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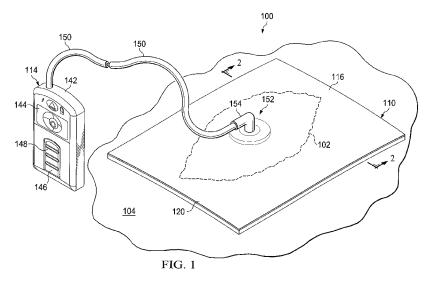
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- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

7 October 2010

(54) Title: REDUCED-PRESSURE WOUND TREATMENT SYSTEMS AND METHODS EMPLOYING MICROSTRAIN-IN-DUCING MANIFOLDS



(57) Abstract: Microstrain-inducing manifolds, systems, and methods are presented that involve microstrain-inducing manifolds that include a plurality of shaped projections for creating microstrain. The shaped projections may be tapered projections. A system may include a sealing member for placing over the tissue site, a microstrain-inducing manifold, and a reduced- pressure subsystem that delivers reduced pressure to the sealing member. The reduced pressure causes the shaped projections to create microstrain at the tissue site. Other methods, apparatuses, and systems are also presented.





International application No. PCT/US2009/068544

#### A. CLASSIFICATION OF SUBJECT MATTER

#### A61H 7/00(2006.01)i, A61H 39/04(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)

A61H 7/00; A61F 13/00; A61H 1/00; B29C 47/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal) & Keywords: microstrain, manifold, reduce, pressure, wound, therapy, particle, tissue

#### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0139987 A1 (AMBROSIO ARCHEL et al.) 12 June 2008 See claims 1 and 4, paragraphs [0097]-[0105], figures 6-9	1-60
A	WO 2007-092405 A2 (TYCO HEALTHCARE GROUP LP et al.) 16 August 2007 See claim 1, abstract, figures 10-15	1-60
A	US 2007-0239078 A1 (JONATHAN P. JAEB) 11 October 2007 See claims 1 and 19, paragraphs [0028]-[0033], figures 1 and 2	1-60
A	US 2003-0040687 A1 (THOMAS A. BOYNTON et al.) 27 February 2003 See claims 1 and 13, abstract, figure 1	1-60
A	US 2004-0073151 A1 (RICHARD SCOTT WESTON) 15 April 2004 See claims 1 and 13, paragraphs [0041]-[0045], figure 1	1-60

		Further	documents	are	listed	in	the	conti	nuatior	ιof	`Box	C.
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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
- "&" document member of the same patent family

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Date of mailing of the international search report

09 AUGUST 2010 (09.08.2010)

Name and mailing address of the ISA/KR



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### INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/068544

DOX NO. 11 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.: 61-63 because they relate to subject matter not required to be searched by this Authority, namely: Claims 61-63 pertain to methods for treatment of human body by surgery and thus relate to a subject matter which this International Searching Authority is not required to search under Article 17(2)(a)(i) and Rule 39.1(iv) PCT.
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.

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