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(71) Applicant (for all designated States except US): FEN-WAL, INC. [US/US]; Three Corporate Drive, Lake Zurich, IL 60047 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MATHIAS, Jean-Marie [BE/BE]; Avenue Du Tonnelier 46, B-1428

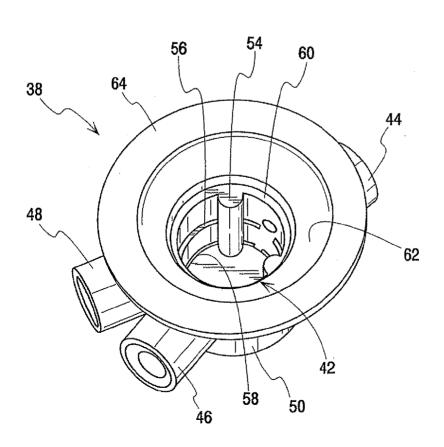
Lillois (BE). WEST, Richard, L. [US/US]; 37162 North Lake Shore Drive, Lake Villa, IL 60046 (US). BLICKHAN, Bryan, J. [US/US]; 520 Hemlock Lane, Libertyville, IL 60048 (US). BOWMAN, Joseph, H. [US/US]; 37199 North Twin Oaks Drive, Lake Villa, IL 60046 (US). BENJAMIN, Grant, S. [US/US]; 25649 West Marion Avenue, Ingleside, IL 60041 (US). BISCHOF, Daniel, F. [US/US]; 8191 Stickney Run, Bull Valley, IL 60092 (US). RONDEAU, Georges [FR/BE]; Rue du Quesnay 37, B-7604 Braff (BE).

(74) Agent: KOLOMAYETS, Andrew, G.; Cook, Alex, McFarron, Manzo, Cummings & Mehler, Ltd., 200 West Adams Street, Suite 2850, Chicago, IL 60606 (US).

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[Continued on next page]

#### (54) Title: FLOW CONTROLLERS AND SYSTEMS AND METHODS USING THE SAME



(57) Abstract: Flow controllers are provided for interconnecting a fluid source to two separate collection zones. The flow controllers include a body having a fluid inlet communicating with the source and two fluid outlets, each communicating with one of the collection zones. An actuator member received within a cavity of the body selectively establishes fluid communication between the inlet and an outlet. In a first position, the fluid inlet is in fluid communication with one of the fluid outlets and the associated collection zone. The actuator member is nonrotationally moved to a second position within the cavity to establish fluid communication between the fluid inlet and the other fluid outlet, thereby halting flow through the first outlet and allowing fluid communication with the other collection zone. optional safety feature prevents movement of the actuator member from the second position to the first position.



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MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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- (88) Date of publication of the international search report: 10 July 2008

#### INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/083344

A. CLASSIFICATION OF SUBJECT MATTER INV. A61B5/00 A61M39/22

F16K3/26

F16K11/07

ADD. A61M5/14

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)

A61B A61M F16K

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 practical, search terms used)

EPO-Internal, WPI Data

ategory*	Citation of document, with indication, where appropriate, of the	e relevant passages	Relevant to claim No.
X	EP 0 576 380 A (AGUETTANT LAB [ 29 December 1993 (1993-12-29)	[FR])	1-4,10, 14,15, 29,33, 36,37, 46,48, 51,54, 56,58, 61,62
Y	the whole document		5,9,13, 39,53,57
<b>Y</b> .	AU 458 487 B2 (LIPSOKY RB) 27 February 1975 (1975-02-27) the whole document		5,9,13, 53,57
		<b>-/-</b> -	
X Furt	her documents are listed in the continuation of Box C.	X See patent family annex.	<b>.</b>
"A" docume consider earlier of filing of the citation of the riter of the citation	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another in or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but han the priority date claimed	<ul> <li>'T' later document published after the in or priority date and not in conflict will cited to understand the principle or t invention</li> <li>'X' document of particular relevance; the cannot be considered novel or canninvolve an inventive step when the cannot be considered to involve an idecument is combined with one or n ments, such combination being obvi in the art.</li> <li>'&amp;' document member of the same pater</li> </ul>	claimed invention of be considered to locument is taken alone claimed invention of be considered to locument is taken alone claimed invention inventive step when the nore other such docuous to a person skilled
Date of the	actual completion of the international search	Date of mailing of the international se	earch report
. 8	February 2008	16/05/2008	
lame and r	mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,	Authorized officer  Petersch, Bernha	

## **INTERNATIONAL SEARCH REPORT**

International application No
PCT/US2007/083344

C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	1-15, 29-39, 46-71 39 1-15, 29-39, 46-71	
A	WO 03/079942 A (JORDAAN MARIUS [ZA]) 2 October 2003 (2003-10-02) the whole document figure 3		
<b>T</b>			
A	WO 2006/039251 A (BAXTER INT [US]; MATHIAS JEAN-MARIE [BE]; BLICKHAN BRYAN J [US]; HALDI) 13 April 2006 (2006-04-13) the whole document		

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 40-45,72-77

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery: Claims 40-45 and 72-77 refer to methods for treatment of the human body by surgery practised on the human body in the sense of rule 39.1(iv) PCT, in particular in the light of the description paragraphs [002],[007] and [00103], where venipuncture is disclosed. This is why these claims have not been searched (rule 66.1(e) PCT).

International application No. PCT/US2007/083344

## INTERNATIONAL SEARCH REPORT

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.: 40-45, 72-77 because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
<ol> <li>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:</li> </ol>
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
As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
Ciamis.
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 reportcovers 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.:
1-15, 29-39, 46-71
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: 1-15,29-39,46-71

Claims 1-15, 29-39 and 46-71 essentially define a 3-way flow controller for one-time use which is easily operable and consists of two parts

2. claims: 16-28

Claims 16-28 essentially define a 3-way flow controller which has advantages for manufacturing, especially for steam sterilization, and consists of three parts

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2007/083344

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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		•	EP	1793737 A2	13-06-2007