

(51) International Patent Classification:
A61M 5/142 (2006.01) A61M 39/28 (2006.01)(21) International Application Number:
PCT/US2010/021721(22) International Filing Date:
22 January 2010 (22.01.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/148,863 30 January 2009 (30.01.2009) US(71) Applicant (for all designated States except US):
NESTEC S.A. [CH/CH]; Avenue Nestle 55, CH-1800
Vevey (CH).

(72) Inventors; and

(71) Applicants : HARIHARESAN, Seralaathan [IN/US];
1405 San Jacinto Drive, Flower Mound, TX 75028 (US).
HIGHLEY, Brian [US/US]; 1460 Lockwood Drive,
Keller, TX 76248 (US).(74) Agent: LOBEL, Gary M.; Nestle HealthCare Nutrition,
12 Vreeland Road, 2nd Floor, Florham Park, NJ 07932
(US).(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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ,
TM), European (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, 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))

(54) Title: INFUSION PUMP CASSETTE WITH ANTI-FREE-FLOW VALVE MECHANISM

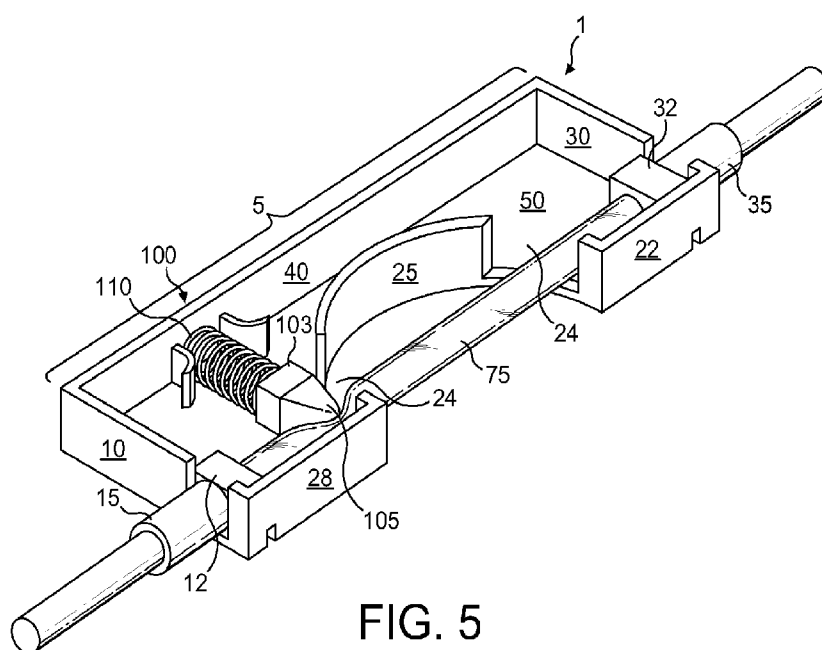


FIG. 5

(57) Abstract: A cassette (1) that is insertable into an infusion pump for delivery of a fluid to a subject that has a housing with two ends for holding flexible tubing (75) through which the fluid is directed. The housing has an open area exposing the tubing, which engages a pumping mechanism when inserted into an infusion pump. An anti-flow valve mechanism (100) associated with the tubing or the cassette and present either in, on or near the housing is made up of a piston (103/105) and spring (110), where the spring biases the piston against the tubing to prevent fluid flow.