(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
9 October 2014 (09.10.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/165501 A1

(51) International Patent Classification:
A61M 5/14 (2006.01)

(21) International Application Number:
PCT/US2014/032506

(22) International Filing Date:
1 April 2014 (01.04.2014)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/807,941 3 April 2013 (03.04.2013) US
14/230,413 31 March 2014 (31.03.2014) US

(71) Applicant: **BECTON, DICKINSON AND COMPANY** [US/US]; 1 Becton Drive, Mc 110, Franklin Lakes, NJ 07417-1880 (US).

(72) Inventors: **WIEST, Kathleen**; 1202 Chateaugay Ave, Naperville, IL 60540 (US). **MILLER, Lindsay**; 5400 Randolph Road, Charlotte, NC 28211 (US). **WILLIAMS, Jessica**; 5 Pebble Beach, Amarillo, TX 79124 (US). **ZAUNBRECHER, Rebecca**; 402 Border Rd, Concord, MA 01742 (US). **SATERBAK, Ann**; 12906 Hansel Ln, Houston, TX 77024 (US). **ODEN, Z., Maria**; 4019 Southwestern Street, Houston, TX 77005 (US). **GEISZLER, Andrew**; 3435 7th Avenue South, Great Falls, MT 59405 (US).

(74) Agents: **HIGHET, David, W.** et al.; VP & Chief IP Counsel, Becton, Dickinson And Company, (servilla Whitney LLC), 1 Becton Drive, MC 110, Franklin Lakes, NJ 07417-1880 (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, 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, IR, IS, JP, KE, KG, 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, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM,

[Continued on next page]

(54) Title: INTRAVENOUS TUBING SET MODIFIED FOR IN-LINE CATHETER FLUSHING

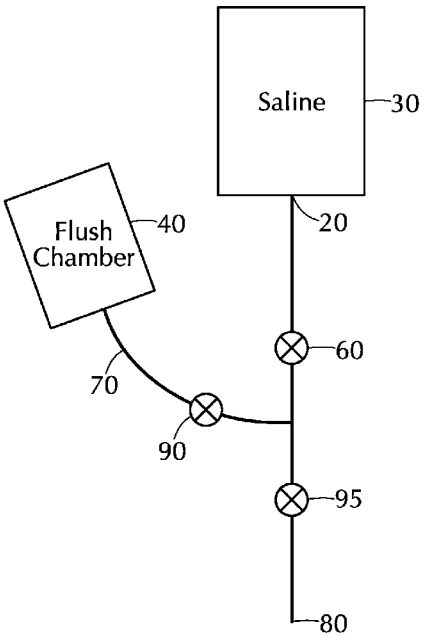


FIG. 1

(57) Abstract: An intravenous tubing set is provided having a coupling component (20) for accessing a source of flush solution (30); a flush chamber (40); a first IV tubing (50) for delivering saline solution from the source of flush solution to the flush chamber; a first flow control device (60) disposed in the tubing between the source of flush solution and the flush chamber to control the flow of flush solution into the flush chamber; a second IV tubing (70) for delivering flush solution to a patient catheter; and a second flow control device (90) disposed in the second tubing between the flush chamber and the patient catheter (80).

WO 2014/165501 A1

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, KM, ML, MR, NE, SN, TD, TG).

Published:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*