

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
30 September 2021 (30.09.2021)



(10) International Publication Number
WO 2021/194760 A1

- (51) International Patent Classification:
A61M 25/06 (2006.01)
- (21) International Application Number:
PCT/US2021/021979
- (22) International Filing Date:
11 March 2021 (11.03.2021)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
62/993,390 23 March 2020 (23.03.2020) US
17/192,778 04 March 2021 (04.03.2021) US
- (71) Applicant: **BECTON, DICKINSON AND COMPANY**
[US/US]; 1 Becton Drive, Franklin Lakes, New Jersey
07417 (US).
- (72) Inventor: **NADU, Jithendra Kumar Sathyanarayana**;
#09-87, Block 682A, Woodlands Drive-62, Woodlands
731682 (SG).
- (74) Agent: **METCALF, Craig**; 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,

(54) Title: NEEDLE SHIELD

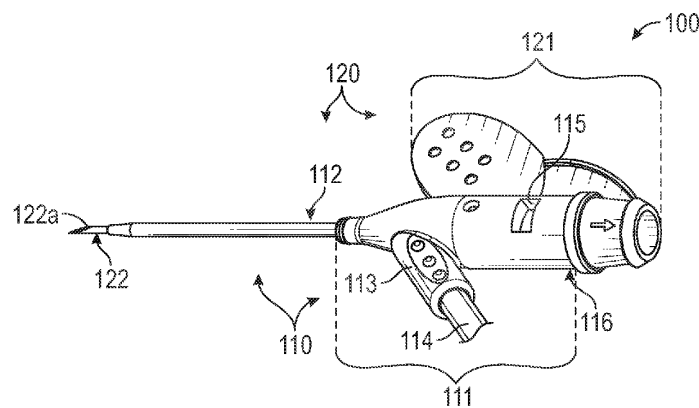


FIG. 1A

(57) Abstract: A shield for a needle of a peripheral intravenous catheter or other IV catheter system is provided. The shield may be formed of a single piece of material that may be bent to form a top portion, a bottom portion, a proximal portion, a top distal portion and a bottom distal portion. The proximal portion may form a proximal needle opening and the top or bottom distal portion may form a distal needle opening to allow a needle to extend through the shield when the shield is positioned within the lumen of a catheter adapter. When the distal tip of the needle is withdrawn proximally, the shield may transition from an unlocked position to a locked position in which the distal tip will be retained within the shield.

[Continued on next page]

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:

- *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))*