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MO2010A000270 29 September 2010 (29.09.2010) IT
- (71) **Applicant (for all designated States except US):** **RAND S.R.L.** [IT/IT]; Strada Statale 12, n. 62, I-41036 Medolla (MO) (IT).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** **BELLINI, Corrado** [IT/IT]; Via Montale, 21, I-41036 Medolla (MO) (IT). **GALAVOTTI, Daniele** [IT/IT]; Via Marche, 11, I-41037 Mirandola (MO) (IT). **RONCO, Claudio** [IT/IT]; Viale Astichello, 8, I-36100 Vicenza (VI) (IT).
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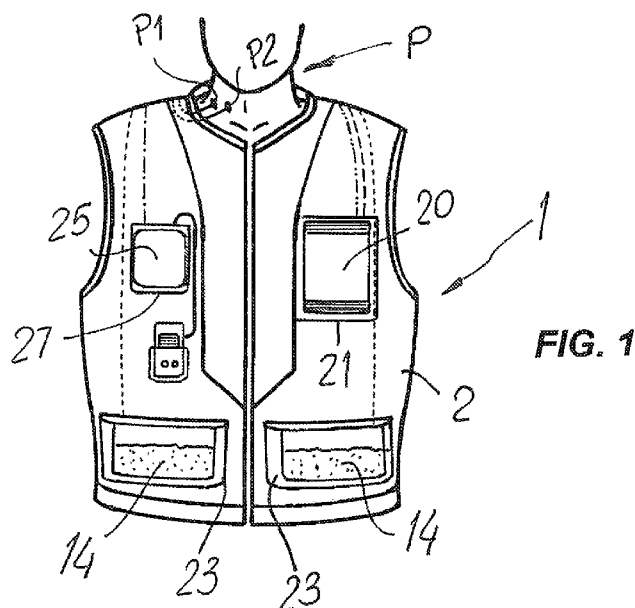
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- (88) **Date of publication of the international search report:**
15 November 2012

(54) **Title:** WEARABLE SYSTEM FOR EXECUTING DEPURATIVE TREATMENT OF ORGANIC FLUIDS WITH THE USE OF EXTRACORPOREAL CIRCUITS



(57) **Abstract:** The wearable system (1) for executing depurative treatments of organic fluids with the use of extracorporeal circuits (3) comprises a clothing article (2) wearable by a patient (P), in which at least one disposable extracorporeal circuit (3) is removably housed, which comprises: a line (4) for drawing, from a patient (P) drawing point (P1), organic fluid to be depurated; a line (9) for returning, to a patient (P) infusion point (P2), depurated organic fluid; filtering means (8) for filtering said organic fluid to be depurated, arranged between said drawing line (4) and said return line (9); first pumping means (5) for pumping, along said extracorporeal circuits (3), said organic fluid to be depurated and said depurated organic fluid; means (14) for collecting and storing fluid residues filtered from said organic fluid to be depurated, connected to said filtering means (8) via a collection line (15), said extracorporeal circuit (3) comprising an anti-thrombogenic covering.

INTERNATIONAL SEARCH REPORT

International application No PCT/IB2011/054261

A. CLASSIFICATION OF SUBJECT MATTER INV. A61M1/16 A61M1/36 ADD.				
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) A61M				
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) EPO-Internal, WPI Data				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Y	US 2008/217245 A1 (RAMBOD EDMOND [US] ET AL) 11 September 2008 (2008-09-11) paragraphs [0038] - [0075] figure 1	1-16		
Y	US 2004/220509 A1 (OLSEN ROBERT W [US] ET AL) 4 November 2004 (2004-11-04) paragraph [0087]	1-16		
A	WO 2008/082528 A1 (LANDE ARNOLD J [US]) 10 July 2008 (2008-07-10) page 11, line 20 - page 18, line 7 figures 1, 8	1		
A	US 2009/120864 A1 (FULKERSON BARRY NEIL [US] ET AL) 14 May 2009 (2009-05-14) paragraphs [0029] - [0063] figures 1-6	1		
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.				
* Special categories of cited documents : <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> "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 </td> <td style="width: 50%; border: none; vertical-align: top;"> "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 "&" document member of the same patent family </td> </tr> </table>			"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	"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 "&" document member of the same patent family
"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	"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 "&" document member of the same patent family			
Date of the actual completion of the international search	Date of mailing of the international search report			
14 February 2012	28/08/2012			
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Schlaug, Martin			

INTERNATIONAL SEARCH REPORT

International application No PCT/IB2011/054261

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008/051689 A1 (GURA VICTOR [US] ET AL) 28 February 2008 (2008-02-28) cited in the application paragraphs [0029] - [0033] figure 1 -----	1
A	US 6 579 265 B1 (KIHARA KAZUHIKO [JP] ET AL) 17 June 2003 (2003-06-17) figures 1-2 column 4, line 38 - column 5, line 47 -----	1
A	US 2006/015057 A1 (HO CHIH-HU [US] ET AL) 19 January 2006 (2006-01-19) paragraphs [0011] - [0014] figure 6 -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IB2011/054261

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008217245 A1	11-09-2008	SE 534780 C2	20-12-2011
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		EP 1124595 A2	22-08-2001
		US 6579265 B1	17-06-2003
		WO 0103754 A2	18-01-2001

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		WO 2006019891 A2	23-02-2006

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-16

A wearable system for performing purifying therapies and further features relating to an article of clothing with an optional extracorporeal circuit wherein the extracorporeal circuit comprises an anti-trombogenic coating;

2. claims: 17, 18

A filter apparatus for purification of organic fluids comprising a filtering means housing body with pumps and further features relating to chemical parameter detecting and leakage detecting means;

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2011/054261

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.:
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:

see additional sheet

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 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.:

1-16

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.