Abstract:
The present invention provides systems, apparatus and methods for selectively applying electrical energy to body tissue. A device is provided having an enclosure within an outer wall formed from an electrically-permeable material. The device further includes an electrode positioned within the interior of the enclosure and a fluid passage coupled to the enclosure for delivery of an electrically conductive fluid into the interior so that the electrically conductive fluid couples the electrode with the electrically-permeable section of the outerwall. The conductive fluid allows for the passage of electrical energy from the electrode for treatment of tissue on or in a patient. In this manner, the electrode does not directly contact the tissue of the patient, which reduces the potential for collateral tissue damage or necrosis and/or excessive electric fields in the tissue.
**INTERNATIONAL SEARCH REPORT**

**INTERNATIONAL APPLICATION**

**International application No.**
PCT/US 09/36259

**A. CLASSIFICATION OF SUBJECT MATTER**

<table>
<thead>
<tr>
<th>IPC(8)</th>
<th>Classification</th>
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<td>A61 B 18/00 (2009.01)</td>
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**USPC - 606/41**

**B. FIELDS SEARCHED**

**Minimum documentation searched (classification system followed by classification symbols)**

USPC: 606/41

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

USPC: 604/19, 20, 48, 508, 509, 96.01; 606/32; 41; 607/2, 3, 9, 46, 63, 115, 116 (text searched-s [ie terms below])

**Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)**

PubWest (POPB, USPT, USOC, EPAB, and JPAB); Google Scholar

Search Terms: electrode$1, electr:ecT,S, electromagnets, balloon, [expandS, inflatS, deformS, innervatS, stimulatS, modulatS, inhibitS, exciT,S, nerve, vagal, and vagus

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<td>X</td>
<td>US 2005/0165388 A1 (BHOLA) 28 July 2005 (28.07.2005), entire document, more specifically, Fig 1A-3B, 4B, 5A, 6A-6C, 7B, 8A-8D, and 12-15A, para[0003], [0004], [0006]-[0063], [0065]-[0068], [0070], [0071], [0074]-[0078], [0086], [0088]-[0092], [0094], [0096], [0099], [0106], [0107], [0115], [0136], [0154], [0157], and [0171]-[0186]</td>
<td>1-10, 13-15, 18, 20, 21, 23-29, 35-44, 51, and 56</td>
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<td>Y</td>
<td>US 5,056,332 A (HULL et al.) 15 October 1991 (15.10.1991), entire document, more specifically, Fig 1, 2, and 5, col 1, in 20 to col 3, in 24</td>
<td>11, 12, 16, 17, 19, 22, 45-50, and 53-55</td>
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<td>Y</td>
<td>US 2007/0191902 A1 (ERRICO et al.) 16 August 2007 (16.08.2007), entire document, more specifically, abstract, para[0006], [0036], [0037], [0039], and [0049]-[0052]</td>
<td>30-34 and 52</td>
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**D. DOCUMENTS CITED**

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**Date of the actual completion of the international search**

23 April 2009 (23.04.2009)

**Date of mailing of the international search report**

11 MAY 2009

**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. 671-273-3201

**Authorized officer:**

Lee W. Young

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PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (April 2007)