

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 August 2008 (28.08.2008)

(10) International Publication Number
WO 2008/103798 A3

(51) International Patent Classification:

A61L 27/14 (2006.01)

(21) International Application Number:

PCT/US2008/054531

(22) International Filing Date:

21 February 2008 (21.02.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/902,593 21 February 2007 (21.02.2007) US

(71) Applicant (for all designated States except US): **POWERVISION, INC.** [US/US]; 298 Harbor Boulevard, Belmont, CA 94002 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **YOUR, Jingjiong** [US/US]; 22598 Lazy Oak Court, Cupertino, California 95014 (US).

(74) Agent: **ZLOGAR, Thomas M.**; Shay Glenn LLP, 2755 Campus Drive, Suite 210, San Mateo, California 94403 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BY, BW, CZ,

CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

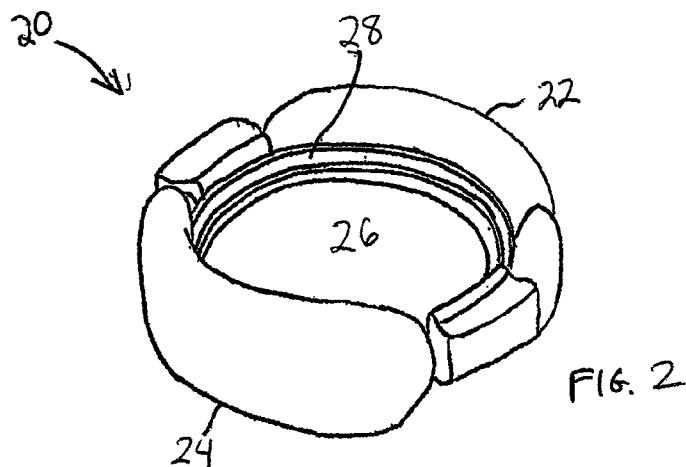
Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

11 September 2009

(54) Title: POLYMERIC MATERIALS SUITABLE FOR OPHTHALMIC DEVICES AND METHODS OF MANUFACTURE



(57) Abstract: Biocompatible polymers useful in ophthalmic devices such as accommodating intraocular lenses. The polymers have improved resistance to the diffusion of fluid, relatively high refractive indexes, and mechanical properties to allow for deformation upon the application of force.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/054531

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61L27/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A61L B29D G02B A61K A61F C08F C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, EMBASE, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 814 680 A (IMAFUKU SUGURU [JP] ET AL) 29 September 1998 (1998-09-29) column 1, line 65 - column 4, line 56; examples 1,4 comparative example 2, claims	14-35
A	WO 2007/005778 A (POWERVISION INC [US]; ESCH VICTOR [US]; CHESKIN BARRY [US]; SCHOLL JOH) 11 January 2007 (2007-01-11) page 1 - page 4, line 8 page 6, line 29 - page 7, line 27 page 9, line 14 - line 17 page 16, line 7 - line 29; claims 1,19-21,39,40	1-40

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

1 July 2009

Date of mailing of the International search report

08/07/2009

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Muellner, Wilhelm

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/054531

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 898 972 A (MENICON CO LTD [JP]) 3 March 1999 (1999-03-03) paragraph [0001] - paragraph [0009] paragraph [0022] - paragraph [0029] paragraph [0057] - paragraph [0061]; tables claims -----	1-40
A	US 6 555 030 B1 (WEINSCHENK III JOSEPH I [US]) 29 April 2003 (2003-04-29) column 1 - column 2, line 12 column 3, line 54 - column 5, line 31 -----	1-40

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2008/054531	
---	--

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5814680	A	29-09-1998	AU	703753 B2		01-04-1999
			AU	4676796 A		11-09-1996
			BR	9606822 A		23-12-1997
			CA	2207010 A1		29-08-1996
			CN	1175905 A		11-03-1998
			DE	69618764 D1		14-03-2002
			DE	69618764 T2		19-09-2002
			EP	0811393 A1		10-12-1997
			ES	2171647 T3		16-09-2002
			HK	1005796 A1		09-08-2002
			IN	187504 A1		11-05-2002
			JP	2967093 B2		25-10-1999
			JP	8224295 A		03-09-1996
			WO	9625962 A1		29-08-1996
			NZ	301359 A		26-08-1998
WO 2007005778	A	11-01-2007	AU	2006265668 A1		11-01-2007
			CA	2613580 A1		11-01-2007
			EP	1906882 A2		09-04-2008
			JP	2008544817 T		11-12-2008
			US	2008015689 A1		17-01-2008
EP 0898972	A	03-03-1999	DE	69813115 D1		15-05-2003
			DE	69813115 T2		24-12-2003
			JP	3641110 B2		20-04-2005
			JP	11056998 A		02-03-1999
			US	6140438 A		31-10-2000
US 6555030	B1	29-04-2003	AT	270611 T		15-07-2004
			AU	5164501 A		07-11-2001
			BR	0106643 A		09-04-2002
			CA	2377841 A1		01-11-2001
			DE	60104191 D1		12-08-2004
			DE	60104191 T2		14-07-2005
			EP	1274562 A2		15-01-2003
			ES	2223823 T3		01-03-2005
			JP	2003530978 T		21-10-2003