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[Continued on next page]

(54) Title: SYSTEMS AND METHODS FOR DELIVERING FLUID TO A WOUND THERAPY DRESSING

(57) Abstract: Provided are systems and methods for delivery of fluid to a wound therapy dressing. In exemplary embodiments, a pressure source provides negative pressure to a wound dressing and a biasing mechanism provides positive pressure to a fluid reservoir.

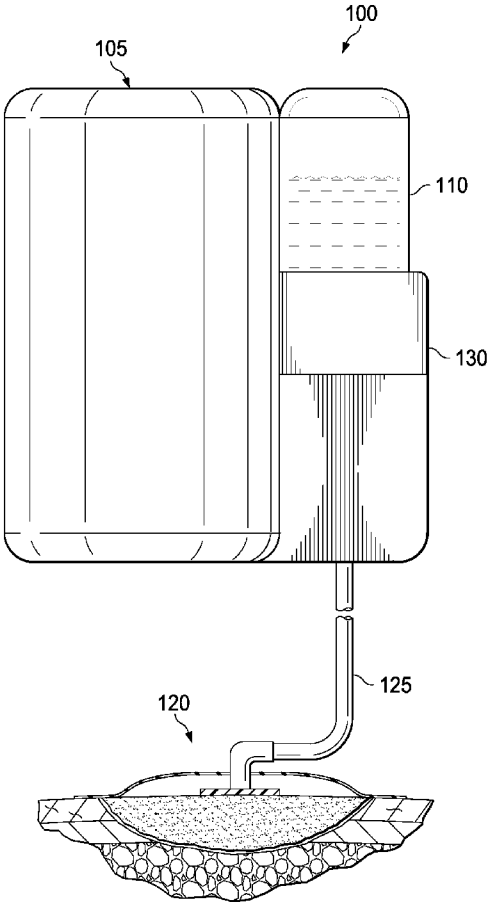


FIG. 1

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— *with international search report (Art. 21(3))*

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28 November 2013

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/023482

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61M1/00
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.
X	US 2002/198503 A1 (RISK JAMES R [US] ET AL RISK JR JAMES R [US] ET AL) 26 December 2002 (2002-12-26)	1-3,13
Y	paragraphs [0039] - [0064]	4-7,14
A	figures 1, 4, 8	8-12

X	WO 00/78372 A1 (ALCON LAB INC [US]) 28 December 2000 (2000-12-28) page 5, line 19 - page 6, line 11 page 10, line 12 - page 11, line 3 figures 1, 11	1-3,8-12

Y	US 2011/306941 A1 (CHANDRASEKAR N R [US] ET AL) 15 December 2011 (2011-12-15)	4,5,7,14
A	paragraphs [0028] - [0033] figures 1-4	1

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[X] Further documents are listed in the continuation of Box C.

[X] 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 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
23 April 2013	07/10/2013

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Schlaug, Martin

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/023482

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2008/098207 A2 (TWIN STAR MEDICAL INC [US]; ODLAND RICK M [US]) 14 August 2008 (2008-08-14)	6
A	page 18, lines 25-28	1
A	US 2010/022990 A1 (KARPOWICZ JOHN [US] ET AL) 28 January 2010 (2010-01-28) paragraphs [0049] - [0052] figure 4	1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/023482

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. [X] Claims Nos.: 22-30
because they relate to subject matter not required to be searched by this Authority, namely:

see FURTHER INFORMATION sheet PCT/ISA/210

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. [X] 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.:

1-14

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-14

A system to deliver fluid to a wound therapy dressing comprising a negative pressure source, a housing to receive a fluid reservoir for providing fluid to the wound therapy dressing, a control circuit and
further features relating to a biasing mechanism;
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2. claims: 15-22

A system to deliver fluid to a wound therapy dressing comprising a negative pressure source, a housing to receive a fluid reservoir for providing fluid to the wound therapy dressing, a flow controller, a control circuit and
further features relating to a flow sensor;

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 22-30

A method of providing instillation fluid and negative pressure to a wound dressing and as such to the wound is considered a method for treatment of the human or animal body by therapy and / or surgery. The subject matter of claims 22-27 and 28-03 was therefore not searched (Article 17(2)(a)(i) /(ii) and Rule 39.1 (iv) PCT) and consequently no opinion will be formulated on the subject matter of those claims (Article 34(4)(a)(i) and Rule 67.1(iv) PCT).

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2013/023482

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002198503 A1	26-12-2002	US 2002198503 A1	26-12-2002
		US 2005090787 A1	28-04-2005
		US 2007005028 A1	04-01-2007
WO 0078372 A1	28-12-2000	AT 249851 T	15-10-2003
		AU 760279 B2	08-05-2003
		AU 5591600 A	09-01-2001
		BR 0011764 A	08-07-2003
		CA 2373926 A1	28-12-2000
		DE 60005346 D1	23-10-2003
		DE 60005346 T2	01-07-2004
		DK 1187643 T3	26-01-2004
		EP 1187643 A1	20-03-2002
		ES 2204629 T3	01-05-2004
		JP 2003519509 A	24-06-2003
		MX PA01011676 A	10-09-2003
		PT 1187643 E	31-12-2003
		US 2002077587 A1	20-06-2002
		WO 0078372 A1	28-12-2000
US 2011306941 A1	15-12-2011	NONE	
WO 2008098207 A2	14-08-2008	EP 2114508 A2	11-11-2009
		US 2010100061 A1	22-04-2010
		WO 2008098207 A2	14-08-2008
US 2010022990 A1	28-01-2010	AU 2009273903 A1	28-01-2010
		CA 2729841 A1	28-01-2010
		EP 2313123 A2	27-04-2011
		JP 2011528958 A	01-12-2011
		US 2010022990 A1	28-01-2010
		WO 2010011920 A2	28-01-2010