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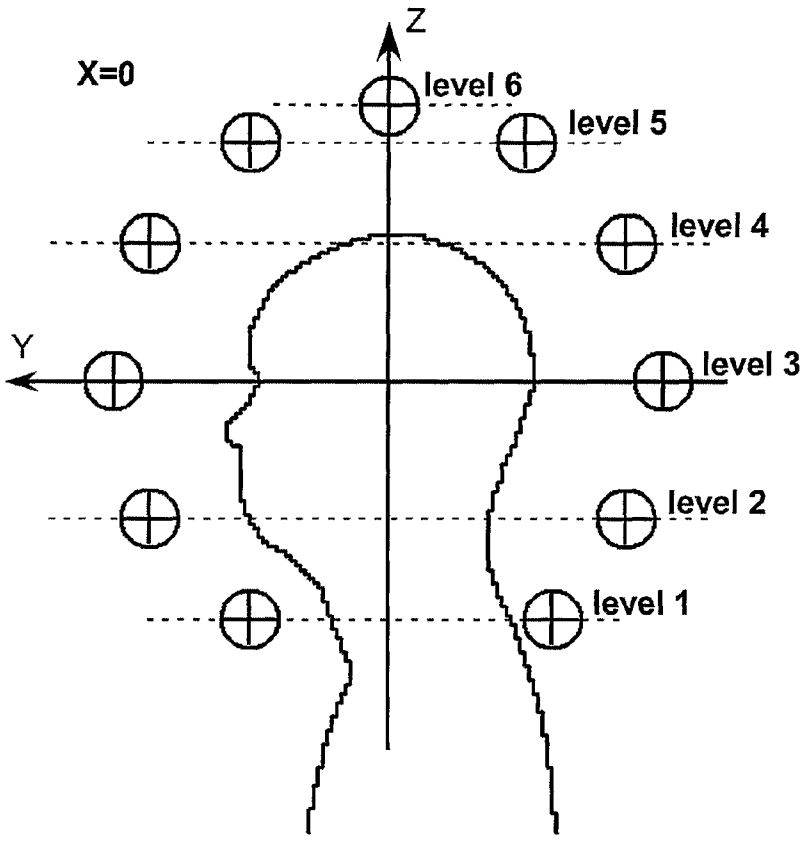
[Continued on next page]

(54) Title: RF COIL FOR A HIGHLY UNIFORM B1 AMPLITUDE FOR HIGH FIELD MRI



(57) Abstract: An array coil to achieve more uniform RF excitation for high field magnetic resonance imaging. In the preferred embodiment, the array coil has a plurality of transmit- composite elements distributed around the object to be imaged. A composite element comprises up to three current loops preferably orthogonal to each another. The array coil has the capability to shape the distribution of all three orthogonal components (x, y, and z) of the RF B_1 field.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC: **G01V 3/00**(2006.01)
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USPC: 324/318,322;600/422
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. : 324/318,322, 319,309;600/422,421

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,313,633 A (BOSKAMP) 06 November 2001 (06.11.2001), column 3, lines24-52.	1-20
A	US 6,768,303 A (SU ET AL) 27 July 2004 (27.07.2004), see abstract of the disclosure.	1-20
A	US 5,804,969 A (LIAN ET AL) 08 September 1998 (08.09.1998), see abstract of the disclosure and Fig. 1.	1-20

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

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Continuation of B. FIELDS SEARCHED Item 3:
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