



Commercial patent information sources

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www.magister.eu

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Agenda

- Some terminology
- Why pay for commercial services?
- What is “value-add”?
- Database categories
- How the commercial sector adds to our range of search tools



Terminology

- Database producer
 - either (a) an organisation which generates and publishes information as part of its everyday operation (e.g. a national patent office)
 - or (b) an organisation which obtains and processes raw data from other sources and puts it into a common database structure, sometimes including additional data/ meta-data not present in the original.

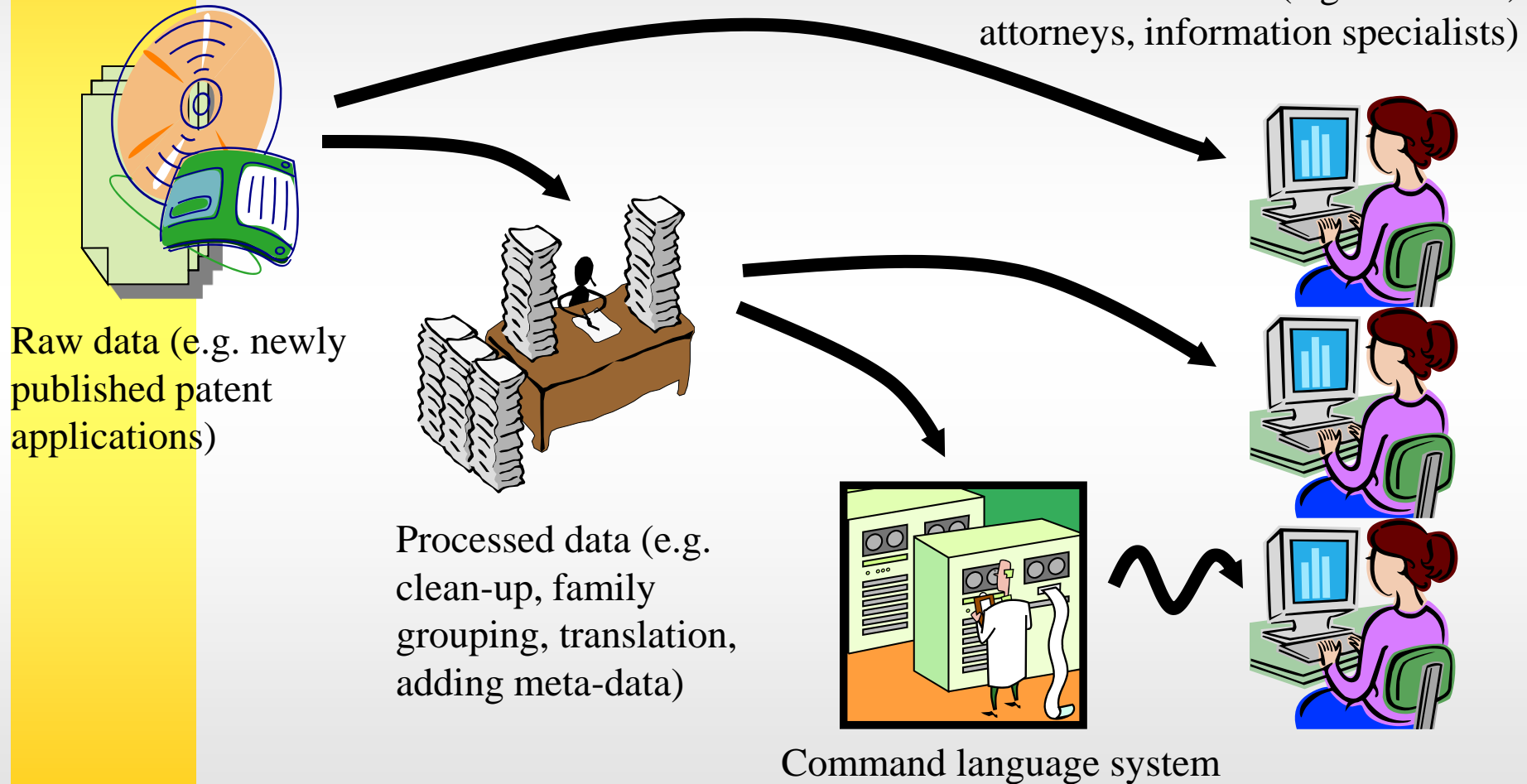


Terminology (II)

- Host (or vendor)
 - either (a) an organisation which provides access on subscription to one or more of *its own databases* in a common search environment
 - or (b) an organisation which provides access on subscription to a range of databases which have been created by *one or more third-party database producers*, under licence.



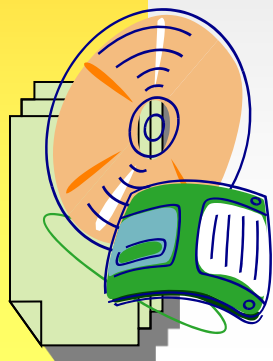
How information is retrieved



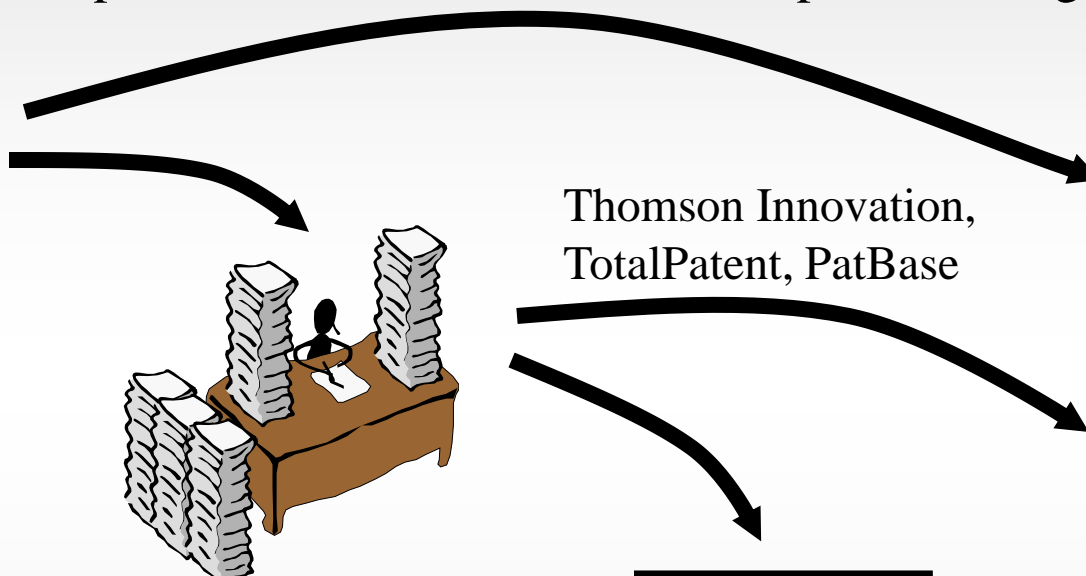


Who does what?

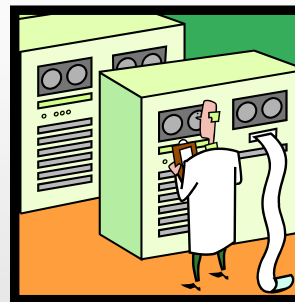
Espacenet, DEPATISnet, PatentScope, USPTO.gov etc



National patent
offices and
publishing
authorities



Commercial
publishers e.g.
Thomson, CAS,
Elsevier, Minesoft



Dialog, STN, Orbit.com





Why pay for commercial search services? (I)

- Enhanced file content
 - the user knows what's there (and what's missing); KD coverage, year range coverage, known gaps are normally well documented;
 - normalised data may be present, saving the searcher time (and money per search)
- Better command language
 - features such as flexible fielded searching, search set storage, more options for output (sorting, viewing) are taken for granted, not just present in the 'advanced search' mode (if at all)



Why pay for commercial search services? (II)

- Better support to users
 - contact points for administrative and technical help (advice on search functions, direct from either the host or the database producer)
- Secure (encrypted) connections
 - reliable, high speed links

The connection has timed out

The server at distant.ompic.org.ma is taking too long to respond.

Fatal error: Call to undefined method JUser::getAuthorisedViewLevels() in /home/www/9f6c7251da907b498b67318db6c41554/web/components/com_joodb/helpers/joodb.php on line 640



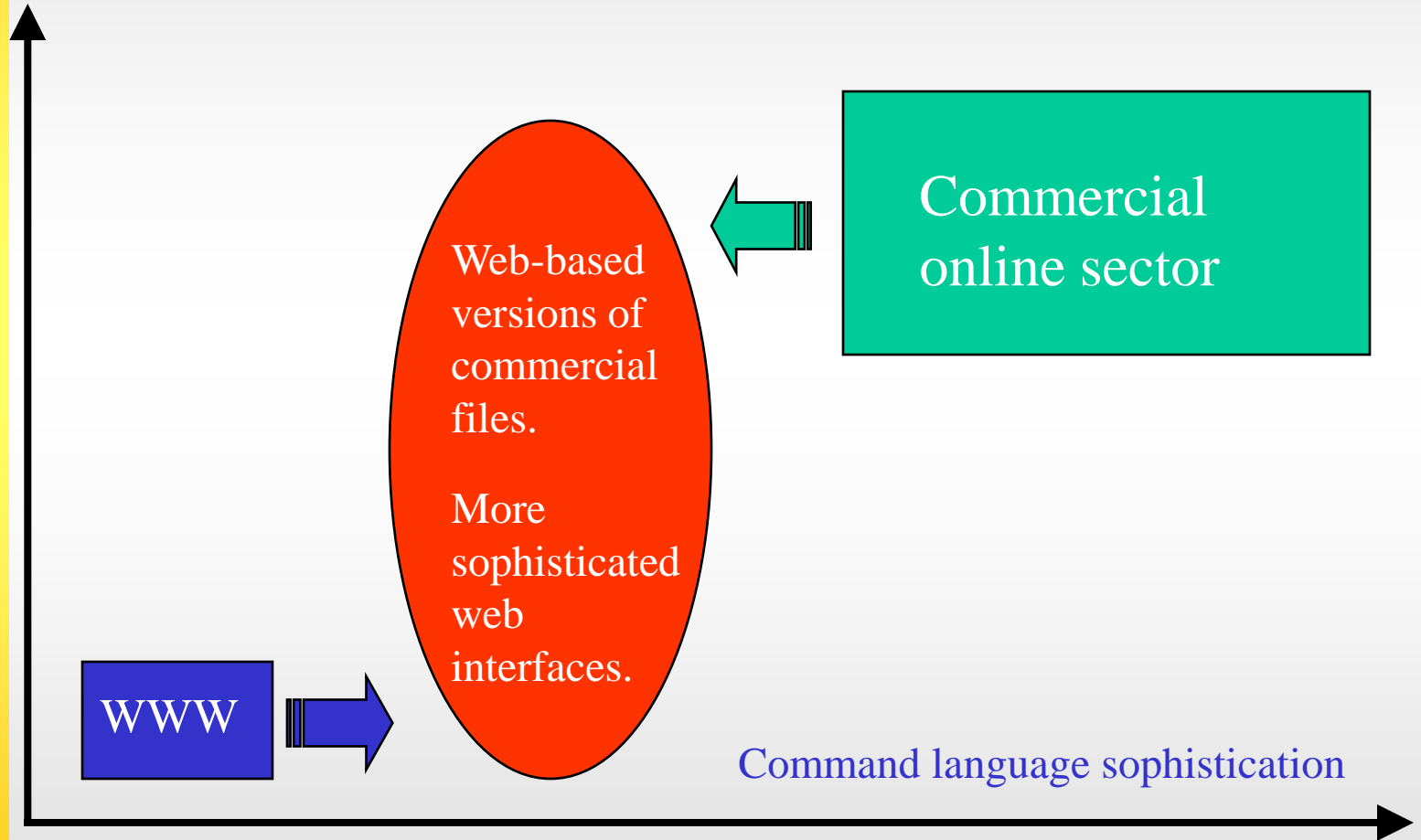
Commercial online -v- Internet files

- Commercial online files differ from free-of-charge internet files by:
 - adding value to record content
 - additional text, indexing, family grouping
 - providing a more sophisticated search environment
 - complex command languages, saved search features
- In particular, creation of patent family records is a “value-added” feature not found in “raw data” files.
 - some families are entirely algorithmic
 - others include manual enhancement
 - the more complicated methods exist only in the commercial sector.



Free -v- fee: increasing trends

Added
value
elements





The major players amongst fee-based providers

- STN International (STNWeb)
- Questel-Orbit (QPAT, Qweb, Orbit.com)
- Proquest-Dialog Corporation (Dialog)
- Thomson Reuters (Thomson Innovation, Derwent Innovations Index, Delphion, MicroPatent)
- Minesoft/RWS (PatBase)
- Elsevier/LexisNexis (TotalPatent)
- University of Ilmenau (PATON)



Brief biographies



Cooperative venture between Chemical Abstracts Service (US), FIZ-Karlsruhe (Germany) and JAICI (Japan)
Strong in chemical information; in the process of launching a new web-based interface with more powerful search features.

Private corporation based in France

Long-standing specialists in supplying IP information, including designs and trademarks. Expanding product range to include more advice to business management.

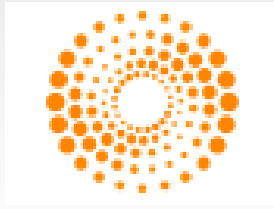


Private corporation based in the USA

Strong in business information; have had more influence in the past in supply of patent information, but no longer No.1. One of the first major hosts to migrate to a web platform.



Brief biographies



Multinational corporation based in the UK

Involved in many publishing activities; IP information division based on takeover of Derwent Information Ltd. New distribution channels (e.g. Thomson Innovation) developed alongside conventional licensing to third-party hosts

Private corporation based in the UK

Highly-skilled staff, acted as agents for Questel for many years. Cooperating with RWS Information to produce the PatBase platform; mixture of bibliographic and full-text.



Subsidiary of multinational publisher Elsevier (NL)

Took over Dutch corporation to revive old patent information interests; produced new platform with exclusive full-text content and machine translation.



Same data, different interface...

- Thomson Reuters
 - World Patent Index
 - Patent Citation Index

} Thomson Innovation
- European Patent Office
 - INPADOC

Espacenet, GPI, STN
- Fairview Research
 - IFIClaims.com

Dialog
- Questel.Orbit
 - PlusPat/FamPat

} Orbit.com
- etc. etc.

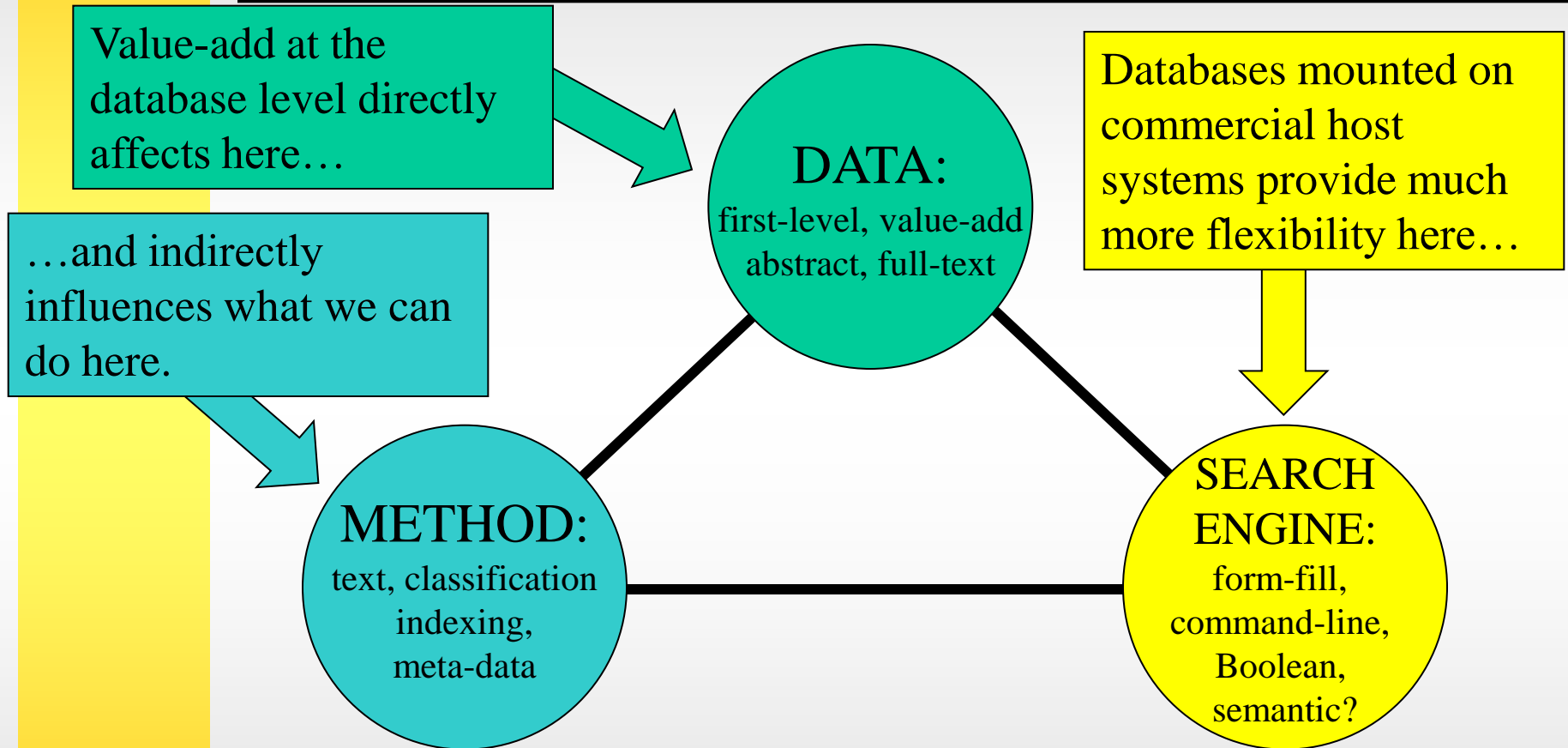


Commercial file coverage

- Various private database producers have generated value-added databases covering patents from:
 - CN, DE, (DD), EP, FR, GB, IT, JP, US, WO
 - Only about 30 countries have any searchable full-text patents at all
- The largest multi-country sources range from c.40-70 countries, with late 19th century (few) or mid-1970's (typical) start dates.
- For review of the commercial sector:
 - *Manual of Online Search Strategies, vol. 2: Business, Law, News & Patents*. Aldershot: Gower, 2001
 - *Information Sources in Patents*. Munich: KG Saur 2011 (new edition)



Value-added database searching





Value-add type 1: Standardisation, e.g. of names

- Applicants and assignees

- Nihon Nohyaku ?
- Nihon Noyaku ?
- Nippon Nohyaku ?
- Nippon Noyaku ?
- Japan Agrochemical ?

日本農薬株式会社

- Inventors

- Joe Smith ?
- J Smith ?
- Smith J ?



Standardisation of application and publication numbers

- There is considerable variation in the ‘native format’ of application numbers
 - 83305005.7, 438,482, PV 7414-83, 08/535,626, ES U 96 02975
 - and of publication numbers
 - KR 92-7234 B1, US 4,510,160, EP 0 106 469 B1, DE 1 95 12345 A1, CN 96 240254 U
- Non-expert searchers in raw data files can waste a lot of time on a ‘simple’ search.
 - Commercial files like WPI apply conversion rules which save search time and improve confidence



A genuine example - OJ(P) data

- G D Società per Azioni
 - IT 93 BO A 0256
- G.D SpA
 - IT 93 BO A 0254
- G.D Società per Azioni
 - IT 93 BO A 0261
- G.D. S.p.A.
 - IT 93 BO A 0255, IT 93 BO A 0257



Generate Differences



Value-add type 2: Enhancing the original data

PCT		WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau	
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)			
(51) International Patent Classification ⁶ : A61K 31/00	A2	(11) International Publication Number: WO 99/17755	
		(43) International Publication Date: 15 April 1999 (15.04.99)	
(21) International Application Number: PCT/EP98/06278		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, 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, TI, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 5 October 1998 (05.10.98)			
(30) Priority Data: 9721139.5 7 October 1997 (07.10.97)	GB		
(71) Applicant (for all designated States except US): GLAXO GROUP LIMITED [GB/GB]; Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).		Published Without international search report and to be republished upon receipt of that report.	
(72) Inventors; and (75) Inventors/Applicants (for US only): MANGEL, Allen, Wayne [US/US]; Glaxo Wellcome Inc., Five Moore Drive, Re- search Triangle Park, NC 27709 (US), NORTHCLUTT, Al- lison, Ruth [US/US]; Glaxo Wellcome Inc., Five Moore Drive, Research Triangle Park, NC 27709 (US).			
(74) Agent: LANE, Graham; Glaxo Wellcome plc, Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).			
(54) Title: MEDICAMENTS			
(57) Abstract This invention relates to the use of 5-HT ₃ receptor antagonists in the treatment of nonconstipated female IBS patients.			

- WO 99/17755-A2
 - Original title
 - Medicaments
 - Derwent title
 - Use of a 5-HT₃ receptor antagonist e.g. alosetron for the treatment of nonconstipated female irritable bowel syndrome, diarrhoea predominant IBS and alternating constipation/diarrhoea IBS.



Enhancement = not relying upon what is supplied by the applicant

PCT		WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau	
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)			
(51) International Patent Classification ⁶ : A61K 31/00	A2	(11) International Publication Number: WO 99/17755	(43) International Publication Date: 15 April 1999 (15.04.99)
(21) International Application Number: PCT/EP98/06278	(22) International Filing Date: 5 October 1998 (05.10.98)	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, 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, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(30) Priority Data: 9721139.5	7 October 1997 (07.10.97)	GB	(72) Inventors; and (75) Inventors/Applicants (for US only): MANGEL, Allen, Wayne [US/US]; Glaxo Wellcome Inc., Five Moore Drive, Research Triangle Park, NC 27709 (US), NORTHCLUTT, Alison, Ruth [US/US]; Glaxo Wellcome Inc., Five Moore Drive, Research Triangle Park, NC 27709 (US).
(71) Applicant (for all designated States except US): GLAXO GROUP LIMITED [GB/GB]; Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).		Published Without international search report and to be republished upon receipt of that report.	
(74) Agent: LANE, Graham; Glaxo Wellcome plc, Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).			
(54) Title: MEDICAMENTS			
(57) Abstract This invention relates to the use of 5-HT ₃ receptor antagonists in the treatment of nonconstipated female IBS patients.			

- WO 99/17755-A2
 - Original abstract
 - “This invention relates to the use of 5-HT₃ receptor antagonists in the treatment of nonconstipated female IBS patients”
 - 18 words
 - in English (luckily!)
 - Derwent abstract
 - 147 words
 - Standardised vocabulary and spelling
 - Always in English



Chemical Abstracts record for WO 99/17755-A2 (part 1)

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2014 ACS on STN
AN 1999:244568 CAPLUS <<LOGINID::20140520>>
DN 130:276752
ED Entered STN: 21 Apr 1999
TI 5-HT3 receptor antagonists for the treatment of irritable bowel syndrome
IN Mangel, Allen Wayne; Northcutt, Allison Ruth
PA Glaxo Group Limited, UK
SO PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DT Patent
LA English
CC 1-9 (Pharmacology)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9917755	A2	19990415	WO 1998-EP6278	19981005
	WO 9917755	A3	19990923		
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, 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, UA, UG, US, UZ, VN, YU, ZW			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2305751	A1	19990415	CA 1998-2305751	19981005
	AU 9896293	A	19990427	AU 1998-96293	19981005
	AU 750818	B2	20020725		
	EP 1021174	A2	20000726	EP 1998-950103	19981005
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	BR 9812886	A	20000808	BR 1998-12886	19981005
	TR 2000000913	T2	20010122	TR 2000-913	19981005
	EE 2000000214	A	20010615	EE 2000-214	19981005
	ZA 9809061	A	20010705	ZA 1998-9061	19981005
	JP 2001518495	T	20011016	JP 2000-514627	19981005
	HU 2000003750	A2	20011028	HU 2000-3750	19981005
	HU 2000003750	A3	20030228		
	NZ 503698	A	20021025	NZ 1998-503698	19981005
	EA 3184	B1	20030227	EA 2000-299	19981005
	IN 1998CA01765	A	20050701	IN 1998-CA1765	19981005
	US 6284770	B1	20010904	US 2000-529050	20000405
	NO 2000001776	A	20000606	NO 2000-1776	20000406
	MX 2000003375	A	20001113	MX 2000-3375	20000406
	HR 2000000198	A2	20010430	HR 2000-198	20000407
	US 20010044450	A1	20011122	US 2001-834717	20010413
	US 6429209	B2	20020806		
	US 20030036549	A1	20030220	US 2002-166401	20020610
	US 6593336	B2	20030715		
PRAI	GB 1997-21139	A	19971007		
	WO 1998-EP6278	W	19981005		
	US 2000-529050	A1	20000405		
	US 2001-834717	A1	20010413		

Enhanced title:

5-HT3 receptor antagonists for the treatment of irritable bowel syndrome

Full patent family data:

(24 members listed, each with corresponding application number and date)

Consolidated priority data:

(Original GB priority, PCT filing and two US continuations)



Chemical Abstracts record for WO 99/17755-A2 (part 2)

CLASS	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 9917755	IPCI	A61K0031-00 [ICM,6]
		IPCR	A61K0045-00 [I]; A61K0031-00 [I]; A61K0031-40 [I]; A61K0031-435 [I]; A61K0031-47 [I]; A61K0031-495 [I]; A61K0031-55 [I]; A61P0001-00 [I]; A61P0001-08 [I]; A61P0025-04 [I]; A61P0043-00 [I]
		CPCI	A61K0031-00 [I]
		ECLA	A61K0031-00
	CA 2305751	IPCI	A61K0031-00 [ICM,6]; A61K0031-40 [ICS,6]; A61K0031-435 [ICS,6]; A61K0031-47 [ICS,6]; A61K0031-495 [ICS,6]; A61K0031-55 [ICS,6]
		IPCR	A61K0045-00 [I]; A61K0031-00 [I]; A61K0031-40 [I]; A61K0031-435 [I]; A61K0031-47 [I]; A61K0031-495 [I]; A61K0031-55 [I]; A61P0001-00 [I]; A61P0001-08 [I]; A61P0025-04 [I]; A61P0043-00 [I]
		CPCI	A61K0031-00 [I]
		ECLA	A61K0031-00
	AU 9896293	IPCI	A61K0031-00 [ICM,6]
		IPCR	A61K0045-00 [I]; A61K0031-00 [I]; A61K0031-40 [I]; A61K0031-435 [I]; A61K0031-47 [I]; A61K0031-495 [I]; A61K0031-55 [I]; A61P0001-00 [I]; A61P0001-08 [I]; A61P0025-04 [I]; A61P0043-00 [I]
		CPCI	A61K0031-00 [I]
		ECLA	A61K0031-00
	EP 1021174	IPCI	A61K0031-00 [ICM,6]; A61K0031-435 [ICS,6]; A61K0031-40 [ICS,6]; A61K0031-47 [ICS,6]; A61K0031-495 [ICS,6]; A61K0031-55 [ICS,6]
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		CPCI	A61K0031-00 [I]
		ECLA	A61K0031-00
	US 20010044450	IPCI	A61K0031-55 [ICM,7]; A61K0031-4748 [ICS,7]
		IPCR	A61K0031-00 [I]
		CPCI	A61K0031-00 [I]
		NCL	514/292.000; 514/214.030; 514/183.000; 514/230.500; 514/254.060; 514/284.000; 514/304.000; 514/305.000; 514/306.000; 514/394.000; 514/397.000
		ECLA	A61K0031-00
	US 20030036549	IPCI	A61K0031-4745 [ICM,7]
		IPCR	A61K0031-00 [I]
		CPCI	A61K0031-00 [I]
		NCL	514/291.000; 514/397.000; 514/292.000; 514/183.000; 514/230.500; 514/254.060; 514/284.000; 514/304.000; 514/305.000; 514/306.000; 514/394.000
		ECLA	A61K0031-00

**Consolidated classification for each member
of the patent family:**
(includes IPC, CPC, USPC, ECLA (for old
records))



Chemical Abstracts record for WO 99/17755-A2 (part 3)

New abstract (always in English):

word or phrase-searchable; uses standard abbreviations to assist synonym finding

```
AB This invention relates to the use of 5-HT3 receptor antagonists in the
treatment of nonconstipated female irritable bowel syndrome (IBS)
patients. Clin. studies with IBS patients showed that twice daily
administration of 1 mg alosetron significantly improved abdominal pain and
bowel functions.
ST antiserotonergic irritable bowel syndrome treatment; alosetron female
irritable bowel syndrome treatment
IT 5-HT antagonists
(5-HT3; 5-HT3 receptor antagonists for treatment of nonconstipated
female irritable bowel syndrome)
IT Intestine, disease
(irritable bowel syndrome; 5-HT3 receptor antagonists for treatment of
nonconstipated female irritable bowel syndrome)
```

**Additional text metadata (uncontrolled) and
indexing terms (drawn from controlled
vocabulary):**

word or phrase-searchable



Chemical Abstracts record for WO 99/17755-A2 (part 4)

Additional coded metadata (CAS Registry Numbers ® and indexing terms (drawn from controlled vocabulary):
word/ phrase-searchable, linked to RN

```
IT 89565-68-4, Tropisetron 99614-02-5, Ondansetron 109889-09-0,  
Granisetron 115956-12-2, Dolasetron 120635-74-7, Cilansetron  
122852-42-0, Alosetron 122852-69-1, Alosetron hydrochloride  
123040-69-7, Azasetron 123258-84-4, Itasetron 123441-85-0  
132036-88-5, Ramosetron 141549-75-9, Indisetron 143257-98-1,  
Lerisetron  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
(Uses)  
(5-HT3 receptor antagonists for treatment of nonconstipated female  
irritable bowel syndrome)
```

Chemical compound 'role' indicators:

can be linked to RN to form a new searchable
phrase defining what a compound is doing, or
being used for, in a document description



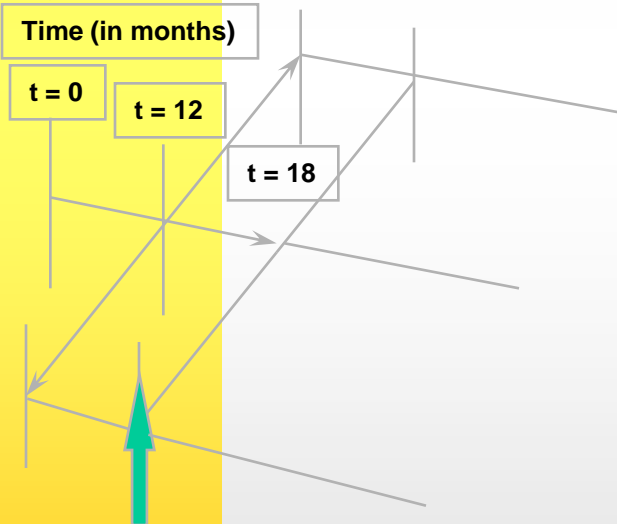
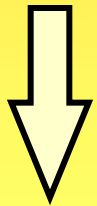
Enhancement can also be in record structure

- A number of commercial providers make patent information more convenient for searchers by grouping documents into families
 - not everyone uses the same family rules!
- For searching in subject matter, the DocDB family may sometimes be too tight, and the INPADOC family too loose
 - the family rules used by commercial providers like Thomson, Minesoft and Questel fall somewhere between the two extremes.

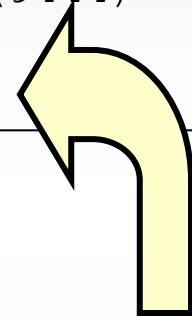


An example patent family record from WPI

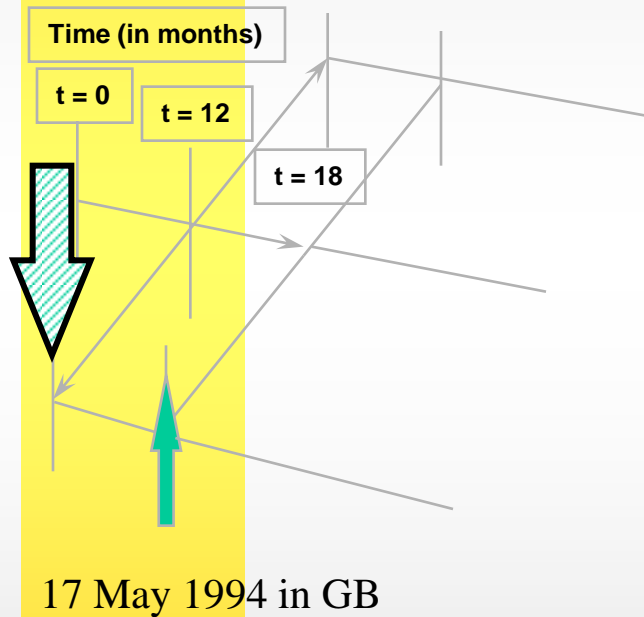
17 May 1993 in DE



AN	94-351379 [44]
TI	Device for removal of inspec..
PA	(HEIC) HEIDELBERGER DRUCK..
PI	GB2278108 A 941123 (9444)*
ADT	94GB-0009857 940517
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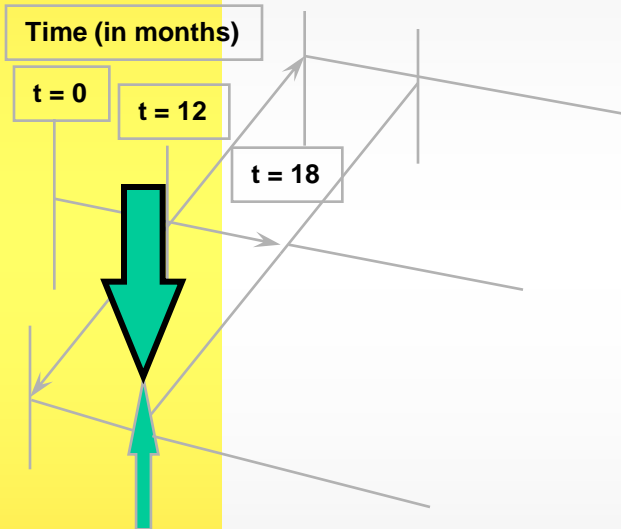
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17 May 1993 in Germany (DE)



AN	94-351379 [44]
TI	Device for removal of inspec..
PA	(HEIC) HEIDELBERGER DRUCK..
PI	GB2278108 A 941123 (9414)*
ADT	94GB-0009857 940517
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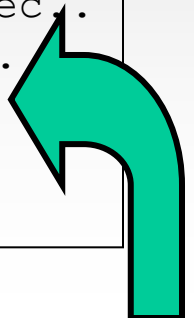
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17 May 1993 in Germany (DE)

t = 12
Foreign filing on 17 May 1994 in
United Kingdom (GB)



23 Nov 1994 in GB

AN	94-351379 [44]
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PA	(HEIC) HEIDELBERGER DRUCK..
PI	GB2278108 A 941123 (9444)*
ADT	94GB-0009857 940517
PRAI	93DE-4316413 930517



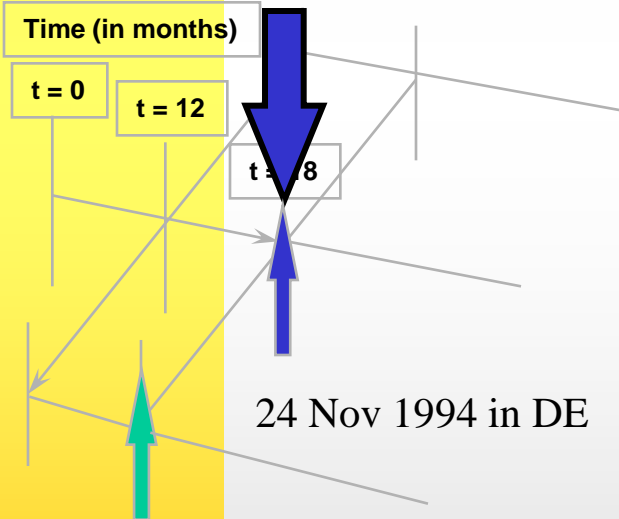
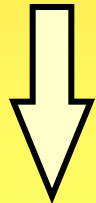
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Foreign filing on 17 May 1994 in
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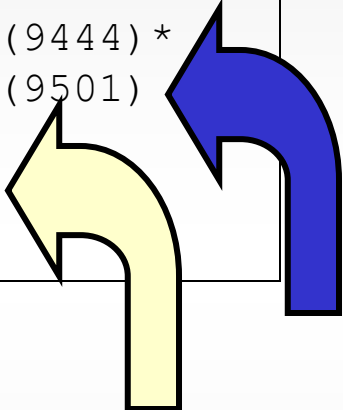
t = 18
Basic publishes on 23 Nov 1994 in
United Kingdom (GB)



17 May 1993 in DE



AN	94-351379	[44]
TI	Device for removal of inspec..	
PA	(HEIC) HEIDELBERGER DRUCK..	
PI	GB2278108 A	941123 (9444)*
	DE4316413 A1	941124 (9501)
ADT	94GB-0009857	940517
	93DE-4316413	930517
PRAI	93DE-4316413	930517



t = 18

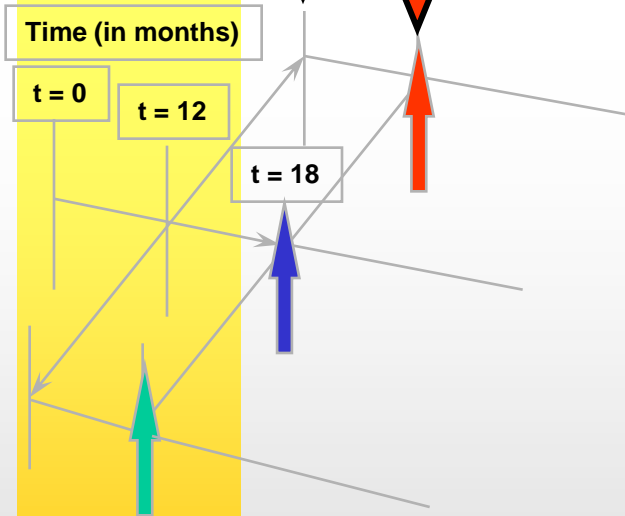
First equivalent publishes on 24 Nov 1994 in Germany (DE) ; priority details = national application details

The record for DE4316413 in a national (German) database will show NO PRIORITY DETAILS.



13 May 1994
in FR

25 Nov 1994
in FR



AN	94-351379 [44]
TI	Device for removal of inspec..
PA	(HEIC) HEIDELBERGER DRUCK..
PI	GB2278108 A 941123 (9444)*
	DE4316413 A1 941124 (9501)
	FR2705329 A1 941125 (9502)
ADT	94GB-0009857 940517
	93DE-4316413 930517
	94FR-0005897 940513
PRAI	93DE-4316413 930517

t = 18

Second equivalent publishes on 25 Nov 1994 in France (FR), claiming the same priority details.



Value-add type 3: Creating new fields

- Detailed subject indexing applied
 - Derwent class code B05, B02
 - B05 Other organics (multi classes from steroids, fused ring heterocyclics, other heterocyclics and/or natural products and polymers)
 - Derwent Manual Codes B14-E10C, B14-L06
 - B14-E10C Drugs acting on the gastrointestinal system ; gastrointestinal dysfunction ; bowel and colon
 - Hierarchically structured, suitable for generic retrieval at different levels of specificity



DWPI abstract for WO 99/17755-A2 (part 1)

L2 ANSWER 1 OF 1 WPINDEX COPYRIGHT 2014 THOMSON REUTERS on STN
AN 1999-287665 [199924] WPINDEX <<LOGINID::20140520>>
DNC C1999-084928 [199924]
TI Use of a 5-HT3 receptor antagonist to treat irritable bowel syndrome
DC B02; B05
IN MANGEL A W; NORTHCUTT A R; NORTHEUTT A R
PA (GLAX-C) GLAXO GROUP LTD; (GLAX-C) GLAXO WELLCOME INC; (SMIK-C)
SMITHKLINE
BEECHAM CORP; (MANG-I) MANGEL A W; (NORT-I) NORTHCUTT A R; (PROM-N)
PROMETHEUS LAB INC
CYC 83
PI WO 9917755 A2 19990415 (199924)* EN 18[0]
AU 9896293 A 19990427 (199936) EN
EP 1021174 A2 20000726 (200037) EN
NO 2000001776 A 20000606 (200039) NO
BR 9812886 A 20000808 (200044) PT
CZ 2000001259 A3 20000913 (200054) CS
SK 2000000486 A3 20010118 (200108) SK
CN 1281357 A 20010124 (200130) ZH
US 6284770 B1 20010904 (200154) EN
KR 2001015707 A 20010226 (200156) KO
ZA 9809061 A 20010926 (200161) EN 19
MX 2000003375 A1 20001101 (200163) ES
HU 2000003750 A2 20011029 (200175) HU
JP 2001518495 T 20011016 (200176) JA 30
US 20010044450 A1 20011122 (200176) EN
US 6429209 B2 20020806 (200254) EN
AU 750818 B 20020725 (200260) EN
NZ 503698 A 20021025 (200274) EN
US 20030036549 A1 20030220 (200316) EN
US 6593336 B2 20030715 (200348) EN
PH 1199802601 B1 20030526 (200446) EN
US 6284770 C1 20101019 (201072) EN

Enhanced title:

Use of a 5-HT3 receptor antagonist to treat irritable bowel syndrome
(subscribers will have access to a longer, more informative title than this)

Derwent class:

(broad subject classification, useful for current awareness)

Standard company codes:

(assist in normalising company names and collecting subsidiaries)

Full patent family listing:

(in date order of publication)



DWPI abstract for WO 99/17755-A2 (part 2)

ADT WO 9917755 A2 WO 1998-EP6278 19981005; AU 9896293 A AU 1998-96293 19981005; AU 750818 B AU 1998-96293 19981005; BR 9812886 A BR 1998-12886 19981005; CN 1281357 A CN 1998-811899 19981005; EP 1021174 A2 EP 1998-950103 19981005; NZ 503698 A NZ 1998-503698 19981005; EP 1021174 A2 WO 1998-EP6278 19981005; NO 2000001776 A WO 1998-EP6278 19981005; BR 9812886 A WO 1998-EP6278 19981005; CZ 2000001259 A3 WO 1998-EP6278 19981005; SK 2000000486 A3 WO 1998-EP6278 19981005; US 6284770 B1 WO 1998-EP6278 19981005; HU 2000003750 A2 WO 1998-EP6278 19981005; JP 2001518495 T WO 1998-EP6278 19981005; US 20010044450 A1 Cont of WO 1998-EP6278 19981005; US 6429209 B2 Cont of WO 1998-EP6278 19981005; NZ 503698 A WO 1998-EP6278 19981005; US 20030036549 A1 Cont of WO 1998-EP6278 19981005; US 6593336 B2 Cont of WO 1998-EP6278 19981005; ZA 9809061 A ZA 1998-9061 19981005; PH 1199802601 B1 PH 1998-2601 19981006; CZ 2000001259 A3 CZ 2000-1259 19981005; HU 2000003750 A2 HU 2000-3750 19981005; JP 2001518495 T JP 2000-514627 19981005; SK 2000000486 A3 SK 2000-486 19981005; US 6284770 B1 US 2000-529050 20000405; US 20010044450 A1 Cont of US 2000-529050 20000405; US 6429209 B2 Cont of US 2000-529050 20000405; US 20030036549 A1 Cont of US 2000-529050 20000405; US 6593336 B2 Cont of US 2000-529050 20000405; MX 2000003375 A1 MX 2000-3375 20000406; NO 2000001776 A NO 2000-1776 20000406; KR 2001015707 A KR 2000-703739 20000407; US 20010044450 A1 US 2001-834717 20010413; US 6429209 B2 US 2001-834717 20010413; US 20030036549 A1 Cont of US 2001-834717 20010413; US 6593336 B2 Cont of US 2001-834717 20010413; US 20030036549 A1 US 2002-166401 20020610; US 6593336 B2 US 2002-166401 20020610; US 6284770 C1 PCT Application WO 1998-EP6278 19981005; US 6284770 C1 US 2000-529050 20000405

FDT AU 750818 B Previous Publ AU 9896293 A; US 20010044450 A1 Cont of US 6284770 A; US 6429209 B2 Cont of US 6284770 B; US 20030036549 A1 Cont of US 6284770 B; US 6593336 B2 Cont of US 6284770 B; US 20030036549 A1 Cont of US 6429209 B; US 6593336 B2 Cont of US 6429209 B; AU 9896293 A Based on WO 9917755 A; EP 1021174 A2 Based on WO 9917755 A; BR 9812886 A Based on WO 9917755 A; CZ 2000001259 A3 Based on WO 9917755 A; US 6284770 B1 Based on WO 9917755 A; HU 2000003750 A2 Based on WO 9917755 A; JP 2001518495 T Based on WO 9917755 A; AU 750818 B Based on WO 9917755 A; NZ 503698 A Based on WO 9917755 A; US 6284770 C1 Based on WO 9917755 A

PRAI GB 1997-21139 19971007

**Consolidated application,
family and priority data:**
(reveals relationships
between different
publication stages for the
same country)



DWPI abstract for WO 99/17755-A2 (part 3)

Consolidated classification data:

(IPC, CPC, ECLA, USCL, Japanese FI and F-terms)

IC ICM A61K031-00; A61K031-405; A61K031-437
ICS A61K031-00; A61K031-40; A61K031-435
IPCI A61K0031-00 [I,A]; A61K0031-00 [I,C]; A61K0031-40 [I,A]; A61K0031-40
[I,C]; A61K0031-435 [I,A]; A61K0031-435 [I,C]; A61K0031-47 [I,A];
A61K0031-47 [I,C]; A61K0031-495 [I,A]; A61K0031-495 [I,C]; A61K0031-55
[I,A]; A61K0031-55 [I,C]; A61K0045-00 [I,A]; A61K0045-00 [I,C];
A61P0001-00 [I,A]; A61P0001-00 [I,C]; A61P0001-08 [I,A]; A61P0025-00
[I,C]; A61P0025-04 [I,A]; A61P0043-00 [I,A]; A61P0043-00 [I,C]
IPCR A61K0031-00 [I,A]; A61K0031-40 [I,A]; A61K0031-415 [I,A]; A61K0031-435
[I,A]; A61K0031-435 [I,A]; A61K0031-46 [I,A]; A61K0031-47 [I,A];
A61K0031-47 [I,A]; A61K0031-495 [I,A]; A61K0031-55 [I,A]; A61K0031-655
[I,A]; A61K0045-00 [I,A]; A61P0001-00 [I,A]; A61P0001-04 [I,A];
A61P0001-08 [I,A]; A61P0025-04 [I,A]; A61P0043-00 [I,A]
CPC A61K0031-00
EPC A61K0031-00
NCL NCLM 514/291.000; 514/292.000
NCLS 514/183.000; 514/214.030; 514/230.500; 514/254.060; 514/284.000;
514/304.000; 514/305.000; 514/306.000; 514/394.000; 514/397.000
FCL A61K0031-40; A61K0031-435; A61K0031-47; A61K0031-495; A61K0031-55;
A61K0045-00; A61P0001-00; A61P0001-08; A61P0025-04; A61P0043-00 111
FTRM 4C086/AA01; 4C086/AA02; 4C084/AA17; 4C086/BC04; 4C086/BC27; 4C086/BC28;
4C086/BC47; 4C086/BC53; 4C086/CB16; 4C086/GA06; 4C084/MA01; 4C086/MA01;
4C086/MA04; 4C084/NA14; 4C086/NA14; 4C086/ZA66; 4C084/ZA66.1; 4C086/ZC42;
4C084/ZC42.2; 4C084; 4C086; 4C201; 4C206



DWPI abstract for WO 99/17755-A2 (part 4)

New abstract:

(divided into sections, each separately searchable)

AB WO 1999017755 A2 UPAB: 20101109
NOVELTY - The use of a 5-HT₃ receptor antagonist, e.g. granisetron, or its derivative in the manufacture of a medicament for the treatment of non constipated female irritable bowel syndrome is new.
ACTIVITY - Antiinflammatory. In tests on female patients, those given alosetron (1 mg BID) reported 33.0 +/- 28.8 days with urgency compared with 54.3 +/- 32.04 days for those given placebo.
MECHANISM OF ACTION - 5-HT₃ receptor antagonist.
USE - The 5-HT₃ receptor antagonist is used to treat irritable bowel syndrome.

MC CPI: B06-D01; B06-D04; B06-D05; B06-D06; B06-D13; B06-D15; B06-D18;
B06-E02; B14-E10C; B14-L06

Derwent Manual Codes:

(proprietary metadata tags representing technical subjects;
searchable alone or in combination with text)



Patent documents can be processed to 'enrich' the data linked to each record

- Original paper document
 - effectively unsearchable by structure
- Electronic abstracted/indexed version
 - WPI ; 3 generic compound types indexed (with role) + 4 specific compounds (with role)
 - Chemical Abstracts ; 13 specific compounds indexed (with role)



Commercial database categories

- Patents from more than one country and across all technology fields (*family databases*)
- Patents from more than one country, selected by technology field
- Patents from one country, across all technical fields (*national databases*)
- Patents from one country selected by technology field



Commercial database categories

Multi-country, multi-technology	Single country, multi-technology
Multi-country, single technology	Single country, single technology



Multi-country, multi-technology

- Derwent World Patent Index ; weekly
 - 38 current countries
 - 4 ceased / defunct authorities : AR, CS, DD, SU
 - 2 non-patent literature : Research Disclosure (resumed) and International Technology Abstracts (ceased 1993)
- Main strengths :
 - subject searching (deep-indexed with quality English abstracts for most records)



Multi-country, multi-technology

- INPADOC ; weekly
 - bibliographic data for c.90 countries
 - legal status data for c.40
- A few abstracts : mostly title / IPC only for subject searching
 - different versions now available, some with abstracts and longer timespan
- Main strengths :
 - family searching
 - speed of updating



Multi-country, multi-technology

- PlusPat/FamPat ;
 - based heavily on DocDB
 - bibliographic data for c.90 countries
- Record content varies
 - some with numeric data + CPC class
 - majority with additional assignee, title, classification(s), (some abstracts)
- Main strengths :
 - unique old family data + some unique current



Multi-country, multi-technology

- PatBase (Minesoft Ltd/RWS)
- Bibliographic search based on INPADOC/OPS data; a few extra countries beyond DocDB coverage
 - plus full-text searchable documents from US, EP, WO, GB, DE and FR
- Built in links to external national registers and document supply services
- Only available via a browser interface – not loaded on any other commercial host



Multi-country, multi-technology

- WIPS Global
- Based in South Korea, marketing agents in UK and US
- Cluster of single-country files, plus a version of INPADOC supplemented by additional KR-A and KR-B data
- Browser interface only
 - www.wipsglobal.com



Multi-country, multi-technology

- A few current Web servers allow *simultaneous* searching to the same depth across more than one country, mimicking the effect of a multi-country file
- Multiple individual files mounted on :
 - Delphion – DE, US, EP-A, EP-B, WO, (JP)
 - MicroPatent PatentWeb – DE, FR, GB, US, EP-A, WO, (JP)
- Espacenet has records for multiple countries but at different levels (some full-text, displayable only, some bibliographic data only)



Multi-country, single technology

- Chemical Abstracts ; weekly
 - “chemical” patents only
 - c.60 current countries
 - many added 2000/2001 (15 countries)
 - 3 defunct authorities : CS, DD, SU
- Provides abstracts for basics only ;
“residents-only” policy for some countries
- Family search capability added in STN
version only - INPADOC data



Multi-country, single technology

- Chemical Abstracts
- Used INPADOC as a primary screen for selection - therefore limited to their country coverage for much of the coverage
 - in recent years, concluded own agreements for data feed direct from patent offices
- Sub-structure chemical search links
 - Unique subject search capability for PL and IN patents; not deep-indexed in WPI



Multi-country, single technology

- EnCompass ; monthly
 - petroleum and petrochemical industry
 - 9 countries 1963-1982 ; expanded to approximately 36 since 1982.
 - Sources data from CAS and Derwent and re-indexes under own scheme
- Main strengths :
 - excellent subject searching, incl. process chem.
 - some unique old (pre-1970) data



Multi-country, single technology

- Pharm ; biweekly
 - 6 current countries, start date varies
 - Originally linked to Markush-searchable file MPHARM
 - English abstracts and extensive subject indexing, as well as structure-searchable
- Unique source for French BSM patents by structure
- Now merged with WPIM to form MMS at structure search level



Multi-country, single technology

- Food Science & Technology Abs :
monthly
 - All aspects of food science, some nutrition.
 - Approximately 11 countries ; rather idiosyncratic coverage
 - English abstracts for all records
- Main strengths :
 - Good subject indexing, basis for cross-filing



Multi-country, single technology

- CAB International ; monthly
 - agriculture and some human nutrition
 - “a few” countries ; unable to locate specific data ; subject coverage mainly limited to dairy science
 - English abstracts
- Main strengths :
 - could provide industry-specific terminology link to other files



Multi-country, single technology

- Currently abstracting

- Aluminium Industry Abstracts
- APTIC
- Energy Science & Technology
- FLUIDEX
- Foods Adlibra
- Metadex

- Subject matter

- ➔ Aluminium industry news and research
- ➔ Anti-pollution (EPA)
- ➔ Energy technology (US DoE)
- ➔ Hydraulic engineering
- ➔ Food
- ➔ Metallurgy



Multi-country, single technology

- Currently abstracting
 - Paperchem
 - Pira
 - Telegen
 - Water Resources
 - Weldasearch
 - World Surface Coatings Abstracts
 - etc.
- Subject matter
 - ➔ Paper and pulp
 - ➔ Paper, print, packaging
 - ➔ Biotechnology
 - ➔ Water
 - ➔ Welding
 - ➔ Paints and coating technology



Multi-country, single technology

- No longer abstracting
 - INSPEC
 - Beilstein
 - BioBusiness
- Subject matter
 - ➔ Physics / engineering
 - ➔ Chemistry
 - ➔ Commercial biology



Single country, multi-technology

- EP
 - Full text EP-A from 1987, EP-B from 1991, bibliographic from 1978: loaded on STN, Questel, Dialog, MicroPatent...
- FR
 - Full text FR-A from 1980, bibliographic from 1966
- GB
 - Full text GB-A from 1979 (STN, Questel), from 1916 (MicroPatent)
- IT
 - ITALPAT, patents and utility models 1983-93 (exclusive to Questel)
- DE
 - Full-text from 1987, PATDPASPC (STN, supplementary protection certificates), bibliographic from 1968 (various hosts), PATDD (former East German patents, 1981 to date, STN)



Single country, multi-technology

- WO
 - Full text from 1978 (Eng, Fre, Ger, Spa only), bibliographic from 1978
- CN
 - Chinapats: manual English abstracts, 1985 to date (Questel and Dialog)
- JP
 - Patent Abstracts of Japan (PAJ) from 1976, subject coverage varies across timespan
- US
 - IFI CLAIMS (deep-indexed, from 1950), full-text from c.1976 (most hosts), 1836 (MicroPatent)
- RU
 - Patent Abstracts of Russia, from 1994 (STN, PATON)



Single country, single technology

- BIOSIS :
 - US patents only in the biological sciences
 - previously covered in BioBusiness file, which was principally geared towards the commercial development of biology
 - also contains some patents from the mid-1980's. The BioBusiness data may be transferred later.



Other reviews

- *Manual of Online Search Strategies, vol. 2: Business, Law, News & Patents.* Aldershot: Gower, 2001
- *Information Sources in Patents.* Berlin: de Gruyter 2011



What do commercial files offer for patentability searching?

- A patentability search is a subject-based approach to information, which typically utilises a mixture of
 - words
 - from titles, abstracts, claims, full texts
 - and codes
 - such as official classification schemes and proprietary indexing, such as Derwent classes or CAS General Subject Headings and Registry Numbers



Words

- Title words
 - original patent titles are usually very uninformative (e.g. “New process”)
- Enriched titles are provided by WPI, IFI and CAS
- Original titles only are provided by INPADOC, JAPIO and EPAT



Words

- Because of the poor quality on un-enriched titles, “limiting” your strategy to title terms only will not necessarily improve precision - it may get worse
- If other word fields are present (abstract, claims), use as many as possible.



Abstracts

- Abstracts also vary in quality
 - some are written by the applicant (EPAT, IFI)
 - some are written by the database producer (WPI, CAS)
- Do not assume that all records in a given database have abstracts
 - several countries in WPI are “title-only”
 - no abstracts for PCT cases in EPAT



Abstracts

- Some databases (IFI, EPAT) contain both an abstract and at least one claim
- Professional abstracts usually use more “everyday” terms
- An applicant’s abstract may consist merely of the text of a main claim



Claims

- Negative
 - The text used in claims is very formal
 - often includes long lists of optional terms
 - not very suitable for proximity text searching
- Positive
 - If all claims are present, this field may include a specific term which is not in the abstract



Indexing terms

- Text indexing terms are applied by Chemical Abstracts to all patents selected, irrespective of country
 - Controlled vocabulary, updated and amended between Collective Index Periods
- EnCompass applies industry-specific coding for petrochemical patents



Full texts

- Principal sources are US, EP and WO documents only
 - some DE, FR, GB loads.
 - some SE, BE available; more due soon
- USPATFULL on STN has merged the CAS indexing terms applied to chemical patents
- Full text is not a panacea but can be helpful in certain types of search
- Don't assume the text is in English
 - some (not all) vendors provide MT versions



Who has what?

- WPI
 - titles, professional abstracts, some claims
- INPADOC
 - original titles only, not all in English
- IFI
 - original + enriched titles, applicant abstracts, all claims
- JAPIO
 - original titles, some abstracts



Who has what?

- PlusPat
 - no text fields at all originally, now linked
- Chinapats
 - applicant's title and abstract (both English)
- EPAT / EPATFULL
 - applicant's title and abstract, some claims and/or full texts ; not always present
- PCTFull / WOTEXT
 - Full texts (Danger! - some OCR versions)



Codes

- Official classifications
 - International Patent Classification
 - ECLA (EPO internal classification)
 - US Patent Classification
 - Now both being replaced by CPC
 - FI Classification
 - F-term deep indexing



International Patent Classification

- Applied by most patent offices to their documents
 - present in almost all files ; EP, JP, US, DE etc.
- Post reform (from 2006); radical redesign from earlier versions
 - new way of handling classes, new MCD file available to search back to 1920 and beyond.



International Patent Classification

- Positive
 - when “pooled” - as in WPI - it can be a very useful search tool in its own right
 - can be used to provide a technological context
 - is the only reliable subject search tool in INPADOC bibliographic data
 - goes back to 1968 (1950 in CLAIMS)
 - if MCD data are merged, back to 1920 at least, in some cases to mid 1800s.



International Patent Classification

- Negative
 - needs practice, care with understanding structure and classification rules
 - infrequent updating, less suitable for fast-moving technologies
 - post-reform, this has been addressed with (probably) annual updating from now on.



FI/F-terms

- FI is an internal enhancement of IPC, applied by the JPO to JP documents only.
- A related subject indexing scheme (F-terms) is available in English, but is not widely deployed in online files yet; available on JPO website, CAS (chemistry only), PatBase and FamPat.



Derwent classes

- A broad subject sub-division, available to non-subscribers
- Chemical ; 12 sections, 138 classes
- Mechanical ; 15 sections, 103 classes
- Electrical ; 6 sections, 50 classes
- Based on the IPC, but intellectually applied by Derwent indexers



Derwent classes

- Chemical
 - Sections A to M
- Mechanical
 - Sections P and Q
- Electrical
 - Sections S to X
- Common online format ; ANN



Derwent classes

- The Derwent classes are open to all users of the online file
- A separate Manual Code system is only available to subscribers
 - approx. 11,000 codes
 - applied to chemical patents since 1963
 - applied to electrical patents since 1980



Subject searching hints

- Avoid relying solely upon one form
 - titles OR'd with IPC
 - abstracts/claims OR'd with Derwent classes
 - IPC OR'd with USCI
- Check thoroughly whether your chosen search field is available in all files



Structure-based searching

- Searching for chemicals by nomenclature is not advised
 - large % of compounds are not named at all
 - large % of those named can have more than one name, specific or generic
 - trivial or approved names are used inconsistently and often not until late in a compound's life e.g. drug names
- Structure-based searching is the only option



Structure-based searching

- Two basic types
 - fragment coded (Derwent WPI, IFI, GREMAS)
 - structure split into small parts and each assigned a code.
 - strategy comprises re-assembling common elements to retrieve all permutations
 - topographical (CAS Registry, Marpat, MMS, DCR)
 - based on connection tables to generate screens



Summary

- You get what you pay for!
- Commercial files (whether based on browser interfaces or not) continue to offer higher quality information than most first-level data sources
- Free-of-charge sources can be very helpful to assist in strategy generation process.