

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 August 2008 (14.08.2008)

PCT

(10) International Publication Number
WO 2008/097475 A3

- (51) **International Patent Classification:**
A61B 8/08 (2006.01) A61B 5/107 (2006.01)
- (21) **International Application Number:**
PCT/US2008/001373
- (22) **International Filing Date:** 1 February 2008 (01.02.2008)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
60/899,282 2 February 2007 (02.02.2007) US
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- (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, FT, 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, 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
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

- (88) **Date of publication of the international search report:**
25 September 2008

(54) **Title:** METHOD AND SYSTEM FOR DETERMINING PLACENTAL VOLUME

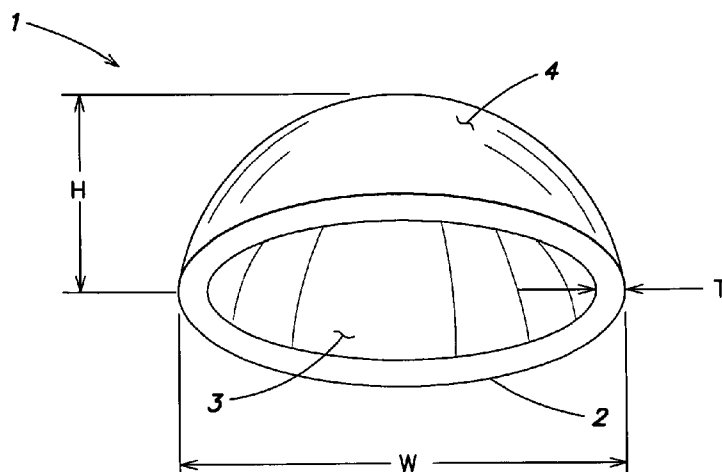


FIG. 1

(57) **Abstract:** Method and system for determining a volume of a placenta in utero. The placenta in utero may be modeled as having a convex-concave shape (e.g., like that of a portion of a spherical shell). Volume of the placenta may be determined based on the width (or height) and thickness of the placenta, or based on width, height and thickness of the placenta. Placenta size characteristics may be measured using imaging techniques, such as ultrasound. In one aspect of the invention, a volume of a placenta in utero may be compared to the volume of other placentas for similar gestational age, and a determination regarding whether the placenta volume poses a risk to fetal health may be made.

WO 2008/097475 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/001373

A CLASSIFICATION OF SUBJECT MATTER
INV. A61B8/08 A61B5/107

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

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 practical search terms used)

EPO-Internal

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document with indication where appropriate of the relevant passages	Relevant to claim No
X	HABIB, FAWZIA A: "Prediction of low birth weight infants from ultrasound measurement of placental diameter and placental thickness" ANNALS OF SAUDI MEDICINE, vol. 22, no. 5-6, November 2002 (2002-11), pages 312-314, XP002489653 page 312, column 1, line 1 - page 313, column 1, line 6 paragraph [DISCUSSION]	1-5,7,8
Y	----- -/-	6,9, 13, 19



Further documents are listed in the continuation of Box C



See patent family annex

" Special categories of cited documents

"A¹ document defining the general state of the art which is not considered to be of particular relevance

"E' earlier document 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

'&¹ document member of the same patent family

Date of the actual completion of the international search

25 July 2008

Date of mailing of the international search report

11/08/2008

Name and mailing address of the ISA/

European Patent Office P B 5818 Patentlaan 2
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Authorized officer

Batai Ile, Frederic

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/001373

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document with indication where appropriate of the relevant passages	Relevant to claim No
X	WO 2006/062867 A (DIAGNOSTIC ULTRASOUND CORP [US]; CHALANA VIKRAM [US]; MCMORROW GERALD) 15 June 2006 (2006-06-15) paragraphs [0050], [0055], [0078], [0079] paragraphs [0095] - [0104] figure 10	10-12, 14-18
Y	-----	9, 13, 19
Y	JAUNIAL)X ERIC ET AL: "Ultrasonographic investigation of placental morphologic characteristics and size during the second trimester of pregnancy" AMERICAN JOURNAL OF OBSTETRICS & GYNECOLOGY, MOSBY, ST LOUIS, MO, US, vol. 170, no. 1, 1 January 1994 (1994-01-01), pages 130-137, XP008093646 ISSN: 0002-9378 paragraph [COMMENT] -----	6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/001373-

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. ☒ LKJ Claims NOS.: 21-27
because they relate to subject matter not required to be searched by this Authority, namely:

Claims 21-27 : Rule 39.1(iv) PCT - Diagnostic method practised on the human or animal body
Claim 26 : Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy
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:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable 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 reportcovers 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.

D No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/001373

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2006062867 A	15-06-2006	US 2007004983 A1	04-01-2007