

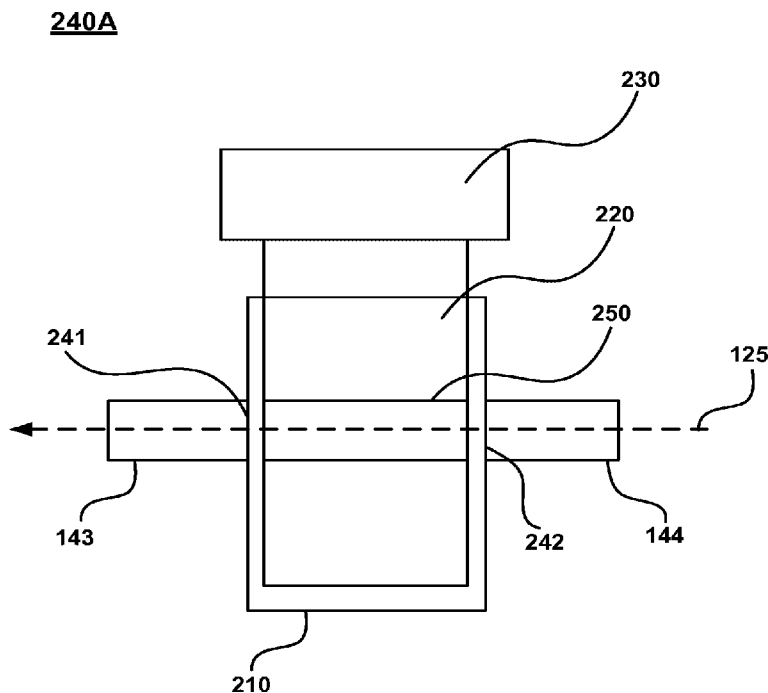


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- (71) Applicant: CAREFUSION 303, INC. [US/US]; 3750
Torrey View Court, San Diego, CA 92130 (US).
- (72) Inventors: MANSOUR, George; 1684 Blue Ridge Drive,
Pomona, CA 91766 (US). ZOLLINGER, Chris; 13506
Mockingbird Way, Chino Hills, CA 91709 (US). YEH,
Jonathan; 1323 Barberry Drive, Diamond Bar, CA 91765
(US). CLARKE, Christopher, J.; 9 Rodney Road, Walton
On Thames, Surrey KT 12 3LE (GB).

- (74) Agents: HANKINS, John, A. et al.; McDermott Will &
Emery LLP, 4 Park Plaza, Suite 1700, Irvine, CA 92614
(US).
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MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC,
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MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
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[Continued on next page]

(54) Title: FLUID FLOW CONTROL BY A NON-PINCHING VALVE



(57) Abstract: A pumping system comprising a pump comprising a door for access within a housing of the pump, a pump segment configured for conveying fluid based on compression of the pump segment, a pump segment frame for preventing said pump segment from stretching, a visual placement indicator configured for facilitating in a proper placement of the pump segment frame in the housing, and a non-pinching valve configured to be disposed in the housing and to control a flow of the fluid without requiring pinching of a tube.

WO 2013/188216 A3



Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *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:
10 April 2014

Published:

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

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/044595

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61M5/168 A61M39/22
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	WO 2008/144622 A1 (UNIV SOUTH FLORIDA [US]; HOYTE LENNOX [US]) 27 November 2008 (2008-11-27) page 4 - page 6	1-19, 40-42
X	US 2006/089603 A1 (TRUITT TIM L [US] ET AL) 27 April 2006 (2006-04-27) the whole document	1-19, 40-42
X	WO 2011/148120 A1 (SMITHS MEDICAL INTERNAT LTD [GB]; KEARNS JAMES DANIEL [GB]) 1 December 2011 (2011-12-01) the whole document	1-19, 40-42
X	US 2010/274179 A1 (DERICHS KEVIN J [US]) 28 October 2010 (2010-10-28) the whole document	1-19, 40-42
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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 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 18 December 2013	Date of mailing of the international search report 24/02/2014
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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 Neiller, Frédéric
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/044595

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 2 168 611 A1 (TYCO HEALTHCARE [US]) 31 March 2010 (2010-03-31) the whole document	1-19, 40-42
X	----- WO 2010/140063 A2 (MIIJERS JAN WILLEM MARINUS [NL]) 9 December 2010 (2010-12-09) the whole document -----	1-19, 40-42

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/044595

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.:

1-19, 40-42

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: 1-19, 40-42

A valve system with slidable element

2. claims: 20-39

A pump segment frame system with position indicator

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/044595

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2008144622	A1	27-11-2008	CA 2684205 A1 19-11-2009
			EP 2146770 A1 27-01-2010
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			WO 2010126622 A1 04-11-2010

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			BR PI0903854 A2 20-07-2010
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			WO 2010140063 A2 09-12-2010
