



(11) **EP 4 233 930 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
20.09.2023 Bulletin 2023/38

(51) International Patent Classification (IPC):
A61M 1/00 (2006.01)

(43) Date of publication A2:
30.08.2023 Bulletin 2023/35

(52) Cooperative Patent Classification (CPC):
**A61M 1/79; A61M 1/60; A61M 1/72; A61M 1/743;
A61M 1/78; A61M 2205/125; A61M 2209/084**

(21) Application number: **23173541.6**

(22) Date of filing: **11.11.2019**

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**

(71) Applicant: **Stryker Corporation**
Kalamazoo, MI 49002 (US)

(30) Priority: **12.04.2019 US 201916383218**
19.07.2019 US 201962876229 P
25.07.2019 US 201916522066

(72) Inventors:
• **ZOLLINGER, Michael**
Chelsea, MI, 48118 (US)
• **LADUKE, Peter**
Holland, MI, 49424 (US)

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
19821318.3 / 3 952 938

(74) Representative: **Röthinger, Rainer**
Wuesthoff & Wuesthoff
Patentanwälte PartG mbB
Schweigerstrasse 2
81541 München (DE)

(54) **MANIFOLD FOR A MEDICAL WASTE COLLECTION SYSTEM**

(57) A medical waste collection system for collecting medical waste material through a manifold during a medical procedure comprises: a waste container; a receiver coupled to the waste container and comprising a housing defining an opening into which the manifold is configured to be inserted in a proximal direction and removed in a distal direction opposite the proximal direction. The receiver comprises a sled assembly movably coupled to the housing and configured to be engaged by the manifold during insertion of the manifold into the receiver; a locking assembly comprising: a locking member having an engagement surface; a release member coupled to the locking member; a biasing element biasing the locking assembly to a locked configuration in which the engagement surface engages the manifold in a fully inserted operative position to prevent distal movement of the manifold and the sled assembly; and an actuator coupled to the release member and configured to receive an input from a user to move the locking assembly from the locked configuration to an unlocked configuration in which the engagement surface disengages from the manifold to permit the distal movement of the manifold and the sled assembly.

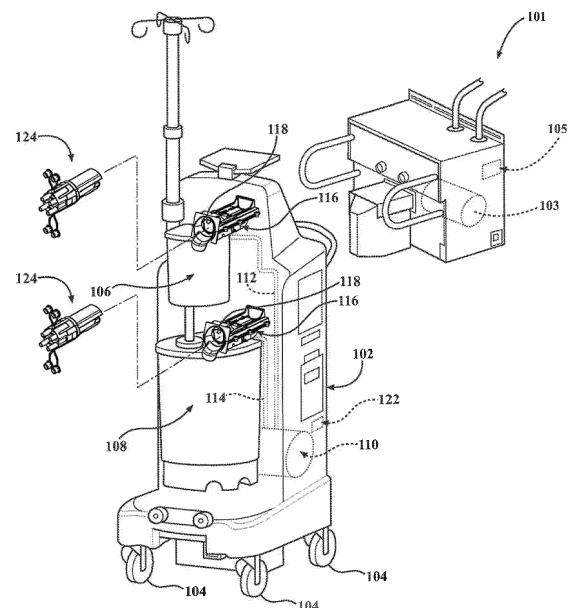


FIG. 2

EP 4 233 930 A3



EUROPEAN SEARCH REPORT

Application Number

EP 23 17 3541

5

DOCUMENTS CONSIDERED TO BE RELEVANT

10

15

20

25

30

35

40

45

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	WO 2008/118397 A1 (ALLEGIANCE CORP [US]; MICHAELS THOMAS L [US] ET AL.) 2 October 2008 (2008-10-02) * pages 5-6; figure 8 * -----	1-15	INV. A61M1/00
A	CN 107 951 576 A (SHENZHEN FERVID MEDICAL TECH CO LTD) 24 April 2018 (2018-04-24) * paragraphs [0050] - [0055]; figures 6,7 * -----	1-15	
A	US 2007/135778 A1 (MURRAY SEAN A [US] ET AL) 14 June 2007 (2007-06-14) * the whole document * -----	1-15	
A	US 2007/135779 A1 (LALOMIA BRENT S [US] ET AL) 14 June 2007 (2007-06-14) * the whole document * -----	1-15	
			TECHNICAL FIELDS SEARCHED (IPC)
			A61M

1

The present search report has been drawn up for all claims

50

Place of search The Hague	Date of completion of the search 16 August 2023	Examiner Chevtchik, Natalia
-------------------------------------	---	---------------------------------------

55

EPO FORM 1503 03:82 (F04C01)

CATEGORY OF CITED DOCUMENTS
 X : particularly relevant if taken alone
 Y : particularly relevant if combined with another document of the same category
 A : technological background
 O : non-written disclosure
 P : intermediate document

T : theory or principle underlying the invention
 E : earlier patent document, but published on, or after the filing date
 D : document cited in the application
 L : document cited for other reasons

 & : member of the same patent family, corresponding document

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 23 17 3541

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-08-2023

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2008118397 A1	02-10-2008	AU 2008232360 A1	02-10-2008
		AU 2008232361 A1	02-10-2008
		CA 2681734 A1	02-10-2008
		CA 2681735 A1	02-10-2008
		CN 101765465 A	30-06-2010
		CN 101765547 A	30-06-2010
		DK 2139620 T3	07-03-2016
		EP 2139620 A1	06-01-2010
		EP 2142438 A1	13-01-2010
		JP 5329522 B2	30-10-2013
		JP 2010522060 A	01-07-2010
		JP 2010522061 A	01-07-2010
		US 2009005747 A1	01-01-2009
		US 2009012485 A1	08-01-2009
		US 2013341330 A1	26-12-2013
		US 2013345651 A1	26-12-2013
WO 2008118397 A1	02-10-2008		
WO 2008118398 A1	02-10-2008		
-----	-----	-----	-----
CN 107951576 A	24-04-2018	NONE	
-----	-----	-----	-----
US 2007135778 A1	14-06-2007	AU 2006332540 A1	12-07-2007
		CA 2633265 A1	12-07-2007
		CA 2880488 A1	12-07-2007
		CA 3028892 A1	12-07-2007
		CA 3142839 A1	12-07-2007
		CN 101370535 A	18-02-2009
		CN 102500000 A	20-06-2012
		CN 104874035 A	02-09-2015
		DK 1968665 T3	28-11-2016
		DK 2384776 T3	14-08-2017
		EP 1968665 A2	17-09-2008
		EP 2384776 A1	09-11-2011
		EP 2384777 A1	09-11-2011
		EP 2388024 A1	23-11-2011
		EP 2388025 A1	23-11-2011
		EP 3243535 A1	15-11-2017
		EP 3744360 A1	02-12-2020
		ES 2569490 T3	11-05-2016
		ES 2601552 T3	15-02-2017
		ES 2601829 T3	16-02-2017
ES 2637226 T3	11-10-2017		
ES 2810757 T3	09-03-2021		
JP 5203218 B2	05-06-2013		
JP 5393851 B2	22-01-2014		
JP 5548247 B2	16-07-2014		

EPC FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

55

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 23 17 3541

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-08-2023

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		JP 5548248 B2	16-07-2014
		JP 5564087 B2	30-07-2014
		JP 5567635 B2	06-08-2014
		JP 2009519776 A	21-05-2009
		JP 2012228548 A	22-11-2012
		JP 2013034885 A	21-02-2013
		JP 2013034888 A	21-02-2013
		JP 2013034891 A	21-02-2013
		JP 2013046767 A	07-03-2013
		KR 20080089389 A	06-10-2008
		KR 20140010193 A	23-01-2014
		PL 1968665 T3	31-03-2017
		PL 2384776 T3	31-10-2017
		US 2007135778 A1	14-06-2007
		US 2010036335 A1	11-02-2010
		US 2012238975 A1	20-09-2012
		US 2013345652 A1	26-12-2013
		US 2015105740 A1	16-04-2015
		US 2017043064 A1	16-02-2017
		US 2017043068 A1	16-02-2017
		US 2018243487 A1	30-08-2018
		US 2018256790 A1	13-09-2018
		US 2019269833 A1	05-09-2019
		US 2021268165 A1	02-09-2021
		WO 2007079319 A2	12-07-2007

US 2007135779 A1	14-06-2007	AU 2006326508 A1	21-06-2007
		CA 2633082 A1	21-06-2007
		CA 2867838 A1	21-06-2007
		CA 2930748 A1	21-06-2007
		CN 101370534 A	18-02-2009
		CN 102512716 A	27-06-2012
		CN 105497994 A	20-04-2016
		DK 1960014 T3	09-01-2017
		EP 1960014 A2	27-08-2008
		EP 2359878 A2	24-08-2011
		EP 2359879 A2	24-08-2011
		EP 2364736 A2	14-09-2011
		EP 3192538 A1	19-07-2017
		EP 3666302 A1	17-06-2020
		EP 4005610 A1	01-06-2022
		ES 2609391 T3	20-04-2017
		ES 2622229 T3	06-07-2017
		ES 2625677 T3	20-07-2017
		ES 2784705 T3	30-09-2020
		JP 5613718 B2	29-10-2014

EPC FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

55

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 23 17 3541

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-08-2023

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
			JP 6060218 B2	11-01-2017
			JP 6208838 B2	04-10-2017
			JP 2009519757 A	21-05-2009
15			JP 2012166046 A	06-09-2012
			JP 2014131760 A	17-07-2014
			JP 2015186630 A	29-10-2015
			JP 2017051625 A	16-03-2017
			KR 20080087118 A	30-09-2008
			KR 20130122024 A	06-11-2013
20			KR 20140036029 A	24-03-2014
			PL 1960014 T3	31-08-2017
			US 2007135779 A1	14-06-2007
			US 2010049152 A1	25-02-2010
			US 2014338529 A1	20-11-2014
25			US 2018221804 A1	09-08-2018
			US 2019070550 A1	07-03-2019
			US 2021379525 A1	09-12-2021
			WO 2007070570 A2	21-06-2007
30	-----			
35				
40				
45				
50				

EPC FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

55