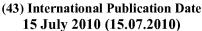


(10) International Publication Number WO 2010/081093 A3



- (51) International Patent Classification: *A61F 2/16* (2006.01) *A61F 9/00* (2006.01)
- (21) International Application Number:

PCT/US2010/020648

(22) International Filing Date:

11 January 2010 (11.01.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/143,559 9 January 2009 (09.01.2009)

US

- (71) Applicant (for all designated States except US): POW-ERVISION, INC. [US/US]; 298 Harbor Boulevard, Belmont, CA 94002 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ARGENTO, Claudio [BR/US]; 298 Harbor Boulevard, Belmont, CA 94002 (US). SMILEY, Terah, Whiting [US/US]; 298 Harbor Boulevard, Belmont, CA 94002 (US). FLAHERTY, Bryan, Patrick [US/US]; 298 Harbor Boulevard, Belmont, CA 94002 (US). CHESKIN, Barry [US/US]; 298 Harbor Boulevard, Belmont, CA 94002 (US).
- (74) Agents: ZLOGAR, Thomas M. et al.; Shay Glenn LLP, 2755 Campus Drive, Suite 210, San Mateo, CA 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, BW, BY, BZ, CA, CH, CL, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, 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:

21 October 2010

**(54) Title**: INTRAOCULAR LENSES AND METHODS OF ACCOUNTING FOR CAPSULE SIZE VARIABILITY AND POST-IMPLANT CHANGES IN THE EYE

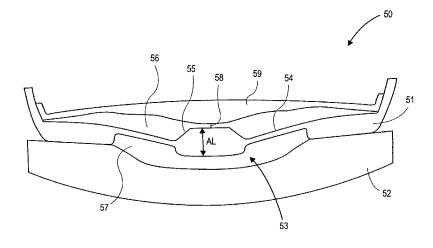


FIG. 7

(57) Abstract: Accommodating intraocular lenses and methods of use which account for changes to a capsular bag post-implantation as well as a mismatch is size between the accommodating intraocular lens and capsule.



International application No. PCT/US2010/020648

#### A. CLASSIFICATION OF SUBJECT MATTER

#### A61F 2/16(2006.01)i, A61F 9/00(2006.01)i

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

#### FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61F 2/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: intraocular, lens, fluid, pressure, non-linear, etc.

#### DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2009-0005865 A1 (SMILEY TERRY W. et al.) 01 January 2009 See abstrac; Figs. 2-7, 15-16; page 3, [0058]; page 5, [0078]; and claims.	30-32 1-22,42-46
A	US 2007-0088433 A1 (-) 19 April 2007 See abstrac; Figs. 1-2; page 4, [0049]; and claims.	1-22,30-32,42-46
A	US 2006-0253196 A1 (-) 09 November 2006 See abstrac; Fig. 1; page 2, [0030]; and claims.	1-22,30-32,42-46
A	US 2008-0046075 A1 (VICTOR ESCH et al.) 21 February 2008 See abstrac; Fig. 1; and claims.	1-22,30-32,42-46

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
- earlier application or patent but published on or after the international filing date
- document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- document referring to an oral disclosure, use, exhibition or other
- 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 mailing of the international search report

Date of the actual completion of the international search

24 AUGUST 2010 (24.08.2010)

24 AUGUST 2010 (24.08.2010)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

BAE, YEO WOOL

Telephone No. 82-42-481-5568



International application No.

DOX NO. 11 Observations where certain claims were found unsearchable (Continuation of item 2 of first sneet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: 23-29, 33-41, 47-52 because they relate to subject matter not required to be searched by this Authority, namely: Claims 23-29, 33-41, and 47-52 pertain to methods for treatment of the human by therapy, as well as diagnostic methods, and thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest  The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.  The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.  No protest accompanied the payment of additional search fees.

Information on patent family members

International application No.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009-0005865 A1	01.01.2009	AU3300879AA	09.07.2004
		AU5299661AA	04.05.2006
		AU8279167AA	29.01.2009
		CA2507694AA	01.07.2004
		CA2584472AA	04.05.2006
		CA2693906AA	29.01.2009
		EP1585563A2	19.10.2005
		EP1816984A2	15.08.2007
		EP1816984A4	13.01.2010
		EP2053991A2	06.05.2009
		EP2178462A2	28.04.2010
		EP2178463A2	28.04.2010
		JP04480585B2	16.06.2010
		JP2006518222T2	10.08.2006
		JP2010501276T2	21.01.2010
		US20030147046A1	07.08.2003
		US20030149480A1	07.08.2003
		US20040169816A1	02.09.2004
		US20040184158A1	23.09.2004
		US20050021139A1	27.01.2005
		US20050119740A1	02.06.2005
		US20060041307A1	23.02.2006
		US20060100701A1	11.05.2006
		US20070010880A1	11.01.2007
		US20070100445A1	03.05.2007
		US20070106377A1	10.05.2007
		US20070203578A1	30.08.2007
		US20070213817A1	13.09.2007
		US20080015689A1	17.01.2008
		US20080046074A1	21.02.2008
		US20080046075A1	21.02.2008
		US20080306588A1	11.12.2008
		US20090005865A1	01.01.2009
		US20090149952A1	11.06.2009
		US20100131058A1	27.05.2010
		US6860601	01.03.2005
		US6935743	30.08.2005
		US7122053	17.10.2006
		US7217288	15.05.2007
		US7247168	24.07.2007
		US7261737	28.08.2007
		US7485144	03.02.2009
		US7637947	29.12.2009
		W004054471A2	01.07.2004
		W004054471A3	26.02.2009
		W006047383A2	04.05.2006
		W006047383A3	14. 12. 2006
		W02008024766A2	28.02.2008
		W02008024766A3	28.02.2008

Information on patent family members

International application No.

Patent document	Publication	Patent family	Publication
cited in search report	date	member(s)	date
		W02009015226A2	29,01,2009
		W02009015226A3	12.03.2009
		W02009015234A2	29.01.2009
		W02009015234A3	30.04.2009
		11020000 10204A0	00.07.2000
US 2007-0088433 A1	19.04.2007	WO 2007-047529 A2	26.04.2007
		W0 2007-047529 A3	26.04.2007
		WO 2007-047529 A3	04.10.2007
US 2006-0253196 A1	09.11.2006	AU 2004-299063 A1	30.06.2005
		BR P10417581A	20.03.2007
		CA 2549203-A1	30.06.2005
		EP 1694253 A1	30.08.2006
		EP 1694253 A4	22.08.2007
		JP 2007-534364 A	29.11.2007
		JP 2007-534364 T	29.11.2007
		US 2005-0131535 A1	16.06.2005
		WO 2005-058205 A1	30.06.2005
		WO 2005-058205 A1	30.06.2005
LIC 2002 0046075 A4	21 02 2002	ALL 2005, 200661 A1	04.05.2006
US 2008-0046075 A1	21.02.2008	AU 2005-299661 A1	04.05.2006
		AU 2005-299661 A2	04.05.2006
		AU 2005-299661 A2	21.08.2008
		AU 2006-265668 A1	11.01.2007
		AU 2006-304339 A1 AU 2007-340043 A1	26.04.2007 10.07.2008
		AU 2007-340043 AT CA 2584472-A1	04.05.2006
		CA 2613580-A1	04.05.2006 11.01.2007
		CA 2626269-A1	26.04.2007
		CA 2674816-A1 CN 101547663 A	10.07.2008
		CN 101547663 A CN 101547663 A	30.09.2009
			30.09.2009
		EP 1816984 A2	15.08.2007 09.04.2008
		EP 1906882 A2	
		EP 1948084 A2 EP 2094193 A2	30.07.2008
		JP 2008-517663 A	02.09.2009
		JP 2008-517663 A JP 2008-544817 A	29.05.2008 11.12.2008
		JP 2008-544817 A JP 2009-511230 A	19.03.2009
		JP 2010-514507 A	06.05.2010
		US 2004-0169816 A1	02.09.2004
		US 2005-0119740 A1	02.06.2005
		US 2006-0041307 A1	23.02.2006
		US 2006-0041307 A1	11.05.2006
		US 2007-0010880 A1	11.03.2006
		US 2007-00106377 A1	10.05.2007
		US 2007-0100377 A1	30.08.2007
		US 2007-0203378 AT	13.09.2007
		US 2007-0213617 A1	17.01.2008
		US 2008-0046074 A1	21.02.2008
		00 2000 0040074 AT	21.02.2000

Information on patent family members

International application No.

Patent document cited in search report  Publication date  US 2008-046075 A1 21.02.2008 US 7122053 B2 17.10.2006 US 7217288 B2 15.05.2007 US 7247168 B2 24.07.2007 US 7261737 B2 28.08.2007 US 7485144 B2 03.02.2009 US 7637947 B2 29.12.2009 W0 2006-047383 A2 04.05.2006
US 7122053 B2 17.10.2006 US 7217288 B2 15.05.2007 US 7247168 B2 24.07.2007 US 7261737 B2 28.08.2007 US 7485144 B2 03.02.2009 US 7637947 B2 29.12.2009
W0 2006-047383 A3       04.05.2006         W0 2007-005778 A2       11.01.2007         W0 2007-005778 A3       11.01.2007         W0 2007-047530 A2       26.04.2007         W0 2007-047530 A3       26.04.2007         W0 2008-077040 A2       26.06.2008         W0 2008-077040 A3       26.06.2008         W0 2008-082957 A2       10.07.2008         W0 2008-082957 A3       10.07.2008