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(54) Title: WIRELESS PATIENT MONITORING DEVICE FOR MAGNETIC RESONANCE IMAGING

(57) Abstract: The invention relates to systems, methods, and associated devices for wirelessly communicating physiologic signals or other data in an electromagnetically noisy environment, such as a magnetic resonance imaging (MRI) suite. They permit wireless communication of data obtained from a sensor module attached to a patient while situated within the bore of an MR scanner. The system includes a first transceiver and a second transceiver. The first transceiver is linked to the sensor module for transmitting the data received therefrom. The second transceiver, which is connected to an apparatus remote from the first transceiver, is used to convey to the apparatus the data received from the first transceiver. The first and second transceivers enable the sensor module and the apparatus to communicate unidirectionally or bidirectionally without being adversely affected by, or adversely affecting, the operation of the MR system.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/24652

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC: A61B 5/05(2006.01)

USPC: 600/410,411  
 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)  
 U.S. : 600/410,411

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0095263 A1 (VARSHNEYA ET AL.) 22 May 2003 (22.05.2003), entire document	1-38
A	US 6,052,614 A (MORRIS, SR, ET AL.) 18 April 2000 (18.04.2000), entire document	1-38
A	US 6,704,592 B1 (REYNOLDS ET AL.) 09 March 2004 (09.03.2004), entire document	1-38

<input type="checkbox"/> Further documents are listed in the continuation of Box C.	<input type="checkbox"/> See patent family annex.
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