

Search query (3): [SP]: single-use disposable set connector a medical connector for providing a sterile connection between a multi-use portion and a single-use portion of a fluid delivery system is provided. the medical connector includes a fluid inlet port configured for removable engagement with a connection port of a multi-use disposable set (muds) to establish a fluid connection therewith and a waste outlet port configured for removable engagement with a waste inlet port of the muds to establish a fluid connection therewith. a patient fluid line is connected, at a first end, to the fluid inlet port and connected, at a second end, to the waste outlet port. fluid flow through the patient fluid line is unidirectional from the first end to the second end. the patient fluid line is configured for being disconnected from the waste outlet port for delivering fluid to a patient. a multi-fluid delivery system having the medical connector and muds is also provided.

Results: 24

Search history

Search PN=(WO2015106107) (Results 1)

1:

Search [SP]: 1. a medical connector comprising: a fluid inlet port configured for removable engagement with a connection port of a multi-use disposable set (muds) to establish a fluid connection therewith a waste outlet port configured for removable engagement with a waste inlet port of the muds to establish a fluid connection therewith and a patient fluid line connected, at a first end, to the fluid inlet port and connected, at a second end, to the waste outlet port, wherein fluid flow through the patient fluid line is unidirectional from the first end to the second end, and wherein the patient fluid line is configured for being disconnected from the waste outlet port for delivering fluid to a patient. 2. the medical connector of claim 1, further comprising a locking mechanism for removably securing the medical connector to the muds. 3. the medical connector of claim 2, wherein the locking mechanism has a flexible tab that is deflectable between an engaged position and a disengaged position by deflecting at least a portion of the flexible tab. 4. the medical connector of claim 3, wherein the flexible tab has a pressing surface that, when pressed, deflects the flexible tab from the engaged position to the disengaged position. 5. the medical connector of claim 1, wherein the fluid inlet port comprises a shroud surrounding at least a portion of the fluid inlet port. 6. the medical connector of claim 5, wherein the shroud has at least one indentation to facilitate handling of the medical connector. 7. the medical connector of claim 5, wherein the shroud has one or more ribs protruding from an outer surface of the shroud. 8. the medical connector of claim 1, wherein the fluid inlet port is shaped to prevent connection with the waste inlet port of the muds and wherein the waste outlet port is shaped to prevent connection with the connection port of the muds. 9. the medical connector of claim 1, wherein the medical connector has an asymmetrical shape such that the medical connector is connectable with the muds in one orientation only. 10. the medical connector of claim 9, further comprising at least one fin to prevent erroneous connection of the medical connector with the muds. 11. the medical connector of claim 1, wherein the second end of the patient fluid line has a connector configured for removable engagement with the waste outlet port while maintaining sterility of the second end. 12. the medical connector of claim 11, wherein the connector is in fluid communication with the waste outlet port when engaged with the waste outlet port. 13. the medical connector of claim 11, wherein the connector is a luer-lock connector. 14. the medical connector of claim 1, further comprising a one-way valve configured for maintaining unidirectional flow through the fluid inlet port into the patient fluid line. 15. the medical connector of claim 1, further comprising at least one sensor element configured for interacting with at least one sensor configured for detecting a presence or absence of the at least one sensor element indicating that the medical connector has been properly inserted or installed in the connection port. 16. the medical connector of claim 15, wherein the at least one sensor element has one or more reflective surfaces for reflecting visible or infrared light to the at least one sensor. 17. the medical connector of claim 1, wherein the fluid inlet port has at least one seal for forming a fluid-tight connection between the fluid inlet port and the connection port. 18. a single-use disposable set connector, the connector comprising: a fluid inlet port configured for removable engagement with a connection port of a multi-use disposable set (muds) to establish a fluid connection therewith a waste outlet port configured for removable engagement with a waste inlet port of the muds to establish a fluid connection therewith a spacer separating the fluid inlet port from the fluid outlet port a locking mechanism configured for removably securing the connector to the muds, the locking mechanism having a flexible tab that is deflectable between an engaged position and a disengaged position by deflecting at least a portion of the flexible tab a patient fluid line connected, at a first end, to the fluid inlet port and a connector connected to a second end of the patient fluid line, wherein fluid flow through the patient fluid line is unidirectional from the first end to the second end, and wherein the connector is configured for removable fluid connection with the waste outlet port for delivering fluid to a patient. 19. a method of delivering fluid using a single-use disposable set (suds) connector, the method comprising: fluidly connecting a fluid inlet port of the suds connector with a connection port of a multi-use disposable set (muds) establishing a fluid communication between a waste outlet port of the suds connector and a waste inlet port of the muds priming the suds connector by delivering fluid from the fluid inlet port to the waste outlet port through a fluid line disconnecting the fluid line from the waste outlet port and delivering fluid from the fluid inlet port to a connector through the fluid line. 20. the method of claim 19, further comprising locking the suds connector to the muds prior to priming the suds connector. (Results 0)

Search [SP]: single-use disposable set connector a medical connector for providing a sterile connection between a multi-use portion and a single-use portion of a fluid delivery system is provided. the medical connector includes a fluid inlet port configured for removable engagement with a connection port of a multi-use disposable set (muds) to establish a fluid connection therewith and a waste outlet port configured for removable engagement with a waste inlet port of the muds to establish a fluid connection therewith. a patient fluid line is connected, at a first end, to the fluid inlet port and connected, at a second end, to the waste outlet port. fluid flow through the patient fluid line is unidirectional from the first end to the second end. the patient fluid line is configured for being disconnected from the waste outlet port for delivering fluid to a patient. a multi-fluid delivery system having the medical connector and muds is also provided. (Results 24)

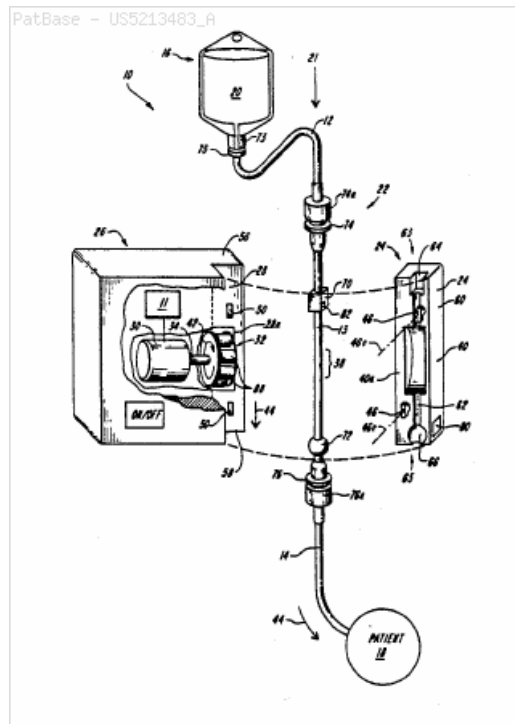
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Priority:	US19910717620 19910619			
Family:	Publication number	Publication date	Application number	Application date
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Probable Assignee:	MAXXIM MEDICAL INC			
Assignee(s):(std):	STRATO MEDICAL CORP			
Assignee(s):	WINFIELD IND ; MAXXIM MEDICAL INC A CORP OF DELAWARE ; STRATO MEDICAL A CORP OF DE CORP ; WINFIELD MEDICAL A CORP ; WINFIELD MEDICAL A CORP OF CA ; INFUSION TECHNOLOGY INC ; MAXXIM MEDICAL INC			
Inventor(s):(std):	FENTON JR PAUL V ; FLAHERTY J CHRISTOPHER ; HARRINGTON FRANCIS P ; GORMAN WILLIAM J			
International class (IPC 8-9):	A61M5/142 F04B43/00 F04B43/12 (Advanced/Invention); A61M5/142 F04B43/00 F04B43/12 (Core/Invention)			
International class (IPC 1-7):	F04B43/12			
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US class:	417/474 417/477 417/477.2 604/153			

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Cited documents: US5074756 A, US4886431 A, US4850807 A, US4818186 A, US4798590 A, US4798580 A, US4790829 A, US4758238 A, US4685902 A, US4673334 A, US4671792 A, US4657490 A, US4585399 A, US4559040 A, US4557725 A, US4537561 A, US4493706 A, US4482347 A, US4303376 A, US4273121 A, US4256437 A, US4187057 A, US4184815 A, US4025241 A, US3990444 A, US3927955 A, US3791777 A, US3565554 A, US3502034 A,

Forward Citations: WO9627402, WO9524558, WO9415098, WO15050752, WO13068206, WO08059498, WO06008376, USD809909, US9987406, US9968739, US9937289, US9919091, US9855110, US9852263, US9810210, US9799274, US9789251, US9726167, US9710610, US9674811, US9662437, US9657902, US9581152, US9526820, US9514518, US9474842, US9470221, US9468714, US9457158, US9404490, US9333290, US9283145, US9238101, US9144646, US9138379, US9132061, US9086178, US9078964, US9056160, US9011379, US8974415, US8920144, US8888738, US8870812, US8696632, US8678793, US8567235, US8562584, US8558964, US8545435, US8545198, US8535025, US8496613, US8491285, US8459968, US8425487, US8382696, US8382447, US8371832, US8361024, US8361023, US8337168, US8323492, US8323231, US8308457, US8206338, US8142400, US8137083, US8105269, US8083503, US8062008, US8034028, US8029253, US8011905, US7998115, US7998109, US7934912, US7887505, US7862535, US7794423, US7753883, US7753881, US7744554, US7731689, US7695255, US7645258, US7608060, US7607554, US7462170, US7445436, US7434312, US7356382, US7303549, US7238164, US7236936, US7144384, US7137964, US7128727, US7092796, US7074021, US7029455, US7018361, US7018360, US6997905, US6960192, US6942473, US6830558, US6790198, US6768425, US6749587, US6743204, US6723072, US6699218, US6692457, US6669669, US6656159, US6656158, US6645176, US6626867, US6494692, US6485464, US6485461, US6468242, US6413233, US6348048, US6074183, US6059753, US6056522, US6039868, US5993420, US5954485, US5938414, US5928196, US5927956, US5916196, US5904668, US5879144, US5842841, US5840069, US5823746, US5795327, US5791880, US5788671, US5772409, US5766155, US5658252, US5637093, US5628619, US5620312, US5569026, US5533877, US5460490, US5425173, US5397222, US5395320, US5388972, US5349825, US5336190, US5281111, US2016331951, US2014276425, US2014086771, US2013315763, US2013071272, US2012232474, US2011232358, US2011152831, US2011152772, US2011004187, US2011004144, US2011004143, US2010256561, US2010249722, US2010049134, US2010036322, US2010030361, US2010004788, US2009240201, US2009221964, US2009182265, US2009081078, US2008097340, US2008095649, US2008015505, US2007269324, US2007217933, US2007217932, US2007135766, US2007107490, US2006276936, US2006184123, US2006178633, US2006041229, US2005278054, US2005267418, US2005238507, US2005182366, US2005171512, US2005107923, US2005070847, US2005069437, US2005065760, US2005023291, US2005021005, US2004228735, US2004199118, US2004176984, US2004153032, US2004127844, US2004116866, US2004092865, US2004087894, US2004078028, US2004064096, US2004064088, US2004027083, US2003233069, US2003181866, US2003139701, US2003032045, US10064987, JP6087892, JP2015198811, JP2015042363, JP2012516209, JP2012176272, JP2012148184, JP2008178444, GB2349431, GB2349431, FR2871857, EP2592270, EP2476446, EP2398532, EP2333341, EP2331163, EP2140895, EP1888143, EP1888143, EP1820967, EP1771662, EP1108891, EP1048848, DE19960668, DE102009058279, DE102006008325, CN104721898, CN102671254, CN102671254,

Abstract:
The system components include a peristaltic infusion pump device keyed for cooperation with a mutually keyed receiver which in turn is additionally keyed for receipt of a mutually keyed tube set having a selected fluid flow capacity for delivery of medical fluids at a selected fluid flow rate in a selected direction to or from a patient.



Title:SYSTEMS AND METHODS FOR CASSETTE IDENTIFICATION FOR DRUG PUMPS

Priority:US19930156040 19931122 US19940228508 19940415 JP19950527071 19950412
WO1995US04527 19950412 US19950465729 19950606 US19950471859 19950606
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Family:	Publication number	Publication date	Application number	Application date
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	CA2187769 AA	19961011	CA19952187769	19950412
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Probable Assignee:SMITHS MEDICAL ASD INC

Assignee(s):(std):SIMS DELTEC INC ; SMITHS MEDICAL MD INC

Assignee(s):PHARMACIA DELTEC INC ; SMITHS MEDICAL ASD INC ; DELTEC INC ; HU JIA ; JOHNSON JAY G ; OLSON JAMES M

Inventor(s):(std):OLSON JAMES M ; JOHNSON JAY GREGORY ; HU JIA ; JOHNSON JAY G ; HU JAI ; OLSEN JAMES M ; OLSON M ; JOHNSON GREGORY

Inventor(s):JIA HU ; JAMES M OLSON ; JAY GREGORY JOHNSON

Agent(s):WRAYS; WRAYS PTY LTD; GOUDREAU GAGE DUBUC

Designated states:AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG UZ VN

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US class:128/DIG.12 128/DIG.13 128/DIG.26 417/26 417/279 417/360 417/415 417/474 604/131 604/151 604/152 604/153 604/174 604/246 604/31 604/67

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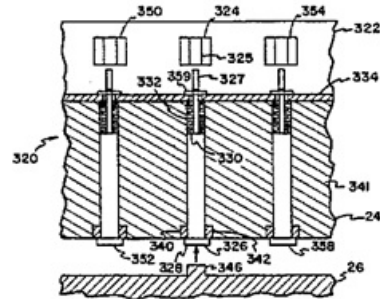
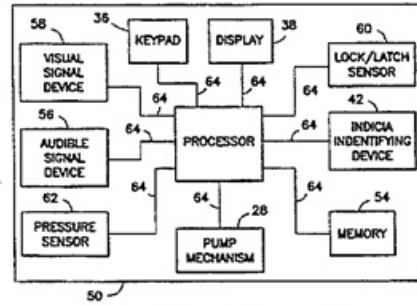
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Abstract:

The present invention concerns a pump provided with a control module and an attachable fluid reservoir cassette. The control module includes a pumping mechanism for pumping fluid from the fluid reservoir to the patient. The cassette is provided with appropriate indicia to identify differences between a plurality of cassettes. The control module further includes cassette indicia identification structure for identifying indicia on the cassette. One type of cassette identification system includes a projection extending from the cassette and structure associated with the control module which engages the projection. Another type of cassette identification system includes a light reflecting system which utilizes light from the control module and reflected off the cassette. Still other types of cassette identification systems utilize other non-contact switches or sensors to sense indicia on the cassette to identify the cassette from a plurality of cassettes.



Title: FILTER BAG AND CONNECTOR CARTRIDGE

Priority: US19950005128P 19951020 US19950512895 19951020 US19950008127P 19951020
 US19950008128P 19951020 US19950005772P 19951020 US19960020754P 19960628
 US19960020752P 19960628 EP19960936727 19961018 US19960733913 19961018
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 US20010951555 20010914 US20020040427 20020109

Family:	Publication number	Publication date	Application number	Application date
	AT289830 E	20050315	AT19960936725T	19961018
	AT332159 E	20060715	AT19960936726T	19961018
	AT350078 E	20070115	AT19960936727T	19961018
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	CA2235218 AA	19980417	CA19962235218	19961018
	CA2235218 C	20070213	CA19962235218	19961018
	CA2235272 AA	19980417	CA19962235272	19961018
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	CN1200040 A	19981125	CN19961097742	19961018
	CN1200041 A	19981125	CN19961097743	19961018
	CN1200052 A	19981125	CN19961097744	19961018
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	DE69634413 T2	20060316	DE19966034413T	19961018
	DE69636327 D1	20060817	DE19966036327	19961018
	DE69636327 T2	20070726	DE19966036327T	19961018
	DE69636816 D1	20070215	DE19966036816	19961018
	DE69636816 T2	20071004	DE19966036816T	19961018
	EP0858347 A2	19980819	EP19960936725	19961018
	EP0858347 A4	19990602	EP19960936725	19961018
	EP0858347 B1	20050302	EP19960936725	19961018
	EP0866725 A1	19980930	EP19960936726	19961018
	EP0866725 A4	19990602	EP19960936726	19961018
	EP0866725 B1	20060705	EP19960936726	19961018
	EP0883430 A1	19981216	EP19960936727	19961018
	EP0883430 A4	20000426	EP19960936727	19961018
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	EP1738782 A1	20070103	EP20060012957	19961018
	JP11513596 T2	19991124	JP19970516057T	19961018
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	JP2001519680 T2	20011023	JP19970516058T	19961018
	JP3537145 B2	20040614	JP19970516058T	19961018
	JP3980058 B2	20070919	JP19970516056T	19961018
	TW290452 B	19961111	TW19950111099	19951020
	TW319696 B	19971111	TW19950111098	19951020
	US2002030002 AA	20020314	US20010951555	20010914
	US2002055725 AA	20020509	US20020040427	20020109
	US5857843 A	19990112	US19960733913	19961018
	US6071095 A	20000606	US19980051482	19980617
	US6325422 BA	20011204	US19980051481	19980605
	US6342048 BA	20020129	US19980051480	19980617
	US6663586 BB	20031216	US20020040427	20020109
	WO9714450 A1	19970424	WO1996US16770	19961018
	WO9714451 A1	19970424	WO1996US16771	19961018
	WO9714493 A1	19970424	WO1996US16772	19961018

Probable Assignee: HAEMONETICS CORP**Assignee(s):(std):** ELLSWORTH JAMES R ; HAEMONETICS CORP ; HARVEST TECHNOLOGIES CORP ; HARVEST TECHNOLOGIES LLC ; VERKAART WESLEY H ; LEASON JOHN A ; HARVEST TECHNOLOGIES INC**Assignee(s):** HARVEST TECHNOLOGIES INCUS ; HARVEST TECHNOLOGIES CORP NORWELL ; HAEMONETICS CORP BRAINTREE**Inventor(s):(std):** ELLSWORTH JAMES R ; ELLSWORTH R ; LEASON JOHN A ; JORGENSEN KEITH J ; JAMES R ELLSWORTH ; JOHN A LEASON ; VERKAART WESLEY H ; VERKAART H ; WESLEY H VERKAART**Agent(s):** RIDOUT AND MAYBEE LLP**Designated states:** AT BE CA CH CN DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE US

International class (IPC 8-9): A61J1/00 A61J1/05 A61J1/10 A61J1/14 A61M1/00 A61M1/02 A61M1/34 A61M1/36 A61M39/02 A61M39/10 B01D27/08 B01D29/03 B01D35/00 B01D35/01 B01D35/02 B01D35/30 B01D36/00 B65D30/22 F04B43/00 F04B43/12 H05K7/18 (Advanced/Invention); A61J1/05 A61J1/10 A61M1/10 A61M1/36 (Advanced/Non-invention); A61J1/00 A61J1/05 A61M1/00 A61M39/00 B01D29/01 B01D35/00 B01D35/30 B01D36/00 F04B43/00 F04B43/12 H05K7/18 (Core/Invention); A61J1/00 A61J1/05 A61J1/10 A61M1/36 (Core/Non-invention)

International class (IPC 1-7): A61B5/00 A61J1/00 A61J1/05 A61J1/10 A61J1/14 A61M1/00 A61M1/02 A61M1/34 A61M1/36 A61M31/00 A61M39/02 A61M39/10 A61M5/165 B01D27/08 B01D29/03 B01D35/00 B01D35/01 B01D35/02 B01D35/30 B65D30/22 B65D81/00 F04B43/08 F04B43/12 F16L35/00

CPC: Y10S604/902 A61M1/0007 A61J1/10 A61J1/1475 A61M1/0001 A61M1/0023 A61M1/0056 A61M1/3626 A61M1/3627 A61M39/10 A61M2039/1044 A61M2205/14 A61M2205/3393 A61M2205/75 A61M2206/16 B01D29/036 B01D36/001 F04B43/0072 F04B43/1253 F04B43/1284 A61J1/05 A61M1/0052 A61M1/0049 A61M1/1039 A61M1/1012 A61M1/1062 A61M1/1006 B01D29/908

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US class: 210/416.1 210/436 210/445 210/445S 210/512.1 210/85 210/94 210/94P 285/93 285/93S 417/360 417/38 417/477.1 417/477.9 422/122 600/378 600/379 600/573 600/578 600/578S 600/579 604/118 604/118S 604/119 604/119S 604/317 604/319 604/319P 604/321 604/322 604/322S 604/323 604/323S 604/4 604/4.01 604/406 604/408 604/65 604/902

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JP class F-Index: A61M1/00/103 A61M1/00/131 A61M1/00/161 A61M1/00/510 A61M1/36/117 B01D35/02/Z B01D35/30 A61J1/00/337 A61J1/00/390/M A61J1/10/337 A61J1/14/390/M A61M39/10 A61M5/14/459/P B65D30/22/J

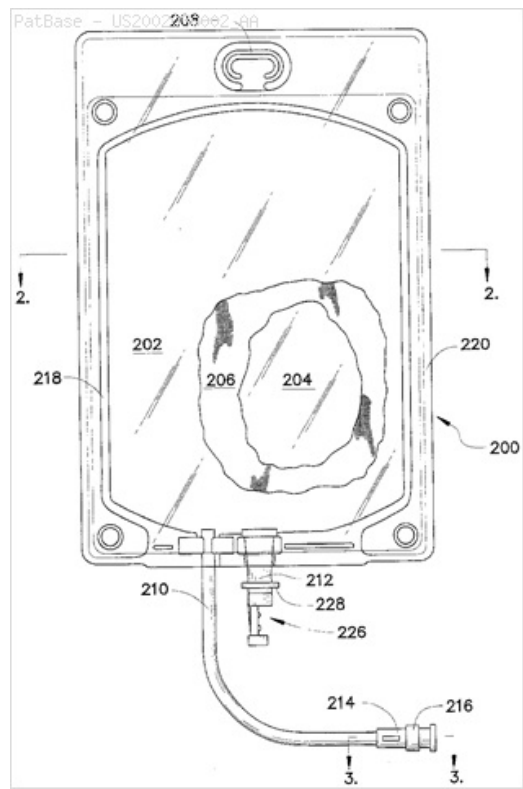
[Classification Explorer](#)

Cited documents: WO9517236 A1, US6547775 BA, US6517512 BA, US6024731 A, US5984892 A, US5971956 A, US5827429 A, US5695489 A, US5656027 A, US5573526 A, US5512042 A, US5507219 A, US5458567 A, US5441650 A, US5429486 A, US5411472 A, US5380314 A, US5372709 A, US5330431 A, US5308483 A, US5269924 A, US5269917 A, US5257917 A, US5230614 A, US5141504 A, US5087250 A, US5024615 A, US5002534 A, US5000351 A, US4954251 A, US4932114 A, US4923451 A, US4818190 A, US4813855 A, US4799925 A, US4798590 A, US4735606 A, US4681571 A, US4650477 A, US4642093 A, US4631008 A, US4527323 A, US4466888 A, US4416658 A, US4275731 A, US4266559 A, US4263140 A, US4191204 A, US4173222 A, US4135647 A, US4080967 A, US4066556 A, US4035304 A, US3799702 A, US3623483 A, US3587660 A, US3506130 A, US3191600 A, US2765923 A, IT593127 A, FR2098593 A5, EP0623357 A1, EP0254607 A2, EP0092313 A2,

Forward Citations: WO9962583, WO9962583, WO18051165, WO17134462, WO16196632, WO15197463, WO13077844, WO09149691, WO09149691, WO09083943, WO05031166, WO04069307, WO0023128, US420444, US9995611, US9968738, US9949601, US9931276, US9931268, US9888817, US9883987, US9849236, US9827163, US9820621, US9801984, US9796166, US9782707, US9693666, US9661964, US9624926, US9591958, US9585530, US9565981, US9545181, US9511989, US9498586, US9480832, US9468423, US9451855, US9451853, US9433332, US9420925, US9415145, US9402789, US9326652, US9320401, US9314139, US9295995, US9238235, US9227201, US9227151, US9206932, US9155821, US9149387, US9101709, US9027198, US8973622, US8967461, US8871526, US8790304, US8764408, US8763895, US8763892, US8760146, US8720772, US8690826, US8662154, US8631831, US8529511, US8524090, US8522832, US8465467, US8454907, US8424685, US8376985, US8360737, US8317491, US8154274, US8142404, US8142399, US8109906, US8053721, US8052643, US8052642, US8021336, US7981074, US7975491, US7967784, US7927304, US7896834, US7846131, US7828786, US7763005, US7758551, US7722573, US7722562, US7713241, US7713236, US7704231, US7641794, US7563248, US7560686, US7537579, US7445436, US7430942, US7356382, US7329250, US7168930, US7092796, US6874197, US6740074, US6676644, US6655934, US6651529, US6632352, US6547775, US6533834, US6251296, US6231645, US6231320, US6228260, US6228151, US6221134, US6200276, US62016290330, US2015107603, US2014100523, US2013046365, US2012184899, US2012109008, US2011201998, US2011104800, US2010282666, US2010209966, US2010198145, US2010198144, US2010160857, US2010057092, US2010051533, US2009264824, US2008156476, US2008147023, US2008135725, US2008125699, US2008125697, US2008015507, US2007253833, US2007240447, US2007208307, US2007208304, US2007107517, US2007104599, US2007078431, US2006276936, US2006253062, US2006211986, US2006052738, US2006004327, US2005267401, US2005189283, US2005187528, US2005165369, US2005107923, US2005069437, US2005069419, US2004251195, US2004122383, US2003225366, US2003209479, US2003204172, US2003144646, US2003106969, US2003053938, US2002139419, US10046112, US10022498, RU2623078, NO20160512, KR101061691, JP5829608, JP4074433, JP2017502774, JP2013500774, JP2006518620, JP2002527209, GB2432121, EP3251706, EP3061474, EP2959927, EP2949356, EP2720639, EP2720639, EP2610622, EP2440263, EP2440263, EP2145639, EP2075017, EP1932554, EP1829573, EP1829572, EP1808196, EP1680600, EP1059094, CN106310416, CN104014006, CN103998071, AU2010200409, AU2007240235, AU2007200848, AU2004210407,

Abstract:

A filter bag (200) and connector cartridge are used for collection of physiological fluids. The bag (200) includes an internal filter (206) and two seals (218, 220) on the perimeter. An inner seal (218) bonds the outer sheets (202, 204) of the bag and the filter, while the outer seal (220) bonds only the two outer sheets (202, 204) and acts as a safety seal. The bag includes a verification element that cooperates with a verification connector to ensure that the bag is properly attached to the fluid supply line before a fluid pump is enabled.



Title:SWABBABLE NEEDLELESS INJECTION PORT SYSTEM HAVING LOW REFLUX

Priority:US19980166559 19981005WO1999US22883 19991001US20000568478 20000509KR20017004304 20010404

Family:	Publication number	Publication date	Application number	Application date
	AT326259 E	20060615	AT19990953021T	19991001
	AU199965058 A1	20000426	AU19990065058	19991001
	AU199965058 A5	20000426	AU19990065058	19991001
	AU765829 B2	20031002	AU19990065058	19991001
	BRPI9915920 A	20010821	BR1999PI15920	19991001
	BRPI9915920 B1	20081118	BR1999PI15920	19991001
	CA2346468 AA	20010404	CA19992346468	19991001
	CA2346468 C	20080415	CA19992346468	19991001
	DE69931384 D1	20060622	DE19996031384	19991001
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	EP1119392 A1	20010801	EP19990953021	19991001
	EP1119392 A4	20021029	EP19990953021	19991001
	EP1119392 B1	20060517	EP19990953021	19991001
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	IL142461 A0	20020310	IL19990142461	19991001
	IL142461 A1	20080413	IL19990142461	19991001
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	JP4362015 B2	20091111	JP20000573425T	19991001
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	US6299131 BA	20011009	US20000568478	20000509
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Probable Assignee:RYMED TECHNOLOGIES LLC

Assignee(s):(std):RYMED TECHNOLOGIES INC ; RYMED TECHNOLOGIES ; RYMED TECHNOLOGIE INC ; RYAN DANA W

Assignee(s):RYAN DANA WM ; RTI TRANSACTIONS LLC ; RYMED TECHNOLOGIES LLC ; DANA W RYAN ; LEE MED TECHNOLOGIES KO PO RAY LTD ; MIDDLEBURY ADVISORS LLC (AS AGENT) ; MIDDLEBURY ADVISORS LLC AS AGENT ; PINNACLE FAMILY OFFICE INVESTMENTS LP

Inventor(s):(std):DANA WM RYAN ; RYAN DANA W ; RYAN DANA WM ; RYAN WM

Inventor(s):DANA W RYAN

Agent(s):HALFORDS IP; SMART AND BIGGAR; EDWARD LANGER; MASUI CHUJI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; KANDA FUJIIHIRO; TOMITA HIROYUKI

Designated states:AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8-9):A61M39/00 A61M39/02 A61M39/04 A61M39/26 F16K51/00 (Advanced/Invention); A61M39/02 A61M39/26 (Advanced/Non-invention); A61M39/00 A61M39/02 F16K51/00 (Core/Invention); A61M39/00 (Core/Non-invention)

International class (IPC 1-7):A61M A61M39/02 A61M39/26 F16K51/00

CPC:Y10S604/905 A61M39/045 A61M39/26 A61M2039/267

European class:A61M39/04B K61M39/26 K61M39/26M

US class:251/149.1 251/149.4 251/149.6 604/905

JP class F-Term:4C066 4C066/AA07 4C066/BB01 4C066/CC01 4C066/DD01 4C066/JJ01

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[Classification Explorer](#)

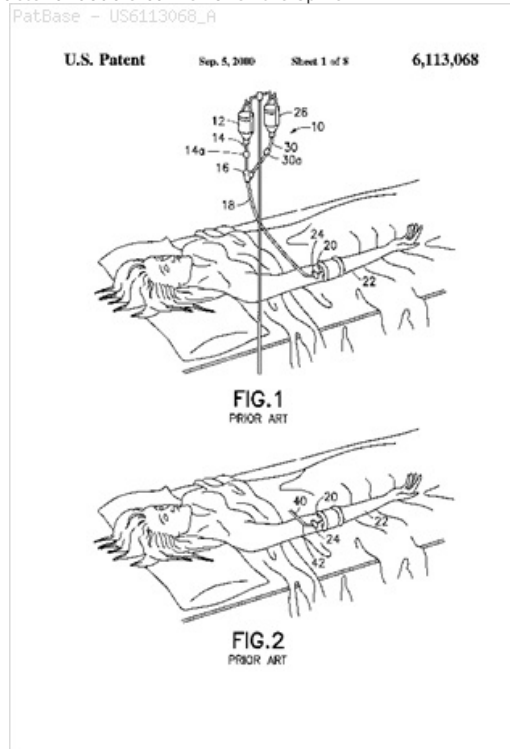
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Forward Citations:WO18056465, WO16201406, WO13017518, WO12169295, WO12115911, WO10028040, WO07087500, WO07087500, WO06074935, WO06037638, WO06031958, WO05120630, WO05069832, WO05069832, WO04056417, WO04030744, USD826400, USD801522, USD793551, USD786427, USD767124, USD765837, USD757933, USD737436, USD734868, USD720451, USD716916, USD644731, USD637713, US9999471, US9999383, US9989177, US9987406, US9974940, US9974939, US9951899, US9943463, US9943332, US9933094, US9925365, US9913945, US9913935, US9907887, US9907617, US9895526, US9884176, US9839741, US9839580, US9801786, US9795536, US9782576, US9775981, US9764125, US9750926, US9724504, US9707386, US9707346, US9636492, US9629992, US9610431, US9610405, US9592344, US9579498, US9545474, US9533137, US9533132, US9518813, US9468749, US9463309, US9440060, US9421321, US9415200, US9393399, US9393363, US9393353, US9358379, US9352140, US9339639, US9339438, US9326717, US9320881, US9320879, US9314606, US9309020, US9295824, US9295764, US9289589, US9289587, US9283324, US9283145, US9278206, US9272125, US9259284, US9238129, US9234616, US9205243, US9198831, US9192753, US9192449, US9186707, US9186494, US9168366, US9168203, US9163764, US9144646, US9138572, US9138379, US9132063, US9132061, US9126029, US9126028, US9114242, US9039672, US9039659, US9039653, US8999073, US8998875, US8998858, US8998840, US8998266, US8985639, US8979792, US8979136, US8974425, US8968343, US8945068, US8932256, US8926583, US8925970, US8910919, US8905994, US8900206, US8900190, US8888758, US8882710, US8876840, US8870850, US8870829, US8864726, US8864725, US8858500, US8852145, US8814839, US8790330, US8777909, US8777908, US8758306, US8753325, US8752598,

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Abstract:

A needleless IV injection port assembly includes a spiked body provided with a hollow spike, a female luer component, a flexible and resilient spike boot having a tip and spring portion, a centering member, and a resilient swabbable septum. The spike boot extends over the spike, the centering member is provided over a portion of the spike and spike boot, and the septum is provided between the centering member and an end of the female luer component. The spiked body and the female luer component are secured together to complete the assembly. The length of the female luer component and/or the length of the spike is chosen so that when a separate male luer is positioned over a protuberance on the septum and pushed into the female luer component, the male luer places pressure upon the septum which thereby urges the septum toward the spike. The pressure on the septum causes the spring portion of the boot to be compressed and the tip portion of the boot to be pierced by the tip of the spike. As the septum is further compressed, the septum extends over the spike, with a pre-slit hole in the septum facilitating the extension thereof, such that a hollow of the spike is in fluid communication with the male luer connector. The injection port causes minimal reflux, and the spike boot and septum provide a swabbable antibacterial double barrier over the spike.



Title:

COUPLED DRIVE MULTI-POSITION FLUID VALVE APPARATUS AND METHOD

Priority:

US20040544870P 20040213 US20050057395 20050211

Family:

Publication number	Publication date	Application number	Application date
US2005199304 AA	20050915	US20050057395	20050211
US7201185 BB	20070410	US20050057395	20050211
WO05080843 A1	20050901	WO2005US04598	20050211

Probable Assignee:

IDEX HEALTH AND SCIENCE LLC

Assignee(s):(std):

NICHOLS JON A ; POPPE CARL H ; RHEODYNE LLC ; SERVIN CARL M ; STRAKA MICHAEL R

Assignee(s):

IDEX HEALTH AND SCIENCE LLC ; RHEODYNE LLP

Inventor(s):(std):

STRAKA MICHAEL R ; SERVIN CARL M ; POPPE CARL H ; NICHOLS JON A

Inventor(s):

NICHOLS JON ; POPPE CARL ; SERVIN CARL ; STRAKA MICHAEL

Agent(s):

BEYER WEAVER AND THOMAS LLP; BEYER WEAVER LLP

Designated states:

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International class (IPC 8-9):

F16K31/02 F16K31/04 (Advanced/Invention)

International class (IPC 1-7):

F16K31/04

CPC:

Y10T137/5109 Y10T137/8242 Y10T137/87772 F16K31/04

European class:

F16K31/04

US class:

137/269 137/554 137/870

Classification Explorer

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Forward Citations:

WO17153901, WO16112163, WO11014310, USD742330, US9912257, US9649436, US9621078, US9473048, US9156674, US9015933, US8939645, US8933596, US8915158, US8884474, US8689899, US8282284, US8261773, US8159107, US8134276, US8122973, US7394375, US7308908, US2013044969, US2012167377, US2010096150, US2008087478, US2008061655, US2008049296, US2008048519, US2008043304, US2008042520, US2006260695, US2006076419, US10059582, JP2013500452, GB2535628, EP2803889, EP2636934, DE102008053570, DE102008053570,

Abstract:
A multi-position micro-fluidic valve system that includes an actuator assembly with a housing and a drive shaft rotatably disposed in the housing for rotational displacement about a drive axis thereof. One end of the drive shaft is configured to couple to a drive motor for selective rotation of the drive shaft about the drive axis. One of at least two different multi-position fluid valve devices can be removably mated to the actuator assembly. Each valve device is configured for rotational movement of a corresponding valve shaft about a valve rotational axis thereof between a plurality of discrete fluid distribution positions. A coupling device selectively and removably mounts the valve shaft of the respective valve device to the drive shaft of the actuator assembly. This enables selective positioning of the multi-position fluid valve device at a discrete one of the plurality for discrete distribution positions.

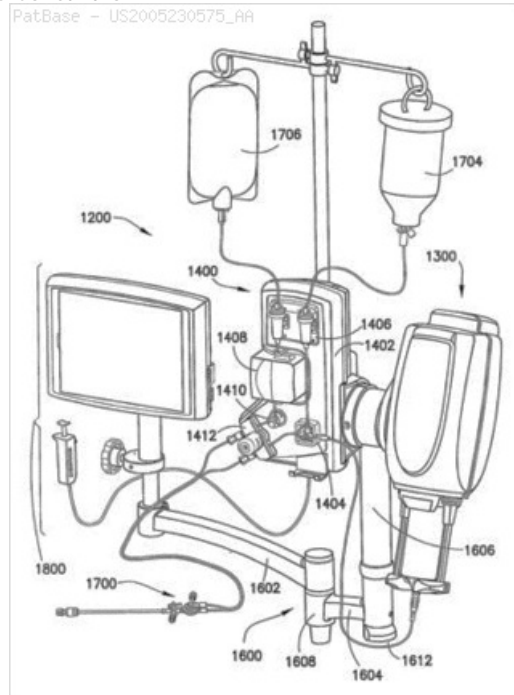
PatBase PDF Export - Page: 12 10/09/2018

Title:	MOBILE FLUID DELIVERY SYSTEM WITH DETACHABLE PEDESTAL																																																			
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Probable Assignee:	BAYER AG																																																			
Assignee(s):(std):	BARLOW WILLIAM D ; BAYER AG ; BAYER HEALTHCARE LLC ; BAYER MEDICAL CARE INC ; BEAULIEU RODERICK H ; CALLAN GERALD W ; EHRENBERGER MICHAEL J ; DEDIG JAMES A ; HAURY JOHN A ; FELIX SUSAN L ; GRUBIC HERB ; CRITCHLOW RICHARD G ; HUSSAIN MIRZA H ; EHRENBERG MICHAEL J ; GRUBIC HERBERT ; DEDIG JAMES ALBERT ; FELIX SUSAN LYNN ; HUSSAIN MIRZA HYDER ; ZELENSKI KAREN M ; JOYCE THOMAS P ; RHINEHART JEFFREY ; SCHRIVER RALPH H ; SPOHN MICHAEL A ; SHEARER JOHN D JR ; SPEICHER JONATHAN R ; SCUTT CHRISTOPHER M ; KOPACKO RALPH ; STOKES JERRY A JR ; O MEARA LINDA M ; KWO JENNIE ; PEDRAZA LUIS A ; MEDRAD INC ; SHEARER JR JOHN D ; KOPACKO RALPH E ; STOKES JR JERRY A																																																			
Assignee(s):	SHEARER JOHN D ; STOKES JERRY A																																																			
Inventor(s):(std):	BARLOW WILLIAM D ; BEAULIEU RODERICK H ; CALLAN GERALD W ; CRITCHLOW RICHARD G ; DEDIG JAMES A ; EHRENBERGER MICHAEL J ; FELIX SUSAN L ; GRUBIC HERB ; HAURY JOHN A ; JOYCE THOMAS P ; KOPACKO RALPH ; KWO JENNIE ; HUSSAIN MIRZA H ; HUSSAIN MIRZA HYDER ; O MEARA LINDA M ; PEDRAZA LUIS A ; RHINEHART JEFFREY ; SCHRIVER RALPH H ; SCUTT CHRISTOPHER M ; SHEARER JOHN D JR ; SPEICHER JONATHAN R ; SPOHN MICHAEL A ; STOKES JERRY A JR ; STOKES JR JERRY A ; ZELENSKI KAREN M ; SWANTNER MICHAEL J ; SHEARER JR JOHN D ; KOPACKO RALPH E ; GRUBIC HERBERT ; FELIX SUSAN LYNN ; EHRENBERG MICHAEL J ; DEDIG JAMES ALBERT																																																			
Inventor(s):	O'MEARA LINDA M ; O AND 39 MEARA LINDA M ; ZELENSKI KAREN ; STOKES JERRY AJR ; STOKES JERRY ; STOKES JERRY A ; SPOHN MICHAEL ; BARLOW WILLIAM ; SHEARER JOHN DJR ; SPEICHER JONATHAN ; SHEARER JOHN ; SHEARER JOHN D ; SCUTT CHRISTOPHER ; SCHRIVER RALPH ; PEDRAZA LUIS ; JOYCE THOMAS ; O MEARA LINDA ; HUSSAIN MIRZA ; HAURY JOHN ; FELIX SUSAN ; EHRENBERGER MICHAEL ; DEDIG JAMES ; CRITCHLOW RICHARD ; CALLAN GERALD ; BEAULIEU RODERICK																																																			
Agent(s):	GREGORY L BRADLEY, MEDRAD INC; GREGORY L BRADLEY MEDRAD INC; GREGORY L BRADLEY,MEDRAD INC; GREGORY L; CHRISTIAN E; DAVID; JOSEPH L; JAMES R																																																			
Designated states:	AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW																																																			
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Forward Citations:	WO18098144, WO18098130, WO18089882, WO17117463, WO16207577, WO15132676, WO15106107, WO14160326, WO14150225, WO14012802, WO13135905, WO13079743, WO11011346, WO09000806, WO08079540, WO08042721, WO08036935, WO08036935, WO07100396, WO07100396, USRE45717, USD818581, USD816831, USD816829, USD815730, USD813376, USD802118, USD799025, USD788911, USD752209, USD751690, USD751689, USD749206, USD745661, USD536454, US9987468, US9976665, US9943652, US9931461, US9931276, US9889289, US9889288, US9883987, US9861742, US9856990, US9849236, US9836930, US9833559, US9827410, US9827163, US9814871, US9808571, US9772044, US9764081, US9759343, US9750953, US9746094, US9746093, US9737649, US9724467, US9724466, US9724465, US9707342, US9687249, US9669206, US9566381, US9555379, US9526920, US9526830, US9526829, US9511989, US9486579, US9474857, US9457140, US9435455, US9433730, US9372486,																																																			

US9308323, US9308051, US9259527, US9259526, US9151646, US9089367, US9011377, US8945051, US8919384, US8910344, US8905969, US8870865, US8852167, US8852147, US8808253, US8777944, US8777871, US8747358, US8684145, US8568349, US8539672, US8430859, US8403909, US8361040, US8328738, US8303613, US8287517, US8257287, US8257286, US8251092, US8205847, US8147464, US8147463, US8043229, US7987722, US7818992, US7805978, US7726174, US7326186, US2017281922, US2017193766, US2017113005, US2017072131, US2016339229, US2015314074, US2015283322, US2014222009, US2014208251, US2013281974, US2013072791, US2012253271, US2012123257, US2012059313, US2011108689, US2010222768, US2010204573, US2010200076, US2010129784, US2010076307, US2010016796, US2010004558, US2009293588, US2009247865, US2009240178, US2009149743, US2009137978, US2009069830, US2009069712, US2008302925, US2008134750, US2008103445, US2008098798, US2008091142, US2008077176, US2008077063, US2008004818, US2007238967, US2007129705, US2007106263, US2006178632, US2005104444, US2004242996, US10029220, US10022493, RU2628647, FR2988006, ES2372511, EP3266481, EP2962770, EP2881129, EP2793978, EP2786773, EP2779982, EP2735376, EP2469438, EP2469437, EP2448612, EP2099517, EP1902747, EP1857252, DE102006023301, CN104888306, CN104689421, CN104582754, CN104080494, CN103813814, CN103239772, CN103191489, CN102612412, CN102612412, AU2007216937,

Abstract:

The mobile fluid delivery system includes a mobile pedestal and a fluid delivery superstructure detachably connected to the pedestal. The fluid delivery superstructure includes a pump device and a fluid control device. A fluid path set operatively associates the pump device with the fluid control device. The superstructure is further adapted to detachably connect to a patient examination platform. A rail mount is used to provide the interface between the superstructure and the patient examination platform. The rail mount attaches to a rail of the patient examination platform and includes a main body defining an elongated recess for engaging the rail of the patient examination platform. The superstructure detachably connects to the main body. Locking devices are used to secure the rail mount to the patient examination platform and the superstructure to the rail mount. A spacer may be inserted into the elongated recess to accommodate different sized rails.



Title:

FLUID DELIVERY SYSTEMS, PRESSURE ISOLATION MECHANISMS, INJECTOR CONTROL MECHANISMS, AND METHODS OF USE THEREOF

Priority:

JP20070508308 20040412 WO2004US11190 20040412 JP20070508308T 20040412 JP20070102326 20070410

Family:

Publication number	Publication date	Application number	Application date
EP1753481 A2	20070221	EP20040821981	20040412
EP1753481 A4	20090603	EP20040821981	20040412
JP2007222656 A2	20070906	JP20070102326	20070410
JP2007532234 T2	20071115	JP20070508308T	20040412
WO05110007 A2	20051124	WO2004US11190	20040412
WO05110007 A3	20061207	WO2004US11190	20040412

Probable Assignee:

MEDRAD INC

Assignee(s):(std):

MEDRAD INC

Inventor(s):(std):

BEAULIEU RODERICK H ; CALLAN GERALD W ; GRIFFITHS DAVID M ; HIRSCHMAN ALAN D ; KWO JENNIE ; PEDRAZA LUIS A ; REILLY DAVID M ; SCHMIDT ROBERT M ; TROMBLEY FREDERICK W III ; TROMBLEY FREDERIK W III ; ZIRPS CHRISTOPHER T

Inventor(s):

TROMBLEY FREDERICK W

Agent(s):

MARUYAMA TOSHIYUKI

Designated states:

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

International class (IPC 8-9):

A61M1/00 A61M37/00 A61M39/22 A61M5/00 A61M5/14 A61M5/142 A61M5/145 A61M5/148 A61M5/168 A61M5/36 G05D16/06 (Advanced/Invention); A61M39/24 A61M5/14 (Advanced/Non-invention); A61M1/00 A61M37/00 A61M39/00 A61M5/00 A61M5/14 A61M5/142 A61M5/145 A61M5/168 A61M5/36 G05D16/04 (Core/Invention); A61M5/14 (Core/Non-invention)

CPC:

A61M5/007 A61M5/14546 A61M5/16827 A61M5/16881 A61M5/36 A61M39/22 A61M39/223 A61M39/24 A61M2005/1403 A61M2205/3331 A61M2205/582

European class:

A61M39/22 A61M5/00R A61M5/145B6 A61M5/168F1 A61M5/36 K61M205/33P K61M205/58C K61M39/22D K61M39/24 K61M5/14A8 K61M5/168A11

JP class F-Term:

4C066 4C066/AA07 4C066/BB01 4C066/CC01 4C066/CC03 4C066/DD07 4C066/DD12 4C066/DD15 4C066/EE14 4C066/GG06 4C066/HH07 4C066/LL09 4C066/LL30 4C066/QQ15 4C066/QQ25 4C066/QQ35 4C066/QQ42 4C066/QQ44 4C066/DD08 4C066/QQ58 4C066/QQ92

JP class F-Index:

A61M39/22/100 A61M5/14/481 A61M5/14/485/F A61M5/168/504 A61M5/168/516 A61M5/36/500 A61M3/02/110 A61M39/24/100 A61M5/00/320 A61M5/14/485/D A61M5/14/510 A61M5/145/500 A61M5/168/506 A61M5/168/530

Classification Explorer

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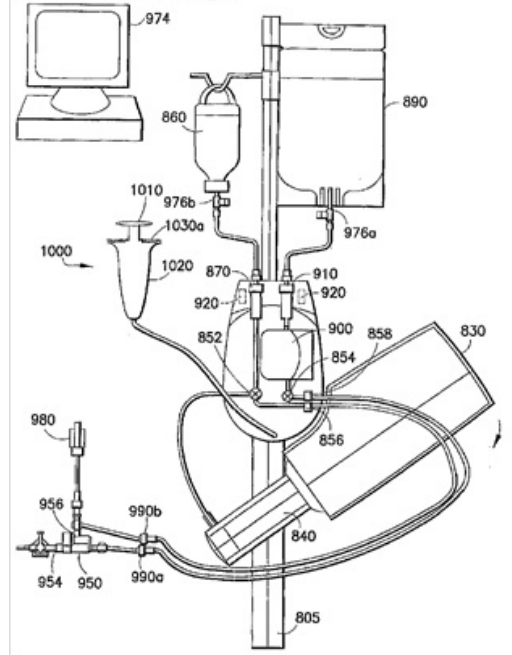
WO03015851 A1, WO0152921 A2, US6221045 BA, US5840026 A, US5573515 A, US5002528 A, US4396385 A, US4243031 A, JP2004538102 T2, JP2001522659 T2, JP2001520905 T2, JP11503941 T2, EP1172124 A2,

Forward Citations:

WO17095747, WO14104338, WO13184642, WO12071314, WO11100851, WO11080843, WO08079540, US9808571, US8801684, US8747356, US8591477, KR101289607, JP6325480, JP6071880, JP5401562, JP5401562, JP2015165893, JP2015157050, JP2014104338, JP2013008929, JP2012016619, JP2011080843, JP2009539562, EP3092017, EP2908884, EP2858712, EP2099517, CN104812435, CN104812435, CN104736187, CN102753220, CN102753220,

Abstract:

An injector system includes a source of injection fluid, a pump device, a fluid path set disposed between the source of injection fluid and the pump device, and a fluid control device operatively associated with the fluid path set. The fluid control device is adapted to permit purging of air from the fluid path set and to stop flow of the injection fluid to a patient at substantially any pressure or flow rate generated by the pump device for delivering a sharp bolus of the injection fluid to the patient. The fluid control device is preferably part of the fluid path set between the source of injection fluid and the pump device. In another aspect, an injector system includes a powered injector, a pressurizing chamber in operative connection with the powered injector, a fluid path in fluid connection with the pressurizing chamber, and a manual control in fluid connection with the fluid path. The manual control includes at least one actuator for controlling the injector through application of force by an operator. The actuator provides tactile feedback of pressure in the fluid path to the operator via a fluid connection with the fluid path. A pressure isolation mechanism for use in a medical procedure includes a lumen, an isolation port in fluid connection with the lumen, and a valve having a first state and a second state. The first state occurs when the lumen and the isolation port are connected. The second state occurs when the lumen and the isolation port are disconnected. The lumen remains open for flow of fluid therethrough in the first state and in the second state. The valve is normally in the first state and is switchable to the second state when fluid pressure in the lumen reaches a predetermined pressure level. A pressure transducer can be in fluid connection with the isolation port of the pressure isolation mechanism. A fluid delivery system includes a manually operated syringe and a pressure isolation mechanism as described above.



Title:

SELF-ALIGNING IVUS CATHETER ROTATIONAL CORE CONNECTOR

Priority:

US20070621356 20070109 WO2008US50518 20080108

Family:

Publication number	Publication date	Application number	Application date
CA2674607 AA	20090706	CA20082674607	20080108
EP2124755 A2	20091202	EP20080727434	20080108
EP2124755 B1	20171227	EP20080727434	20080108
JP2010515538 T2	20100513	JP20090545643T	20080108
JP5300022 B2	20130925	JP20090545643T	20080108
US2008167560 AA	20080710	US20070621356	20070109
US8257267 BB	20120904	US20070621356	20070109
WO08086356 A2	20080717	WO2008US50518	20080108
WO08086356 A3	20081106	WO2008US50518	20080108

Probable Assignee:

BOSTON SCIENTIFIC SCIMED INC

Assignee(s):(std):

BOSTON SCIENT LTD ; BOSTON SCIENT SCIMED INC ; THORNTON PETER

Assignee(s):

BOSTON SCIENTIFIC LIMITED ; BOSTON SCIENTIFIC LTD ; BOSTON SCIENTIFIC SCIMED INC

Inventor(s):(std):

THORNTON PETER

Agent(s):

SMART AND BIGGAR; PFENNING MEINIG AND PARTNER GBR; VOSSIUS AND PARTNER
PATENTANWALTE RECHTSANWALTE MBB; ORRICK HERRINGTON AND SUTCLIFFE LLP IP
PROSECUTION DEPARTMENT; FROMMER LAWRENCE AND HAUG LLP; PATRICK R; ORRICK HERRINGTON
AND SUTCLIFFE LLP ET AL

Designated states:

AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU
CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL
IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT
MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY
SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class
(IPC 8-9):

A61B8/12 A61B8/14 A61M25/18 (Advanced/Invention);
A61B8/12 A61M25/16 (Core/Invention)

CPC:

A61B8/12 A61B8/4209 A61B8/4461

European class:

A61B8/12 A61B8/42B A61B8/44N6

US class:

600/437 600/459 600/462 600/467 600/467P 606/1

JP class F-Term:

4C601 4C601/BB14 4C601/DD14 4C601/EE10 4C601/EE12 4C601/FE04 4C601/GA14

JP class F-Index:

A61B8/12

Classification Explorer

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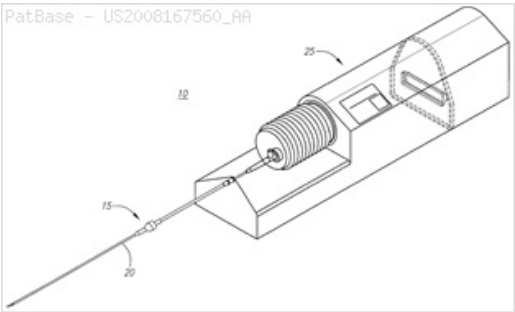
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US6714809 BB, US6700058 BB, US6530887 BA, US6529760 BB, US6508781 BA, US6485482 BA,
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US5348481 A, US5178159 A, US5150715 A, US4407298 A, US4362166 A, US4243884 A, US2009221918
AA, US2007178768 AA, US2007178767 AA, US2007021685 AA, US2005283140 AA, US2005251035 AA,
US2005043618 AA, US2004230123 AA, US2003143895 AA, US2003073348 AA, JP9239083 A2,
JP6133973 A2, JP6022962 A2, JP5056977 A2, JP2003505181 T2, JP2002522105 T2, JP11332866 A2,
EP1026982 B1,

Forward Citations:

WO17062371, WO16112163, US9897694, US8961425, US8591422, US8323203, US8197413,
US2014133269, US2012330160, US2009306518, US2009270737, US10031217, JP6085664,
JP2016073723, JP2012520127,

Abstract:

The present invention provides self-aligning rotational connectors. In an non-limiting embodiment, a catheter system comprises a catheter connectable to a drive unit. The catheter includes a rotator, and at least one orientating feature extending proximally from the rotator, and configured to be inserted into an orienting slot of a shaft connector of the drive unit. When the orienting feature is inserted into the slot of the shaft connector, the slot transmits torque from the shaft connector to the orientating feature, and therefore the rotator of the catheter. Electrical contacts are provided on the rotator and the shaft connector, wherein the contacts of the rotator are properly aligned with and engage the contacts of the shaft connector. Further, the shaft connector has a slopping surface that slopes downward into the slot for automatically aligning the rotator rotationally with the shaft connector during insertion of the catheter into the drive unit.



Title:

FLUID DELIVERY SYSTEM WITH MULTI-DOSE FLUID SOURCE

Priority:

US20070988858P 20071119 CN200880116756 20081119 EP20080852801 20081119
JP20100534059 20081119 EP20100015319 20081119 EP20100015320 20081119
JP20100534059T 20081119 WO2008US12894 20081119 US20080742928 20081119
JP20110231165 20081119 JP20110231166 20081119 JP20150094510 20150505

Family:	Publication number	Publication date	Application number	Application date
	CN101868266 A	20101020	CN200880116756	20081119
	CN101868266 B	20150107	CN200880116756	20081119
	CN102989055 A	20130327	CN201210442417	20081119
	CN102989055 B	20150304	CN201210442417	20081119
	CN102989056 A	20130327	CN201210442981	20081119
	CN102989056 B	20150617	CN201210442981	20081119
	DE602008017327 D1	20120913	DE200860017327T	20081119
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	EP2222358 A2	20100901	EP20080852801	20081119
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	EP2283883 A2	20110216	EP20100015319	20081119
	EP2283883 A3	20111012	EP20100015319	20081119
	EP2283883 B1	20120718	EP20100015319	20081119
	EP2283884 A2	20110216	EP20100015320	20081119
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	ES2391718 T3	20121129	ES20100015319T	20081119
	ES2391719 T3	20121129	ES20100015320T	20081119
	ES2401942 T3	20130425	ES20080852801T	20081119
	JP2011502700 T2	20110127	JP20100534059T	20081119
	JP2012016618 A2	20120126	JP20110231165	20111020
	JP2012016619 A2	20120126	JP20110231166	20111020
	JP2013163069 A2	20130822	JP20130109734	20130524
	JP2013176702 A2	20130909	JP20130133709	20130626
	JP2015142792 A2	20150806	JP20150094510	20150505
	JP5425159 B2	20140226	JP20110231165	20111020
	JP5579616 B2	20140827	JP20100534059T	20081119
	JP5787714 B2	20150930	JP20110231166	20111020
	US2010249586 AA	20100930	US20080742928	20081119
	US8747356 BB	20140610	US20080742928	20081119
	WO09067200 A2	20090528	WO2008US12894	20081119
	WO09067200 A3	20090924	WO2008US12894	20081119

Probable Assignee:

LIEBEL FLARSHEIM CO LLC

Assignee(s):(std):

JOHNSON PAUL A ; LIEBEL FLARSHEIM CO LLC ; MALLINCKRODT INC ; MALLINCKRODT LLC ; COCKER ROBIN C

Assignee(s):

DEUTSCHE BANK NEW YORK BRANCH AG ; LIEBEL FLARSHEIM CO LLC HAZELWOOD

Inventor(s):(std):

COCKER ROBIN ; JOHNSON PAUL ; JOHNSON PAUL A ; COCKER ROBIN C

Inventor(s):

COCKER ROBIN C OLDHAM

Agent(s):

FROHWITTER BERNHARD DIPL ING; CHETTLE ADRIAN JOHN; UNGRIA JAVIER; MALLINCKRODT INC; SEURER JERAD G ET AL

Designated states:

AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9):

A61B18/14 A61B6/00 A61L2/08 A61L2/18 A61M31/00 A61M39/00 A61M39/16 A61M39/26 A61M5/145 A61M5/168 A61M5/178 A61M5/20 A61M5/31 A61M5/315 (Advanced/Invention); A61B6/00 A61M31/00 A61M5/145 A61M5/31 A61M5/315 (Core/Invention)

CPC:

A61B6/548 A61M5/31511 A61M5/007 A61M5/14546 A61M5/16827 A61M2005/14553 A61M2005/3117 A61M2005/3128

European class:

A61M5/145B6 A61M5/168A11 A61M5/315C K61M5/00R K61M5/145B6P K61M5/31A6 K61M5/31A9

US class:

600/432 600/432P 604/114 604/533

JP class F-Term:

4C066 4C066/AA09 4C066/BB01 4C066/CC09 4C066/DD08 4C066/DD12 4C066/EE15 4C066/FF01 4C066/GG04 4C066/GG12 4C066/HH02 4C066/HH05 4C066/HH13 4C066/HH17 4C066/LL02 4C066/QQ22 4C066/QQ32 4C066/QQ72 4C066/QQ92 4C167 4C058 4C058/AA12 4C058/AA22 4C058/BB06 4C058/BB07 4C058/EE26 4C058/JJ07 4C058/JJ08 4C058/KK02 4C058/KK03 4C058/KK05 4C058/KK46 4C066/CC01 4C066/CC03 4C066/DD06 4C066/DD11 4C066/DD13 4C066/EE06 4C066/EE18 4C066/FF03 4C066/GG06 4C066/HH12 4C066/LL01 4C066/AA07 4C066/GG20 4C066/JJ02 4C066/EE14 4C066/LL30 4C066/QQ41 4C066/QQ51 4C066/DD07 4C066/FF05 4C066/JJ07

JP class F-Index:

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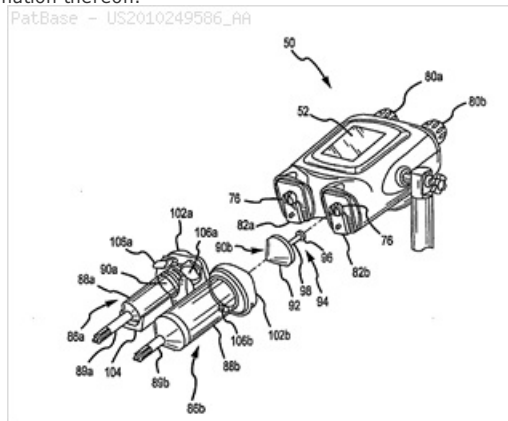
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US2004254525 AA, US2004092885 AA, US2004002685 AA, US2003135250 AA, US2002143294 AA, US2001009994 AA, US1961023 A, JP7213606 A2, JP5329209 A2, JP4500622 T2, JP4500622, JP2007532234 T2, JP2007532234, JP2006230739 A2, JP2004290455 A2, JP2003528698 T2, JP2003528698, JP2003504124 T2, JP2003199823 A2, JP2003199823, JP2002345952 A2, JP2001522660 T2, JP2001520919 T2, JP2001520919, JP2001104492 A2, JP11503939 T2, JP11503939, JP10122471, JP10122471, EP0671179 A2, EP0639389 A1, EP0639389, EP00639389, CN2063018, CN1901952, CN101039711, CA2568680,

Forward Citations: WO14201358, US9855385, US9700670, US9492574, US9408981, US9295742, US9199033, US9173995, US9114215, US2015224248, US10016564, KR101687199, EP3092017, CN105492038, CN104936636, CN104936636, CN103831223, CN103656800, CN102906793,

Abstract:

A fluid delivery system (400A) is generally directed to allowing fluid sources or other fluid delivery components to be reused with multiple fluid targets (318), and includes at least one fluid source (314) fluidly interconnectable with at least one sterilization zone (316) and at least one fluid target (318). This sterilization zone (316) could include one or more sterilization systems that attempt to neutralize contaminants entering the fluid delivery system (400A) by a backflow from the fluid target (318). One such sterilization system (500A-D) includes a container (502a-d) and a flush system (520) for sterilizing the container (502a-d) between uses. Another sterilization system (600) includes a flowpath (604) exposed to an output of an energy source (602) capable of destroying contaminants. Yet another sterilization system could include a sterilizing substance (710) that engages and moves along an interior surface (705) of a housing (704) to treat contamination thereon.



Title:	APPARATUS AND METHODS FOR DELIVERY OF FLUID INJECTION BOLUSES TO PATIENTS AND HANDLING HARMFUL FLUIDS																																																																																																					
Priority:	US20080059384P 20080606 US20090153070 20090217 CN200980131638 20090605 US20090996520 20090605 US20100996520 20101206 JP20150071170 20150331		US20080059384 20080606 US20090171240P 20090421 JP20110512697 20090605 WO2009US46437 20090605 JP20100277820 20101214 JP20160029930 20160219		US20090153070P 20090217 US20090171240 20090421 JP20110512697T 20090605 US20090664653 20091214 US20130971095 20130820																																																																																																	
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Probable Assignee:	BAYER AG																																																																																																					
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Inventor(s):(std):	AARON HUGHES ; ARTHUR E UBER III ; COATES LISA M ; BOUTON CHAD E ; CHAD E BOUTON ; COATES LISA M LM ; GULICK JULIE ; GRIFFITHS DAVID M ; COWAN KEVIN P ; GEORGE SIDDOWAY L ; DAVID M GRIFFITHS ; FREDRICK W TROMBLEY III ; COWAN KEVIN P KP ; GRIFFITHS DAVID M DM ; MABIE MARC A ; MCCUTCHAN LARRY ; KALAFUT JOHN F ; HUGHES AARON ; MARK TROCKI ; JULIE GULICK ; LARRY MCCUTCHAN ; KEVIN P COWAN ; LISA M COATES ; L GEORGE SIDDOWAY ; MARC A MABIE ; MCCUTCHAN LARRY L ; KALAFUT JOHN F JF ; GULICK JULIE J ; HUGHES AARON A ; MABIE MARC A MA ; UBER ARTHUR E III ; TROCKI MARK ; TROMBLEY FREDERICK W III ; SIDDOWAY L GEORGE ; TWICHELL PETER ; SIDDOWAY GEORGE L ; UBER ARTHUR E ; PETER TWICHELL ; UBER III ARTHUR E ; TROMBLEY III FREDERICK W ; TROCKI MARK M ; UBER ARTHUR E III AE ; SIDDOWAY L GEORGE LG ; TROMBLEY FREDERICK W III FW ; TWICHELL PETER P ; UBER ARTUR E III																																																																																																					
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Agent(s):	ZINNECKER ARMIN; MARUYAMA TOSHIYUKI; NISHIOKA NOBUYASU; JILL; DAVID; JAMES R; JOSEPH L; BRYAN P; CHRISTIAN E; BRADLEY GREGORY L																																																																																																					
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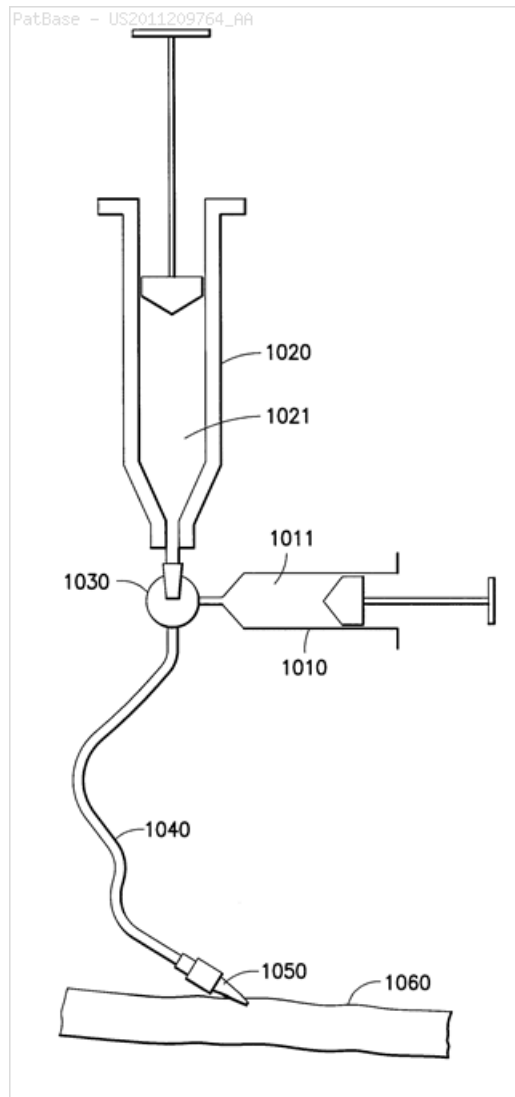
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Forward Citations:

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Abstract:

A hazardous fluid transport container and a hazardous fluid delivery system are disclosed. The hazardous fluid transport container includes a housing enclosing an at least partially shielded enclosure. First and second fluid path elements are disposed within the housing, with the first fluid path element and second fluid path element fluidly coupled together. A pump unit may be provided for dispensing fluid from the first and second fluid path elements optionally into a third fluid path element. Also, methods for priming the hazardous fluid transport container and for mitigating laminar flow injection bolus spreading are disclosed. Additionally, disclosed is a radioactive fluid transport container for a syringe or other container. The radioactive fluid transport container allows the syringe or container to be used in an injection procedure without removal from the container.

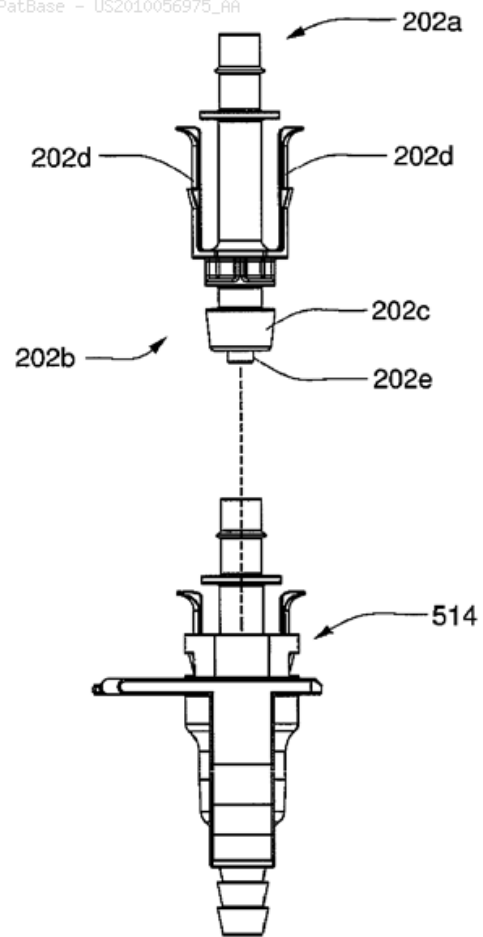


Title: BLOOD LINE CONNECTOR FOR A MEDICAL INFUSION DEVICE**Priority:** US20080199176 20080827

Family:	Publication number	Publication date	Application number	Application date
	US2010056975 AA	20100304	US20080199176	20080827

Probable Assignee: DEKA PRODUCTS PARTNERSHIP LTD**Assignee(s):(std):** DEKA PRODUCTS LP**Assignee(s):** DEKA PRODUCTS PARTNERSHIP LTD**Inventor(s):(std):** DALE JAMES D ; GRANT KEVIN L ; MARCEK GEOFFREY A**Agent(s):** DEKA RESEARCH AND DEVELOPMENT C O WOLF GREENFIELD AND SACKS PC CORP**International class**
(IPC 8-9): A61M1/14 (Advanced/Invention);
A61M1/14 (Core/Invention)**CPC:** A61M1/16 A61M1/1601 A61M1/3607 A61M5/14224 A61M39/1011 A61M39/105 A61M2039/1027
A61M2039/1083 A61M2039/1088 A61M2205/3331 A61M2205/3368 A61M2205/502 A61M1/3609
A61M2230/65**US class:** 604/6.16[Classification Explorer](#)**Cited documents:** US7892197 BB, US7867214 BB, US7662286 BB, US7488448 BB, US7318892 BB, US7318292 BB, US7175606 BB, US7175397 BB, US7169303 BB, US7168334 BA, US6868309 BA, US6860866 BA, US6858019 BB, US6709417 BA, US6673314 BA, US6620119 BA, US6539172 BB, US6537445 BB, US6535689 BB, US6529775 BB, US6527758 BB, US6520747 BB, US6517510 BA, US6347633 BA, US6336911 BA, US6336003 BA, US6176904 BA, US6171261 BA, US6044868 A, US6042784 A, US6041801 A, US5882047 A, US5879316 A, US5875282 A, US5730720 A, US5729653 A, US5714060 A, US5593290 A, US5591389 A, US5591344 A, US5496273 A, US5487827 A, US5486286 A, US5482440 A, US5395316 A, US5385540 A, US5381510 A, US5378126 A, US5278072 A, US5178182 A, US5100554 A, US5088901 A, US5088515 A, US4997570 A, US4906816 A, US4808161 A, US4731072 A, US4574876 A, US4501405 A, US4439188 A, US4369781 A, US4322054 A, US4309592 A, US4133312 A, US3936729 A, US3016563 A, US2011009797 AA, US2009076434 AA, US2009043239 AA, US2009024070 AA, US2009012461 AA, US2009012460 AA, US2009012458 AA, US2009012457 AA, US2009012456 AA, US2009012455 AA, US2009012454 AA, US2009012453 AA, US2009012452 AA, US2009012450 AA, US2009012449 AA, US2009012448 AA, US2009012447 AA, US2009009290 AA, US2009008331 AA, US2009007642 AA, US2009004033 AA, US2008077068 AA, US2008058712 AA, US2008058697 AA, US2008033346 AA, US2008015493 AA, US2007060786 AA, US2006002823 AA, US2005234385 AA, US2005131332 AA, US2005069427 AA, US2005069425 AA, US2005045540 AA, US2005020958 AA, US2004019313 AA, US2004009096 AA, US2004001766 AA, US2003100858 AA, US2002092103 AA,**Forward Citations:** WO15183976, WO15106107, WO12162515, WO11053810, USD785790, USD754322, USD715136, USD712537, USD709612, USD702343, USD699841, USD699840, USD698440, USD698437, USD685906, USD675727, USD663022, USD655393, USD654573, USD652511, USD652510, USD650478, USD649240, USD645547, USD634840, US9999717, US9987410, US9987407, US9981079, US9951768, US9931498, US9861732, US9839776, US9839775, US9732891, US9724458, US9717834, US9700711, US9700660, US9677554, US9649418, US9623196, US9603985, US9597442, US9555179, US9539379, US9535021, US9517295, US9464741, US9388929, US9366781, US9364655, US9358332, US9302037, US9272082, US9248225, US9115708, US9078971, US9046205, US9028691, US9028440, US9022969, US8992189, US8992075, US8985133, US8968232, US8926294, US8888470, US8870549, US8863772, US8840581, US8771508, US8721884, US8721879, US8708950, US8596688, US8562834, US8545698, US8499780, US8491184, US8459292, US8448994, US8425471, US8409441, US8397756, US8393690, US8366655, US8366316, US8357298, US8317492, US8292594, US8273049, US8246826, US8235426, US8197439, US8113546, US8042563, US7967022, US7878553, US2016296687, US2014276213, US2013053774, US2011218600, US2011125085, US2011106002, US2011098635, US2011092894, US2011071465, US2010192686, US2010057016, US2010051529, US2009008331, US2008216898, US2008208111, US2008175719, US10001236, US09999717, EP3205362, EP3072545, CN105120942,**Abstract:**

A blood line connector for a blood circuit of a hemodialysis unit with an ability to make two different types of fluid tight connections, e.g., a screw-type connection with a luer connector at a patient access and a press-in type connection with a dialysate circuit. The blood line connector may include a tube connection end arranged to sealingly engage with a blood circuit tube, and a patient access connection end with a frustoconical member having an internally threaded portion arranged to engage with an externally threaded patient access, and a pair of locking arms extending rearwardly from the frustoconical member. The locking arms may each have a finger depression portion and a barbed portion, and may be arranged to engage with a mating connector on the dialysis unit at the barbed portions to lock the frustoconical member in sealing engagement with the mating connector when making a press-in type connection.



Title:

SENSOR CONTROLLED FLOW PATH FOR PROVIDING FLUIDS TO PATIENTS

Priority:

US20080197040P 20081024 US20090129574 20091026 WO2009US62138 20091026

Family:

Publication number	Publication date	Application number	Application date
US2011313394 AA	20111222	US20090129574	20091026
WO10048644 A1	20100429	WO2009US62138	20091026

Probable Assignee:

INNERSPACE INC

Assignee(s):(std):

BOBO DONALD E SR ; BOBO SR DONALD E ; INNERSPACE INC

Assignee(s):

BOBO DONALD E

Inventor(s):(std):

BOBO DONALD E SR ; BOBO SR DONALD E

Inventor(s):

BOBO DONALD E

Agent(s):

SWANSON SHANE S

Designated states:

AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class

A61M5/142 A61M5/168 (Advanced/Invention)

(IPC 8-9):

CPC:

A61M5/142 A61M5/1723 A61M2205/3337

European class:

A61M5/142 A61M5/172B K61M205/33P2

US class:

604/151 604/151S 604/500 604/500S 604/504 604/504P 604/66 604/66S

[Classification Explorer](#)

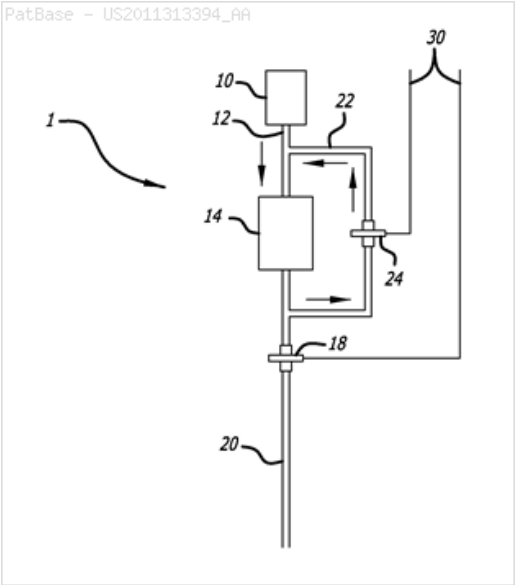
Cited documents:

US2007179437 AA, US2005187515 AA, US2002156463 AA,

Forward Citations:

WO17117463, WO15106107, WO13086147, US9724500,

Abstract:
An outflow line is connected to an infusion pump that is programmed to run at a fixed rate. The outflow line has a bypass line that leads from the pump outlet back to the pump inlet. A line downstream of the entrance to the bypass line leads to the patient. The system has two valves. The fluid en route to the patient passes through the first valve. The bypass line passes through the second valve. When one valve is open, the other is closed. The valves' flow states are controlled by a signal from a control instrument. The system allows the pump output to be directed to the patient or to a bypass circuit that returns fluid leaving the pump back to the pump inlet. The system makes it possible to vary the amount of fluid delivered to a patient by an infusion pump set at a constant pumping rate by varying the open and closed state of valves in response to a signal from a patient monitoring instrument.



Title:	MULTI-FLUID MEDICAL INJECTOR SYSTEM AND METHODS OF OPERATION			
Priority:	US20090228294P 20090724 JP20120521713 20100720 US20100386765 20100720 WO2010US42501 20100720 EP20140155592 20140218 US20160299913 20161021	CN201080043259 20100720 EP20140155592 20100720 JP20120521713T 20100720 US20120386765 20120124 JP20150026115 20150213	EP20100802740 20100720 EP20150180011 20100720 JP20150026115 20100720 US20130041920 20130930 JP20160180391 20160915	
Family:	Publication number	Publication date	Application number	Application date
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	CN102612412 B	20150415	CN201080043259	20100720
	CN104888306 A	20150909	CN201510174190	20100720
	CN104888306 B	20180724	CN201510174190	20100720
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	DK2735376 T3	20171127	DK20140155592T	20100720
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	EP2456572 B1	20140226	EP20100802740	20100720
	EP2735376 A1	20140528	EP20140155592	20100720
	EP2735376 B1	20170823	EP20140155592	20100720
	EP2962770 A1	20160106	EP20150180011	20100720
	EP2962770 B1	20170322	EP20150180011	20100720
	ES2464046 T3	20140530	ES20100802740T	20100720
	ES2629012 T3	20170807	ES20150180011T	20100720
	ES2648524 T3	20180103	ES20140155592T	20100720
	JP2013500060 T2	20130107	JP20120521713T	20100720
	JP2015128613 A2	20150716	JP20150026115	20150213
	JP2016221350 A2	20161228	JP20160180391	20160915
	JP5702383 B2	20150415	JP20120521713T	20100720
	JP6078569 B2	20170208	JP20150026115	20150213
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	US2014027009 AA	20140130	US20130041920	20130930
	US2017035959 AA	20170209	US20160299913	20161021
	US8945051 BB	20150203	US20100386765	20100720
	US9474857 BB	20161025	US20130041920	20130930
	WO11011346 A1	20110127	WO2010US42501	20100720
Probable Assignee:	BAYER AG			
Assignee(s):(std):	BAYER MEDICAL CARE INC ; SCHRIVER RALPH H ; RILEY MICHAEL ; DEDIG JAMES A ; UBER ARTHUR E ; SPOHN MICHAEL ; STOKES JERRY A ; MEDRAD INC ; MAIHOFER ANDREAS ; JOYCE THOMAS P ; CAMPBELL PATRICK B ; STOKES JR JERRY A ; BARLOW WILLIAM D ; BAYER AG ; BAYER HEALTHCARE AG ; BAYER HEALTHCARE LLC			
Assignee(s):	BAYER HEALTHCARE LLC WHIPPANY ; BAYER MEDICAL CARE INC INDIANOLA			
Inventor(s):(std):	CAMPBELL PATRICK B ; DEDIG JAMES A ; JOYCE THOMAS P ; MAIHOFER ANDREAS ; MICHAEL RILEY ; MICHAEL SPOHN ; RILEY MICHAEL ; RILEY MICHAEL A ; SCHRIVER RALPH H ; SPOHN MICHAEL ; STOKES JERRY A ; STOKES JR JERRY A ; UBER ARTHUR E ; WILLIAM D BARLOW ; THOMAS P JOYCE ; RALPH H SCHRIVER ; PATRICK B CAMPBELL ; ARTHUR E UBER ; UBER ARTHUR ; STOKES JERRY ; SCHRIVER RALPH ; JOYCE THOMAS ; DEDIG JAMES ; CAMPBELL PATRICK ; BARLOW WILLIAM ; JERRY A STOKES ; JAMES A DEDIG ; ANDREAS MAIHOFER ; BARLOW WILLIAM D			
Inventor(s):	BARLOW WILLIAM D PITTSBURGH ; DEDIG JAMES A PITTSBURGH ; CAMPBELL PATRICK B MURRYSVILLE ; BARLOW WILLIAM D BEAVER FALLS ; MAIHOFER ANDREAS CHESWICK ; JOYCE THOMAS P WILKINS TOWNSHIP ; STOKES JERRY A APOLLO ; SPOHN MICHAEL FENELTON ; SCHRIVER RALPH H TARENTUM ; RILEY MICHAEL SAXONBURG ; UBER ARTHUR E PITTSBURGH			
Agent(s):	ZINNECKER ARMIN; BIP PATENTS; LEHMANN MARIA ISABEL; CARPINTERO MARIO; MARUYAMA TOSHIEYUKI; NISHIOKA NOBUYASU; DAVID; JOSEPH L; JAMES R; BRADLEY GREGORY L			
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW			
International class (IPC 8-9):	A61B6/00 A61M1/00 A61M31/00 A61M37/00 A61M5/00 A61M5/14 A61M5/142 A61M5/145 A61M5/168 A61M5/178 A61M5/31 A61M5/315 B05C17/01 (Advanced/Invention); A61M5/14 (Advanced/Non-invention)			
CPC:	A61M5/007 A61M5/14546 A61M5/1458 A61M5/16827 A61M2005/1402 A61M2005/1403 A61M2005/14553 A61B6/507 A61M5/1407 A61M5/142 A61B6/481 A61M5/1782			
European class:	A61M5/00R A61M5/145B20 A61M5/145B6 A61M5/168A11 K61M5/145B6P K61M5/14A6 K61M5/14A8			
US class:	1/1 141/2 600/432 600/432P 604/131			
JP class F-Term:	4C066 4C066/AA07 4C066/BB01 4C066/CC01 4C066/DD11 4C066/EE06 4C066/EE18 4C066/FF03 4C066/HH02 4C066/HH14 4C066/QQ32 4C066/QQ35 4C066/QQ72 4C066/AA09 4C066/CC09 4C066/DD12 4C066/EE14 4C066/FF04 4C066/LL08 4C066/QQ82 4C066/QQ92 4C066/CC03 4C066/HH01 4C066/HH11 4C066/LL06 4C066/QQ21 4C066/QQ25 4C066/QQ27 4C066/QQ76 4C167			
JP class F-Index:	A61M39/24 A61M5/14/481 A61M5/142 A61M5/145/500 A61M5/36 A61M5/145/506 A61M5/145/510 A61M5/168/504 A61M5/168/506 A61M36/06 A61M5/315/580			

[Classification Explorer](#)

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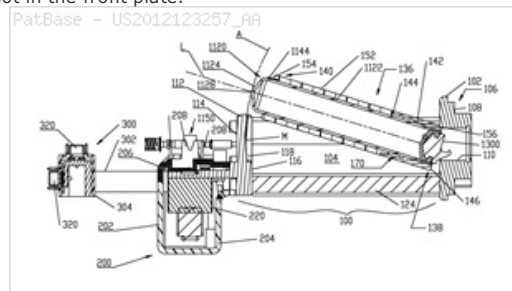
WO06057089 A1, WO06054651 A1, WO06054650 A1, WO06051856 A1, WO06051855 A1, WO05097232 A1, WO05088661 A1, WO05086393 A1, WO05051463 A1, WO03050491 A2, WO02065114 A2, WO02064195 A2, WO02064194 A1, WO0189634 A2, WO0174421 A1, WO0113785 A2, WO01089634, WO00605522 A2, WO0038615 A1, WO0038615, WO00038615, US8361040 BB, US8211067 BB, US8177757 BB, US7887513 BB, US7828776 BB, US7686800 BB, US7169135 BB, US7153288 BB, US7137967 BB, US7128729 BB, US7101352 BB, US7081104 BB, US7047994 BB, US7018363 BB, US7001354 BB, US6969865 BB, US6945959 BB, US6929619 BB, US6917828 BB, US6880808 BB, US6780170 BB, US6764466 BA, US6752789 BB, US6746427 BB, US6676635 BB, US6673048 BA, US6669679 BA, US6659979 BB, US6656157 BA, US6650929 BA, US6648860 BB, US6635030 BA, US6626862 BA, US6623445 BA, US6569127 BA, US6558125 BA, US6533758 BA, US6530907 BA, US6511459 BA, US6488660 BA, US6468261 BA, US6447481 BA, US6368307 BA, US6361528 BA, US6355024 BA, US6344030 BA, US6315758 BA, US6312410 BA, US6293958 BA, US6254572 BA, US6221045 BA, US6196999 BA, US6159183 A, US6099502 A, US6004292 A, US6004285 A, US5997484 A, US5988587 A, US5968015 A, US5938638 A, US5928197 A, US5925022 A, US5920054 A, US5916165 A, US5913844 A, US5902276 A, US5885216 A, US5882343 A, US5868710 A, US5865805 A, US5857647 A, US5855568 A, US5843037 A, US5840026 A, US5806519 A, US5800397 A, US5779675 A, US5743872 A, US5739508 A, US5738659 A, US5681286 A, US5665074 A, US5665067 A, US5662666 A, US5662612 A, US5658261 A, US5573515 A, US5569181 A, US5505707 A, US5464014 A, US5456670 A, US5456669 A, US5451211 A, US5300031 A, US5279569 A, US5239265 A, US5116315 A, US5033650 A, US4979942 A, US4260077 A, US4175559 A, US4175559, US3754644 A, US2703575 A, US2112160 A, US2011054395 AA, US2009149744 AA, US2009022378 AA, US2009014303 AA, US2008287785 AA, US2008225440 AA, US2008161634 AA, US2008154214 AA, US2008154202 AA, US2008086087 AA, US2008076378 AA, US2008058720 AA, US2007276235 AA, US2007203460 AA, US2007197963 AA, US2007161970 AA, US2007100282 AA, US2006271014 AA, US2006264744 AA, US2006184122 AA, US2006180202 AA, US2006167415 AA, US2006151049 AA, US2006138377 AA, US2006106347 AA, US2006079842 AA, US2006079768 AA, US2006079767 AA, US2006079766 AA, US2006079765 AA, US2005245873 AA, US2005234428 AA, US2005234407 AA, US2005230575 AA, US2005194047 AA, US2005182371 AA, US2005182323 AA, US2005182322 AA, US2005148869 AA, US2005148868 AA, US2005148867 AA, US2005143653 AA, US2005113766 AA, US2005113754 AA, US2005049556 AA, US2005038468 AA, US2005038390 AA, US2005038389 AA, US2005038386 AA, US2005027238 AA, US2005015056 AA, US2005000447 AA, US2004254533 AA, US2004249344 AA, US2004249276 AA, US2004225255 AA, US2004215490 AA, US2004199076 AA, US2004167469 AA, US2004162484 AA, US2004152979 AA, US2004133165 AA, US2004122369 AA, US2004097905 AA, US2004092881 AA, US2004087910 AA, US2004087909 AA, US2004082919 AA, US2004064041 AA, US2004064040 AA, US2004010229 AA, US2003122095 AA, US2003028402 AA, US2003028145 AA, US2003028144 AA, US2003007891 AA, US2002198496 AA, US2002183616 AA, US2002169415 AA, US2002143294 AA, US2002128601 AA, US2002115933 AA, US2002095117 AA, US2001011163 AA, JP9285546 A2, JP9164203 A2, JP9131400 A2, JP8336592 A2, JP8164120 A2, JP7178169 A2, JP7100212 A2, JP6165776 A2, JP6154322 A2, JP6142200 A2, JP6142199 A2, JP6038563 A2, JP6030905 A2, JP5329211 A2, JP5125894, JP51025894 U1, JP5084296 A2, JP4270748 B2, JP2013500060 T2, JP2008521577 T2, JP2008521577, JP2008521577, JP2006164865 A2, JP2006164772 A2, JP2006014804 A2, JP2005327539 A2, JP2005270579 A2, JP2005198808 A2, JP2005185311 A2, JP2005160857 A2, JP2005110906 A2, JP2005025556 A2, JP2005024423 A2, JP2005021495 A2, JP2005021431 A2, JP2004357748 A2, JP2004344472 A2, JP2004313579 A2, JP2004313243 A2, JP2004305361 A2, JP2004298610 A2, JP2004298550 A2, JP2004290455 A2, JP2004194877 A2, JP2004194802 A2, JP2004178065 A2, JP2004154239 A2, JP2004154238 A2, JP2004154235 A2, JP2004121467 A2, JP2004024482 A2, JP2004024476 A2, JP2003528698 T2, JP2003505210 T2, JP2003505210, JP2003339695 A2, JP2003295961 A2, JP2003290349 A2, JP2003290348 A2, JP2003290347 A2, JP2003290343 A2, JP2003235974 A2, JP2003235970 A2, JP2003220136 A2, JP2003196390 A2, JP2003150138 A2, JP2003135452 A2, JP2003132766 A2, JP2003033437 A2, JP2002301065 A2, JP2002301063 A2, JP2002011096 A2, JP200200724, JP2002000724 A2, JP2002000724, JP2001520905 T2, JP2001218842 A2, JP2001212241 A2, JP11511356 T2, JP11511356, JP11511356, JP11076402 A2, JP11033113 A2, EP2198978 A1, EP1829576 A1, EP1688157 A1, EP1618907 A1, EP1611911 A1, EP1607112 A1, EP1602389 A2, EP1571519 A2, EP1570874 A2, EP1475111 A2, EP1410815 A1, EP1380261 A2, EP1145703 A1, EP1037682 B1, EP1037682, EP1024847 B1, EP1024847, EP1021813 B1, EP1021813, EP0813429 A1, EP0726789 A1, EP0702966 A2, EP0692766 A1, EP0650739 A1, EP0650738 A1, DE69833269 T2, DE69833269 T, DE69831596 T2, DE69831596 T, DE60113503 T2, DE60113503 T, CN1876191 A, CN1753699 A, CN1671428 A, CN1287013 A, CN1193918 A,

Forward Citations:

WO18089882, WO18017447, WO18009498, WO17152036, WO17038575, WO16191485, WO16112163, WO16069688, WO16069686, WO16033351, WO14160326, WO14150225, US9987420, US9925331, US9895488, US9855390, US9849221, US9844622, US9814871, US9808571, US9789244, US9757591, US9744305, US9700670, US9694131, US9649429, US9615998, US9615755, US9555379, US9486579, US9480797, US9314584, US9259527, US9199033, US9173995, US2017251573, US2016310042, US2016144108, US2016120420, US2015100023, US2015000784, US10039889, US10029220, US10022493, TWI621456, JP6231577, JP6124873, JP5836387, JP2016520338, JP2016221350, JP2015536211, JP2014524756, JP2013051116, EP3284491, EP3015128, EP3015127, EP2754460, EP2754459,

Abstract:

A multi-fluid injector system and methods of operation thereof are presented. One embodiment of such a fluid injector system includes a powered injector, a pressure jacket support, a syringe pressure jacket, and a syringe. The pressure jacket support includes a front plate and a rear plate. The rear plate is connected to the injector and the front plate is spaced from the rear plate and defines a slot. The syringe pressure jacket has a proximal end pivotally connected to the rear plate so that a distal end of the pressure jacket pivots relative to the front plate. The syringe has a syringe body with a distally extending discharge conduit. With the syringe disposed in a barrel of the pressure jacket, pivotal movement of the pressure jacket results in the distal end thereof pivoting toward the front plate to place the discharge conduit within the slot in the front plate.



Title: ELECTRO-MECHANICAL DRUG DELIVERY DEVICE

Priority: US20100318118P 20100326 EP20100168936 20100708 EP20110711846 20110325
US20110582012 20110325 WO2011EP54649 20110325 JP20130500529T 20110325

Family:	Publication number	Publication date	Application number	Application date
	AU2011231570 AA	20110929	AU20110231570	20110325
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	HK1181337 A1	20140829	HK20130108860	20130730
	IL222032 A0	20121129	IL20110222032	20110325
	IL222032 A1	20160331	IL20110222032	20110325
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Probable Assignee: SANOFI SA

Assignee(s):(std): DAY SHANE ALISTAIR ; O HARE AIDAN MICHAEL ; SANOFI AVENTIS DEUTSCHLAND ; YATES BARRY ; WIMPENNY STEVEN

Assignee(s): SANOFI-AVENTIS DEUTSCHLAND GMBH ; SANOFI AVENTIS DEUTSCHLAND GMBH ; SANOFI SA

Inventor(s):(std): AIDAN MICHAEL O HARE ; BARRY YATES ; DAY SHANE ALISTAIR ; O HARE AIDAN MICHAEL ; OHARE AIDAN MICHAEL ; SHANE ALISTAIR DAY ; STEVEN WIMPENNY ; WIMPENNY STEVEN ; YATES BARRY

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; BERESKIN AND PARR LLP SENCRL SRL; DE ELZABURU ALBERTO; PEARL COHEN ZEDEK LATZER BARATZ; MCDONNELL BOEHNNEN HULBERT AND BERGHOFF LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): A61M A61M5/00 A61M5/142 A61M5/172 A61M5/19 A61M5/20 A61M5/24 A61M5/28 A61M5/31 A61M5/315 (Advanced/Invention); A61M39/10 A61M5/31 A61M5/315 A61M5/34 H02J7/00 (Advanced/Non-invention); A61M (Subclass/Invention)

CPC: A61M5/20 A61M5/002 A61M5/19 A61M5/24 A61M5/2448 A61M5/3146 A61M5/31546 A61M5/345 A61M2005/2496 A61M2005/3104 A61M2005/3125 A61M2005/3126 A61M2005/3128 A61M2005/31588 A61M2039/1083 A61M2039/1088 A61M2205/3584 A61M2205/50 A61M2205/505 A61M2205/52 A61M2205/6072 A61M2205/8206 A61M2205/8212 A61M2205/8256 A61M2209/086 H02J7/0047

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US class: 1/1 604/65

JP class F-Term: 4C066 4C066/AA07 4C066/BB01 4C066/CC01 4C066/DD13 4C066/EE06 4C066/FF05 4C066/HH03 4C066/HH13 4C066/JJ07 4C066/LL06 4C066/LL08 4C066/QQ22 4C066/QQ32 4C066/QQ83 4C066/CC09 4C066/EE14

JP class F-Index: A61M5/00 A61M5/20 A61M5/315/550/J A61M5/142/520 A61M5/172 A61M5/20/560 A61M5/28/520 A61M5/315/550/X

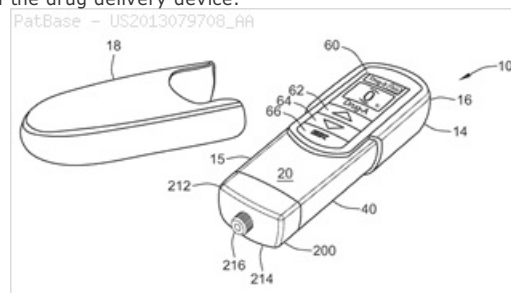
[Classification Explorer](#)

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Forward Citations: WO18011249, WO15181192, WO15091555, WO14118110, WO14118109, WO14118106, WO14118105, WO13171312, WO13171310, WO13113818, WO13102747, WO13093059, US9990122, US9950125, US9945519, US9911308, US9867949, US9836948, US9813003, US9808582, US9750881, US9744302, US9737670, US9731073, US9707354, US9669202, US9629959, US9561333, US9542826, US9492616, US9486583, US9463284, US9446195, US9402959, US9393367, US9364611, US9364610, US9333309, US9220660, US9180259, US9144648, US8945063, US2016331901, US2015367075, US2015367074, US2015363097, US2015359967, US2015320932, US2014114277, US2013016105, US2012259285, US2012253288, US2012238960, US10064996, TWI631969, TWI619490, TWI606821, TWI587855, JP6356698, JP6348124, JP2016508388, JP2016504131, JP2016504128, JP2016504127, JP2015500720, EP2713503, CN104955504, CN104955503, CN104936639, CN104936637, CN104254354, CN104125842, CN104053465, CN104053464,

Abstract: An electro-mechanical drug delivery device comprises a main body having a distal end and a proximal end. The distal end is configured to attach to a dispense interface. A separable housing that can prevent an administration of a drug by the drug delivery device, the housing configured to cover at least a portion of the distal end of the main body when the separable housing is coupled to the main body of the drug delivery device. A conduction element is provided by the main body and configured for establishing an electrical connection with an electrical connector. Establishment of the electrical connection is prevented when the

housing does not cover at least a portion of the distal end of the main body. The electrical connection may be established when the housing covers at least a portion of the distal end of the main body of the drug delivery device.

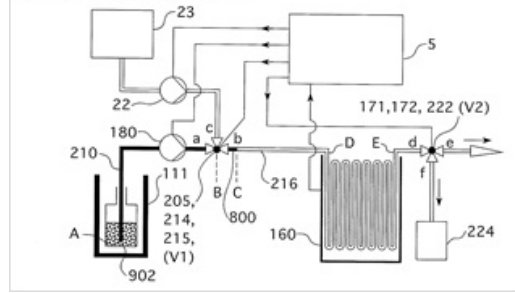


Title: ACTIVITY DELIVERY PROGRESS MONITOR**Priority:** US20100351480P 20100604 WO2011US39203 20110605 AU20110261190 20110606
US20110700299 20110606 WO2011US39203 20110606 US20120700299 20121127
US20160003980 20160122 AU20160202247 20160411

Family:	Publication number	Publication date	Application number	Application date
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	WO11153519 A3	20120419	WO2011US39203	20110606

Probable Assignee: BAYER AG**Assignee(s):(std):** AGAMAITE JAMES ; AGAMAITE JAMES A ; BAJER MEDIKEHL KER INK ; BAYER AG ; BAYER HEALTHCARE LLC ; MEDRAD INC ; GRIFFITH SCOTT R ; MARSH CHARLES ; DESCALZI DOUGLAS ; BAYER MEDICAL CARE INC**Inventor(s):(std):** AGAMAITE JAMES ; AGAMAITE JAMES A ; CHARLES MARSH ; DESCALZI DOUGLAS ; DOUGLAS DESCALZI ; GRIFFITH SCOTT R ; JAMES AGAMAITE ; MARSH CHARLES ; SCOTT R GRIFFITH ; MARSH CHARL Z ; GRIFFIT SKOTT R ; EHGAMEJT DZHEJMS ; DESKAL TSI DUGLAS**Agent(s):** KING AND WOOD MALLESONS; MINTER ELLISON; BLAKE CASSELS AND GRAYDON LLP; BROWNE ROBIN FORSYTHE; JOSEPH L; DAVID; DENESVICH JILL**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**International class (IPC 8-9):** A61K51/00 A61M3/00 A61M36/00 A61M36/06 A61M5/00 A61M5/168 A61N5/00 A61N5/10 G06F19/00 G06Q G16H20/17 G16H20/40 (Advanced/Invention); A61B6/03 A61M5/142 G06F19/00 G21G1/00 (Advanced/Non-invention)**CPC:** A61N5/1064 A61N5/1071 A61B6/037 A61M5/007 A61M5/14212 A61M5/16831 A61M2005/16863 A61M2205/3327 G21G1/0005 A61N5/1001 A61N2005/1021 A61N5/1027 G06F19/3468 G16H20/17 G16H20/40 G06F19/00**US class:** 1/1 600/4**JP class F-Term:** 4C066 4C066/AA09 4C066/BB01 4C066/CC01 4C066/CC03 4C066/QQ51 4C066/QQ71 4C066/QQ77 4C066/QQ78 4C066/QQ82 4C084 4C084/AA12 4C084/AA17 4C084/ZB26 4C085 4C085/HH03 4C085/JJ01 4C167**JP class F-Index:** A61K43/00 A61K49/02/A A61K49/18 A61K51/00/100 A61K51/00/200 A61K51/12/200 A61M36/06 A61M5/00/310 A61M5/00/320 A61M5/00/330 A61M5/168/514/Z A61M5/168/540 A61M5/168/550[Classification Explorer](#)**Cited documents:** WO09042577 A2, WO08083313 A2, WO08083313, WO08082966 A2, WO06007750 A1, US6602488 BA, US6162198 A, US4585941 A, US2013123567 AA, US2012074330 AA, US2011076317 AA, US2010185040 AA, US2009257949 AA, US2008177126 AA, US2008131362 AA, US2005129170 AA, US2005129170, US2005085682 AA, US2004205343 AA, US2004082918 AA, US2003004463 AA, US2003004463, RU2289458, JPS59163584 A2, JP59163584 A2, JP59163584, JP2008506428 T2, JP2008506428 T2, JP2008506428, JP2008500119 T2, JP2004298549 A2, JP2002306609 A2, EP1616587 A1, EP0117752 A2,**Forward Citations:** WO15077777, WO14124424, WO14029810, WO14029810, WO13184642, USD812769, USD812768, USD790727, US9993636, US9867589, US9786024, US9757591, US9662273, US9623262, US9489489, US9474693, US9436989, US9289550, US2016331951, US2015286798, US2014275709, US2013053994, US10045912, JP6286423, JP2015523883, EP3046598, EP2953664, EP2858712, CN105163775, AU2013271802,**Abstract:**

A system and method for monitoring progress of a radiopharmaceutical injection procedure includes: measuring and monitoring radiopharmaceutical activity of a radiopharmaceutical remaining in at least a portion of a disposable administration set used with a radiopharmaceutical fluid delivery system; and displaying the radiopharmaceutical activity remaining in at least the portion of the disposable administration set to an operator.



Title: METHODS, DEVICES, AND SYSTEMS FOR COUPLING FLUID LINES
Priority: US20110494504P 20110608 US20120123008 20120608 WO2012US41765 20120608
US20140123008 20140226 US20170852321 20171222

Family:	Publication number	Publication date	Application number	Application date
	AU2012267476 AA	20121213	AU20120267476	20120608
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	DE112012004344 T5	20140710	DE201211004344T	20120608
	DE112012004344 T8	20140828	DE201211004344T	20120608
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	EP2718605 A4	20150325	EP20120796383	20120608
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	JP6121994 B2	20170426	JP20140514912T	20120608
	US2014191501 AA	20140710	US20120123008	20120608
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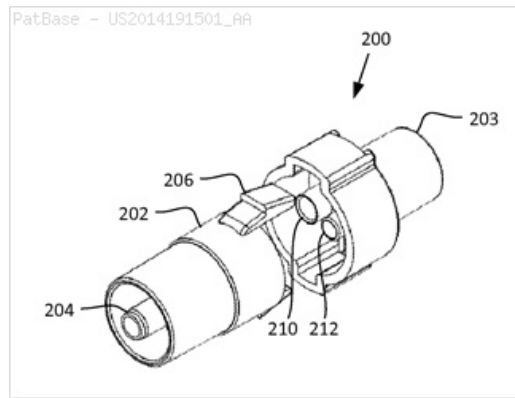
Probable Assignee: NXSTAGE MEDICAL INC
Assignee(s):(std): BRUGGER JAMES M ; NXSTAGE MEDICAL INC ; TREU DENNIS M ; UTTERBERG DAVID S
Assignee(s): GENERAL ELECTRIC CAPITAL ADMINISTRATIVE AGENT AS CORP ; HEALTHCARE FINANCIAL SOLUTIONS LLC SUCCESSOR AGENT AS ; NXSTAGE MEDICAL
Inventor(s):(std): BRUGGER JAMES M ; TREU DENNIS M ; UTTERBERG DAVID S
Inventor(s): DAVID S UTTERBERG ; DENNIS M TREU ; JAMES M BRUGGER
Agent(s): PHILLIPS ORMONDE FITZPATRICK; BORDEN LADNER GERVAIS LLP; LAWRENCE JOHN; GLOBAL IP TOKYO; MARK; POTOMAC LAW GROUP PLLC; CATAN MARK A ET AL
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW
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CPC: F16L35/00 A61M39/1011 A61M39/105 A61M2039/1027 A61M2039/1094 F16L39/02 F16L41/023 F16L2201/10
US class: 285/120.1
JP class F-Term: 3H016 3H016/EA04 3J106 3J106/AB07 3J106/AB10 3J106/BA01 3J106/BB01 3J106/BE26 3J106/CA20 4C066 4C066/AA09 4C066/JJ05 4C167 4C167/AA80 4C167/BB19
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[Classification Explorer](#)

Cited documents: USRE38204 E, US6523861 BA, US6499719 BA, US6481756 BA, US6402207 BA, US6168209 BA, US6168209 B1, US6007107 A, US5921965 A, US5725511 A, US5123677 A, US4900065 A, US4900065, US4796615 A, US4790567 A, US470237 A, US4699298 A, US4676563 A, US4676530 A, US4619640 A, US4211439 A, US4150673 A, US3523700 A, US3429343 A, US2014171855 AA, US2014001748 AA, US2013147185 AA, US2011203582 AA, US2011144626 AA, US2010283238 AA, US2009149077 AA, US2008318477 AA, US2008077176 AA, US2008077063 AA, US2008048436 AA, US2006047251 AA, US2005184264 AA, US2004238776 AA, US2004217586 AA, US2002183763 AA, JP2009505337 T2, JP2009505337, JP10165943, JP10165943, EP0821444 A2, DE20318583 U1, DE102010018954 A1, CN1276046 A,
Forward Citations: WO18077917, WO16189161, WO16135343, WO16025964, US9541227, US9517330, US2014291979, US2014257249, JP2017502774, JP2017072169, JP2016508849, EP3092017, EP2837403,

Abstract:

The disclosed subject matter includes embodiments of fluid couplings that prevent or discourage misconnection of fluid lines. A coupling device includes multiple male and female connectors that are joined to a common line. The coupling device is mated to a matching coupling device only when all the multiple male and female connectors are property joined. If any of the connectors is not property mated to a corresponding one, the coupling will leak. The coupling devices are made unique by providing an arrangement the connectors, number of connectors, shape of connectors or arrangement of interfering connector parts that ensure that any attempt to improperly couple two fluid lines will result in the incomplete mating of one or more of the connectors and thereby cause leakage of the fluid, failure of the coupling to engage, or otherwise cause the attempt to connect to fail.



Title:	CONTINUOUS MULTI-FLUID DELIVERY SYSTEM AND METHOD			
Priority:	US20110537371P 20110921	AU20120312312 20120920	CN201280057101 20120920	
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Probable Assignee:	BAYER AG			
Assignee(s):(std):	BAJER KHELSEK LLSI ; BAYER AG ; BAYER HEALTHCARE AG ; BAYER HEALTHCARE LLC ; MEDRAD INC ; BAYER MEDICAL CARE INC			
Assignee(s):	HAURY JOHN A ; CAPONE CHRISTOPHER D ; HELLER RONALD ; MATOR JOSEPH C ; BISEGNA JOSEPH E ; BAZALA JASON L ; PREM EDWARD K ; WILLIAMS GLEN P ; SEMAN RICHARD A			
Inventor(s):(std):	BAJSEGNA DZHOZE I ; BAZALA DZHEJSON L ; BAZALA JASON L ; BISEGNA JOSEPH E ; CAPONE CHRISTOPHER D ; CHRISTOPHER D CAPONE ; EDWARD K PREM ; GLEN P WILLIAMS ; HAURY JOHN A ; HELLER RONALD ; JASON L BAZALA ; JOHN A HAURY ; JOSEPH C MATOR ; JOSEPH E BISEGNA ; KAPONE KRISTOFER D ; KHELLER RONALD ; KHORI DZHON A ; MATOR JOSEPH C ; MEJTOR DZHOZE F K ; PREM EDVARD K ; PREM EDWARD K ; RICHARD A SEMAN ; RONALD HELLER ; SEMAN RICHARD A ; SIMEN RICHARD A ; UILYAMS GLEN P ; WILLIAMS GLEN P			
Agent(s):	MINTER ELLISON; BLAKE CASSELS AND GRAYDON LLP; BROWNE ROBIN FORSYTHE; DAVID; JAMES R; JOSEPH L; DENESVICH JILL ET AL			
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW			
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JP class F-Index:	A61M5/14/485/D A61M5/14/510 A61M5/145/500 A61M39/22/100 A61M5/14/582 A61M5/168/520			
Classification Explorer				
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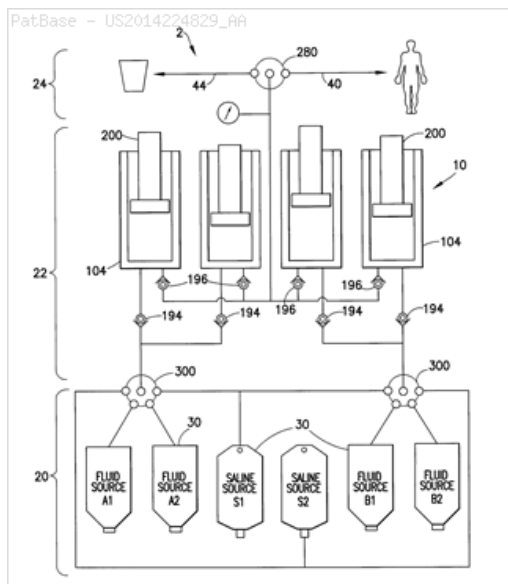
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Abstract:

A fluid pump device is operable by a drive and actuating system. The fluid pump device includes a pump manifold, a plurality of pump cylinders, a plunger reciprocally operable in each of the pump cylinders, and at least one inlet selector valve. The pump cylinders may extend proximally from the pump manifold and are in selective fluid communication with the pump manifold via, for example, respective inlet and outlet check valves. The plungers are reciprocally operable within the pump cylinders and are independently and reciprocally operable by respective piston linear actuators provided in the drive and actuating system. The inlet selector valve is used to establish selective fluid communication between one or more fluid source containers and the pump manifold to control fluid flow into the pump manifold. The inlet selector valve may be located laterally outboard of the pump cylinders and extend generally parallel to the pump cylinders.



Title: STERILITY RETAINING MEDICAL CONNECTOR ASSEMBLY AND METHOD

Priority: US20110548862P 20111019 US20110548862P 20111019 AU20120325975 20121019
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Family:	Publication number	Publication date	Application number	Application date
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Probable Assignee: BAYER AG

Assignee(s):(std): BAYER HEALTHCARE AG ; BAYER HEALTHCARE LLC ; MEDRAD INC ; BAJER KHELSEKER LLSI ; BAYER AG ; BAYER MEDICAL CARE INC

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Agent(s): MINTER ELLISON; BLAKE CASSELS AND GRAYDON LLP; BROWNE ROBIN FORSYTHE; DAVID; JAMES R; JOSEPH L; SCHRAMM DAVID ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): A61J1/20 A61M25/00 A61M25/16 A61M39/02 A61M39/10 A61M39/16 A61M39/18 A61M39/20 A61M39/26 A61M5/178 A61M5/31 A61M5/34 F16L25/00 (Advanced/Invention); A61M39/24 A61M39/26 (Advanced/Non-invention)

CPC: F16L25/00 A61M39/165 A61M39/20 A61J1/2003 A61M5/178 A61M5/31 A61M25/0097 A61M39/00 A61M25/00 A61M39/12 A61M39/26 A61M39/10 A61M39/1011 A61M39/18 A61M2039/1044 A61M2039/1061 A61M2039/267 Y10T137/8811

US class: 137/797

JP class F-Term: 4C066 4C066/CC01 4C066/JJ01 4C066/JJ04 4C066/JJ07 4C167 4C167/AA33 4C167/BB02 4C167/BB04 4C167/BB11 4C167/BB12 4C167/CC29

JP class F-Index: A61M25/00/320/D A61M39/10/100 A61M39/10/120 A61M39/18 A61M39/20 A61M39/24/100 A61M39/26 A61M5/14/459 A61M5/34

[Classification Explorer](#)

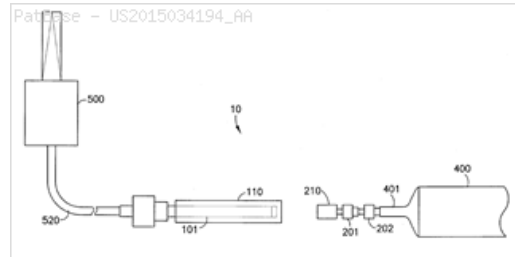
Cited documents: WO9103404 A1, US9408971 BB, US8012144 BB, US7938454 BB, US7740288 BB, US7731155 BB, US7452349 BB, US7374555 BB, US7241285 BA, US7097209 BB, US7083605 BB, US7070589 BB, US7040598 BB, US6911025 BB, US6821267 BB, US6814726 BA, US6666839 BB, US6511472 BA, US6261270 BA, US6164279 A, US6077259 A, US5972292 A, US5913434 A, US5853096 A, US5843037 A, US5840026 A, US5806519 A, US5803510 A, US5785691 A, US5782505 A, US5771935 A, US5746718 A, US5739508 A, US5620433 A, US5569181 A, US5498253 A, US5492147 A, US5482171 A, US5413280 A, US5382242 A, US5340359 A, US5292308 A, US5280809 A, US5221267 A, US5184742 A, US5171229 A, US5098395 A, US5088984 A, US5057088 A, US4981469 A, US4950260 A, US4883641 A, US4810241 A, US4795426 A, US4778447 A, US4775369 A, US4636204 A, US4624664 A, US4579823 A, US4559043 A, US4551146 A, US4511359 A, US4450624 A, US4433973 A, US4398757 A, US4366816 A, US4360969 A, US4340148 A, US4256106 A, US4230231 A, US4194509 A, US4187846 A, US4106654 A, US3987930 A, US3986508 A, US3916929 A, US3835862 A, US3835862, US3658061 A, US3480299 A, US3164279 A, US2997043 A, US2938238 A, US2798487 A, US2780243 A, US2731053 A, US2287746 A, US2013331635 AA, US2013331634 AA, US2013123567 AA, US2013079581 AA, US2013033034 AA, US2011240158 AA, US2011240158, US2011184382 AA, US2011184382, US2011054440 AA, US2011049866 AA, US2010049170 AA, US2010049170, US2009216192 AA, US2009182309 AA, US2009102192 AA, US2008191466 AA, US2008191466, US2008177250 AA, US2008097342 AA, US2008071220 AA, US2008071219 AA, US2006189961 AA, US2005107765 AA, US2005107765,

US2005090805 AA, US2005090805, US2004227120 AA, US2004111078 AA, US2002093192 AA, US2002010437 AA, US2001016704 AA, RU96768 U1, JP2010516342 T2, JP2010516342, JP2008528173 T2, JP2008528173, JP2003210574 A2, JP2003210574, JP2001238945 A2, JP2001238945, EP1834664 B1, EP1331020 A1,

Forward Citations: WO16088835, WO15106107, WO14210418, KR101453068, JP2017502774, JP2016530958, EP3007744,

Abstract:

A medical connector assembly for establishing a fluid connection between a first medical device and a second medical device includes a multi-use connector and a plurality of single-use connectors connected in series. The multi-use connector has a proximal end opposite a distal end along a longitudinal length thereof. The plurality of single-use connectors each have a proximal end opposite a distal end along a longitudinal length thereof. The distal end of the multi-use connector is releasably connected to the proximal end of a first of the serially-connected single-use connectors. When a second of the serially-connected single-use connectors is disconnected from the first single-use connector, the first single-use connector remains connected to the multi-use medical connector as a sterility retaining cover.



Title: PEN-TYPE INJECTION DEVICE AND ELECTRONIC CLIP-ON MODULE THEREFOR

Priority: EP20120155199 20120213 US20120604702P 20120229 CN201380019697 20130208
EP20130706190 20130208 JP20140556064T 20130208 WO2013EP52507 20130208
US20130375113 20130208 JP20170121213 20170621 JP20170121214 20170621

Family:	Publication number	Publication date	Application number	Application date
	AU2013220537 AA	20130822	AU20130220537	20130208
	AU2013220537 BB	20170914	AU20130220537	20130208
	BR112014019550 A2	20170620	BR20141119550	20130208
	BR112014019550 A8	20170711	BR20141119550	20130208
	CN104220115 A	20141217	CN201380019697	20130208
	CN104220115 B	20170613	CN201380019697	20130208
	CN105920706 A	20160907	CN201610357731	20130208
	CN107252511 A	20171017	CN201710343408	20130208
	EP2814545 A1	20141224	EP20130706190	20130208
	HK1199625 A1	20150710	HK20150100081	20150106
	IL233845 A0	20140930	IL20130233845	20130208
	IN05903CN2014 A	20160701	IN2014CN05903	20140801
	JP2015511836 T2	20150423	JP20140556064T	20130208
	JP2017192760 A2	20171026	JP20170121213	20170621
	JP2017192761 A2	20171026	JP20170121214	20170621
	JP6166281 B2	20170719	JP20140556064T	20130208
	KR20140124814 A	20141027	KR20147024618	20130208
	MX2014009766 A1	20150309	MX20140009766	20130208
	RU2014137134 A	20160410	RU20140137134	20130208
	RU2631213 C2	20170919	RU20140137134	20130208
	TW201350158 A	20131216	TW20130105077	20130208
	TWI587886 B	20170621	TW20130105077	20130208
	US2015018770 AA	20150115	US20130375113	20130208
	US9790977 BB	20171017	US20130375113	20130208
	WO13120775 A1	20130822	WO2013EP52507	20130208

Probable Assignee: SANOFI SA

Assignee(s):(std): SANIFI AVENTIS DEUTSCHLAND GMBH ; SANOFI AVENTIS DEUTSCHLAND ; SANOFI AVENTIS DOJCHLAND GMBKH

Assignee(s): SANOFI SA ; SANOFI AVENTIS DEUTSCHLAND GMBH

Inventor(s):(std): ANDRE BARAN ; BARAN ANDRE ; BEHRENDT KAY ; BERENDT KAJ ; KAY BEHRENDT ; BEHRENDT KA ; BARAN ANDR

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; MCDONNELL BOEHEN HULBERT AND BERGHOFF LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): A61B145 A61M A61M5/145 A61M5/168 A61M5/24 A61M5/31 A61M5/315 F16B1/00 F16B17/00 F16B2/02 F16B2/20 F16B21/02 F16B21/06 F16B21/08 F16B7/04 G06F19/00 (Advanced/Invention); A61B5/00 A61B5/145 A61M5/31 G06F19/00 (Advanced/Non-invention); A61B A61M F16B G06F (Subclass/Invention)

CPC: F16B21/088 A61M2005/3126 A61B5/14532 A61B5/4839 A61M2005/3125 A61M2205/14 A61M2205/18 A61M2205/3306 A61M2205/3375 A61M2205/3592 A61M2205/50 A61M2205/502 A61M2205/52 A61M2205/581 A61M2205/582 A61M2205/6045 A61M2205/6072 A61M2205/6081 A61M2209/04 G06F19/3468 A61M5/24 Y10T29/49826 Y10T403/59

US class: 29/428 403/321 604/187

JP class F-Term: 4C066 4C066/BB01 4C066/CC01 4C066/DD07 4C066/EE06 4C066/FF05 4C066/LL30 4C066/PP04 4C066/QQ52 4C066/QQ72 4C066/QQ73 4C066/QQ78 4C066/QQ82 4C066/QQ84 4C066/AA09 4C066/DD12 4C066/EE14 4C066/QQ22 4C066/QQ61 4C066/QQ77

JP class F-Index: A61M5/168 A61M5/24 A61M5/31 A61M5/31/520 A61M5/315/550/A

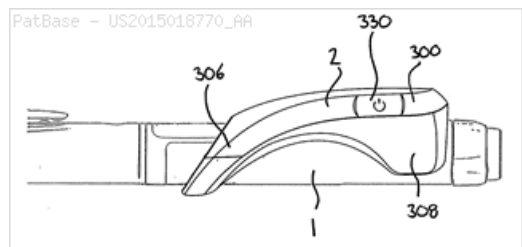
[Classification Explorer](#)

Cited documents: WO11117212 A1, WO11117212, WO11089205 A2, WO10128493 A2, WO10128493, WO10098927 A1, WO10098927, WO10037828 A1, WO10037828, WO09024562 A1, WO07107564 A1, US9089650 BB, US9072833 BB, US9064107 BB, US7740612 BB, US6482185 BA, US6482185, US6162199 A, US2011313349 AA, US2010286612 AA, RU2295361 C2, JP2007236565 A2, JP2005287676 A2, JP2001299936 A2, JP2001299936, EP2182456 A1, EP2182456, EP2060284 A1, EP2060284, CN102170929 A, CN101848742 A, CN101534883 A, CN101454037 A,

Forward Citations: WO17202977, WO17089502, WO16131974, WO16113327, WO15136564, WO14173773, USD773039, USD756506, USD752738, USD752211, US9992281, US9992097, US9986034, US9978025, US9977809, US9959156, US9954795, US9954678, US9949301, US9946743, US9935791, US9930146, US9929935, US9916601, US9916457, US9912776, US9882964, US9846881, US9836540, US9832291, US9832123, US9832116, US9807205, US9800637, US9794238, US9767708, US9729662, US9729616, US9716622, US9699198, US9686194, US9678998, US9660825, US9626413, US9621354, US9609014, US9602596, US9590948, US9590887, US9553812, US9552493, US9537719, US9536059, US9535968, US9516144, US9503365, US9503358, US9497282, US9473576, US9473475, US9473405, US9467492, US9462006, US9456054, US9455835, US9451032, US9444722, US9426113, US9407549, US9407432, US9401864, US9400800, US9391896, US9391777, US9390289, US9379979, US9374304, US9363179, US9363086, US9311377, US9280546, US9276840, US9276751, US10069933, US10069729, US10067948, US10063414, US10051071, US10043016, US10038633, US10033642, US10033639, US10027578, US10021222, US10009446, US10009266, US10003520, US10003507, TWI627979, TWI619490, TWI587855, EP3058974, CN105120929,

Abstract:

The present invention relates to a supplementary device for a manually operable injection device. The device has a body and a mating unit configured to releasably mount the body to the injection device in a specific position relative to an outside surface of the injection device.



Title: SINGLE-USE DISPOSABLE SET CONNECTOR

Priority: US20140925940P 20140110 AU20150204608 20150109 WO2015US10825 20150109
US20150110243 20150109 RU20160132854 20150109 AU20180203857 20180531

Family:	Publication number	Publication date	Application number	Application date
	AU2015204608 AA	20150716	AU20150204608	20150109
	AU2015204608 BB	20180301	AU20150204608	20150109
	AU2018203857 AA	20180621	AU20180203857	20180531
	BR112016015783 A2	20170808	BR20161115783	20150109
	CA2936234 AA	20160707	CA20152936234	20150109
	CL2016001720 A1	20170113	CL20160001720	20160705
	CN106102796 A	20161109	CN201580003984	20150109
	CO20160000723 A2	20170130	CO20160000723	20160808
	EP3092017 A1	20161116	EP20150735396	20150109
	EP3092017 A4	20170809	EP20150735396	20150109
	ID201707319 A	20170714	ID2016P0005266	20150109
	IN201617018642 A	20160831	IN201617018642	20160531
	JP2017502774 T2	20170126	JP20160545910T	20150109
	KR20160106078 A	20160909	KR20167019465	20150109
	MA39181 A1	20170929	MA20150039181	20150109
	MA39181 B1	20171229	MA20150039181	20150109
	MX2016008825 A1	20170406	MX20160008825	20150109
	PH2016501361 A	20160815	PH20160501361	20160711
	RU2016132854 A	20180216	RU20160132854	20150109
	RU2016132854 A3	20180716	RU20160132854	20150109
	SG11201605540V A1	20160830	SG20161105540	20150109
	TH166491 A	20170824	TH20161004002	20150109
	US2016331951 AA	20161117	US20150110243	20150109
	WO15106107 A1	20150716	WO2015US10825	20150109

Probable Assignee: BAYER AG

Assignee(s):(std): BAYER AG ; BAYER HEALTHCARE LLC ; BAYER MEDICAL CARE INC

Assignee(s): CULLEN BENJAMIN JAMES ; SWANTNER MICHAEL ; PROFACA MARK SILVIO ; NORCOTT ALISON RUTH ; SOKOLOV RICHARD ; LAW KAMMAN ; HAURY JOHN A ; MONIS ERNESTO HUESO

Inventor(s):(std): ALISON RUTH NORCOTT ; BENJAMIN JAMES CULLEN ; CULLEN BENJAMIN JAMES ; ERNESTO HUESO MONIS ; HAURY JOHN A ; HUESO MONIS ERNESTO ; JAMES CULLEN BENJAMIN ; JOHN A HAURY ; KAMMAN LAW ; LAW KAMMAN ; MARK SILVIO PROFACA ; MICHAEL SWANTNER ; MONIS ERNESTO HUESO ; NORCOTT ALISON RUTH ; PROFACA MARK SILVIO ; RICHARD SOKOLOV ; RUTH NORCOTT ALISON ; SILVIO PROFACA MARK ; SOKOLOV RICHARD ; SWANTNER MICHAEL

Inventor(s): JOHN HAURY A

Agent(s): MINTER ELLISON; BLAKE CASSELS AND GRAYDON LLP; ESTUDIO CLARKE MODET AND CO CHILE LIMITADA; CAROLINA MERCEDES DAZA MONTALVO; BIP PATENTS; ACHMAD FATCHY SH AFFA INTELLECTUAL PROPERTY RIGHTS; KENT JOSEPH L ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): A61M39/10 A61M39/12 A61M39/18 A61M5/00 A61M5/142 A61M5/145 A61M5/168 (Advanced/Invention); A61M5/142 (Core/Invention)

CPC: A61M2039/1066 A61M2205/273 A61M5/007 A61M2205/52 A61M2205/502 A61M2205/50 A61M2205/3584 A61M39/1011 A61M2039/1027 A61M2039/1033 A61M2039/1094 A61M2205/12

US class: 600/431

JP class F-Term: 4C066 4C066/AA07 4C066/BB01 4C066/CC02 4C066/CC03 4C066/DD06 4C066/DD12 4C066/FF01 4C066/JJ03 4C066/JJ07 4C066/QQ48 4C066/QQ82

JP class F-Index: A61M39/12 A61M39/18 A61M5/14/500

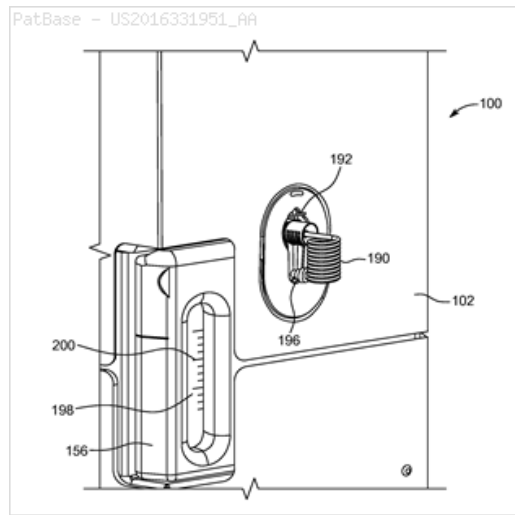
[Classification Explorer](#)

Cited documents: WO13059563 A1, WO13043868 A1, WO12170961 A1, WO09149367 A1, WO09067200 A2, WO05110007 A2, US8147464 BB, US6123686 A, US6113068 A, US5213483 A, US2013079581 AA, US2011313394 AA, US2010056975 AA, JP2011522623 T2, JP2001519680 T2,

Forward Citations: WO18017447,

Abstract:

A medical connector for providing a sterile connection between a multi-use portion and a single-use portion of a fluid delivery system is provided. The medical connector includes a fluid inlet port configured for removable engagement with a connection port of a multi-use disposable set (MUDS) to establish a fluid connection therewith and a waste outlet port configured for removable engagement with a waste inlet port of the MUDS to establish a fluid connection therewith. A patient fluid line is connected, at a first end, to the fluid inlet port and connected, at a second end, to the waste outlet port. Fluid flow through the patient fluid line is unidirectional from the first end to the second end. The patient fluid line is configured for being disconnected from the waste outlet port for delivering fluid to a patient. A multi-fluid delivery system having the medical connector and MUDS is also provided.



Title: MULTIPLE FLUID DELIVERY SYSTEM WITH MULTI-USE DISPOSABLE SET AND FEATURES THEREOF

Priority: US20150101752P 20150109 US20150242090P 20151015 US20150242101P 20151015
WO2016US12434 20160107 US20160541573 20160107

Family:

Publication number	Publication date	Application number	Application date
AR103385 AA	20170503	AR2016P100048	20160108
AU2016205275 AA	20160714	AU20160205275	20160107
CA2973257 AA	20170706	CA20162973257	20160107
CN107427411 A	20171201	CN201680013582	20160107
EP3242649 A1	20171115	EP20160735394	20160107
JP2018501035 T2	20180118	JP20170536535T	20160107
KR20170104528 A	20170915	KR20177021737	20160107
TW201641096 A	20161201	TW20160100655	20160108
TW201725026 A	20170716	TW20170111278	20160108
TWI587855 B	20170621	TW20160100655	20160108
TWI619490 B	20180401	TW20170111278	20160108
US2018015274 AA	20180118	US20160541573	20160107
WO16112163 A1	20160714	WO2016US12434	20160107

Probable Assignee: BAYER AG

Assignee(s):(std): BAYER AG ; BAYER HEALTHCARE LLC

Assignee(s): CAIN BRIAN E ; CULLEN BENJAMIN JAMES ; SOKOLOV RICHARD ; PROFACA MARK SILVIO ; LAW KAMMAN ; COWAN KEVIN P ; HAURY JOHN A ; MONIS ERNESTO HUESO ; NORCOTT ALISON RUTH ; SWANTNER MICHAEL ; SPOHN MICHAEL A ; SPENCE PATRICK ; ANGERT JUSTIN

Inventor(s):(std): PROFACA MARK SILVIO ; SOKOLOV RICHARD ; SPENCE PATRICK ; SPOHN MICHAEL A ; SWANTNER MICHAEL ; RICHARD SOKOLOV ; PATRICK SPENCE ; MICHAEL SWANTNER ; MICHAEL A SPOHN ; MARK SILVIO PROFACA ; KEVIN P COWAN ; KAMMAN LAW ; JUSTIN ANGERT ; JOHN A HAURY ; ERNESTO HUESO MONIS ; BRIAN E CAIN ; BENJAMIN JAMES CULLEN ; ALISON RUTH NORCOTT ; MONIS ERNESTO HUESO ; ANGERT JUSTIN ; CAIN BRIAN E ; COWAN KEVIN P ; CULLEN BENJAMIN JAMES ; HAURY JOHN A ; LAW KAMMAN ; MONIS EMESTO HUESO ; NORCOTT ALISON RUTH

Inventor(s): P COWAN,KEVIN P. ; A HAURY,JOHN A. ; A SPOHN,MICHAEL A.

Agent(s): DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; BIP PATENTS; KENT JOSEPH L ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): A61J1/20 A61J3/00 A61M39/10 A61M39/18 A61M39/22 A61M39/24 A61M5/00 A61M5/14 A61M5/142 A61M5/168 A61M5/19 A61M5/31 (Advanced/Invention); A61M5/00 A61M5/168 (Advanced/Non-invention)

CPC: A61M5/14212 A61M5/1407 A61M5/1452 A61M5/16827 A61M5/16881 A61M2205/14 A61M2205/3306 A61M2205/502 A61M5/31 A61M5/1408 A61M5/168 A61M39/10 A61M5/3146 A61M5/19 A61M39/24 A61M2205/07 A61J3/002 A61M5/007

JP class F-Term: 4C047 4C047/AA05 4C047/AA29 4C047/CC04 4C047/HH07

JP class F-Index: A61J1/20/314/Z

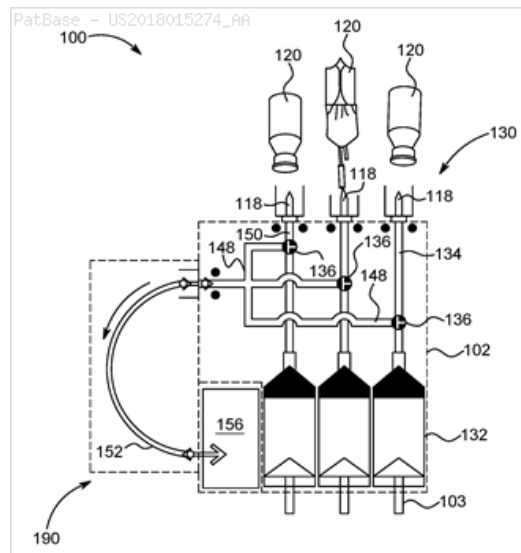
[Classification Explorer](#)

Cited documents: US8257267 BB, US2014228762 AA, US2012123257 AA, US2005199304 AA, TW201350158 A, TW201200190 A, CN103998075 A,

Forward Citations: WO18009498, EP3266481,

Abstract:

A multi-use disposable set (MUDS) has at least one syringe having a proximal end and a distal end spaced apart from the proximal end along a longitudinal axis. The MUDS further has a plunger reciprocally movable within a syringe interior between the proximal end and the distal end. A manifold is in fluid communication with the distal end of the at least one syringe. At least one valve is in fluid communication with the syringe interior. The at least one valve is operable between a filling position for filling the syringe interior with fluid and a delivery position for delivering the fluid from the syringe interior. At least one connection port is in fluid communication with the manifold and the syringe interior when the at least one valve is in the delivery position. A multi-fluid delivery system having the medical convector and MUDS is also provided. Various features of the MUDS system are also described.



Title:

SYSTEM AND METHOD FOR IDENTIFYING A FILL VOLUME OF A FLUID CHAMBER

Priority:

US20160359911P 20160708 US20160421692P 20161114 US20170643542 20170707

Family:

Publication number	Publication date	Application number	Application date
EP3266481 A1	20180110	EP20170180202	20170707
US2018008787 AA	20180111	US20170643542	20170707

Probable Assignee:

BAYER AG

Assignee(s):(std):

BAYER AG ; BAYER HEALTHCARE LLC

Inventor(s):(std):

SCHRIVER RALPH ; SPOHN MICHAEL ; UBER ARTHUR ; UBER III ARTHUR E

Agent(s):

BIP PATENTS

Designated states:

AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8-9):

A61M5/00 A61M5/14 A61M5/142 A61M5/145 A61M5/20 A61M5/31 A61M5/36 (Advanced/Invention); A61M5/178 (Advanced/Non-invention)

CPC:

A61M5/365 A61M5/204 A61M5/1407 A61M5/2066 A61M5/007 A61M5/1456 A61M5/142 A61M2005/1404 A61M2005/1787 A61M5/1411 A61M5/1415 A61M5/31 A61M2005/3125 A61M2205/3313 A61M2205/3389 A61M2205/3393 A61M2205/502 A61M2205/6063 G01F23/00

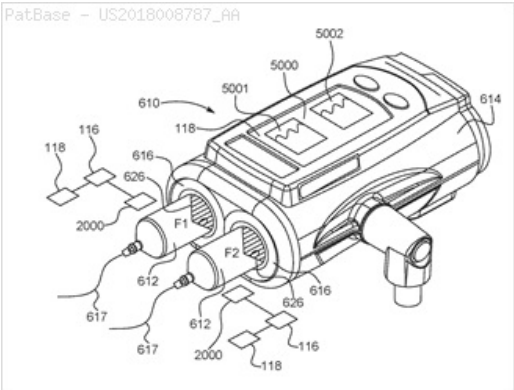
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Cited documents:

WO17040154 A1, WO17040152 A1, WO16191485 A1, WO16172467 A1, WO16112163 A1, WO09025996 A1, US8337456 BB, US8147464 BB, US7556619 BB, US7094216 BB, US2017036941, US201662363668 P, US2008086087 AA,

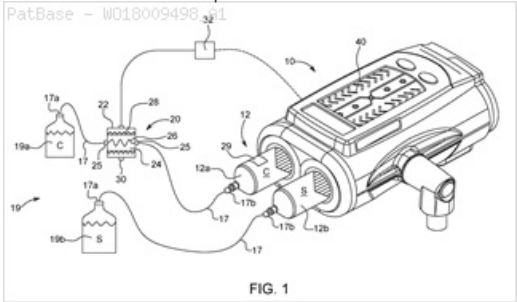
Abstract:

A system and method for determining the fill volume of a fluid chamber includes a fluid injector, at least one fluid chamber in fluid communication with the fluid injector, one or more sensors positioned relative to the at least one fluid chamber and configured to detect a position of a liquid-gas interface of the fluid contained in the at least one fluid chamber, and at least one processor in communication with the sensors and the fluid injector, and configured to: determine the position of the liquid-gas interface of the fluid, calculate the volume of fluid in the at least one fluid chamber based on the position of the liquid-gas interface, and at least one of: i) display the volume of the fluid; ii) enable the fluid injector to perform an action; and iii) disable the fluid injector from performing the action.



Title:	CONTRAST HEATING SYSTEM WITH IN-LINE CONTRAST WARMER			
Priority:	US20160359056P 20160706			
Family:	Publication number	Publication date	Application number	Application date
	WO18009498 A1	20180111	WO2017US40651	20170705
Probable Assignee:	BAYER AG			
Assignee(s):(std):	BAYER AG ; BAYER HEALTHCARE LLC			
Inventor(s):(std):	BINGAMAN MOLLY ; CALLAN GERALD ; COWAN KEVIN ; JEROME GENEVIEVE ; LEROCH MATTHEW ; MOORE DANIEL ; SCHRIVER RALPH ; SPOHN MICHAEL A ; SWANTNER MICHAEL J ; TUCKER BARRY L ; UBER III ARTHUR E			
Agent(s):	KENT JOSEPH ET AL			
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW			
International class (IPC 8-9):	A61M5/145 (Advanced/Invention)			
CPC:	A61M5/14546 A61M5/14566 A61M2005/14553			
	Classification Explorer			
Cited documents:	WO9822168 A2, WO16191485 A1, WO16112163 A1, WO15164783 A1, WO07021746 A2, WO06108026 A2, US9474857 BB, US9199033 BA, US9173995 BA, US7666169 BB, US7553294 BB, US6652489 BB, US6322535 BA, US5383858 A, US2014094883 AA, US2011202034 AA,			
Forward Citations:	US6898205,			

Abstract:
A system for heating a medical fluid has at least one first fluid container for storing the fluid, a fluid injector having at least one second fluid container for receiving the fluid from the at least one first fluid container through a fluid path set, at least one heating element positioned in-line with the fluid path set between the at least one first fluid container and the at least one second fluid container of the fluid injector for heating the fluid to a pre-determined temperature as the fluid flows through at least one fluid path element, and a controller for controlling an output of the at least one heating element based on at least one of a property of the at least one heating element and a property of the fluid flowing through the at least one fluid path element.



Title:	FLUID INJECTOR AND PATIENT SET THEREFOR			
Priority:	US20160363668P 20160718			
Family:	Publication number	Publication date	Application number	Application date
	WO18017447 A1	20180125	WO2017US42314	20170717
Probable Assignee:	BAYER AG			
Assignee(s):(std):	BAYER AG ; BAYER HEALTHCARE LLC			
Inventor(s):(std):	COWAN KEVIN P ; IDDON BARRY ; LEROCH MATTHEW J ; MCDERMOTT MICHAEL ; SALUNKHE BIPIN ; SAVIO DAMIAN PETER FRANCIS ; SIU ERIC ; SOKOLOV RICHARD ; SPOHN MICHAEL A ; SPRADA PETER			
Agent(s):	KENT JOSEPH ET AL			
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW			
International class (IPC 8-9):	A61M5/00 A61M5/14 A61M5/168 A61M5/20 (Advanced/Invention)			
CPC:	A61M5/1408 A61M5/007 A61M5/16827 A61M5/20			
Classification Explorer				
Cited documents:	WO17091643 A1, WO17091636 A1, WO17091635 A1, WO15191438 A2, WO15106107 A1, US9526829 BB, US9199033 BA, US9173995 BA, US7666169 BB, US7553294 BB, US6652489 BB, US5738662 A, US5383858 A, US2017056603 AA, US2016034140, US2016028824, US201562259906 P, US201562259891 P, US201562259708 P, US201514925722, US2015057751, US2015057747, US2015027582, US2015010825, US201462005346 P, US2014027009 AA, US2013041258 AA, US2012037491, US2006100578 AA,			

Abstract:
A syringe manifold (300) for a fluid injector assembly includes a middle body member (304) defining an upper cavity (308) and a lower cavity (309), the middle body member defining at least one fluid path in an upper surface of the middle body member and at least one fluid path in a lower surface of the middle body member, the middle body member defining at least two ports extending through the middle body member, the middle body member comprising an outlet (302) for connection of the syringe manifold to at least one fluid delivery device; a lower body member (303) received within the lower cavity of the middle body member, the lower body member comprising at least one connector for connection of the lower body member to a syringe assembly (700); and an upper body member (305) received within the upper cavity of the middle body member.

