https://clarivate.com/products/dwpi-reference-center/dwpi-coverage/.

Date Coverage 1963 - present

Geographic Coverage International Update Frequency 82 updates/year

Document Types Patents

Publisher

Derwent World Patents Index is provided by Clarivate Analytics. Questions concerning file content should be directed to Customer Care at: https://clarivate.com/contact-us/support/

© 2018, ProQuest LLC All rights reserved

SEARCH FIELD CODE SAMPLE DOCUMENT¹ Preparation of 8,9-dihydro-7H-1,3a,9-triazacyclopenta(a)naphthalen-6-ones DTI. TI useful as intermediates for medicaments, involves dehydrogenating 5,7,8,9tetrahydrotriazacyclopenta(a)naphthalen-6-ones using N-bromosuccinimide 200473 (First update). 200737 (Last update). Drawing available. Patent Family (12 members) Bibliographic information | Claims AB, TX Abstract (enhanced) Translate Alerting AAB, AB, TX NV, AAB, AB, TX Novelty Preparation of 8,9-dihydro-7H-1,3a,9-triazacyclopenta(a)naphthalen-6-ones (I) or their salts involves dehydrogenation (i.e. oxidation) of 5,7,8,9-tetrahydro-4H-1,3a,9-triazacyclopenta(a)naphthalen-6-ones (II) using N-bromosuccinimide (NBS). AAB, AB, TX Description Preparation of 8,9-dihydro-7H-1,3a,9-triazacyclopenta(a)naphthalen-6-ones of formula (I) or their salts involves dehydrogenation (i.e. oxidation) of 5,7,8,9-tetrahydro-4H-1,3a,9-triazacyclopenta(a)naphthalen-6-ones of formula (II) using N-bromosuccinimide (NBS). Me Me NΗ NH (I)(II)R 1 H, methyl or hydroxymethyl; and R 2 - R 1-7C alkyl. 4 Use AAB, AB, TX (I) are useful as intermediates for medicaments for treating gastric and intestinal disorders. Advantage AAB, AB, TX The process may be used on industrial scale. TF, AB, TX Technology focus ORGANIC CHEMISTRY Preferred Method: The amount of NBS used is 1 equivalent calculated on the basis of the amount of (II) used. The reaction is carried out in an inert organic solvent at -70 to 50 (preferably 0 - 30)°C. Subsequent to the reaction with NBS, an organic base (preferably an organic amine, especially triethylamine) is used for the removal of hydrogen bromide.

¹ Sample document is current as of 25 July 2018. Some field content removed for brevity. Page 2

EAB, AB, TX Extension Specific compounds-SPECIFIC COMPOUNDS The preparation of 1 compound (I) is specifically claimed, i.e. 7-(tert-butyldimethysilyloxy)-2,3-dimethyl 8,9-dihydro-7H-1,3a,9-triazacyclopenta(a)naphthalen-6-one (Ia). 2.3 Indexing (details) PA, CO Assignee INV, AU Alsters, P L Mink, D	I-8-phenyl-
The preparation of 1 compound (I) is specifically claimed, i.e. 7-(tert-butyldimethysilyloxy)-2,3-dimethyl 8,9-dihydro-7H-1,3a,9-triazacyclopenta(a)naphthalen-6-one (Ia). 2.3 Indexing (details) PA,CO Assignee INV,AU Inventor	l-8-phenyl-
PA, CO Assignee ALTANA PHARMA AG INV, AU Inventor ALSTERS, P L	
INV, AU Inventor ALSTERS, P L	
Paulus, L A	
PBC, PN, PD ⁴ Publication number WO 2004087718 A1 (14 October 2004)	
APC, APN, APD ⁵ Application number WO 2004EP50414 A (01 April 2004)	
PPC, PRN, PRD Priority number EP 20037663 A (03 April 2003)	
CPC ⁶ CPC classification C07D 471/14 (main); C07F 7/1892	
More details 🔫	
IPC ⁶ IPC classification Version 8: A61K 31/4745 (main); C07F 7/18 (main); C07D; C07D 471 C07D 471/14; C07F; C07F 7/00; C07F 7/18 Version 1-7: C07F 7/18 (main); C07D 471/14	L/00;
More details 🔫	
ECLA classification C07D 471/14; C07F 7/18 C9G	
USCL US classification 546/82 (main)	
JPC ⁶ JP classification FI-term C07F 7/18 T	
More details 🔻	
JPF ⁴ JP classification F-term 4H049; 4H049/VN01; 4H049/VP01; 4H049/VQ60; 4H049/VR23; 4H049 4H049/VS60; 4H049/VU06; 4H049/VV01; 4H049/VV13; 4H049/VW02	/VR41;
M2D Chemical fragment codes M2 01: M905 M904 B614 B711 B720 B743 B831 D013 D014 E260 G010 G J521 M1 M113 M210 M211 M214 M233 M240 M250 M282 M283 M32 M511 M520 M531 M540 M720 N223 N224 N312 N411 N511 N512 N RAFR4Z-H-K-P 975061-H-K-P 56288 02: M905 M904 B614 B711 B720 B743 B831 D012 D013 D014 E260 G G100 H401 H481 J5 J521 M1 M113 M210 M211 M212 M213 M214 M M216 M220 M221 M222 M223 M224 M231 M232 M233 M240 M250 M M540 M630 M640 M650 M720 N223 N224 N312 N411 N511 N512 N 014237801-K-P 56288	20 M411 513 010 M215 M281 M531
KWD Keyword concept 1 0: 975061-H-CL-PRD 1: 0142-37801-CL-PRD 1: 0142-37801-CL-PRD	
DC Derwent chemical class B02: Fused ring heterocyclics	
MCD CPI manual code B05-B01B	

SEARCH

 $^{^{\}rm 2}$ Clicking on hyperlinked content searches the value in all patent databases.

³ The Indexing section includes the Derwent basic patent and application numbers. Patent family details are displayed on the Family tab.

⁴ Also PNA and PDA.

 $^{^{\}rm 5}$ Also APNA and APDA.

⁶ Clicking on "More details" for CPC, IPC and Japanese FI Terms displays the attribute values assigned to each code; the attribute values are not indexed for searching.

FIELD CODE	SAMPLE DOCUMENT (CONT	.)
LA	Publication language	English; Norwegian; Portuguese; Spanish; Korean; Chinese; Japanese
LRP, LRL	Legal representative	RUPP, Herbert (Agent) Altana Pharma AG, Byk-Gulden-Str. 2, 78467 Konstanz, DE, DE
DS	Designated states	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 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: 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 PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW
	Number of designated states	107
NR, NCP, NOC	Document features	7 literature citations (examiner); 2 cited patents (examiner) 1 claims
DW	Update code	DWPI: First updated in 200473; Last updated in 200737 PCI: First updated in 200509; Last updated in 200613 (2004748020)
	Source attribution	Derwent World Patents Index, © Publisher specific
AN	Accession number	2004748020
	Document URL	https://dialog.proquest.com/professional/docview/954257584? accountid=137296
FAV, UD	First available	2012-03-29
	Copyright	© 2018 Clarivate Analytics. All rights reserved.
PUB	Database	Derwent World Patents Index® (1963 - current)

Patent	Family (12 members)
Bibliographic information	on Claims

CLM, TX, FT

SEARCH

 1. Process for the production of compounds of formula 1, [CF C00004] in which R1 is hydrogen, methyl or hydroxymethyl, R2 is 1-7C-alkyl, R3 is 1-7C-alkyl, and their salts, which comprises dehydrogenating (oxidizing) compounds of formula 2, [CF C00005] in which R1, R2, R3 and R4 have the meanings given above, by using NBS (N-bromosuccinimide).

SEARCH FIELD CODE SAMPLE DOCUMENT (CONT.)

	Patent	Family (12 members)					
	Family members (12	2)						
NPF, NCN	Patent family (Num	ber of pat	tents: 12; Number (of countries: 107)				
2,7	Publication number	Kind	Publication date	Application number	Kind	Application date	Update code	
PD, PDA	WO 2004087718	A1	20041014	WO 2004EP50414	А	20040401	200473	Γ
PN, PNA	AU 2004226178	A1	20041014	AU 2004226178	А	20040401	200638	Γ
PDA	NO 200504977	Α	20051026	NO 20054977	Α	20051026	200609	T
APN, APNA	MX 2005PA010311	A1	20051201	MX 200510311	Α	20050926	200629	Γ
APD, APDA	KR 1020050119145	А	20051220	KR 102005718058	А	20050926	200652	
DW	EP 1613637	A1	20060111	EP 2004725052	Α	20040401	200604	Γ
PBC	BR 200408771	Α	20060328	BR 20048771	А	20040401	200624	Γ
APC	CN 1764665	Α	20060426	CN 200480008177	А	20040401	200654	T
	US 20060194972	A1	20060831	US 2005550691	А	20050926	200657	
	JP 2006522068	W	20060928	JP 2006505508	Α	20040401	200667	T
	ZA 200506904	А	20070131	ZA 20056904	Α	20050829	200715	
	IN 2005MN01206	P3	20070420	IN 2005MN1206	А	20051027	200737	t
	EP 1613637 A1 Original publication dat	a		Go back to table 4 Prev	ious Pa	tent member 6 of 12	Next 🕨	
ті		a	PROCESS FOR T	HE PRODUCTION OF IMI	DAZOPY	RIDIN-8-ONES		
ті	Original publication dat	a	PROCESS FOR T		DAZOPY	RIDIN-8-ONES		
TI PA, CO, ACO	Original publication dat	a	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG)	DAZOPY IDAZOPY -8-ONES	RIDIN-8-ONES (RIDIN-8-ONEN , PRO		
	Original publication dat	a	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) Isse 2, 78467 Konstanz,	DAZOPY IDAZOP 8-ONES DE, 784 , NL, NL-	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht,	DCEDE	
PA, CO, ACO INV, AU, ICO LRP, LRL	Original publication dat Original title Assignee Inventor Legal representativ	ve	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B Wolf, Ulrich	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) isse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht	DAZOPY IDAZOPY -8-ONES DE, 784 , NL, NL- 0 Eupen,	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE	DCEDE	
PA, CO, ACO INV, AU, ICO LRP, LRL NA, PDA, DW	Original publication dat Original title Assignee Inventor Legal representativ Publication number	ve r	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B- Wolf, Ulrich ALTANA Pharma Konstanz, DE EP 1613637 A1	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) asse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht -4700 Eupen, BE, B-470 AG, Byk-Gulden-Strasse (11 January 2006, Updat	DAZOPY IDAZOPY ·8-ONES DE, 784 , NL, NL- 0 Eupen, e 2, 7846	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE 57 Konstanz, DE, 784	DCEDE	
PA, CO, ACO INV, AU, ICO LRP, LRL	Original publication dat Original title Assignee Inventor Legal representativ	ve r	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B- Wolf, Ulrich ALTANA Pharma Konstanz, DE EP 1613637 A1	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) isse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht -4700 Eupen, BE, B-470 AG, Byk-Gulden-Strasse (11 January 2006, Updat A (01 April 2004)	DAZOPY IDAZOPY ·8-ONES DE, 784 , NL, NL- 0 Eupen, e 2, 7846	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE 57 Konstanz, DE, 784	DCEDE	
PA, CO, ACO INV, AU, ICO LRP, LRL PNA, PDA, DW APNA, APD	Original publication dat Original title Assignee Inventor Legal representative Publication number Application number Related publication	ve r r	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B- Wolf, Ulrich ALTANA Pharma Konstanz, DE EP 1613637 A1 (EP 2004725052 EP 20037663 A (Based on OPI pa	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) isse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht -4700 Eupen, BE, B-470 AG, Byk-Gulden-Strasse (11 January 2006, Updat A (01 April 2004) (03 April 2003) itent: WO 2004087718 A	DAZOPY IDAZOPY -8-ONES DE, 784 , NL, NL- 0 Eupen, e 2, 7846 te 20060	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE 57 Konstanz, DE, 784	DCEDE	
PA, CO, ACO INV, AU, ICO LRP, LRL PNA, PDA, DW APNA, APD PRN, PRD DT, PNA APNA, APDA	Original publication dat Original title Assignee Inventor Legal representation Publication number Application number Related publication Related application	ve r r	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B· Wolf, Ulrich ALTANA Pharma Konstanz, DE EP 1613637 A1 (EP 2004725052 EP 20037663 A (Based on OPI pa PCT: WO 2004E	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) asse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht -4700 Eupen, BE, B-470 AG, Byk-Gulden-Strasse (11 January 2006, Updat A (01 April 2004) (03 April 2003) tent: WO 2004087718 A P50414 A (01 April 2004	DAZOPY IDAZOP 8-ONES DE, 784 , NL, NL- 0 Eupen, e 2, 7846 te 20060	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE 67 Konstanz, DE, 784 4)	DCEDE NL 67	
PA, CO, ACO INV, AU, ICO LRP, LRL NA, PDA, DW APNA, APD PRN, PRD DT, PNA	Original publication dat Original title Assignee Inventor Legal representative Publication number Application number Related publication	ve r r	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B Wolf, Ulrich ALTANA Pharma Konstanz, DE EP 1613637 A1 (EP 2004725052 EP 20037663 A (Based on OPI pa PCT: WO 2004El Version 8: A61K C07F; C07F 7/18 Version 1-7: C0	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) isse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht -4700 Eupen, BE, B-470 AG, Byk-Gulden-Strasse (11 January 2006, Updat A (01 April 2004) (03 April 2003) itent: WO 2004087718 A P50414 A (01 April 2004 31/4745 (main); C07F	DAZOPY IDAZOPY -8-ONES DE, 784 , NL, NL- 0 Eupen, e 2, 7846 te 20060 A) 7/18 (ma	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE 67 Konstanz, DE, 784 4)	DCEDE NL 67	
PA, CO, ACO INV, AU, ICO LRP, LRL NA, PDA, DW APNA, APD PRN, PRD DT, PNA APNA, APDA IPC	Original publication dat Original title Assignee Inventor Legal representation Publication number Application number Related publication Related application IPC classification	ve r n	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B- Wolf, Ulrich ALTANA Pharma Konstanz, DE EP 1613637 A1 (EP 2004725052 EP 20037663 A (Based on OPI pa PCT: WO 2004El Version 8: A61K C07F; C07F 7/11 Version 1-7: C0 More details	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) isse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht -4700 Eupen, BE, B-470 AG, Byk-Gulden-Strasse (11 January 2006, Updat A (01 April 2004) (03 April 2003) itent: WO 2004087718 A P50414 A (01 April 2004) 31/4745 (main); C07F 13 7F 7/18 (main); C07D 47	DAZOPY IDAZOPY -8-ONES DE, 784 , NL, NL- 0 Eupen, e 2, 7846 te 20060 A) 7/18 (ma	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE 67 Konstanz, DE, 784 4)	DCEDE NL 67	
PA, CO, ACO INV, AU, ICO LRP, LRL PNA, PDA, DW APNA, APD PRN, PRD DT, PNA APNA, APDA	Original publication dat Original title Assignee Inventor Legal representation Publication number Application number Related publication Related application	ve r n	PROCESS FOR T VERFAHREN ZUF DE PREPARATIO ALTANA Pharma Byk-Gulden-Stra ALSTERS PAULU Oranjeplein 273, MINK DANIEL Heckenweg 5, B Wolf, Ulrich ALTANA Pharma Konstanz, DE EP 1613637 A1 (EP 2004725052 EP 20037663 A (Based on OPI pa PCT: WO 2004El Version 8: A61K C07F; C07F 7/18 Version 1-7: C0	HE PRODUCTION OF IMI R HERSTELLUNG VON IM N DE IMADAZOPYRIDIN- AG (BYKG) isse 2, 78467 Konstanz, S LAMBERTUS , NL-6224 KZ Maastricht -4700 Eupen, BE, B-470 AG, Byk-Gulden-Strasse (11 January 2006, Updat A (01 April 2004) (03 April 2003) itent: WO 2004087718 A P50414 A (01 April 2004) 31/4745 (main); C07F 13 7F 7/18 (main); C07D 47	DAZOPY IDAZOPY -8-ONES DE, 784 , NL, NL- 0 Eupen, e 2, 7846 te 20060 A) 7/18 (ma	RIDIN-8-ONES (RIDIN-8-ONEN , PRO 67 Konstanz, DE 6224 KZ Maastricht, BE 67 Konstanz, DE, 784 4)	DCEDE NL 67	

SEARCH FIELD CODE SAMPLE DOCUMENT (CONT.)

PAB, AB

Original abstract (summary):

English:

The invention relates to a process for the production of 7-(trialkyl-silanytoxy)- 2,3-dimethyl-8-phenyl-8,9dihydro-7H-1,3a,9-triazacyclopenta[a]naphthalen-6-one and related compounds by using NBS as oxidizing agent.

Go back to table < Previous Patent member 6 of 12 Next >

SEARCH FIELDS - PATENT BIBLIOGRAPHIC INFORMATION

Field Name	Field Code	Search examples ⁸	Description and Notes
Accession number	AN	an(2004748020)	A unique document identification number assigned by the information provider.
Any number, in many formats	PNUM	pnum(EP 7663) pnum(7663) pnum(KR2005119145A) pnum(KR2005119145) pnum(2005119145)	Publication, application, priority application, related application, and related publication number. Includes various forms of the number.
Application country ⁹	APC	apc(ep)	Application, priority application, and related application country.
Application date ⁷	APD	apd(20051026)	Basic and equivalent application date.
Application dates – all ⁷	APDA	apda(20040401)	Application, priority, and related application dates.
Application number ⁷	APN	apn(WO 2004EP50414)	Basic and equivalent application number.
Application numbers – all ⁷	APNA	apna(MX 200510311)	Application, priority application, and related application numbers.
Author ¹⁰	AU	au(Mink)	Author names in patent databases are inventors but can be searched using the AU field code.
Company information	СО	co(ALTANA PHARMA)	DWPI standardized and as-published patent assignee.
Derw ent Week	DW	dw (200473) dw (200715)	The Derw ent w eek in w hich a publication w as added to the DWPI database.
Designated states	DS	ds(FR)	National (WIPO/PCT) and Regional (EPO).
Document type	DTYPE	dtype(patent)	The only document type in DWPI is "patent".
First available	FAV	fav(2012-03-29)	The first time a document was loaded in a database (DWPI). It does not change how ever many times the record is subsequently reloaded.
From database ¹¹	FDB	NBS and (gastric or intestinal) and fdb(1008360)	Useful in multi-database searches to isolate records from a specific database. FDB cannot be used in a single database search.
Image present	IMGANY	hydrogen bromide and imgany(yes)	Add: AND IMGANY(YES) to a query to limit your search to documents with an image.
Inventor	INV	inv.exact("Mink, D")	May also search inventor names using the AU field code.

⁸ Most, but not all, of the search examples are from the sample record.

⁹ Non-priority application data is included from DWPI Update 198409.

¹⁰ Present from 1978 forward. Last name of author limited to 10 characters prior to DWPI Update 199216.

¹¹ FDB searches the database ID. Click the "Help" hyperlink then click "Search syntax and field codes", and then click "FDB command" for a list of database names and codes that can be searched with FDB. FDB cannot be searched on its ow n; specify at least one search term then AND it with FDB.

Field Nam e	Field Code	Search examples ⁸	Description and Notes
Inventor country	ICO	ico(nl)	
Language ¹²	LA	la(Korean)	The language in which the document was originally published.
Legal representative	LRP	Irp(NATH & ASSOCIATES)	The legal representative, attorney, agent, or firm who represents the patent assignee.
Legal representative location	LRL	Irl(Alexandria, VA)	The mailing address if available.
Number of cited literature references ¹³	NR	nr(>5) nr(7)	The number non-patent literature references. NR is a numeric field.
Number of cited patents ¹³	NCP	ncp(2) ncp(2 or 3 or 4)	NCP is a non-numeric field; using symbols such as "greater than" (>), "less than" (<) is not possible.
Number of citing patents ¹³	NCBP	ncbp(15)	NCBP is a non-numeric field; using symbols such as "greater than" (>), "less than" (<) is not possible.
Number of countries	NCN	ncn(107) ncn(>=1)	NCN is a numeric field; using "greater than" (>) and "less than" (<) symbols, for example, is possible.
Number of patents in family	NPF	npf(12) npf(>1)	NPF is a numeric field; using "greater than" (>) and "less than" (<) symbols, for example, is possible.
Patent assignee	PA	pa(ALTANA PHARMA)	
Patent assignee country	ACO	aco(DE)	The mailing address country for the patent assignee consisting of the ISO-standard 2-letter country code.
Patent publication country	PBC	pbc(us)	Searches the 2-letter ISO standard country code for the basic, equivalent and related publication country.
Patent publication country and kind code	КС	kc(woa1) kc(us)	The kind code indicates the publication level of a patent document. KC searches basic and equivalent publication country and kind, or the country only.
Patent publication country and kind code – all	KCA	kca(US a1) kca(WO A) kca(WO)	The kind code indicates the publication level of a patent document. KCA searches the basic, equivalent and related publication country with kind code, or the country only.
Patent publication date ¹⁴	PD	pd(20041014) pd(200410) pd(2004)	Basic publication date
Patent publication dates – all ¹⁴	PDA	pda(20070420) pda(200704) pda(2007)	Basic, equivalent and related publication dates.
Patent publication number	PN	pn(WO 2004087718A1) pn(WO 2004087718) pn(WO2004087718) pn(CN 1764665)	Basic and equivalent publication numbers.
Patent publication numbers – all	PNA	pna(US 20060194972) pna(WO 2004087718)	Basic, equivalent and related publication numbers.
Priority application country	PPC	ppc(EP)	The 2-letter ISO-standard country code associated with the priority application number.
Priority application date	PRD	prd(20030403) prd(200304) prd(2003)	The 8-digit date assigned to a priority application number.
Priority application number	PRN	prn(EP20037663) prn(EP 20037663A)	The priority application number is the number assigned to the original or first application. Also searchable with APNA.

 ¹² Prior to DWPI Update 199216, language was coded only for EP and WO patents. Language may not be present if the language of the document is the primary language of the patent country
 ¹³ Search Patent Citations Index for citation content. Only the citation counts are available in *DWPISM*.
 ¹⁴ Patent dates may be missing for some records prior to 1974.

Field Name	Field Code	Search examples ⁸	Description and Notes
Publication title	PUB	pub(Derwent World Patents Index)	In a patent database, the publication title is generally the database name.
Publication type	PT	pt("Government & Official Publications")	The only publication type in Derwent World Patents Index is "Government & Official Publications".
Related publication and application type	DT	dt(based on OPI patent) dt(PCT)	The type of related publication and application, such as PCT, Continuation in part, etc.
Updates	UD	ud(2012-03-29)	The date(s) the record was loaded as a result of an update provided by the supplier.

Search Fields – Taxonomies

Classification – CPC ¹⁵	CPC	cpc(C07D 471/14) cpc(C07D 471) cpc(C07D) cpc(C07) cpc(C07) cpc(C)	The Cooperative Patent Classification (CPC) is available for searching from March 2013 forw ard.
Classification – ECLA	ECLA	ecla(C07F 7/18 C9G) ecla(C07F 7) ecla(C07F) ecla(C07) ecla(C)	European Class codes.
Classification – IPC ¹⁶	IPC	ipc(A61K 31/4745) ipc(A61K 31) ipc(A61K) ipc(A61) ipc(A)	International Patent Class codes. IPC Version 7 and earlier is used prior to 2006. The IPC Version 8 is used from 2006 forw ard.
Classification – JP FI-Terms	JPC	JPC(C07F 7/18) JPC(C07F 7) JPC(C07F)	Japanese national Class codes. FI Terms are based on IPC Version 4.
Classification – JP F-Terms	JPF	JPF(4H049/VN01) JPF(4H049)	Japanese national Class codes.
Classification – US	USCL	uscl(546/82) uscl(546)	United States national Class codes.
Derw ent Class	DC	dc(B02)	

SEARCH FIELDS - PATENT TEXT

	Field		
Field Name	Code	Search examples ⁶	Description and Notes
Abstract ^{15,16}	AB	ab(*dimethyl)	Derw ent Alerting, Documentation, Extended and original abstracts
Abstract - Alerting ^{17,18}	AAB	aab(*dihydro)	Present in chemical patents (Chemical Patent Index, or CPI) from 1963 forw ard, in all areas 1970 forw ard.
Abstract – Documentation ^{13,} ¹⁵	DAB	dab(CHLORO* PRE PHENYL)	Contains more detail and depth than the alerting abstract for chemical patent (CPI) documents.

¹⁵ The Cooperative Patent Classification (CPC) was introduced in January 2013. It is structurally similar to the International Patent Classification (IPC), so CPC classes are searched the same way using the CPC field code. CPC attributes are the same as the IPC attributes with the exception of the Value attribute (I - Inventive, A - Additional).

¹⁶ IPC Version 7 and earlier is used from 1970 through 2005. IPC Version 8 is used from 2006 forward. With the introduction of the Reformed International Patent Classification (IPCR/8) on January 1, 2006, the format of the IPC group increased in length from 3 to 4 digits. For comprehensive retrieval, both forms of the classification codes should be searched. Some records may contain IPCR/8 codes as well as earlier versions of IPC codes, indicating that an older patent has been reclassified. Each IPCR/8 classification code is also assigned a series of attributes. These include classification level (A - Advanced, C - Core, S - Subclass), value (I - Inventive, N - Non-inventive), position (F - First, L - Later), status (B -Basic, R - Reclassified, V - Various, D - Deleted), version date, action date, source (H - Human, M - Machine, G - Generated), and assigning office.
¹⁷ Use adjacency and/or Boolean operators to narrow search results. Right and left truncation is available.

¹⁸ Some pre-1970 patent records with DWPI Accession number ending in Z do not have abstracts. Also, abstracts may not be present for Japan or "minor" countries.

Abstract – Extended ^{15,19}	EAB	eab(suspension AND triazacyclopenta)	Additional information for chemical patent (CPI) documents.
Abstract – Novelty ^{15,17}	NV	nv(bromosuccinimide OR NBS)	Also included in the Alerting abstract search, AAB.
Abstract of original patent ^{15,17}	PAB	pab(NBS)	
Abstract present ¹⁶	ABAN Y	hydrogen bromide AND abany(yes)	Add: <i>AND ABANY(YES)</i> to a query to limit retrieval to records with abstracts. About 88% of records have Alerting abstracts.
Abstract - Technology Focus ^{15.17}	ŦF	tf(triethylamine AND "hydrogen bromide")	Information based on the particular type of technology disclosed in the patent.
All fields + text ¹⁵		Dehydrogenat* Gastric N/3 disorder	Using no field code searches all fields
Claims ^{3,15}	CLM	clm(Dehydrogenate*)	Claims are the legal text describing the patent.
Derw ent enhanced title ¹⁵	DTI	dti(bromo*)	Titles that are more informative than the original title on the specification.
Document text ¹⁵	TX	tx(hydrogen bromide) tx(*dimethyl)	Includes Derw ent title and abstract, original title and abstracts, and claims. Also searchable as FT.
Patent title ¹⁵	П	ti(IMIDAZOPYRIDIN*) ti(*hydrogenat*)	TI searches both the Derw ent and original patent titles

SEARCH FIELDS - CHEMICAL INDEXING

Field Name	Field Code	Search examples ⁶	Description and Notes
Chemical fragment code – M0	MOD	m0d(D601)	Includes code and Markush number.
Chemical fragment code – M1	M1D	m1d(N105) m1d(R01863) m1d(107779)	Includes code and specific compound, DCR, Markush, and ring index numbers.
Chemical fragment code – M2	M2D	m2d(N224) m2d(RAFR4Z) m2d(975061) m2d(014237801) m2d(56288)	Includes code and specific compound, DCR, Markush, and ring index numbers.
Chemical fragment code – M3	M3D	m3D(G015) m3D(R00299) m3D(10685) m3D(9950JI101) m3D(01526)	Includes code and specific compound, DCR, Markush, and ring index numbers.
Chemical fragment code – M4	M4D	m4D(D000) m4D(102219601) m4D(07559) m4D(RA5F52) m4D(461774)	Includes code and specific compound, DCR, Markush, and ring index numbers.
Chemical fragment code – M5	M5D	m5D(M430) m5D(R00148) m5D(8349) m5D(030448201)	Includes code and specific compound, DCR, Markush, and ring index numbers.
Chemical fragment code – M6	M6D	m6D(R531) m6D(RAHTJ1) m6D(1074267) m6D(894408501) m6D(05105)	Includes code and specific compound, DCR, Markush, and ring index numbers.
DCR number	DCR	dcr(975061)	Derwent Chemistry Resource number
Derw ent registry number	DR	dr(0649)	Included from DWPI Update 198127 forw ard
Keyw ord indexing	KWD	kw d(975061) kw d(0142-37801)	Includes Markush and DCR numbers.

 $^{^{19}\,\}mathrm{Available}$ from DWPI Update 199908 forward. Page 9

Field Name	Field Code	Search examples ⁶	Description and Notes
Manual code	MCD	mcd(B05-B01B)	
Markush number	CNMK	cnmk(0142-37801)	Also know n as Generic compound number
Plasdoc code	KS	ks(0037) ks(0211)	Polymer key serial (Plasdoc) codes.
Polymer fragment code	PF	pf(034) pf(04B) pf(27A)	The trailing dashes (-) and ampersands (&) have been replaced with the letters "B" and "A".
Polymer indexing ²⁰	DPI	dpi(P0000) dpi(ND01) dpi(R03233)	Includes polymer code, specific compound number, and DCR number.
Ring index number	RIN	rin(56288)	
Specific compound number	CNS	cns(RAFR4Z)	

SEARCH TOOLS

Field codes are used to search document fields, as shown in the sample document. Field codes may be used in searches entered on the

- Basic Search,
- Advanced Search,
- Command Line and
- Look Up Patent
- search pages.

Look up patent

If you need help finding a patent, use the Look Up Patent page to enter any known patent details including: Number, Patent title, Assignee, Inventor, any free-text search terms, Publication date, and Application date.

Limit options

Limit options are quick and easy ways of searching certain common concepts. Check boxes are available on the Advanced Search page for **Abstract included** and **Images included**.

The Advanced search page also contains a short list of choices for **Patent publication country**, **Language** and dates. **Date limiters** are available for selecting single dates or date ranges for **publication date**, **priority date**, **application date**, and **update date**.

Look up lists

Browse the contents of certain fields by using Look up lists on the Advanced Search page. These are particularly useful for validating spellings or the presence of specific data. Terms found in the course of browsing may be selected and automatically added to the Advanced Search boxes. Look up lists are available in the Advanced Search drop-down fields for:

- Inventor,
- Patent assignee,
- Publication kind code,
- Classification (DWPI),
- Classification (CPC, ECLA, IPC, US, JP F-Terms and JP FI-Terms)

Individual Look Up lists are also available on the Advanced search options page for:

- Patent assignee,
- Inventor and

²⁰ Polymer Indexing present from DWPI Update 199332 to replace Polymer Fragments Codes, and Plasdoc Key Serial Codes, discontinued from DPWI Update 199501.

• Classification (IPC).

Sort

Search results can be sorted by Relevance, Publication date (oldest first) and Publication date (most recent first).

"Narrow results by" filters

The **Results** and **Visualize results** display is accompanied by a list of "**Narrow results by**" options shown on the righthand panel. Click on any of these filters to see a ranked list showing the most frequently occurring terms in your results. Click on the term to apply it to ("narrow") your search results. Narrow results by filters include:

- Patent assignee,
- Patent assignee country,
- Inventor,
- Patent publication country,
- Publication kind code,
- Classification (CPC, ECLA, IPC, US, JP F-Terms and JP FI-Terms)
- Database (appears when searching multiple databases), and
- Publication date.

DOCUMENT FORMATS

Pre-defined document formats are available for viewing and download. Search results can be downloaded with the **Download all results**, **Email**, **Print** and **Export/Save** options, and when creating an alert. To design your own download format, choose the "Custom" format option and check the fields to be displayed. Download and Export/Save options include PDF, RTF (for Microsoft Word), XLS (Microsoft Excel), and XML.

Each *DWPI*SM document is a single patent family containing data from the basic and equivalent patent family members. The patent family and original publication data is provided in the following formats.

Document format	Description	Online	Export/ Download ²¹
Result listing Brief/ Detailed view ²²	Derwent title, the Derwent week the document was 1 st added and last updated, database name.	✓ ^{MM}	~
KWIC (Keyword in context)	Brief/Detailed view plus all occurrences of your search terms, highlighted within the fields where the terms occur.	~	~
Preview	Brief/Detailed view plus the Derwent class, patent classification codes and Manual codes.	~	
Brief citation	 Patent family data Bibliographic information: Derwent title, standardized assignee and inventor, priority application number and dates, IPC, CPC, ECLA, US and Japan classifications, publication language, document features, the Derwent week the document was 1st added and last updated, source attribution, accession number, document URL, update dates, and database name. Patent family table: Patent number, kind and date, application number, kind and date, Derwent update code and type. Also, patent number, kind and date, application number, kind and date, related filing details, legal representative and designated states for the basic patent only. 	¥	
Citation/ Abstract	The complete document: Patent family data: 	~	~

²¹ XLS (Microsoft Excel) output is only available with a custom format.

²³ Online view contains a truncated title

 $^{^{22}}$ Brief and Detailed views on the result page are the same for $DWPI^{SM}$

	 Bibliographic information: Derwent title, standardized assignee and inventor, priority application number and dates, IPC, CPC, ECLA, US and Japan classifications, publication language, document features, the Derwent week the document was 1st added and last updated, source attribution, accession number, document URL, update dates, and database name. Derwent abstracts: Alerting, Technology Focus, Extension, Documentation and images (A Citation only format is offered when the abstracts are not available). Derwent indexing: Chemical fragment codes, Keyword indexing, Polymer indexing, PLASDOC codes, Polymer fragment codes, Manual Codes, Specific and Generic (Markush) compound numbers, DCR numbers, Ring index numbers, Derwent Registry numbers. Patent family table: Patent number, kind and date, application number, kind and date, Derwent update code and type. Original, as published data for all patent family members, where availble: Bibliographic information: Title, patent assignee, inventor, legal representative, patent number, kind, date and Derwent update date, application number, kind and date, priority application number and dates, related filing details, patent classification codes, publication language, designated states, pages, and number of drawings. 	
Custom	Choose the fields you want. To design your own download format, choose the "Custom" format option in the Export/Save menu, and check the fields to be downloaded.	~

Notes

Print Counterparts

- Chemical Patents Index
- General and Mechanical Patents Index
- DWPI Gazette Service
- Derwent World Patents Abstracts
- Electrical Patents Index

Terms & Conditions

In addition to the **Dialog Standard Terms & Conditions**, the following Provider terms and conditions also apply.

Contact: **ProQuest Dialog Global Customer Support** Email: Customer@dialog.com

Within North America **1 800 334 2564** Outside North America **00 800 33 34 2564**