Title: SYSTEM AND METHOD FOR DETERMINING AND CONTROLLING CORE BODY TEMPERATURE

Abstract: Systems and methods for accurate temperature modification of a patient, or selected regions thereof, including inducing hypothermia. The temperature modification is accomplished using an in-dwelling heat exchange catheter within which a fluid heat exchange medium circulates. A heat exchange cassette attached to the circulatory flow lines of the catheter, the heat exchange cassette being sized to engage a cavity within a control unit. A temperature measurement scheme for obtaining body core temperature is provided, including methods of obtaining and analyzing temperature data to provide feedback to the control unit for use in controlling the heating and cooling of the heat exchange medium so as to heat or cool a patient to a desired target temperature.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC(7) : A61F 7/00
   US CL : 607/104-106
   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. : 607/104-106
   Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
   NONE
   Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
   NONE

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></td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td>document</td>
<td></td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td>38-39</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 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

T* 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

X* 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

Y* 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

&A* document member of the same patent family

Date of the actual completion of the international search
02 February 2004 (02.02.2004)

Date of mailing of the international search report
10 March 2004

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. (703)305-3230

Authorized officer: [Signature]
Roy D. Gibson
Telephone No. 703-305-3520

Form PCT/ISA/210 (second sheet) (July 1998)