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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, QA, RO, RS, RU, RW, SC, SD,
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TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,

[Continued on next page]

(54) **Title:** INTRAOCULAR PRESSURE MONITORING DEVICE AND METHODS

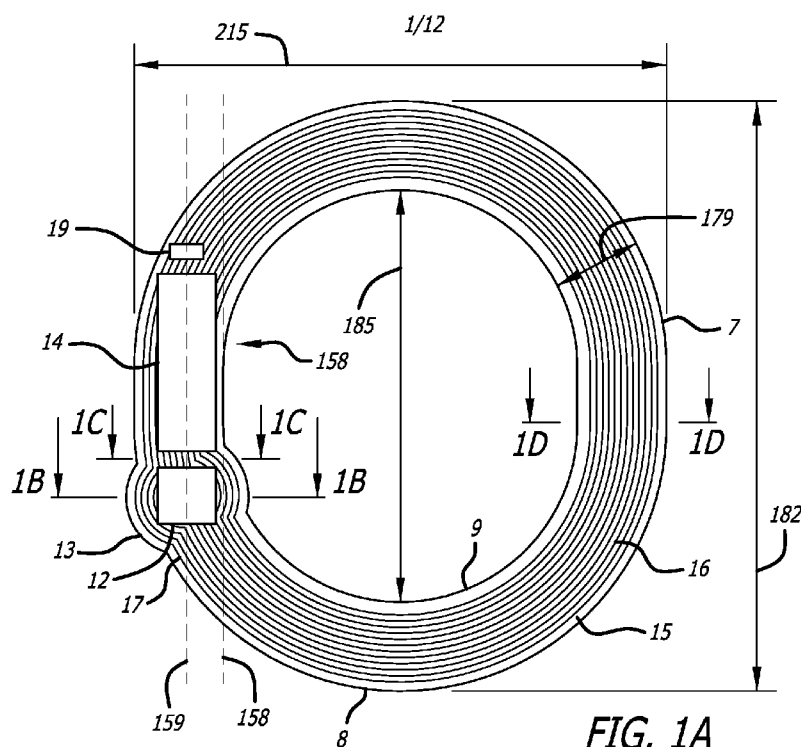


FIG. 1A

(57) **Abstract:** Disclosed herein are intraocular pressure monitoring systems and devices useful for continuously measuring intraocular pressure of an eye in a subject, such as a subject afflicted with glaucoma. Devices described herein can communicate measured pressures wirelessly to a receiver positioned externally to the subject. Also disclosed herein are portable readers, in connection with an intraocular pressure monitoring device, which can be used for data storage, data analysis, data display, and/or data transmission.



DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT,
LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE,
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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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 A61F

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 practicable, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2010/034546 A1 (BOSCH GMBH ROBERT [DE]; HENKE SASCHA [DE]; KLOSE HANS-PETER [DE]) 1 April 2010 (2010-04-01) figures 1-3 page 14, paragraph 3 - page 16, paragraph 1 -----	1-6, 10-13, 68,69, 75,76, 84-87
X	US 2007/123767 A1 (MONTEGRANDE VALENTINO [US] ET AL) 31 May 2007 (2007-05-31) figures 2,5 paragraphs [0042] - [0050], [0059] ----- -/--	1-6, 10-13, 68,69, 75,76, 84-87

☒ 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

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"P" document published prior to the international filing date but later than the priority date claimed

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"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

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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.
X	DE 198 58 172 A1 (CAMPUS MICRO TECHNOLOGIES GMBH [DE]; DATAMARS SA [CH]; MORCHER GMBH [D] 21 June 2000 (2000-06-21) figure 1 page 2, line 61 - page 3, line 22 -----	1-6, 10-13, 68,69, 75,76, 84-87
A	SCHNAKENBERG U ET AL: "Initial investigations on systems for measuring intraocular pressure", SENSORS AND ACTUATORS A, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. 85, no. 1-3, 25 August 2000 (2000-08-25), pages 287-291, XP004214485, ISSN: 0924-4247, DOI: 10.1016/S0924-4247(00)00426-X page 288, right-hand column, lines 28-32 -----	1
A	KALYAN C KATURI ET AL: "Intraocular Pressure Monitoring Sensors", IEEE SENSORS JOURNAL, IEEE SERVICE CENTER, NEW YORK, NY, US, vol. 8, no. 1, 1 January 2008 (2008-01-01), pages 12-19, XP01197896, ISSN: 1530-437X page 15, right-hand column, lines 13-16 -----	1
A	US 2011/022055 A1 (QUINTIN NICOLAS [PL] ET AL) 27 January 2011 (2011-01-27) paragraphs [0004], [0040] -----	1,4-6
A	WO 2007/136993 A1 (MAYO FOUNDATION [US]; SIT ARTHUR J [US]; MCLAREN JAY W [US]) 29 November 2007 (2007-11-29) page 9, lines 2-3 -----	11,12
A	US 6 443 893 B1 (SCHNAKENBERG UWE [DE] ET AL) 3 September 2002 (2002-09-03) cited in the application figure 2 -----	13
A	US 6 579 235 B1 (ABITA JOSEPH L [US] ET AL) 17 June 2003 (2003-06-17) cited in the application column 9, lines 15-18 -----	69
A	WO 2008/027996 A2 (CALIFORNIA INST OF TECHN [US]; TAI YU-CHONG [US]; CHEN PO-JUI [US]; RO) 6 March 2008 (2008-03-06) paragraph [0094] -----	75,76

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2012/000831

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.: 109-116
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
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:

see additional sheet

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 fees, this Authority did not invite payment of additional fees.
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.:
1-6, 10-13, 68, 69, 75, 76, 84-87

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-6, 10-13, 68, 69, 75, 76, 84-87

rollable/foldable intraocular pressure monitoring device

2. claims: 7-9, 14, 70-73

arrangement of the elements of an intraocular pressure monitoring device

3. claims: 15-29, 39-67, 74

substrate for an intraocular pressure monitoring device

4. claims: 30-38

antenna for an intraocular pressure monitoring device

5. claims: 77-83

variants of implantation of an intraocular pressure monitoring device

6. claims: 88-92, 117-144

remote transceiver for an intraocular pressure monitoring device

7. claims: 93-108

carrier for inserting an intraocular pressure monitoring device

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2012/000831

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			WO 2008027996 A2	06-03-2008
