



- (51) International Patent Classification:
A61M 1/00 (2006.01)
- (21) International Application Number:
PCT/US2012/038416
- (22) International Filing Date:
17 May 2012 (17.05.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/489,786 25 May 2011 (25.05.2011) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: WOUND HEALING SYSTEM USING POSITIVE PRESSURE TO PROMOTE GRANULATION AT A TISSUE SITE

(57) Abstract: A wound healing system (100) for promoting healing of a wound of a patient includes a positive pressure source (113), a reduced pressure source (151), an porous foam (121) positioned in contact with the wound. The porous foam includes a plurality of flow channels in fluid communication with the reduced pressure source. The system further includes a filler member (125) having a flexible wall defining an interior chamber. The interior chamber is in fluid communication with the positive pressure source, and a cover member (110) is positioned over the filler member.

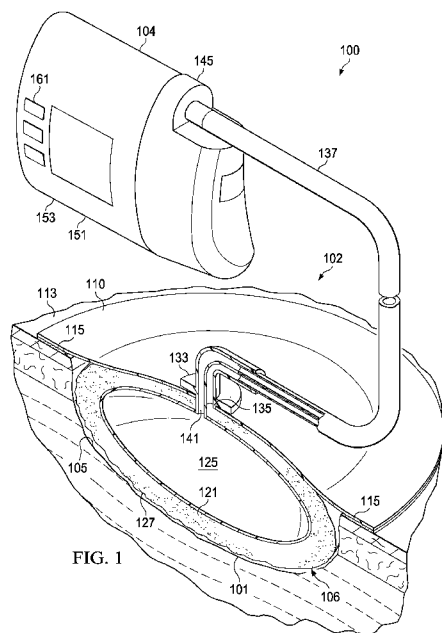


FIG. 1





GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *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))*

(88) Date of publication of the international search report:
14 March 2013

Published:

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

INTERNATIONAL SEARCH REPORT

International application No PCT/US2012/038416

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.
Y	WO 2005/082435 A1 (HUNTLEIGH TECHNOLOGY PLC [GB]; MCLEOD ALASTAIR GEORGE [GB]; COOK STEPH) 9 September 2005 (2005-09-09) page 2 - page 4 figure 1 -----	1-11
Y	US 2010/305490 A1 (COULTHARD RICHARD DANIEL JOHN [GB] ET AL) 2 December 2010 (2010-12-02) paragraphs [0006], [0010] - [0011], [0044] - [0051], [0073] figure 2 -----	1-11
Y	US 2009/043268 A1 (EDDY PATRICK E [US] ET AL) 12 February 2009 (2009-02-12) paragraph [0030] ----- -/--	9,10
<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 :		
"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	
27 September 2012	07/01/2013	
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 Bichlmayer, K	

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2012/038416

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2009/106895 A1 (SMITH & NEPHEW [GB]; HARTWELL EDWARD YERBURY [GB]; CHAPPEL JONATHAN [G] 3 September 2009 (2009-09-03) pages 4,6 -----	12

INTERNATIONAL SEARCH REPORT

International application No.
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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.:
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.:

1-12, 51

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/US2012/038416

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2005082435 A1	09-09-2005	AU 2005216691 A1	09-09-2005
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		EP 2247322 A1	10-11-2010
		US 2011172616 A1	14-07-2011
		WO 2009106895 A1	03-09-2009

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-12, 51

A wound healing system for promoting healing of a wound of a patient, the system comprising a positive pressure source, a reduced pressure source, a porous foam positioned in contact with the wound, a filler member having a flexible wall defining an interior chamber, the chamber being in fluid communication with the positive pressure source, and a cover member positioned over the filler member.

2. claims: 13-25

A wound healing system for promoting healing of a wound of a patient, the system comprising a positive pressure source, a reduced pressure source, a filler member having an expandable wall defining an interior chamber, the interior of the chamber being in fluid communication with the positive pressure source, and a cover member positioned over the filler member, wherein external fluid are not supplied to the wound.

3. claims: 26-37, 52

A wound healing system for promoting healing of a wound of a patient, comprising a pump having an inlet and an outlet, the inlet of the pump having a reduced pressure that is less than a reference pressure and the exhaust having a positive pressure that is greater than a reference pressure, a filler member having an interior chamber fluidly connected to the exhaust of the pump, a cover member positioned over the filler member, and a granulation promoting material positioned at the wound.

4. claims: 38-50

A wound healing system for promoting healing of a wound of a patient, comprising a reduced pressure source, a filler member having a plurality of compartments, each of them including a fluid at a pressure that is greater than or equal to an ambient pressure surrounding the sealed compartments, and a cover member positioned over the filler member, wherein the cover member provides for biasing force to the filler member directed to the wound.
