FUNCTIONAL IMAGING IN FREELY MOVING SUBJECT

A system for monitoring brain activity in a mobile animal or human subject is disclosed which comprises a first device adapted for attaching fiber optical cables to the head of a subject. A second device is detachably coupled to the first device and holds the fiber optical cables. The fiber optic cables provide a communicating light path between a tomographic imaging device and the brain of the subject when the second device is plugged into the first device in a manner equivalent to plugging a male connector into a female connector.
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC: G06K 9/00(2006.01);A61B 6/00(2006.01);G01N 23/00(2006.01);G21K 1/12(2006.01);H05G 1/60(2006.01)
USPC: 382/131;378/21;600/378,383
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.: 382/131;378/21;600/378,383

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 6,602,220 B1 (Ludvig et al.) 5 August 2003 (05.08.2003), columns 1 and 5.</td>
<td>1-18</td>
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<tr>
<td>Y</td>
<td>US 2005/0107716 A1 (Eaton et al.) 19 May 2005 (19.05.2005), paragraphs 31, 34, 45, 47.</td>
<td>1-18</td>
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<td>Y</td>
<td>US 6,475,188 B1 (Baxter) 5 November 2002 (05.11.2002), columns 1-2.</td>
<td>2-4</td>
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<tr>
<td>Y</td>
<td>US 2005/0203366 A1 (Donoghue et al.) 15 September 2005 (15.09.2005), paragraphs 73-74.</td>
<td>9,14</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C.

Date of the actual completion of the international search: 30 August 2007 (30.08.2007)

Date of mailing of the international search report: 23 OCT 2007

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