

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
19 May 2022 (19.05.2022)



(10) International Publication Number
WO 2022/103579 A2

(51) International Patent Classification:
A61M 25/06 (2006.01)

(21) International Application Number:
PCT/US2021/056769

(22) International Filing Date:
27 October 2021 (27.10.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/114,276 16 November 2020 (16.11.2020) US
17/508,105 22 October 2021 (22.10.2021) US

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

(72) Inventor: **NAIDU, Jithendra Kumar Sathyanarayana**;
#09-87, Block 682A, Woodlands Drive-62, Woodlands
731682 (SG).

(74) Agent: **BLAIR, Whitney**; Kirton McConkie, 36 South
State Street, Suite 1900, Salt Lake City, Utah 84111 (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, 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,
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).

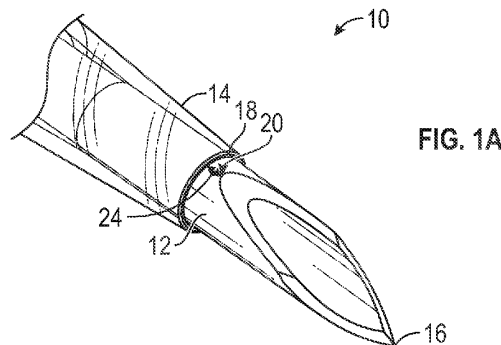
Declarations under Rule 4.17:

— *as to the applicant's entitlement to claim the priority of the
earlier application (Rule 4.17(iii))*

Published:

— *without international search report and to be republished
upon receipt of that report (Rule 48.2(g))*

(54) Title: INTRODUCER NEEDLE HAVING A BUMP AND RELATED SYSTEMS AND METHODS



(57) Abstract: A catheter system may include a catheter adapter, which may include a distal end, a proximal end, and a lumen extending through the distal end of the catheter adapter and the proximal end of the catheter adapter. The catheter system may include a septum assembly disposed within the lumen of the catheter adapter. The catheter system may include a catheter extending from the distal end of the catheter adapter. The catheter system may include an introducer needle, which may include a proximal end, a sharp distal tip, and a bump disposed between the proximal end and the sharp distal tip. The proximal end of the introducer needle may be secured within a needle hub of the catheter system. In response to the bump contacting the septum assembly, the sharp distal tip of the introducer needle is disposed distal to a distal end of the catheter.



WO 2022/103579 A2