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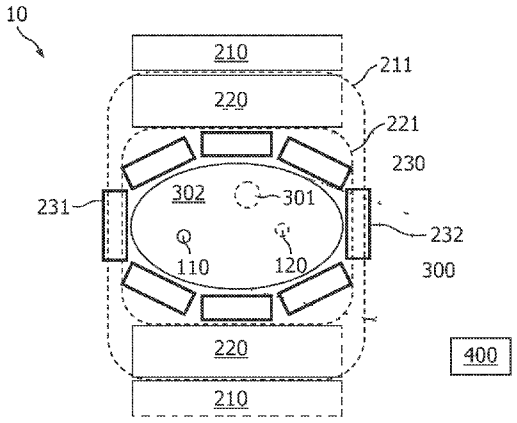
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25 September 2008

(54) **Title:** METHOD AND ARRANGEMENT FOR LOCATING MAGNETIC MARKERS IN A REGION OF ACTION



(57) **Abstract:** A method and an arrangement for influencing and/or detecting and/or locating magnetic markers in a region of action is disclosed, which method comprises the steps of: generating a magnetic drive field so that the magnetization of the magnetic marker changes, generating a magnetic selection field having a pattern in space of its magnetic field strength providing a magnetic field gradient in the region of action, acquiring a first signal by means of a first receiving probe and acquiring a second signal by means of a second receiving probe, the first receiving probe and the second receiving probe being located at different locations relative to the region of action, the first signal and the second signal depending on the magnetization of the magnetic marker in the drive field and in the selection field and further depending on the location of the magnetic marker, the magnetic selection field having a first magnetic field strength configuration, repeating at least once the acquisition of the first signal and of the second signal in the presence of the selection field having a second magnetic field strength configuration, computing an estimation of the location of the magnetic marker by means of the acquired signals.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B5/00 G01N27/00

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 G01N

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	US 2003/085703 A1 (GLEICH BERNHARD [DE]) 8 May 2003 (2003-05-08)	1-3, 5-12, 14-18
Y	abstract; claims 1-17; figures 1,2,6a-d 'paragraphs [0006] - [0017], [0045] - [0070]	4,13
X	GLEICH B ET AL: "Magnetic particle imaging (MPI)" MEDICAMUNDI, PHILIPS MEDICAL SYSTEMS, SHELTON, CT, US, vol. 50, no. 1, 1 May 2006 (2006-05-01), pages 66-71, XP008080803 ISSN: 0025-7664	1-3, 5-12,. 14-18
Y	the whole document	4,13

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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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.
Y	US 6 168 780 B1 (ANDRAE WILFRIED [DE]) 2 January 2001 (2001-01-02) the whole document	4,13
Y	WEITSCHIES W. ET AL.: "Magnetic marker monitoring: an application of biomagnetic measurement instrumentation and principles for the determination of the gastrointestinal behavior of magnetically marked solid dosage forms" ADVANCED DRUG DELIVERY REVIEWS, vol. 57, 2005, pages 1210-1222, XP002485152 the whole document	4,13

INTERNATIONAL SEARCH REPORT

Information on patent family members

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