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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
19 October 2017 (19.10.2017)

WIPO | PCT

(10) International Publication Number
WO 2017/180279 A8

(51) International Patent Classification:
A61M 5/42 (2006.01) *A61M 5/142* (2006.01)

(21) International Application Number:
PCT/US2017/022291

(22) International Filing Date:
14 March 2017 (14.03.2017)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/323,278 15 April 2016 (15.04.2016) US

(71) Applicant: **THE REGENTS OF THE UNIVERSITY OF MICHIGAN** [US/US]; Office of Technology Transfer, 1600 Huron Parkway, 2nd Floor, Ann Arbor, MI 48109-2590 (US).

(72) Inventors: **SIENKO, Kathleen**; 2350 Hayward St., 3454 GBB, Ann Arbor, MI 48109 (US). **MOHEDAS, Ibrahim**; 525 N. Ashley St., Ann Arbor, MI 48103 (US). **SARVESTANI, Amier, Sabet**; 100 East Hartsdale, Apt. 6FE, Hartsdale, NY 10530 (US). **BERTCH, Corey**; 42442 Blackstone Court, Canton, MI 48187 (US). **FRANKLIN, Anthony**; 12046 Miller Rd., Swartz Creek, MI 48473 (US). **JOYCE, Adam**; 31542 Grove Dr., Livonia, MI 48154 (US). **MCCORMICK, Jacob**; 10444 Gale Rd., Goodrich, MI 48438 (US). **SHOEMAKER, Michael**; 5356 Royal Vale Ln., Dearborn, MI 48126 (US).

(74) Agent: **KRIEGEL, Jeremy, R.**; Marshall, Gerstein & Borun LLP, 233 S. Wacker Drive, 6300 Willis Tower, Chicago, IL 60606-6357 (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, 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, 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, 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).

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

(48) Date of publication of this corrected version:
09 November 2017 (09.11.2017)

(15) Information about Correction:
see Notice of 09 November 2017 (09.11.2017)

(54) Title: ASSISTIVE DEVICE FOR SUBCUTANEOUS INJECTIONS OR IMPLANTS

(57) Abstract: An assistive device for subcutaneous injections or implants. The assistive device is placed under a blood pressure cuff that displaces the skin and subcutaneous tissues of a patient at an insertion site in order to allow guided insertion of a needle or implant applicator into a subcutaneous fat layer. The skin and subcutaneous tissue is displaced or drawn, via pressure applied by the blood pressure cuff, through an injection window of a device body into a hollow cavity of the device body. A guide channel leads from a front side of the device body into the hollow cavity, and an applicator of an adapter is inserted through the guide channel into the subcutaneous fat layer.

WO 2017/180279 A8