

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 April 2009 (02.04.2009)

(10) International Publication Number
WO 2009/042810 A3

(51) International Patent Classification:
A61B 5/00 (2006.01)

(21) International Application Number:
PCT/US2008/077751

(22) International Filing Date:
25 September 2008 (25.09.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/975,077 25 September 2007 (25.09.2007) US
12/238,260 25 September 2008 (25.09.2008) US

(71) Applicant (for all designated States except US): **ISENSE CORPORATION** [US/US]; 27700 SW 95th Avenue, Wilsonville, OR 97070 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WARD, William, Kenneth** [US/US]; 27700 SW 95th Avenue, Wilsonville, OR 97070 (US). **BRUCE, Robert** [US/US]; 27700 SW 95th Avenue, Wilsonville, OR 97070 (US). **WOOD, Les** [US/US]; 27700 SW 95th Avenue, Wilsonville, OR 97070 (US). **LICHTTENEGGER, Gary** [US/US]; 27700 SW 95th Avenue, Wilsonville, OR 97070 (US).

(74) Agent: **PREWITT, Steven, J.**; Schwabe, Williamson & Wyatt, P.C., 1211 SW Fifth Avenue, Suite 1900, Portland, OR 97204 (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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, MT, NL, NO, PL, PT, RO, SE, SI, SK, 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))

(88) Date of publication of the international search report:
12 August 2010

(54) Title: METHOD AND APPARATUS FOR TREATING SKIN PRIOR TO BIOSENSOR INSERTION

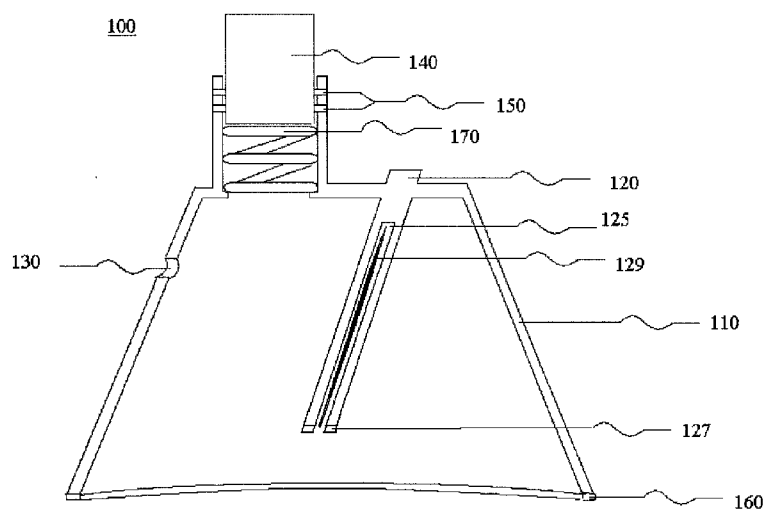


Figure 1

(57) Abstract: Embodiments of the present invention provide a device and method for treating animal skin to produce tautness in the skin during the insertion of an analyte sensor. A device in accordance with embodiments of the present invention includes a housing that partially encloses a cavity and is adapted for mounting onto animal skin and a sensor insertion module adapted to insert an analyte sensor through animal skin.

WO 2009/042810 A3

A. CLASSIFICATION OF SUBJECT MATTER*A61B 5/00(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)

IPC 8: 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 since 1975.

Japanese utility models and applications for utility models since 1975.

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

eKIPASS(KIPO internal)

Keywords: suction, sensor, insertion, tautening

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 6743211 B1 (PRAUSNITZ, M. R. et al.) 1 June 2004 See figure 13, claims 1, 2, 5, 7, and columns 3, 8, 9, 13, 14.	1-4, 7-18, 21-28 ----- 5, 6, 19, 20
Y	US 2003-0199790 A1 (BOECKER, D. et al.) 23 October 2003 See abstract and claims 1, 4, 10.	5, 6, 19, 20
A	US 2005-0197666 A1(RANEY, C. C.) 8 September 2005 See figures 1-3, abstract, and claims 1, 3, 5, 6.	1-28
A	US 6752817 B2 (FLORA, B. A. et al.) 22 June 2004 See figure 4, abstract, and claims 1, 2, 5, 9.	1-28

 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

"&" document member of the same patent family

Date of the actual completion of the international search

08 APRIL 2009 (08.04.2009)

Date of mailing of the international search report

08 APRIL 2009 (08.04.2009)

Name and mailing address of the ISA/KR

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

Facsimile No. 82-42-472-7140

Authorized officer

KIM, KEON HYEONG

Telephone No. 82-42-481-8509



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2008/077751

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6743211 B1	01.06.2004	AU 2000-54613 A1	28.12.2000
		AU 5461300 A	28.12.2000
		CA 2376128 A1	14.12.2000
		EP 1187653 A2	20.03.2002
US 2003-199790 A1	23.10.2003	AU 2003-231749 A1	03.11.2003
		AU 2003-231749 A8	03.11.2003
		AU 2003-234167 A1	03.11.2003
		AU 2003-239160 A1	03.11.2003
		CN 1662174 A	31.08.2005
		EP 1501402 A2	02.02.2005
		EP 1501409 A1	02.02.2005
		EP 1501410 A2	02.02.2005
		JP 2005-523065 T	04.08.2005
		US 7410468 B2	12.08.2008
		US 2004-049220 A1	11.03.2004
		US 2008-0119761 A1	22.05.2008
		US 7226461 B2	05.06.2007
		WO 0308-8824A2	30.10.2003
		WO 0308-8824A3	26.02.2004
WO 0308-8834A1	30.10.2003		
WO 0308-8835A2	30.10.2003		
WO 0308-8835A3	24.12.2003		
US 2005-197666 A1	08.09.2005	EP 1737344 A1	03.01.2007
		US 7377903 B2	27.05.2008
		WO 2005-094683 A1	13.10.2005
US 6752817 B2	22.06.2004	US 2002-138040 A1	26.09.2002