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- with international search report (Art. 21(3))
- 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))

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(54) Title: VENOUS WARMING DEVICE

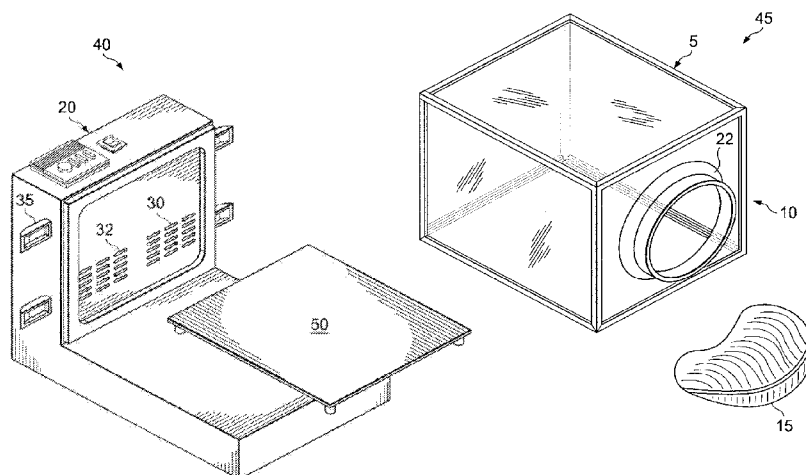


FIG. 9

(57) Abstract: An apparatus for increasing venous blood flow to an extremity of a patient is disclosed. The apparatus includes a forced heated air unit, and a detachable transparent housing having an opening through which the extremity of the patient may be introduced in to the detachable transparent housing.



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**A. CLASSIFICATION OF SUBJECT MATTER***A61F 7/00(2006.01)i, F24F 3/00(2006.01)i, A61L 2/06(2006.01)i*

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)

A61F 7/00; A01K 1/03; A01K 1/00; A61G 11/00; A61F 7/12; A01G 23/10; A61B 5/00

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)

eKOMPASS(KIPO internal) &amp; Keywords: venous blood, heater, fan, transparent housing, vent, and controller.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5728142 A (JOHN M. PROKOPCHAK et al.) 17 March 1998 See abstract; c. 2, l. 48-c. 5, l. 55; claims 1-12; Fig. 1.	1-5
Y	JP 10-150877 A (TOKYO MENITSUKUSU KK) 09 June 1998 See abstract; paragraphs [12]-[32]; claim 1; Fig. 2.	1-5
A	US 6074363 A (ANTHONY V. BERAN et al.) 13 June 2000 See the whole document.	1-5
A	US 6565593 B2 (LAWRENCE G. DIANA) 20 May 2003 See the whole document.	1-5
A	US 6036633 A (COLIN G. HODGE) 14 March 2000 See the whole document.	1-5
A	EP 0447958 A1 (DRAGERWERK AKTIENGESELLSCHAFT) 25 September 1991 See the whole document.	1-5

 Further documents are listed in the continuation of Box C. See patent family annex.

\* 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 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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

08 NOVEMBER 2010 (08.11.2010)

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**16 NOVEMBER 2010 (16.11.2010)**

Name and mailing address of the ISA/KR

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**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.: 6-10  
because they relate to subject matter not required to be searched by this Authority, namely:  
Claims 6-10 pertain to methods for treatment of human body by therapy, thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.
2.  Claims Nos.:  
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:
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 an additional fee, this Authority did not invite payment of any additional fee.
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.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2010/026166**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5728142 A	17.03.1998	None	
JP 10-150877 A	09.06.1998	None	
US 6074363 A	13.06.2000	None	
US 6565593 B2	20.05.2003	US 2002-128699 A1	12.09.2002
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EP 0447958 A1	25.09.1991	DE 4008822 A1	26.09.1991
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		US 5100375 A	31.03.1992