METHODS FOR MEASURING TISSUE IMPEDANCE AND DEVICES THEREOF

A method and apparatus for measuring an impedance of a tissue region inside a body of a patient. A first guidewire is advanced into a tissue region of a body of a patient, wherein the first guidewire comprises one or more electrodes electrically coupled to the tissue region. A second guidewire is advanced into the body, wherein the second guidewire comprises one or more electrodes electrically coupled to the tissue region of the body of the patient and spaced from the first guidewire. An error correction electrode is electrically coupled to the body. A voltage is applied across the first and the second guidewires. The impedance of the tissue region between the first and the second guidewires is measured while using an electrical pathway created by the error correction electrode.
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))
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 5/04, 5/05, 17/22, 18/18 (2014.01)
USPC - 606/33, 49, 128

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)

IPC(8) - A61B 5/04, 5/05, 17/22, 18/18 (2014.01)
USPC - 606/33, 49, 128; CPC - A61B 5/02007, 18/18, 18/245, 2018/1861

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database 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>X</td>
<td>US 4729385 A (JUNCOSA, RD et al.) March 08, 1988; abstract: figures 2, 5, 6A-6B; column 2, lines 60-61; column 3, lines 8-9, 60-66; column 4, lines 15-28, 45-60; column 5, lines 4-11; claim 1</td>
<td>1-2, 7-8</td>
</tr>
<tr>
<td>Y</td>
<td>US 2009/0131925 A1 (TEMPEL, MA et al.) May 21, 2009; figure 2; paragraph [0035]; claim 40</td>
<td>3-6, 9-12</td>
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<tr>
<td>Y</td>
<td>US 2004/0082962 A1 (DEMARAIS, D et al.) April 29, 2004; figure 9; paragraph [0059]; claim 32</td>
<td>6, 12</td>
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Further documents are listed in the continuation of Box C.

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Date of the actual completion of the international search: 15 August 2014 (15.08.2014)

Date of mailing of the international search report: 05 SEP 2014

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201

Authorized officer: Shane Thomas

PCT Helpdesk: 571-272-4300
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