

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
06 January 2022 (06.01.2022)



(10) International Publication Number
WO 2022/006243 A1

(51) International Patent Classification:
A61M 25/00 (2006.01)

(21) International Application Number:
PCT/US2021/039843

(22) International Filing Date:
30 June 2021 (30.06.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/047,118 01 July 2020 (01.07.2020) US

(71) Applicant: **BARD ACCESS SYSTEMS, INC.** [US/US];
605 North 5600 West, Salt Lake City, UT 84116 (US).

(72) Inventor: **HOWELL, Glade H.**; 2037 East Bear Mountain
Drive, Draper, UT 84020 (US).

(74) Agent: **WIGHT, Todd W.**; RUTAN & TUCKER LLP,
18575 Jamboree Road, 9th Floor, Irvine, CA 92612
(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 applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))

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))



WO 2022/006243 A1

(54) Title: RAPIDLY INSERTABLE CENTRAL CATHETERS AND METHODS OF MANUFACTURE THEREOF

(57) Abstract: Rapidly insertable central catheters ("RICCs") and methods are disclosed. A RICC (100) can include a first section (130) of a first polymeric material in a distal portion of a catheter tube, a second section (124) of a second polymeric material proximal of the first section, and a tapered junction therebetween (134). The first polymeric material has a first durometer. The second polymeric material has a second, lesser durometer. The junction is formed of the second polymeric material or a third polymeric material having a third durometer closer to the second durometer than the first durometer. The first section has a proximal portion disposed in a receptacle of the junction. An abluminal surface of a distal portion of the junction smoothly transitions onto an abluminal surface of the proximal portion of the first section without an edge that catches on skin when the RICC is inserted into an insertion site of a patient.