

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2013/017949 A8

(43) International Publication Date
7 February 2013 (07.02.2013)

- (51) International Patent Classification:
A61M 5/14 (2006.01) *A61M 5/142* (2006.01)
- (21) International Application Number:
PCT/IB2012/001835
- (22) International Filing Date:
17 September 2012 (17.09.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
13/196,136 2 August 2011 (02.08.2011) US
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: INFUSION PUMP WITH INDEPENDENTLY CONTROLLABLE VALVES FOR OPTIONAL GRAVITY INFUSION AND LOW POWER OPERATION

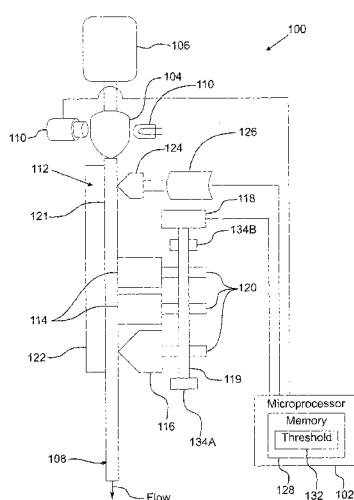


Fig. 1

(57) Abstract: An infusion pump, including: a specially programmed microprocessor; a drip chamber for connection to a source of fluid and to an output tubing; a pumping section including a plurality of fingers and a first actuator, controllable using the microprocessor, for sequentially displacing the plurality of finger to compress a first portion of the output tubing to displace fluid from the drip chamber through the output tubing; an inlet valve disposed between the drip chamber and the pumping section and arranged to compress the output tubing to restrict or block flow through the output tubing; and a second actuator, controllable using the microprocessor, for opening or closing the inlet valve independent of the displacement of the plurality of fingers; or for operating the inlet valve to control a rate of flow of fluid from the drip chamber to the portion of the output tubing, such that the pump can be used in a pumping mode or a gravity infusion mode.

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— *with information concerning request for restoration of the right of priority in respect of one or more priority claims (Rules 26bis.3 and 48.2(b)(vii))*

(88) Date of publication of the international search report:
6 June 2013

(48) Date of publication of this corrected version:
28 November 2013

(15) Information about Correction:
see Notice of 28 November 2013