



T T P

An A to X of Patent Citations and Searching



Jane List

Wednesday 22nd October 2008

ICIC Conference 2008 Nice, France.

The Technology Partnership plc

+44 1763 262626

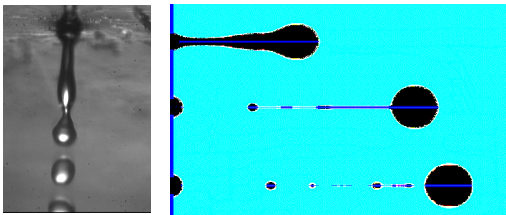
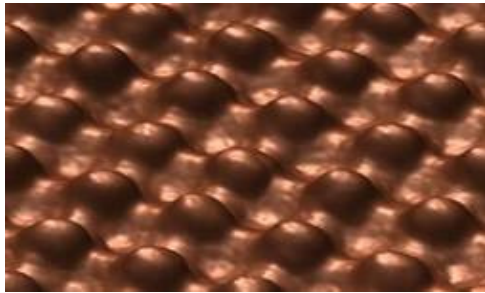
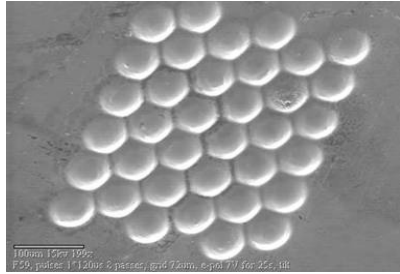
www.ttp.com



The Technology Partnership plc

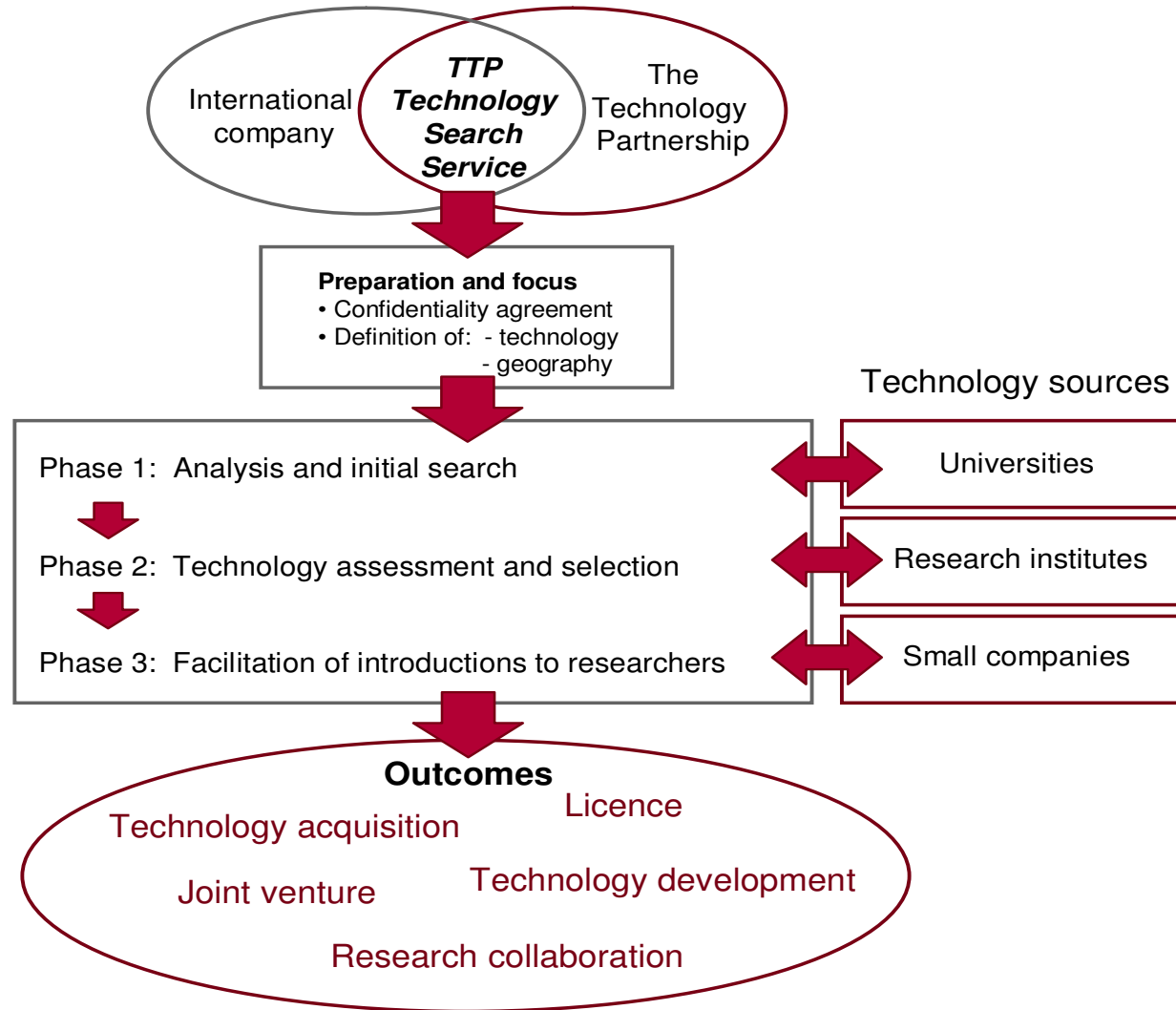
www.ttp.com

- Technology development
- Enabling products for clients
- IP and Searching



T T P

TTP Technology Search Service™ - Open Innovation

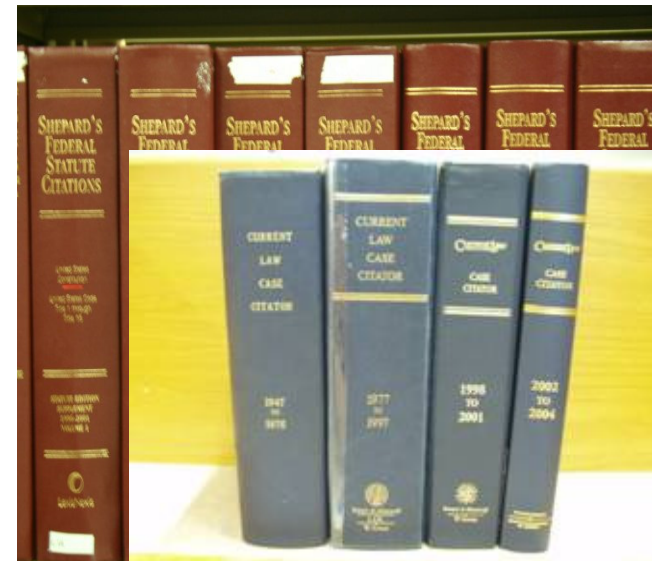


contact: jane.list@ttp.com or peter.leverkus@ttp.com

+44 1763 262626

History of patent citation searching

- Shepard's citation 1873
- US patent citations started in 1947
- Eugene Garfield Science Citation Index 1955
- ISI Patent Citation Index 1964 – 1966
- (Derwent) Patent Citation Index 1994 – 1997, 2007-
- internet based patent office databases 1996 onwards



Cited References on Patents

-US6394363 , EP1071559

- **By inventors**

**Background to the Invention
US IDS**

- **On patent applications:**

**EP, WO, GB
A1, A3, A4
A, X, Y, P, E,T,&**

- **In File Histories:**

**Epoline, PAIR, IPDL
Oppositions**

- **On granted patents**

US, JP, EP

-Michel, J, 2001, *Scientometrics* 51, 201-



US006394363B1

(12) **United States Patent**
Arnott et al.

(10) **Patent No.:** US 6,394,363 B1
(45) **Date of Patent:** May 28, 2002

(54) **LIQUID PROJECTION APPARATUS**

(58) **Field of Search** 239/102.1, 102.2,
239/304, 305, 438, 456, 536, 549, 551,
554, 555, 568, 553.3; 347/46, 47, 68, 69,
70; 134/1.3, 2, 3, 26, 28

(75) **Inventors:** Michael George Arnott; Simon Roger Johnson; Victor Carey Humberstone; Richard Wilhelm Janse Van Rensburg, all of Cambridgeshire (GB)

(56) **References Cited**
U.S. PATENT DOCUMENTS

(73) **Assignee:** The Technology Partnership PLC, Rayston (GB)

5,518,179 A * 5/1996 Humberstone et al. .. 239/102.2
RE35,737 E * 2/1998 Sourlis et al. 347/47
5,798,771 A * 8/1998 Nishii et al. 347/7
5,831,650 A * 11/1998 Reinten 347/68
5,877,789 A * 3/1999 Reinten 347/48
5,964,958 A * 10/1999 Ferrell et al. 134/26

(*) **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.:** 09/673,384

* cited by examiner

(22) **PCT Filed:** Apr. 16, 1999

Primary Examiner—Henry C. Yuen

(86) **PCT No.:** PCT/GB99/01164

Assistant Examiner—Davis Hwu
(74) **Attorney, Agent, or Firm—**Dykame Gossett PLLC

§ 371 (c)(1),
(2), (4) **Date:** Oct. 17, 2000

(57) **ABSTRACT**

(87) **PCT Pub. N**
PCT Pub. I

(56)

References Cited

U.S. PATENT DOCUMENTS

(30) **Foreign**

Aug. 17, 1998 (

(51) **Int. Cl.**7

(52) **U.S. Cl.**

5,518,179 A * 5/1996 Humberstone et al. .. 239/102.2
RE35,737 E * 2/1998 Sourlis et al. 347/47
5,798,771 A * 8/1998 Nishii et al. 347/7
5,831,650 A * 11/1998 Reinten 347/68
5,877,789 A * 3/1999 Reinten 347/48
5,964,958 A * 10/1999 Ferrell et al. 134/26

(56) **Reference**

WO-A-97/ * cited by examiner

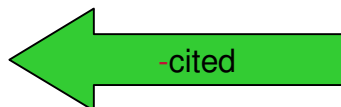
US-A- 4 605 167

US-A- 4 897 903

* **PATENT ABSTRACTS OF JAPAN** vol. 8, no. 28
(M-274), 7 February 1984 (1984-02-07) & JP 58
187369 A (M. MASAYOSHI), 1 November 1983
(1983-11-01)



T T P

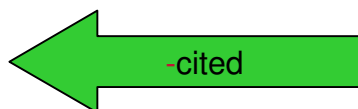


Patent citations – family databases content overview

PATENTING AUTHORITY	YR STARTED	PCI	INPAFAMDB	PATBASE	CAS	QPAT FAMPAT	ESPACENET	USPTO
US	1947	1973	1947	1950	1997	2001		1973
JP	1970	1994	1970?	in prep.		Y		
WO	1978	1978	1978	1978	1997	1978	1978	
EP	1978	1978	1978	1978	1997	1978	1978	
CA	1948				2005			
DE	1957	1994	1941	Y	1997			
FR	1968	2007	1970?	1978	2003			
GB	1978	1994	1978	1978	2003			
NL, BE		2007	Y					
ES		2007	Y					



T T P



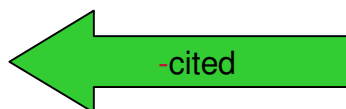
Using patent citations in a search

May form part of a Prior art search

- Part of iterative search process: keywords, citations, classifications, refine
 - *down draft gasification of wood chips*
 - **DOWN DRAUGHT** (e.g. **GB2183249**, **US1821263**)
- Find a heavily cited relevant patent

As part of a Patent Landscaping activity

- Identify competitors
 - **KONARKA/PA.D NOT KONARKA/PA (35)** (removes self-citations)
 - **(P) (X/CAT.D or Y/CAT.D) (6)** (similar technology)
 - **Du Pont; NanoLedge, NanoCrystal Lighting, Universities**
- Identify potential threats / licensees

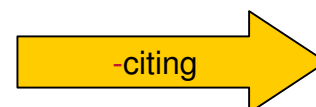
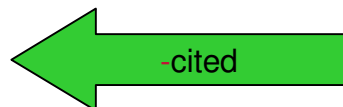


Patent citations - databases functionality overview

FIELDS	PCI	INPAFAMDB	PATBASE	CAS	QPAT FAMPAT	TOTAL PATENT	ESPACENET	USPTO
CITED PATENT COUNT	CDPC, PNC.D (OSC.D)	REP	DISPLAY					
CITING PATENT COUNT	PNC.G							
CITED PATENT SEARCH	PN.D	RPN	LINK	RPN	CITB		LINK	/REF, /FREF
CITING PATENT SEARCH	PN.G		LINK		CITF		LINK	LINK
CITATION CATEGORY	CAT.D, CAT.G	SRT					A3; EPOLINE	*
NPL	REN, CRC	REN, REXP	DISPLAY	REC			A3; EPOLINE	/OREF
TOTAL CITED COUNT	REC	REC						
CITED ASSIGNEE	PA.D							
CITING ASSIGNEE	PA.G							
CITED INVENTOR	IN.D			RIN				/REF
CITING INVENTOR	IN.G							
CITED PUBLICATION YEAR				RPY				

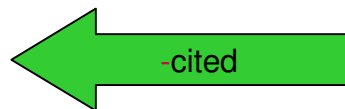
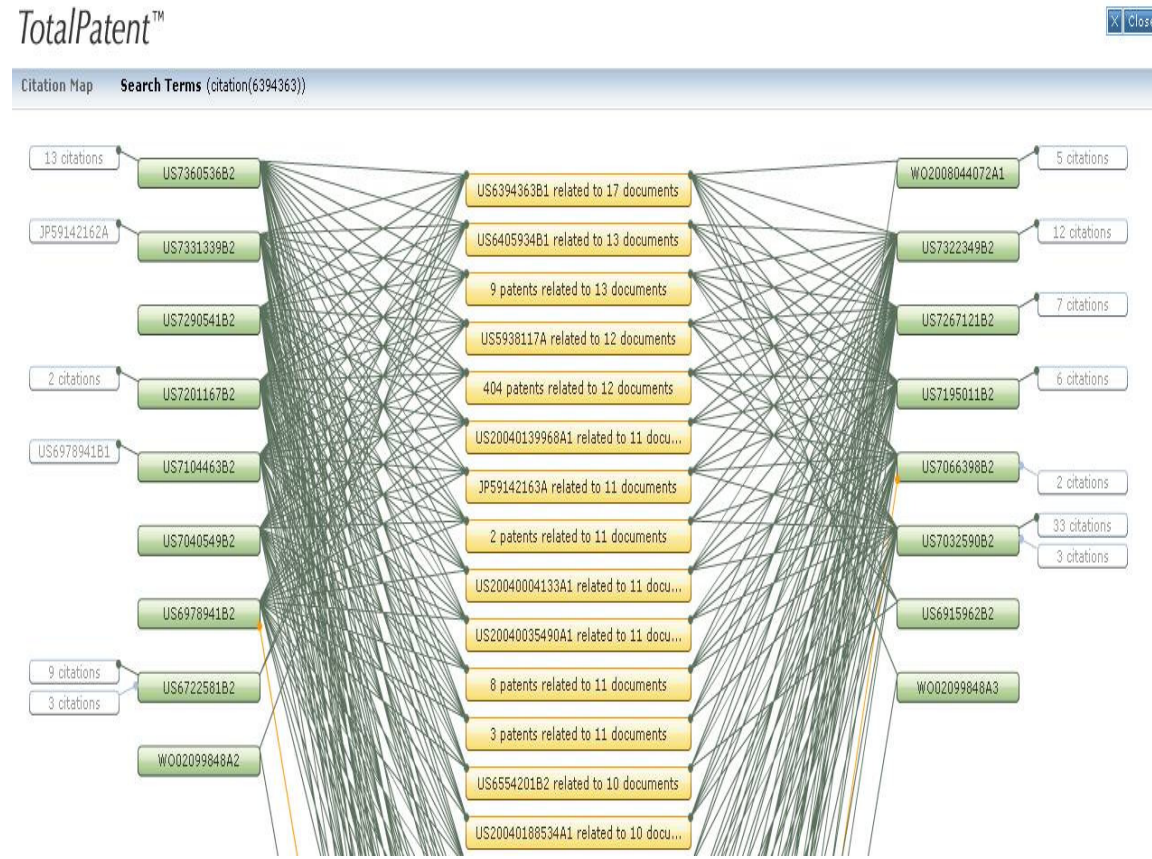
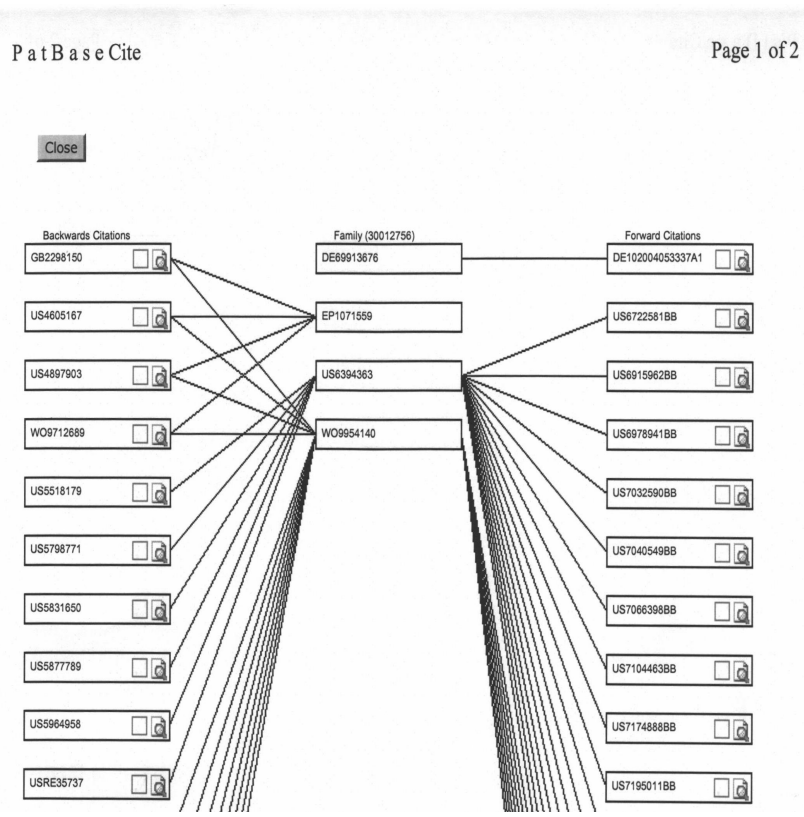


T T P



Patent citations - Trees for Analysis

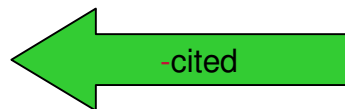
-Based on citations of US6394363



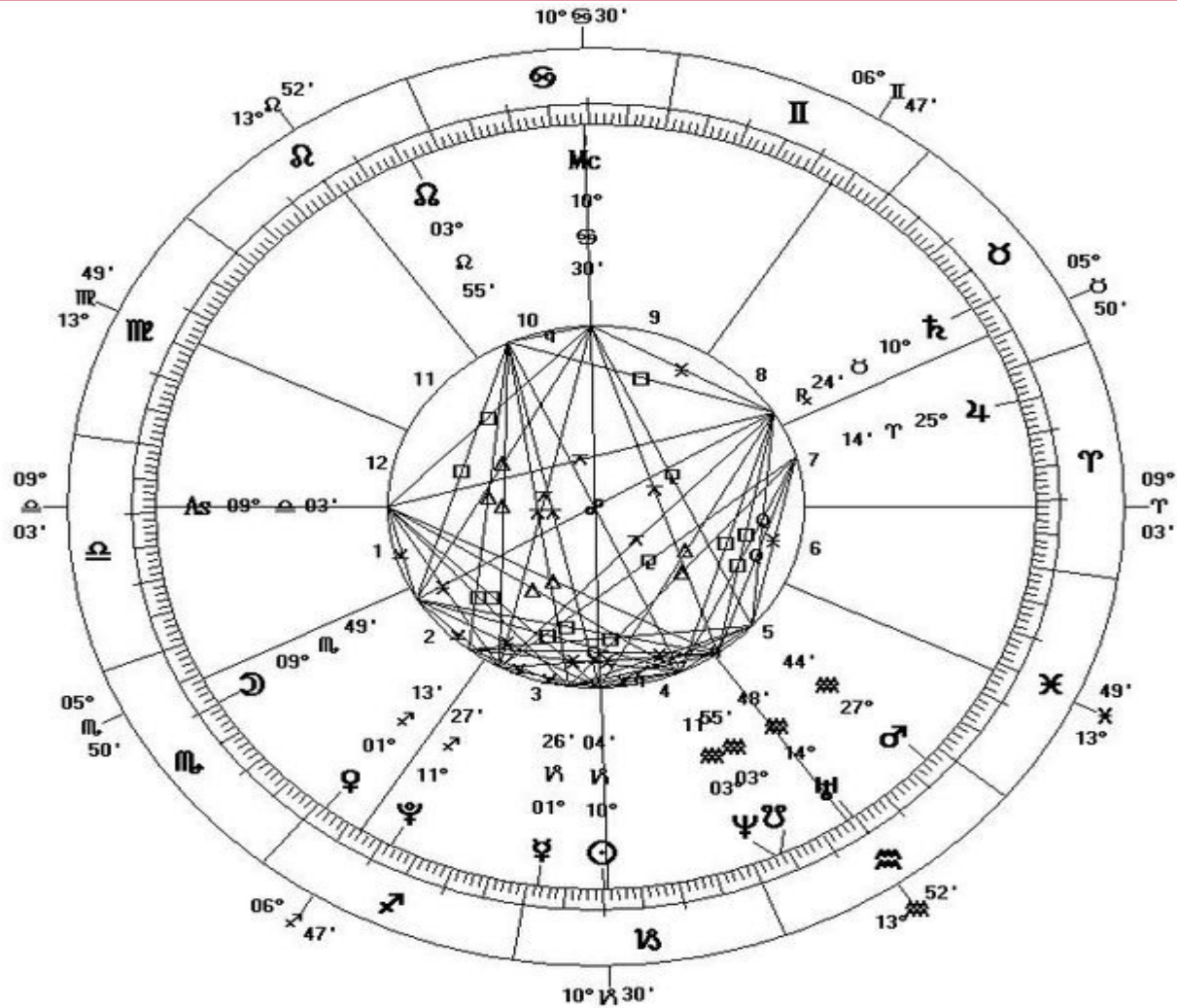
Use Patent Citations to enhance your searches

- Patent citations
 - represent added value from the patent offices
 - are a language independent search tool
 - provide a link between patents related by subject
 - can provide links to older documents
 - are now well covered by major databases

- looking forward to improvements ...



An A to X of Patent Citations and Searching



T T P

