Abstract: A method for medical treatment includes bringing an applicator, having an array of protrusions disposed thereon, into proximity with a skin surface of a patient so as to maintain a space between a plurality of the protrusions and the skin surface. Radio-frequency (RF) electrical power is applied to the applicator so as to cause electrical discharges to be generated, in response to the RF electrical power, between the plurality of the protrusions and respective points on the skin surface via a fluid medium in the space.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A61B 18/18 (2009.01)
USPC - 606/41
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)
USPC: 606/41
IPC(8): A61B 18/18 (2009.01)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 606/1, 9, 32, 34; 607/1, 2, 95, 98, 100, 101, 104, 115, 145, 147, 148, 153

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST, Google Scholar: (rf or radio adj frequency) and skin and skin near10 (electricS4 or dischargs4) and (roller or applicator) and protrusion and resonant near5 circuit and impedance and (pulse near5 modulation or pwm) and phase and unipolar

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 2006/0189978A1 (KARN et al.) 24 August 2008 (24.08.2008) para [0002], [0043]-[0063], [0116]-[0155]; Fig. 1B, 3, 5 and 8</td>
<td>1-13 and 30-41</td>
</tr>
<tr>
<td>Y</td>
<td>WO 2005/098980A1 (GANZ et al.) 20 October 2005 (20.10.2005) p 4, ln 11-17; p 10, ln 31-33; p 11, ln 1-22; Fig. 1-3</td>
<td>1-13 and 30-41</td>
</tr>
</tbody>
</table>

* Special categories of cited documents:
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  "O" document referring to an oral disclosure, use, exhibition or other means
  "P" document published prior to the international filing date but later than the priority date claimed
  "S" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
  "S" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
  "S" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
  "S" document member of the same patent family

Date of the actual completion of the international search
11 July 2009 (11.07.2009)

Date of mailing of the international search report
27 JUL 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. 571-273-3201

Authorized officer: Lee W. Young
PCT Helpdesk: 571-272-4300
PCT OGP: 571-272-7774
### Box No. II  Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
   - because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 22-29
   - because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
   - Claim numbers 14-21 are missing from the international application as filed. Claims 22-29 are each written as dependent on one or more of claims 16-23. The scope of claims 22-29 cannot be ascertained absent the content of the missing base claims. Therefore, no international search has been carried out for claims 22-29.

3. ☐ Claims Nos.:
   - because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box No. III  Observations where unity of invention is lacking (Continuation of Item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant’s protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2007)