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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, QA, RO, RS, RU, RW, 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.

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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

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(54) **Title:** APPARATUS AND METHODS FOR NON-INVASIVELY MEASURING PHYSIOLOGIC PARAMETERS OF ONE OR MORE SUBJECTS

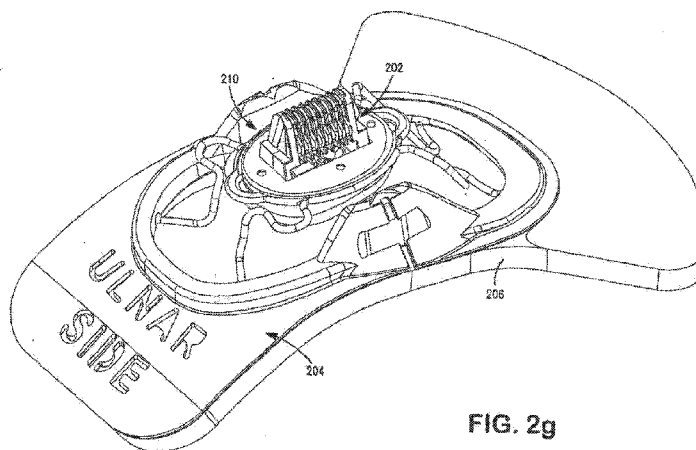


FIG. 2g

(57) **Abstract:** Improved apparatus and methods for non-invasively assessing one or more physiologic (e.g., hemodynamic) parameters associated with a living organism. In one embodiment, the invention comprises an apparatus adapted to automatically and accurately place and maintain a sensor (e.g., tonometric pressure sensor) with respect to the anatomy of the subject. The apparatus is comprised of a sensor device removably coupled to a host device which is used to position the sensor during measurements. Methods for positioning the alignment apparatus and sensor, and operating the apparatus, are also disclosed.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 12/35677

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 5/02, 5/021 (2012.01)

USPC - 600/485, 490

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)

IPC: A61B 5/02, 5/021 (2012.01)

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

IPC: A61B 5/02, 5/021 (2012.01)

USPC: 600/485, 490, 499; 606/201

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

PubWEST (PGPB,USPT,EPAB,JPAB), Google (Patents, Scholar); Keywords: flex\$4, conform\$4, frame\$4, sensor, transducer, film, sheet, membrane, mat\$3, connect\$4, radi\$4, ulna\$4, foam\$2, orient\$6, align\$4, styloid, process, powder\$4, lubric\$6, brace, splint, bracelet, zero\$4, tar\$3, pull\$3, tab, sens\$4, read\$4, measur\$4, physiologic\$4, hemodynamic\$4, esh

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	US 2008/0021334 A1 (Finburgh et al.) 24 January 2008 (24.01.2008) para [0099], [0102], [0135], [0137]-[0140], [0159]-[0163], [0168], [0191]-[0194], [0199], [0211]; Fig. 2a, 2g-2k, 2p, 2y	1-8, 26, 27 ----- 9-25
Y	US 2011/0009723 A1 (Mannheimer et al.) 13 January 2011 (13.01.2011) para [0032]	9-25
Y	US 2006/0135896 A1 (Latimer) 22 June 2006 (22.06.2006) para [0020]	17
Y	US 2009/0131806 A1 (Finburgh et al.) 21 May 2009 (21.05.2009) para [0092], [0121]	18-20

 Further documents are listed in the continuation of Box C.

* 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 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

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