

STN[®]

Patent Citation Searching on STN[®]

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CAPADOC


Session Agenda

- Patent citation searching on STN
 - The premise
 - Databases covering citations
 - Types of citation searches
- Search examples

What is a citation?

- In the context of patents, a citation is a reference to a previous work (prior art) that is considered relevant to current patent application in hand
- The cited document may be a patent or a non-patent publication, e.g. a scientific journal article
- Citations may be made by the Inventor or by the Examiner during patent examination
- Citations are typically located at the front or at the back of a patent or published application

Patent citations appear on the front page of USPTO issued (granted) patents



US006565065B1

(12) **United States Patent**
Palmer

(10) **Patent No.:** US 6,565,065 B1
(45) **Date of Patent:** May 20, 2003

(54) **DISC VALVE ADAPTOR**

(75) **Inventor:** Robert Palmer, Hopatcong, NJ (US)

(73) **Assignee:** Straham Valves, Inc., Florham Park, NJ (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** 09/991,018

(22) **Filed:** Nov. 16, 2001

(51) **Int. Cl.:** F16K 25/00

(52) **U.S. Cl.:** 251/186; 251/191; 251/264; 251/357

(58) **Field of Search:** 251/176, 186, 251/191, 264, 357

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,574,054 A	11/1951	Miller	
2,839,265 A	* 6/1958	Hobbs	251/191
2,918,078 A	12/1959	Cummings	
3,211,418 A	10/1965	Lohr	
3,211,419 A	* 10/1965	Lohr	251/191
3,612,479 A	* 10/1971	Smith, Jr.	251/191
3,804,365 A	* 4/1974	Fetterolf et al.	251/186
4,073,308 A	* 2/1978	Stith, Jr.	251/191
4,815,698 A	* 3/1989	Palmer	251/176

OTHER PUBLIC

Sung IL Valve Industry Co., Ltd., (Upper Type), Model STBF-U, unknown).

Key Bellevilles, Inc., Live Loading Live Loading of Valve Stem Pat leakage problems (catalog), date

* cited by examiner

Primary Examiner—Ehud Garten
Assistant Examiner—John Bastian

(74) *Attorney, Agent, or Firm*
Gilfillan, et al.; John G. Gilfillan,

(57) **ABSTRACT**

An adaptor is for a rising disc valve rotating a stem in a housing bore which disc engages a disc valve member from a conical housing seat space stack of Belleville -steel springs is and the ring seal. An interface ring and the ring seal. As the disc moves seat, a ring at the attachment member attachment member can no longer compressively loads the springs further axially displaced to the compressive load on the ring seal expands the seal radially outwardly against the housing bore and radially inwardly against the piston shank.

16 Claims, 5 Drawing Sheets


(56) **References Cited**

U.S. PATENT DOCUMENTS

2,574,054 A	11/1951	Miller	
2,839,265 A	* 6/1958	Hobbs	251/191
2,918,078 A	12/1959	Cummings	
3,211,418 A	10/1965	Lohr	
3,211,419 A	* 10/1965	Lohr	251/191
3,612,479 A	* 10/1971	Smith, Jr.	251/191
3,804,365 A	* 4/1974	Fetterolf et al.	251/186
4,073,308 A	* 2/1978	Stith, Jr.	251/191
4,815,698 A	* 3/1989	Palmer	251/176

Patent citations appear in the Search Report of EPO published applications and granted patents

(19)  **Europäisches Patentamt**
European Patent Office
 Office européen des brevets


(11)  **EP 0 786 399 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 01.10.1997 *Bulletin 1997/40* (51) Int. Cl.⁶: **B62M 23/02**
 (43) Date of publication A2: 30.07.1997 *Bulletin 1997/31*
 (21) Application number: 97101373.5
 (22) Date of filing: 29.01.1997

(84) Designated Contracting States: DE DK ES FR GB IT NL (72) Inventor: Miyata, Syoichiro Iwata-shi, Shizuoka-ken (JP)
 (30) Priority: 29.01.1996 JP 12973/96 (74) Representative: Grünecker, Kinzold, Stockmair & Schwanhäusser Anwaltssozietät Maximilianstrasse 58 80538 München (DE)

(71) Applicant: YAMAHA HATSUDOKI KABUSHIKI KAISHA Iwata-shi Shizuoka-ken, 438 (JP)

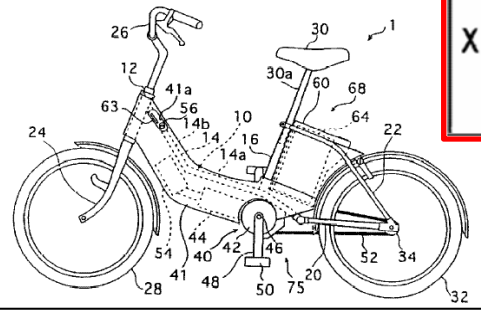
 **European Patent Office** **EUROPEAN SEARCH REPORT** Application Number EP 97 10 1373

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP 0 590 674 A (YAMAHA) * column 6, line 56 - column 7, line 8 *	1-3, 13-15	B62M23/02
X	US 4 062 421 A (WEBER) * the whole document *	1,13	
A	PATENT ABSTRACTS OF JAPAN vol. 096, no. 003, 29 March 1996 & JP 07 309283 A (YAMAHA MOTOR CO LTD), 28 November 1995, * abstract *	1-3, 13-15	
A	PATENT ABSTRACTS OF JAPAN vol. 095, no. 009, 31 October 1995 & JP 07 143603 A (AQUEOUS RES:KK), 2 June 1995, * abstract *	1,13	

(54) **Muscle-operated vehicle with an auxiliary electrical power drive system for controlling said system**

(57) Muscle-operated vehicle, especially bicycle, comprising a muscle-operated driving system having a crankshaft (46) rotatable by muscle power from a driver, and an auxiliary electrical power drive system. Further, a controller (54) is provided for controlling the output of the auxiliary electrical power drive system based on operating conditions detected. Said controller comprises determining means for determining whether said vehicle is to be driven for power assisted running, the ratio of assist power to be supplied to the crank pedals in response to the detected operating conditions.



DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	EP 0 590 674 A (YAMAHA) * column 6, line 56 - column 7, line 8 *	1-3, 13-15
X	US 4 062 421 A (WEBER) * the whole document *	1,13

The present search report has been drawn up for all classes

Place of search THE HAGUE	Date of completion of the search 8 August 1997	Examiner Denicolai, G
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CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure F : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document
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Patent citation searching - the premise

- If a patent document cites an earlier publication (going back in time), OR
- The patent document is cited by a subsequent publication (going forward in time)
- This patent document and the earlier and/or subsequent publications are related by subject matter

Why search for patent citations?

- Enhance prior art or patentability searches
 - Citations can act as “stepping stones” in a subject search, yielding results that may not otherwise have been identified in a conventional search
- Analyze your competitors
 - Who is developing whose technology?
 - Identify especially important intellectual property
 - Patent portfolio management
- Assist in legal challenges
 - Compare citations from different patenting authorities

Competitive analysis of patent citation data

- Analysis of competitors
 - What organizations are working in this similar area of research?
 - Who is developing whose technology?
 - Are they possibly infringing on the original invention?
- Analysis of patent citation counts
 - What are the most significant inventions?
 - Which patent families are most often cited?

These databases cover patent citations

Important STN databases for patent citations

- Patents Citation Index™ (PCI)
- INPAFAMDB
- CAplusSM

Others covering patent citations

- USPAT databases
- EPFULL
- IFIPAT
- PATDPA

Comparing citation databases

If you are interested in these subject areas (time periods)	And non-patent literature of this type	And/or patents from these organizations	Consider this STN database
All areas (1973-)	none	US (1973-) EP WO (1978-) DE JP GB (1994-) BE FR ES NL (2007-)	PCI
All areas (1947-)	none	21 Authorities	INPAFAMDB
Chemistry, biochemistry, chemical engineering (1997-)	Journals, reviews, conference proceedings, technical reports	US EP WO DE (1997-) GB FR (2003-) CA (2005-)	CAplus
Science, technology, medicine (1974-)	Journals, reviews, conference proceedings	none	SCISEARCH®

Comparing citation databases (cont.)

If you are interested in these subject areas (time periods)	And non-patent literature of this type	And/or patents from these organizations	Consider this STN database
All areas (1975-), selected technologies (1971-1974)	none	US	USPATFULL
Chemistry (1950-)	none	US	IFIPAT
All areas (1978-)	none	EP	EPFULL
All areas (1968-)	none	DE and EP/WO with DE as a designated state	PATDPA

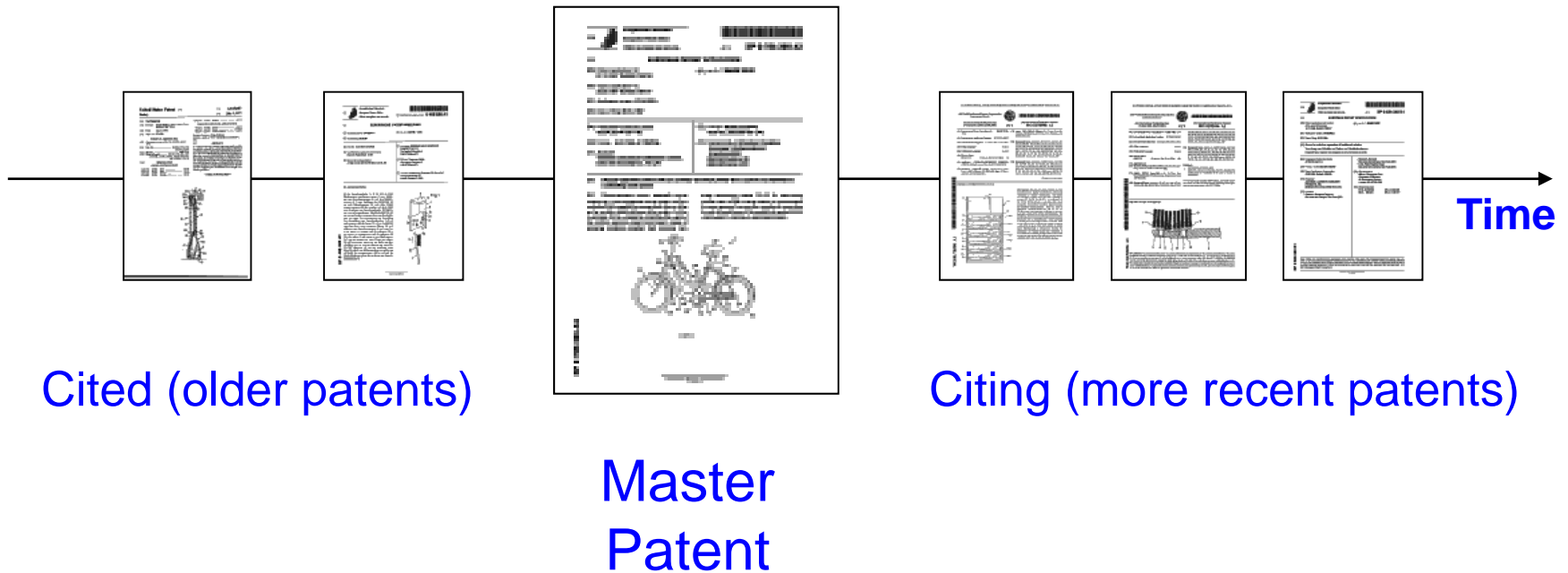
Patents Citation Index

- PCI is the companion citation search database for Derwent World Patents Index[®] (DWPISM)
- Ongoing examiner citations from 10 authorities
 - US, PCT/WO, EP, JP, DE, GB, BE, ES, FR, NL
- Up-to-date family data from DWPI
- Coverage dates back to 1973
- Updated every 3-4 days

A PCI Reference Manual STN User Guide is available:

www.stn-international.de/fileadmin/be_user/STN/pdf/search_materials/patents/pciman.pdf

What are *cited* and *citing* patents?



PCI record structure

- A PCI record consists of three parts
 - The master patent family
 - Cited patents and cited literature
 - Citing patents

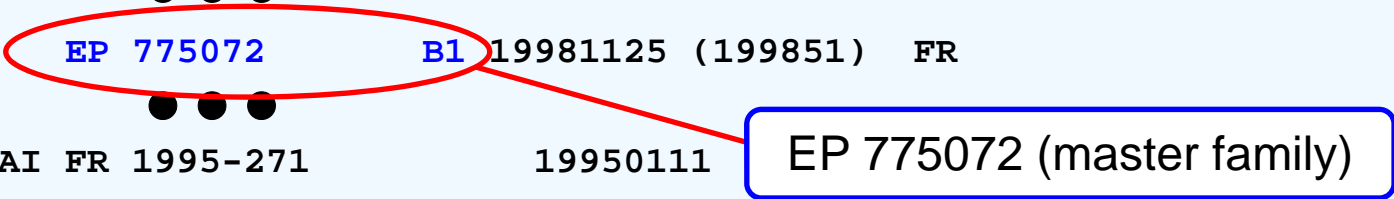
PRESENT

PAST

FUTURE

PCI record: Master DWPI family

L1 ANSWER 1 OF 1 PCI COPYRIGHT 2008 THOMSON REUTERS on STN
AN 1996-139581 [14] PCI
TI Variable-volume bottle for carbonated drink - has pleated side walls
and inner retainer in two sections to hold bottle in compressed state
IN DEMEESTER J H M; DEMEESTER J; DEMEESTER M; DEMMESTER J H M; HONORE J;
VATELOT Y
PA (DEME-I) DEMEESTER J; (DEMM-I) DEMMESTER J H M; (HONO-I) HONORE J;
(DEME-I) DEMEESTER M; (VATE-I) VATELOT Y; (DEME-I) DEMEESTER J H M
PI WO 9605114 A1 19960222 (199614)* FR 45[23]
● ● ●
EP 775072 A1 19970528 (199726) FR
● ● ●
EP 775072 B1 19981125 (199851) FR
● ● ●
PRAI FR 1995-271 19950111
FR 1994-9910 19940810



PCI record: Cited Patents (CDP)

CDP Cited Patents

Master Patent

By Cat Cited Patent Accession Number

● ● ●

EP 775072 B1	Ex	US 4456134 A	1984-176604
	PA: (COOP-I)	COOPER L	
	IN: COOPER L		

● ● ●

EP 775072 (master family) cites US 4456134 (cited).

PCI record: Citing Patents (CGP)

CGP Citing Patents

Master Patent	By	Cat	Citing Patent	Accession Number
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● ● ●

EP 775072 B1	Ex		DE 19920761 C1	2000-424499
			PA: (KRON-I) KRONSEDER H	
			IN: KRONSEDER H	

● ● ●

DE 19920761 (citing) cites EP 775072 (master family).

Searching PCI

- PCI has a logical system of patent field codes for cited and citing data
 - .D for citeD or .G for citinG data

	Master	Cited	Citing
Derwent Accession Number	AN	OS.D	OS.G
Patent Number	PN	PN.D	PN.G
Assignee name	PA	PA.D	PA.G
Assignee code	PACO	PACO.D	PACO.G
Inventor	IN	IN.D	IN.G
Citation count by accession number	N/A	OSC.D	OSC.G
Citation count by patent number	N/A	PNC.D	PNC.G

Searching PCI

- Elements of a PCI citation entry are linked together with the (P) operator
 - Records with British Motorola patents citations
 - => S MOTOROLA/PA.D (P) GB/PC.D

Popular PCI display formats


D SCAN	Random title (free)
D TRIAL	Accession Number and title (free)
D HITCDP	Hit cited patent data
D CITN	All citation data (CDP, REN, CGP)
D BRIEF.D	Title, Assignee, cited patents
D BRIEF.G	Title, Assignee, citing patents
D ALL	Complete record (full details)
D ALLB	Complete record (condensed)

Identification of related publications to an invention is straightforward

Search Question:

Which patent documents are related by subject matter to patent WO2000065014 assigned to Procter & Gamble?

Original document of the invention

 PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau	
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)	
(51) International Patent Classification ⁷ : C11D 3/22, D06M 15/03	(11) International Publication Number: WO 00/65014 (43) International Publication Date: 2 November 2000 (02.11.00)
(21) International Application Number: PCT/US00/11016 (22) International Filing Date: 25 April 2000 (25.04.00) (30) Priority Data: 60/131,287 27 April 1999 (27.04.99) US	(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, 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).
(71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): BARNABAS, Mary, Vijayarani [IN/US]; 5777 Sawgrass Drive, West Chester, OH 45069 (US). BARNABAS, Freddy, Arthur [IN/US]; 5777 Sawgrass Drive, West Chester, OH 45069 (US). SHOWELL, Michael, Stanford [US/US]; 685 Compton Road, Cincinnati, OH 45231 (US). SMETS, Johan [BE/BE]; Bollenberg 79, B-3210 Lubeek (BE). (74) Agents: REED, T. David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).	Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
(54) Title: TREATING COMPOSITIONS COMPRISING POLYSACCHARIDES	
(57) Abstract The present invention relates to treating compositions, preferably laundry and/or fabric and/or color care compositions comprising polysaccharides, and methods of using such compositions to provide improved color appearance and/or pill prevention and/or abrasion resistance and/or wrinkle resistance and/or shrinkage resistance benefits, while at the same time providing improved cleaning benefits, over laundry and/or fabric and/or color care compositions without such polysaccharides.	

SEARCH and DISPLAY the document in PCI

=> FILE PCI

=> S WO2000065014/PN

=> D ALL

DISPLAY ALL gives
bibliographic information, all
cited references, and all citing
references that are needed.

L1 ANSWER 1 OF 1 PCI COPYRIGHT 2008 THOMSON REUTERS on STN
AN 2001-146672 [15] WPINDEX
DNC C2001-043340 [15]
TI Starch-free treating composition for treating fabrics
and natural fibers, comprises polysaccharide with beta-
linked backbone, having specific polymerization degree
IN BARNABAS F A; BARNABAS M V; SHOWELL M S; SMETS J
PA (PROC-C) PROCTER & GAMBLE CO
CYC 89

(Continued on next page)

Display the document in PCI (cont.)

```
PI    WO 2000065014    A1 20001102 (200115)* EN 101[0] <--
      AU 2000046599    A  20001110 (200115)  EN
      BR 2000010587    A  20020205 (200213)  PT
      EP 1173535       A1 20020123 (200214)
```

● ● ●

This is the list of all family patent numbers.

CTCS CITATION COUNTERS

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PNC.DI    0    Cited Patents Count (by inventor)
PNC.DX   10    Cited Patents Count (by examiner)
IAC.DI    0    Cited Issuing Authority Count (by inventor)
IAC.DX    4    Cited Issuing Authority Count (by examiner)
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PNC.GI    0    Citing Patents Count (by
PNC.GX    9    Citing Patents Count (by
```

● ● ●

Reminder: **.D** stands for cite**D** patents, and **.G** stands for citin**G** patents.

(Continued on next page)

Display the document in PCI (cont.)

REN Literature Citations

```
-----  
Citing Publication      By      Cat      Literature Reference  
-----  
EP 1173535 A           Ex  
US 6613733 B1         Ex  
  
WO 2000065014 A       Ex  
A reference from the  
DWPI database.  
See references of WO 0065014A1  
Hercules Inc., "Guar gum  
anti-redeposition agent in  
liquid detergents for.. " WPI World  
Patent Inf. Aug. 6, 1978 Abstract  
Only 1 p  
DATABASE WPI Section Ch,  
Week 198929 Derwent Publications  
Ltd., London, GB; Class A87, AN  
1989-207019  
XP002145949 & CN 8 607 435
```

● ● ●

(Continued on next page)

Display the document in PCI (cont.)

CGP Citing Patents

Cited Publication	By	Cat	Citing Patent	Accession Number
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● ● ●

WO 2000065014 A	Ex	A	EP 1408103 A	2004-393196
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PA: (SLTA-C) SOLUTIA EURO NV/SA

IN: FEYT L E

	Ex		EP 1341892 B1	2002-590455
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PA: (PROC-C) PROCTER & GAMBLE CO

IN: TRINH T; BARNABAS M V; ● ● ●

WO 2000065014 A1	● ● ●			
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	Ex	X	WO 2004005444 A1	2004-122594
--	----	---	------------------	-------------

PA: (HENK-C) HENKEL KGAA

IN: BLOCK C; PENNINGER J; MAYER K;
SCHRECK B; LANGEN E; JEKEL M



A highly relevant document
citing the P&G invention.

Publication and search report of Henkel invention citing the P&G invention

(12) NACH DEM VERTRAG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum
Internationales Büro

(43) Internationales Veröffentlichungsdatum
15. Januar 2004 (15.01.2004)

(10) Internationale Veröffentlichungsnummer
WO 2004/005444 A1

PCT

(51) Internationale Patentklassifikation?
(21) Internationales Aktenzeichen: PCT/
(22) Internationales Anmeldedatum: 27. Juni 2004
(25) Einreichungssprache:
(26) Veröffentlichungssprache:
(30) Angaben zur Priorität: 102 30 416.5 6. Juli 2002 (06.
(71) Anmelder (für alle Bestimmungsstaaten mit US): HENKEL COMMANDITGESELLSCHAFT AKTIEN [DE/DE]; Henkelstrasse 67, 40625 Solingen (DE).
(72) Erfinder; und

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 03/06842

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 100 02 008 A (COGNIS DEUTSCHLAND GMBH) 26 July 2001 (2001-07-26) claims; example 2	1-9, 11, 14
X	WO 00 42144 A (PROCTER & GAMBLE) 20 July 2000 (2000-07-20) page 2; claims page 5	1, 3-14, 17
X	WO 00 65014 A (PROCTER & GAMBLE) 2 November 2000 (2000-11-02) page 1 -page 2; claims page 10 -page 11 page 51; examples X-XVI, XVIII-XXX	1, 3-17
	WO 98 29528 A (PROCTER & GAMBLE) 9 July 1998 (1998-07-09) page 1 -page 2; claims; examples page 10 -page 11	1, 3-14, 17

This is the P&G invention looked at initially, now listed in the search report of the Henkel invention.

DWPI gives more information on all the related patent documents

=> FILE WPINDEX

=> TRANSFER L1 1- OS.D OS.G /AN

L2 TRANSFER L1 1-
L3 15 L2/AN

Transfer of “other source” cited (OS.D) and citing (OS.G) accession numbers to search as Accession Numbers in DWPI (/AN).

=> D BIB 1-

● ● ●

L3 ANSWER 4 OF 15 WPINDEX COPYRIGHT 2008 THOMSON REUTERS on STN

AN 2004-122594 [12] WPINDEX

DNC C2004-049301 [12]

TI Solid laundry detergent, e.g. powder, granulate, extrudate or molded portion, e.g. tablet, contains finely-divided cellulose and/or cellulose derivative as textile care component

DC A11; A14; A25; A97; D25

IN BLOCK C; JEKEL M; LANGEN E; MAYER K; ● ● ●

PA (HENK-C) HENKEL KGAA

● ● ●

The basic steps of finding related patents

Summary

- To find related patents starting with a patent number:
 - => FILE PCI
 - => S WO2000065014/PN (produces answer set L1)
 - => FILE WPINDEX
 - => TRA L1 1- OS.D OS.G /AN (produces L2 and L3)

Answer set **L3** contains the cited and citing patents

Note: Although PN.D and PN.G would work just as well as OS.D and OS.G (**L3**), using Accession Numbers is usually more efficient, since there is only one Accession Number per patent family.

Enhance prior art or patentability searches using patent citations

Search Question:

Find all patent documents that are related by subject matter to patents on coin/bank note counting devices (T05-L07/MC).

Learn more about Electrical Patents Index (EPI) Manual Codes (MC):

<http://scientific.thomson.com/support/patents/dwpioref/reftools/classification/epi-codes/>

Extending a DWPI prior art search using PCI

=> FILE WPINDEX

=> S T05-L07/MC

T05-L07 COIN AND NOTE COUNTING
L1 686 T05-L07/MC

=> FILE PCI

=> TRANSFER L1 1- AN

L2 TRANSFER L1 1- AN : 686 TERMS
L3 311 L2

=> FILE WPINDEX

=> TRANSFER L3 1- OS.G OS.D /AN

L4 TRANSFER L3 1- OS.G OS.D :
L5 2198 L4/AN

=> S L5 NOT T05/MC

T05 COUNTING, CHECKING, VENDING, ATM
202915 T05/MC
L6 632 L5 NOT T05/MC

311 of the 686 DWPI records have a corresponding PCI record (L3).

Transfer of “other source” cited (OS.D) and citing (OS.G) accession numbers to search as Accession Numbers in DWPI (/AN).



632 related DWPI records are found that are not classified as coin/bank note counting device inventions (L6).

Review DWPI titles using D SCAN format

=> D SCAN

L6 632 ANSWERS WPINDEX COPYRIGHT 2008 THOMSON REUTERS on STN
TI Medium scanning system e.g. for photographic paper detects
presence-absence of images formed on both sides of medium so as to
generate blank and image signals respectively

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 2

L6 632 ANSWERS WPINDEX COPYRIGHT 2008 THOMSON REUTERS on STN
TI Note-freed amusement media e.g. pachinko balls dispensing machine -
has note discrimination unit, note return unit and sum of balance
calculator

L6 632 ANSWERS WPINDEX COPYRIGHT 2008 THOMSON REUTERS on STN
TI Image processing method e.g. for colour printer - reading and
extracting colour document into two colours and one aromatic colour
and output

HOW MANY MORE AN

The additional patents are in different subject areas, but involve “counting technologies” that may be applicable to coin and bank note counting, e.g. counting printer paper.

How to extend a prior art search using PCI ?

Summary

- To find related patents starting with a subject search

=> FILE WPINDEX

=> *S subject of interest* (produces L1)

=> FILE PCI

=> TRANSFER L1 1- AN (produces L2 and L3)

=> FIL WPINDEX

=> TRA L3 1- OS.D OS.G /AN (produces L4 and L5)

=> S L1 OR L5 (produces L6)

Answer set **L6** contains the original patents plus all the cited and citing patents.

Identifying key patents

Search Question:

Which are the key patents of Henkel in the area of detergents/washing?

Note: In this example we use the Other Source Count Citing (OSC.G) analysis field. The “Other Source” is the citing DWPI Accession Number (AN). OSC.G is therefore the number of citing DWPI ANs – e.g. the number of citing DWPI patent families.

Identifying key patents

=> **FIL WPINDEX**

=> **S (HENKEL/PA OR HENK/PACO) AND C11D/IPC,EPC**

L1 3544 (HENKEL/PA OR HENK/PACO) AND C11D/IPC,EPC

Run a technology search in WPINDEX.

=> **FILE PCI**

=> **TRANSFER L1 1- AN**

L2 TRANSFER L1 1- AN

L3 3303 L2

Extraction of Accession Numbers from WPINDEX and searching them in PCI.

=> **ANALYZE L3 1- OSC.G**

L4 ANALYZE L3 1- OSC.G

ANALYZING the number of patent families citing the Henkel inventions.

Identifying key patents (cont.)

=> D L4 1-

L4 ANALYZE L3 1- OSC.G : 78 TERMS

TERM #	# OCC	# DOC	% DOC	OSC.G
1	575	575	17.41	0/OSC.G
2	534	534	16.17	1/OSC.G
3	393	393	11.90	2/OSC.G
● ● ●				
54	1	1	0.03	170/OSC.G
55	1	1	0.03	177/OSC.G
56	1	1	0.03	228/OSC.G
57	1	1	0.03	41/OSC.G
58	1	1	0.03	47/OSC.G
● ● ●				

The most cited invention by Henkel in this area was cited by 228 patent families (228/OSC.G).

Identifying key patents (cont.)

=> S L3 AND 228/OSC.G

L5 1 L3 AND 228/OSC.G

=> D AN TI PA CTCS

L5 ANSWER 1 OF 1 PCI COPYRIGHT 2008 THOMSON REUTERS on STN

AN 1989-032811 [05] PCI

TI Surface active alkyl:glycoside cpds. - preparation by reaction of butanol with glyucose and trans-acetalisation with fatty alcohol

PA (HENK-C) HENKEL KGAA

CTCS CITATION COUNTERS

● ● ●

OSC.GX	124	Citing Patent WPI Accession Number Count (by examiner)
OSC.GI	104	Citing Patent WPI Accession Number Count (by inventor)

Retrieve the Henkel PCI record with 228 citing patent families (L5).

The most cited invention by Henkel in this area was cited by 228 patent families (228/OSC.G).

How to identify key patents ?

Summary

- To identify key patents in a DWPI answer set by citation count
 - => FILE WPINDEX
 - => *S topic of interest* (produces L1)
 - => FILE PCI
 - => TRANSFER L1 1- AN (produces L2 and L3)
 - => ANALYZE L3 1- OSC.G (produces L4)
 - => D L4 1- (find high OSC.G values)
 - => *S (high values)/OSC.G AND L3* (produces L5)

L5 contains the PCI records for the highly cited patents.

Patent citation analysis is a useful tool for identifying and studying competitors

Search Question:

Which competitors cite Colgate Palmolive inventions the most since 2000?

Analyzing competitors of Colgate Palmolive

=> FILE PCI

PA.D and PACO.D are the cited patent assignee name and code.

=> S ((COLGATE/PA.D OR COLG/PACO.D) NOT (COLGATE/PA OR COLG/PACO)) AND PY.B>2000

L1 4700 ((COLGATE/PA.D OR COLG/PACO.D) NOT (COLGATE/PA OR COLG/PACO)) AND PY.B>2000

Exclude self-citations.

=> ANALYZE L1 1- PAX PACO

L2 ANALYZE L1 1- PAX PACO : 10404 TERMS

=> D PAX TOP 6

L2 ANALYZE L1 1- PAX PACO : 10404 TERMS

TERM #	# OCC	# DOC	% DOC	PAX PACO
2	489	489	10.40	(PROC-C) PROCTER & GAMBLE CO
4	329	329	7.00	(UNIL-C) UNILEVER PLC
5	326	326	6.94	(UNIL-C) UNILEVER NV
6	252	252	5.36	(UNIL-C) HINDUSTAN LEVER LTD
7	214	214	4.55	(UNIL-C) UNILEVER HOME & PERSONAL CARE USA DIV
9	171	171	3.64	(KIMB-C) KIMBERLY-CLARK WORLDWIDE INC

Analyzing competitors of Colgate Palmolive (cont.)

=> D L2 PACO TOP 20 WITH "-C"

L2 ANALYZE L1 1- PAX PACO :

TERM #	# OCC	# DOC	% DOC	PAX PACO
1	494	489	10.40	PROC-C
3	1157	352	7.49	UNIL-C
8	200	172	3.66	KIMB-C
10	158	155	3.30	HENK-C
12	154	154	3.28	OREA-C
14	142	80	1.70	RECK-C
16	71	69	1.47	ECON-C
18	62	61	1.30	KAOS-C
19	61	61	1.30	BEIE-C
24	70	49	1.04	SHEL-C

=> S L1 AND PROC/PACO

L3 489 L1 AND PROC/PACO

Selectively display only the standardized Patent Assignee Codes using "-C".

PROC-C = Procter & Gamble
UNIL-C = Unilever
KIMB-C = Kimberly-Clark
HENK-C = Henkel

Retrieve the 489 Procter & Gamble inventions that cited Colgate Palmolive inventions (L3).

Using PCI Hit Cited Patent (HITCDP) display provides just the hit citation

=> D BIB HITCDP

```
L3 ANSWER 1 OF 489 PCI COPYRIGHT 2008 THOMSON REUTERS on STN
AN 2008-H98379 [51] PCI
TI Preparing spray-dried detergent powder having anionic surfactant,
zeolite builder and phosphate builder, comprises preparing an aqueous
slurry comprising water and non-aqueous material and spraying . . . .
IN BROOKER A T; FINLAY C N F; LUKSZA P A; RIDLEY G; . . . .
PA (PROC-C) PROCTER & GAMBLE CO
PI EP 1914297 A1 20080423 (200851)* EN 14[0] <--
ADT EP 1914297 A1 EP 2006-21613 20061016
PRAI EP 2006-21613 20061016
```

This recent P&G European Published application cites a Colgate Palmolive UK Published Application from 1985.

CDP Cited Patents

Citing Publication	By	Cat	Cited Patent	Accession Number
--------------------	----	-----	--------------	------------------

EP 1914297 A1	Ex	X	GB 2159534 A	1985-305350
	PA:		(COLG-C) COLGATE PALMOLIVE CO	
	IN:		FREEMAN G M	

How to identify competitors ?

Summary

- To analyze the organizations developing inventions in the same area as your company

=> FILE PCI

=> S *your company* /PA.D, /PACO.D

NOT *your company* /PA, PACO (produces L1)

=> ANALYZE L1 1- PAX PACO (produces L2)

=> D TOP 10 PACO

=> D TOP 10 PAX

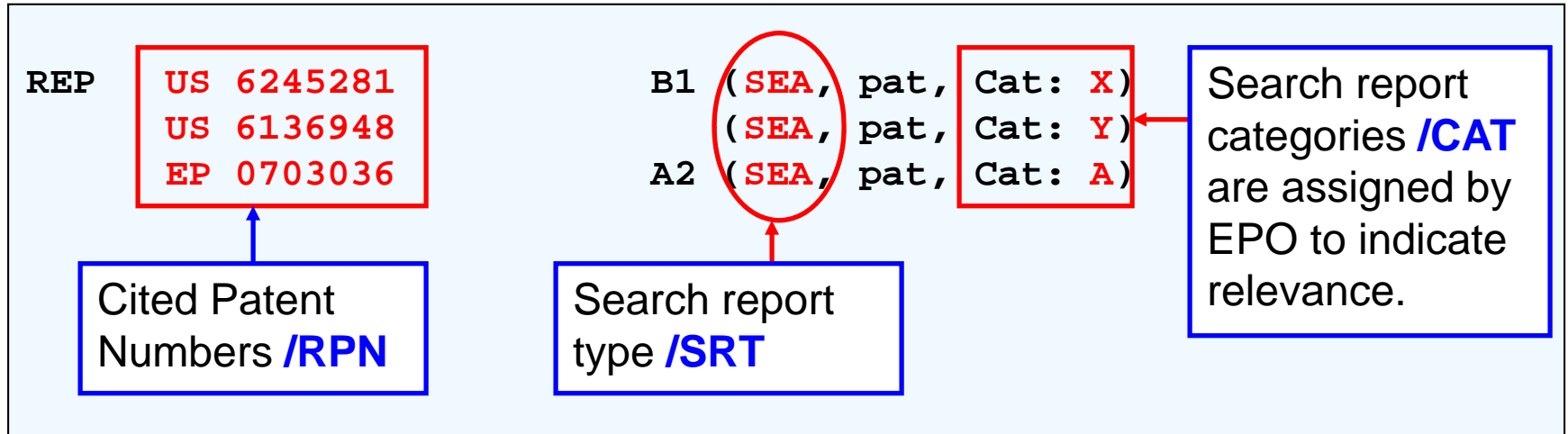
This gives a listing of the top 10 organizations most frequently citing *your company's* patents by Assignee Code (PACO) and Assignee Name with Code (PAX).

INPAFAMDB is the International Patent Family Database on STN

- INPAFAMDB is formed from the EPO DOCDB patent family and INPADOC PRS Legal Status databases
- Coverage of 81 patent authorities from the early 1800s
- The complete archive of European (ECLA, ICO) and International (IPC) classifications back into the 1800s
- Applicant abstracts and/or English translations for 43 patent authorities dating back to the 1890s
- Fully integrated Legal Status data for 51 authorities
- Comprehensive patent and non-patent literature citations for 21 patent authorities

Patent citations sample display

From EP 1384565



- Search Report Types **/SRT**
 - **APP, SEA, EXA, OPP, 115** (3rd parties)
- Search Report Categories **/CAT**
 - **A E L O P T X Y**
- Linked with **(S)** proximity operator

Literature citations sample display

From EP 1384565

REXP XP002213140 (SEA, Cat: X)
XP000656866 (SEA, Cat: X)

XP-numbers from EPO /REXP.

REN KELLER PETER: "Der Stoff, aus dem die Prototypen sind"
KUNSTSTOFFE, CARL HANSER VERLAG. MUNCHEN, DE, vol. 89,
no. 11, 1 November 1999 (1999-11-01), pages 58-61,
XP002213140 ISSN: 0023-5563

SCHMACHTENBERG E ET AL: "LASERSINTERN VON POLYAMID.
LASER-SINTERING OF POLYAMIDE" KUNSTSTOFFE, CARL HANSER
VERLAG. MUNCHEN, DE, vol. 87, no. 6, 1 June 1997
(1997-06-01), pages 773-774,776, XP000656866
ISSN: 0023-5563

Cited non-patent literature /REN.

Search report category definitions can be useful to identify highly relevant documents

- A** technological background
- D** document cited in the application
- E** earlier application or patent but published on or after the international filing date
- L** document cited for other reasons
- O** non-written disclosure
- P** intermediate document
- T** theory or principle underlying the invention
- X** particularly relevant if taken alone
- Y** particularly relevant if combined with another document of the same category

Search Report Type (/SRT) codes are also available in INPAFAMDB

SEA	citation from search report
APP	cited by applicant
EXA	revealed during examination
OPP	revealed during opposition
115	observation by third parties

Patent citation analysis is a useful tool for identifying and studying competitors

Search Question:

The company Qiagen is interested if any competitors have published inventions very close to their technology.

Identifying potential competitors of Qiagen

=> FILE INPAFAMDB

=> S QIAGEN/PASS

L1 238 QIAGEN/PASS

=> TRANSFER L1 PN 1- /RPN

L2 TRANSFER L1 1- PN :

L3 1109 L2/RPN

=> S L3 NOT QIAGEN/PA,PAS

L4 1015 L3 NOT QIAGEN/PASS

=> S L3(S)X/CAT NOT QIAGEN/PASS

L5 237 L3 (S) X/CAT NOT QIAGEN/PA

1. Company search for Qiagen in the assignee super search field (/PASS).

2. TRANSFER publication numbers (PN) to the referenced publication number field /RPN.

3. Exclude self-citations (L4).

Option: Use (S) proximity to refine the Qiagen cited patent numbers (/RPN) with an "X" search report category (/CAT).

Identifying potential competitors of Qiagen

=> D TRIAL PAS PI REP

```
L5      ANSWER 1 OF 237      INPAFAMDB COPYRIGHT 2008 EPO/FIZ KA on STN
TIEN    Method for detecting mutation of nucleic acid using single-stranded
        DNA-binding protein.
IPCI    C12Q0001-68      [I,A ]; C12Q0001-68      [I,C*]
EPC     C12Q0001-68D2G+531/125+531/119+522/101
FA      AB; AI; AN; DAV; DS; DT; ED; EPC; EW; IN; INS; IPC; . . . .
PAS     FUJIFILM CORP, JP
PI      EP 1932925      A1 20080618
        JP 2008136436      A 20080619
REP     US 20020009716  A1 (SEA, pat, Cat: X)
        - WO 9745555      A1 (SEA, pat, Cat: X)
        - US 5660988      A (SEA, pat, Cat: A)
        - WO 2004081224      A2 (SEA, pat, Cat: A)
        - WO 2002077286      A1 (SEA, pat, Cat: A)
        - WO 2003038053      A2 (SEA, pat, Cat: A)
        - US 20020132259      A1 (SEA, pat, Cat: A)
        - US 20040224336      A1 (SEA, pat, Cat: A)
        - JP 2003052396      A (APP, pat)
        - JP 05130870      A (APP, pat)
        - JP 05002934      A (APP, pat)
```

The hit Qiagen publication is a high-relevance X category citation.

Cited patent references are conveniently de-duplicated between family members in the standard REP display.

Identifying potential competitors of Qiagen

=> ANALYZE L5 1- PAS

L6 ANALYZE L5 1- PAS : 812 TERMS

=> D DOC 1-15

L6 ANALYZE L5 1- PAS : 812 TERMS

TERM #	# OCC	# DOC	% DOC	PAS
1	37	8	3.38	APPLERA CORP
2	30	6	2.53	INVITROGEN CORP
3	19	5	2.11	FUJI PHOTO FILM CO LTD
4	69	4	1.69	BECTON DICKINSON CO
5	58	4	1.69	COLEY PHARM GMBH
6	45	4	1.69	MILLIPORE CORP
7	28	4	1.69	HOFFMANN LA ROCHE
8	22	4	1.69	ROCHE DIAGNOSTICS GMBH
9	17	4	1.69	CANON KK
10	12	4	1.69	AGILENT TECHNOLOGIES INC
11	7	4	1.69	BENDZKO PETER
12	66	3	1.27	UNIV IOWA RES FOUND
13	47	3	1.27	PROMEGA CORP
14	41	3	1.27	XZILLION GMBH & CO KG
15	28	3	1.27	COLEY PHARM GROUP INC

Here we are analyzing the INPAFAMDB standardized patent assignee field (PAS).

Organizations with high relevance "X" category citations to Qiagen patents.

Comprehensive patent citation searching

- Different patent family members may be cited in patent documents from different authorities
- Two steps are key for comprehensive patent citation searching
 - Identify all patent family members
 - Search all possible databases that might contain that cited reference

Monitor for potential infringement

Search Question:

Locate references citing US5237069, a Dow Chemical patent describing heterocyclic borate metal complexes as coordination polymerization catalysts.

Locate invention of interest

```
=> FILE INPAFAMDB HCAPLUS WPINDEX
```

```
=> SET MSTEPS ON  
SET COMMAND COMPLETED
```

SET MSTEPS ON to create a separate L-number for each database.

```
=> S US5237069/PN
```

```
L1          1 FILE INPAFAMDB  
L2          1 FILE HCAPLUS  
L3          1 FILE WPINDEX
```

```
TOTAL FOR ALL FILES
```

```
L4          3 US5237069/PN
```

Identify family members...

=> D 1-3 TI PI

L4 ANSWER 1 OF 3 INPAFAMDB COPYRIGHT 2008 EPO/FIZ KA on STN
TI HYDRIDOTRIS(PYRAZOLYL)BORATE METAL COMPLEXES AND
POLYMERIZATION PROCESS.

- HETEROCYCLE BORATE METAL COMPLEXES AND THEIR USE AS
COORDINATION POLYMERIZATION CATALYSTS.

. . . .

PI	AU 9186732	A	19920430
	CA 2054246	A1	19920427
	CN 1062733	A	19920715
	DE 69125336	D1	19970430
	DE 69125336	T2	19971023
	EP 482934	A1	19920429
	EP 482934	B1	19970326
	JP 04305585	A	19921028
	US 5237069	A	19930817

Identify family members... (cont.)

L4 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Heterocyclic borate metal complexes as coordination
polymerization catalysts

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	EP 482934	A1	19920429	EP 1991-309855	19911024
	EP 482934	B1	19970326		
	R: BE, CH, DE, FR, GB, IT, LI, SE				
	US 5237069	A	19930817	US 1990-603350	19901026
	JP 04305585	A	19921028	JP 1991-337493	19911023
	CA 2054246	A1	19920427	CA 1991-2054246	19911025
	AU 9186732	A	19920430	AU 1991-86732	19911025
	CN 1062733	A	19920715	CN 1991-109984	19911026

...all of them

L4 ANSWER 3 OF 3 WPINDEX (C) 2008 THOMSON REUTERS on STN
TI New pyrazolyl borate metal complexes - are used as catalyst
for preparation of syndiotactic polymers with or without
aluminium cpds..

PI EP 482934 A 19920429 (199218)* EN 10p
R: BE CH DE FR GB IT LI SE
AU 9186732 A 19920430 (199226) C07F019-00
CA 2054246 A 19920427 (199229) C07F007-00
JP 04305585 A 19921028 (199250) 7p C07F007-28
CN 1062733 A 19920715 (199313) C07F005-04
US 5237069 A 19930817 (199334) 6p C07D231-10
EP 482934 B1 19970326 (199717) EN 11p C07F007-00
R: BE CH DE FR GB IT LI SE
DE 69125336 E 19970430 (199723) C07F007-00

Choose sources

Database	Reason for selection
PCI	Country and time coverage
INPAFAMDB	Country and time coverage
CAplus	Currency and coverage from both patents and journal literature
USPATFULL	Currency for U.S. citing patents
EPFULL	Currency for EP citing patents
SCISEARCH	Cited references from journal literature and time coverage

Extract and search the patent numbers as cited references

```
=> FILE PCI INPAFAMDB HCAPLUS USPATFULL EPFULL SCISEARCH
```

```
=> TRANSFER L4 PN 1- /RPN
```

```
L5          TRANSFER L4 1- PN :          7 TERMS
L6          19 FILE PCI
L7          7 FILE INPAFAMDB
L8          11 FILE HCAPLUS
L9          8 FILE USPATFULL
L10         3 FILE EPFULL
L11        15 FILE SCISEARCH
```

The **TRANSFER PN** command appended by **/RPN** extracts information from one field (**PN**) and searches it in another field (**RPN**).

```
TOTAL FOR ALL FILES
```


```
L12         63 L5/RPN
```

```
L13         QUE TERMS FROM L5/RPN WITH NO HITS:      4 TERMS
```

Identify duplicates

```
=> SET DUPORDER FILE  
SET COMMAND COMPLETED
```

Note: The PCI database does not support DUPLICATE identification or removal.



```
=> DUPLICATE IDENTIFY L12
```

```
DUPLICATE IS NOT AVAILABLE IN 'PCI'.
```

```
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
```

```
PROCESSING COMPLETED FOR L12
```

```
L14          63 DUP IDE L12 (INCLUDES 10 SETS OF DUPLICATES)  
             ANSWERS '1-19' FROM FILE PCI  
             ANSWERS '20-26' FROM FILE INPAFAMDB  
             ANSWERS '27-37' FROM FILE HCAPLUS  
             ANSWERS '38-45' FROM FILE USPATFULL  
             ANSWERS '46-48' FROM FILE EPFULL  
             ANSWERS '49-63' FROM FILE SCISEARCH
```

Sort results by invention

=> **FSORT L14**

SEL L14 1- PN,APPS

L15 SEL L14 1- PN APPS :

'L15' DELETED

L15 63 FSO L14

15 different invention families are represented in these 63 answers.

7 Multi-record Families	Answers 1-31
Family 1	Answers 1-5
Family 2	Answers 6-9
Family 3	Answers 10-16
Family 4	Answers 17-19
Family 5	Answers 20-25
Family 6	Answers 26-27
Family 7	Answers 28-31
8 Individual Records	Answers 32-39
24 Non-patent Records	Answers 40-63

Non-patent literature from SCISEARCH and CPlus also cites US5237069.

Review one title from each family group

=> D PFAM=1- TI

L15 ANSWER 1 OF 63 PCI COPYRIGHT 2008 THOMSON REUTERS on STN FAMILY 1

TI New organometallic complex having neutral multidentate ligand and having tripod structure useful as catalyst for trimerization of ethylene



L15 ANSWER 20 OF 63 PCI COPYRIGHT 2008 THOMSON REUTERS on STN FAMILY 5

TI Olefin polymerisation catalysts, useful with aluminoxane catalysts for ethylene polymerisation - comprising transition metals or lanthanide, a non-coordinating anion, tris-pyrazolyl tri:dentate and alka-poly:enyl ligands



L15 ANSWER 28 OF 63 PCI COPYRIGHT 2008 THOMSON REUTERS on STN FAMILY 7

TI Aza:borolinyll metal complex as olefin* polymerisation catalysts - prepared by reaction of 2-methyl-1-tert-butyl-(delta)3-1,2-aza:boroline and lithium 2,2,6,6-tetra:methyl:piperidide



Or display all records from one family

=> D PFAM=2 TOTAL BIB HIT

L15 ANSWER 6 OF 63 PCI COPYRIGHT 2008 THOMSON REUTERS on STN FAMILY 2
AN 2001-089974 [10] PCI
TI New organometallic compound for use as catalyst in the polymerization
and copolymerization of ethylene
IN WANG S; CHAN S; TSAI J; TING C; CHEN Y
PA (INTE-N) IND TECHNOLOGY RES INST
PI US 6150529 A 20001121 (200110)* EN 6[0]
ADT US 6150529 A CIP of US 1995-481113 19950607; US 6150529 A Div Ex US
1996-602206 19960215; US 6150529 A Div Ex US 1997-897862 19970721; US
6150529 A US 1999-249511 19990212
FDT US 6150529 A Div ex US 5891816 A; US 6150529 A Div ex US 5684098 A; US
6150529 A CIP of US 5519099 A
PRAI US 1999-249511 19990212

CDP Cited Patents

Citing Publication By Cat Cited Patent Accession Number

US 6150529 A	Ex		US 5237069 A	1992-142984
	PA:	(DOWC-C)	DOW CHEM CO	
	IN:	NEWMAN T H		

Or display all records from one family (cont.)

● ● ●

L15 ANSWER 9 OF 63 USPATFULL on STN FAMILY 2
AN 96:43749 USPATFULL
TI Organometallic catalysts containing hydrotris(pyrazolyl) borate and
cyclopentadienyl groups, and processes of employing the same
IN Wang, Shian-Jy, Hsinchu, Taiwan, Province of China
PA Industrial Technology Research Institute, Hsinchu Hsien, Taiwan,
Province of China (non-U.S. corporation)
PI US 5519099 19960521
AI US 1995-481113 19950607 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Nagumo, Mark
LREP Liauh, W. Wayne
CLMN Number of Claims: 17
ECL Exemplary Claim: 16
DRWN No Drawings
LN.CNT 675
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
REP **US 5237069** Aug 1993 548/110.000 Newman <--

Review titles for the non-patent records

=> D TI 40-63

L15 ANSWER 40 OF 63 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Comparison of olefin polymerization behavior of sterically crowded tris(pyrazolyl)borate group 4 metal complexes



L15 ANSWER 51 OF 63 SCISEARCH COPYRIGHT 2008 The Thomson Corporation on STN

TI Chelating aryloxy ligands in the synthesis of titanium, niobium, and tantalum compounds: Electrochemical studies and styrene polymerization activities



L15 ANSWER 55 OF 63 SCISEARCH COPYRIGHT 2008 The Thomson Corporation on STN

TI Polymerizations of olefins and diolefins catalyzed by monocyclopentadienyltitanium complexes containing a (dimethylamino)ethyl substituent and comparison with ansa-zirconocene systems



Display selected non-patent records

=> D BIB HIT 40 51

L15 ANSWER 40 OF 63 HCAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:264614 HCAPLUS
TI Comparison of olefin polymerization behavior of sterically crowded
tris(pyrazolyl)borate group 4 metal complexes
AU Michiue, Kenji; Jordan, Richard F.
CS R&D Center, Mitsui Chemicals, Inc., 580-32 Nagaura, Sodegaura-City,
Chiba, 299-0265, Japan
SO Journal of Molecular Catalysis A: Chemical (2008), 282(1-2), 107-116
CODEN: JMCCF2; ISSN: 1381-1169
PB Elsevier B.V.
DT Journal
LA English
RE.CNT 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

RE
(36) Newman, T; EP 0482934 1992 [HCAPLUS](#)

Hyperlinks to the CAplus records are available.

Display selected non-patent records (cont.)

L15 ANSWER 51 OF 63 SCISEARCH COPYRIGHT 2008 The Thomson Corporation on STN
 AN 2002:43439 SCISEARCH
 GA The Genuine Article (R) Number: 505XA
 TI Chelating aryloxide ligands in the synthesis of titanium, niobium, and
 tantalum compounds: Electrochemical studies and styrene polymerization
 activities
 AU Michalczyk L; de Gala S; Bruno J W (Reprint)
 CS Wesleyan Univ, Dept Chem, Middletown, CT 06459 USA (Reprint); Yale
 Univ, Dept Chem, New Haven, CT 06511 USA
 CYA USA
 SO ORGANOMETALLICS, (24 DEC 2001) Volume 20, Number 26, pp. 5547-5556.
 ISSN: 0276-7333.
 PB AMER CHEMICAL SOC, 1155 16TH ST, NW, WASHINGTON DC 20037
 DT Article; Journal
 LA English
 REC Reference Count: 79
 ED Entered STN: 18 Jan 2002
 Last Updated on STN: 18 Jan 2002
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

In this example, the hit reference patent number (RPN) is an EP equivalent to US5237069.

STN Patent Number (RPN)	Year (RPY)	Reference Inventor /Assignee (RIN)	Type	Reference Patent Number (RPN)
EP 482934	1992	NEWMAN T H		EP 482934

Search Strategy summary

To locate references citing a key patent...

- Step 1. Locate the invention in databases reporting the family members
- Step 2. Extract numbers for family members and search as references patent numbers (RPN)
- Step 3. Remove duplicate records
- Step 4. Sort results by invention
- Step 5. Display results

Summary of key resources on STN

Important STN databases for patent citations

- Patents Citation Index (PCI)
- INPAFAMDB
- CAplus

Others covering patent citations

- USPAT databases
- EPFULL
- IFIPAT
- PATDPA

STN[®]

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www.stn-international.com