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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))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) **Date of publication of the international search report:**
15 April 2010

(54) **Title:** WIRELESS ULTRASOUND MONITORING DEVICE

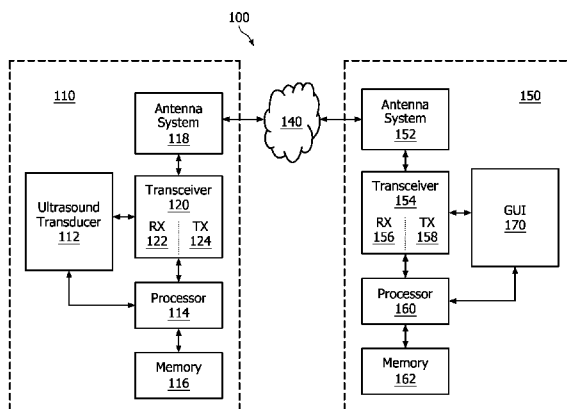


FIG. 1

(57) **Abstract:** A monitoring system includes a transducer and a wireless interface. The transducer receives ultrasonic imaging signals reflected from a target object and provides imaging data based on the received imaging signals. The wireless interface communicates the imaging data over a wireless communications network to a host device. The transducer may include a transesophageal echocardiogram (TEE) ultrasound transducer probe, a transnasal TEE (TNE) ultrasound transducer probe, or a transthoracic transducer.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2009/053627

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B8/12 A61B1/273

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/110261 A1 (RANDALL KEVIN S [US] ET AL) 15 May 2008 (2008-05-15)	1-8
Y	paragraph [0059] paragraph [0168] paragraph [0187] paragraph [0196] paragraph [0237] - paragraph [0238] figures	9
X	WO 2008/057566 A (BELSON AMIR [US]) 15 May 2008 (2008-05-15)	1
Y	page 4, line 4 - page 6, line 28; figures ----- -/--	9,11

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 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.

"&" document member of the same patent family

Date of the actual completion of the international search

26 October 2009

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10/02/2010

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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.
X	US 2003/163045 A1 (GATZKE RONALD D [US]) 28 August 2003 (2003-08-28)	1, 10
Y	paragraph [0025] paragraph [0030] paragraph [0034] - paragraph [0035]; figures -----	11
Y	US 6 379 304 B1 (GILBERT JEFFREY M [US] ET AL) 30 April 2002 (2002-04-30) paragraph [0060] -----	9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2009/053627

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.:
because they relate to subject matter not required to be searched by this Authority, namely:

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.:

see annex

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: 1-11

TEE ultrasound transducer probe comprising a wireless interface

2. claims: 12-17

TEE ultrasound transducer probe comprising an articulated distal tip

3. claims: 18-20

plurality of transthoracic transducers and a transceiver sending the collective imaging data wirelessly to a host device

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IB2009/053627

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008110261 A1	15-05-2008	WO 2008060438 A2	22-05-2008
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