

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 August 2022 (25.08.2022)



(10) International Publication Number
WO 2022/177932 A1

(51) International Patent Classification:
A61M 25/01 (2006.01)

(21) International Application Number:
PCT/US2022/016518

(22) International Filing Date:
16 February 2022 (16.02.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/149,988 16 February 2021 (16.02.2021) US

(71) Applicant: **BECTON, DICKINSON AND COMPANY**
[US/US]; 1 Becton Drive, Franklin Lakes, New Jersey
07417 (US).

(72) Inventors: **LACKEY, John**; 1409 W 3630 S, West Valley City, Utah 84119 (US). **SCHERICH, Megan**; 253 Wilson Avenue S, Salt Lake City, Utah 84115 (US). **HOPWOOD, Benjamin**; 2950 S 2000 E, Salt Lake City, Utah 84109 (US). **HARDING, Weston, F.**; 2421 N 910 W, Lehi, Utah 84043 (US). **BLANCHARD, Curtis, H.**; 14156 S. Mt Ogden Peak Drive, Riverton, Utah 84096 (US). **BURKHOLZ, Jonathan, Karl**; 1971 South Wasatch Drive, Salt

Lake City, Utah 84108 (US). **MA, Yiping**; 2220 North 2300 East, Layton, Utah 84040 (US). **HORTIN, Justin, G.**; 973 Country Lane, Farmington, Utah 84025 (US).

(74) Agent: **QUEEN, Lara, Northrop** et al.; The Webb Law Firm, One Gateway Center, 420 Ft. Duquesne Blvd., Suite 1200, Pittsburgh, Pennsylvania 15222 (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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

(54) Title: CATHETER TRACTION DEVICES, SYSTEMS, AND METHODS

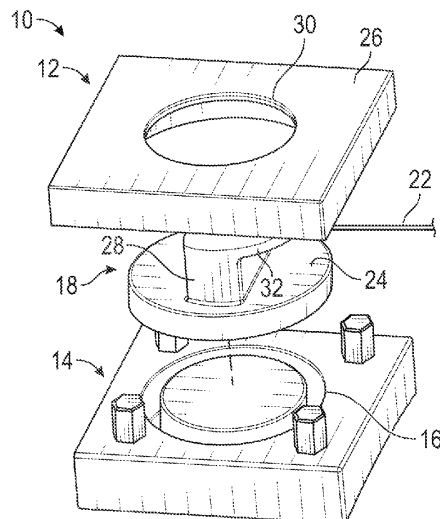


FIG. 1A

(57) Abstract: A catheter traction system to apply traction to an intravenous catheter. The catheter traction system may include a rotary device and an extension member. The extension member may extend from the rotary device and be configured to couple to a catheter assembly. In response to activation of the rotary device, the extension member may be configured to apply traction to the catheter assembly.

[Continued on next page]

WO 2022/177932 A1

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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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))*