

(43) International Publication Date
3 January 2014 (03.01.2014)

- (51) **International Patent Classification:**
A61M 5/24 (2006.01) *A61M 5/28* (2006.01)
- (21) **International Application Number:**
PCT/US2013/047867
- (22) **International Filing Date:**
26 June 2013 (26.06.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/664,443 26 June 2012 (26.06.2012) US
13/925,172 24 June 2013 (24.06.2013) US
- (71) **Applicant:** BECTON, DICKINSON AND COMPANY
[US/US]; 1 Becton Drive, MC 089, Franklin Lakes, New
Jersey 07417-1880 (US).
- (72) **Inventors:** FERRERI, Suzanne; 273 Edwards St., Ridge-
wood, New Jersey 07450 (US). ZERDA, Adam; 27 Fox
Chase Road, Oak Ridge, New Jersey 07438 (US).
KENNEDY, James; 74 Tater Street, Mont Vernon, New
Hampshire 03057 (US). CARLSON, Morgan; 70 Havilah
St., Lowell, Massachusetts 01852 (US). MANKE, Darrin;
75 Granville Lane, North Andover, Massachusetts 01845
(US). PANECKI, Lee; 28 Eagle Drive, Newton, New Jer-
sey 07860 (US).
- (74) **Agents:** HIGHET, David W. et al.; VP & Chief IP Coun-
sel, Becton Dickinson and Company, (Diehl Servilla LLC),
1 Becton Drive MC 110, Franklin Lakes, New Jersey
07417-1880 (US).

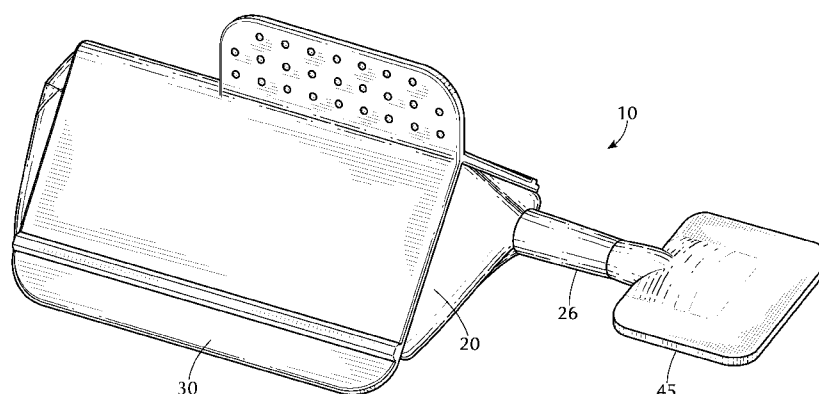
(81) **Designated States** (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, 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, SC,
SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, 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))
- with information concerning incorporation by reference of
missing parts and/or elements (Rule 20.6)

(88) **Date of publication of the international search report:**
13 March 2014

(54) **Title:** CLIP SYRINGE**FIG. 8**

(57) **Abstract:** A single use pre-filled delivery device (10) is disclosed having a deformable container (20) including a side wall (21) having an inside surface defining a chamber (23) for retaining fluid, a clip element (30), and a locking element (40). The deformable container further includes a closed proximal end (24) and an open distal end (25) including a male luer tip (26) having a passageway (27) therethrough providing fluid communication with the chamber. The male luer tip may be removably connectable to a female luer connection of a vascular access device. The clip element includes a distal end, proximal end, and a pivot located between the distal end and the proximal end of the clip element for collapsing the deformable container to drive fluid out of the chamber by movement of the proximal end towards the distal end. The pivot may be a hinge, which may be in the form of a living hinge. The deformable container may be attached to the clip element. The locking element may be disposed on the clip element.