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61/291,131 30 December 2009 (30.12.2009) US(71) Applicants (for all designated States except US):
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: SYSTEM, DEVICE, AND METHOD FOR DETERMINATION OF INTRAOCULAR PRESSURE

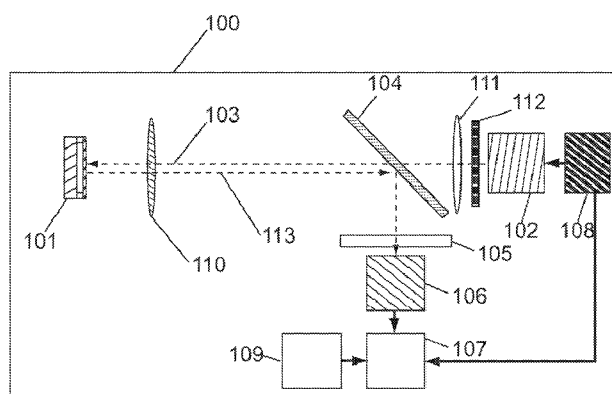


FIG. 1

(57) **Abstract:** A system for determination of intraocular pressure includes: an intraocular pressure sensor; a light source illuminating the sensor with one or more wavelengths of light; and a detector that measures emitted light from the sensor. The sensor includes a substrate member, a spacer member, and a flexible membrane, which define a sealed cavity. The flexible membrane moves in response to intraocular pressure changes. A device for measuring intraocular pressure includes: the sensor; an anchoring member attached to the sensor for immobilizing the sensor in an eye; and a protective member attached to the anchoring member and covering the sensor to prevent contact between the flexible membrane and the eye. A method for determination of intraocular pressure includes: placing the sensor in an eye; illuminating, with a light source, the sensor with one or more wavelengths of light; and detecting, with a detector, a resultant light that contains information about intraocular pressure.

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A. CLASSIFICATION OF SUBJECT MATTER*A61B 3/16(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)

A61B 3/16; A61F 2/16; A61B 5/00

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 pressure, IOP, sensor, flexible membrane, interference, anchor.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 2008-0154114 A1 (ABRAHAM LIVNE et al.) 26 June 2008 See abstract, paragraphs [0039]-[0062], claims 1-43 and figures 1-5.	1,17-18,29 2-16,19-28,30-40
X A	US 2004-0254438 A1 (ROY S. CHUCK et al.) 16 December 2004 See abstract, paragraphs [0031]-[0036], claims 1-18 and figures 1-3.	1,17-18,29 2-16,19-28,30-40
X Y A	US 6939299 B1 (KURT PETERSEN et al.) 06 September 2005 See abstract, column 6, line 28 - column 9, line 65, claims 1-41 and figures 1,3,4,8.	10-11,16 12-14 15
Y	PO-JUI CHEN et al. Microfabricated Implantable Parylene-Based Wireless Passive Intraocular Pressure Sensors. JOURNAL OF MICROELECTROMECHANICAL SYSTEMS VOL. 17, NO. 6, DECEMBER 2008, pages 1342-1351. See figure 2.	12-13
Y	US 2009-0299216 A1 (PO-JUI CHEN et al.) 03 December 2009 See abstract, figure 1-4, 7-23, table II, paragraphs [0044]-[0088].	14



Further documents are listed in the continuation of Box C.



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INTERNATIONAL SEARCH REPORT

International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0123768 A1 (SHARON F. FREEDMAN et al.) 31 May 2007 See abstract, paragraphs [0026]–[0034], claims 1-39 and figures 1-6.	1-40
A	US 4922913 A (GEORGE E. WATERS, JR. et al.) 08 May 1990 See abstract, column 4, line 7 – column 5, line 65, claims 1-8 and figures 1-3.	1-40
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International application No.

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