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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))

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27 December 2012

(54) Title: INTRAOCULAR LENS LOADING SYSTEMS AND METHODS OF USE

(57) Abstract: Intraocular lens loading devices, system, and methods of use. The device and systems can be used to load an intraocular lens into a cartridge, from which it can be delivered into a patient's eye. The devices and systems can also be used to simply advance an intraocular lens through any type of loading or delivery device.



WO 2012/129407 A3

**A. CLASSIFICATION OF SUBJECT MATTER****A61F 2/16(2006.01)i, A61F 2/14(2006.01)i, A61F 2/76(2006.01)i**

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)

A61F 2/16; A61F 9/00; A61F 9/007

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) &amp; Keywords: KOMPASS, Google

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008-0033449 A1 (COLE, M. S. et. al.) 07 February 2008	1,5-7,9,18
A	See abstract; paragraph [0005], [0056], [0058]-[0059], [0061], [0063], [0066]-[0068]; claims 1-38.	2-4,8,10-17,19-40
A	US 2005-0049606 A1 (VAQUERO, E. et. al.) 03 March 2005	1-40
	See entire document.	
A	US 2009-0030425 A1 (SMILEY, T. W. et. al.) 29 January 2009	1-40
	See entire document.	
A	US 2010-0324671 A1 (SHADDUCK, J. H.) 23 December 2010	1-40
	See entire document.	
A	US 7074227 B2 (PORTNEY, V.) 11 July 2006	1-40
	See entire document.	



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 application or patent 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 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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

23 OCTOBER 2012 (23.10.2012)

Date of mailing of the international search report

**25 OCTOBER 2012 (25.10.2012)**

Name and mailing address of the ISA/KR

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**INTERNATIONAL SEARCH REPORT**

International application No.

**PCT/US2012/030127****Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

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.:  
because they relate to subject matter not required to be searched by this Authority, namely:
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:

Claims 1-9 are directed to a method of loading a fluid-filled intraocular lens comprising providing a fluid-filled intraocular lens comprising an optic portion and a peripheral portion, applying loading forces and loading the intraocular lens into a delivery or a storage device (Group 1).

Claims 10-17 are directed to a method of loading a fluid-filled intraocular lens comprising providing a fluid-filled intraocular lens comprising an optic portion and a first haptic, applying a loading force and loading the intraocular lens into a delivery or storage device (Group 2).

Claims 18-25 are directed to a method of loading a fluid-filled intraocular lens comprising positioning a plunger distal portion and positioning an intraocular lens into the lens positioning region (Group 3).

- Continued on Supplemental Box -

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.

Continuation of:

Box III

Claims 26-32 are directed to a method of preparing a fluid-filled intraocular lens comprising positioning a plunger distal portion and positioning an intraocular lens into the lens positioning region (Group 4).

Claims 33-35 are directed to a method of deploying a fluid-filled intraocular lens from a delivery device comprising applying a loading force on an optic portion and advancing the intraocular lens out of the cartridge solely (Group 5).

Claims 36-40 are directed to a loading instrument adapted to advance an intraocular lens through a loading device comprising an elongate portion and a distal lens engaging portion (Group 6).

The only common technical feature between Groups 1-6 is a method of loading a fluid-filled intraocular lens comprising providing a fluid-filled intraocular lens and positioning the lens into a lens positioning region. However, this feature lacks novelty and/or inventive step with respect to a document of US 2008-0033449 A1 (COLE, M. S.; 7 February 2008).

Thus, the invention Groups 1-6 do not relate to a single general inventive concept under PCT Rule 13.1 because the above mentioned technical feature fails to contribute over the prior art within the meaning of PCT Rule 13.2.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2012/030127**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2012/030127**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010-0324671 A1	23.12.2010	US 2003-0060878 A1 US 2005-0149183 A1 US 7776088 B2	27.03.2003 07.07.2005 17.08.2010
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