

CORRECTED VERSION

(19) World Intellectual Property Organization  
International Bureau



(10) International Publication Number  
WO 2017/127701 A8

(43) International Publication Date  
27 July 2017 (27.07.2017)

(51) International Patent Classification:

A61N 1/05 (2006.01) A61N 1/375 (2006.01)  
A61N 1/372 (2006.01)

(21) International Application Number:

PCT/US2017/014369

(22) International Filing Date:

20 January 2017 (20.01.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/281,403 21 January 2016 (21.01.2016) US  
15/410,161 19 January 2017 (19.01.2017) US

(71) Applicant: MEDTRONIC, INC. [US/US]; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (US).

(72) Inventors: CHEN, Xin; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (US). EGGEN, Michael D.; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (US). GRUBAC, Vladimir; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (US). COLIN, Brian P.; 710 Medtronic Parkway N.E., Minneapolis, Min-

nesota 55432 (US). GAN, Wei; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (US). ANDERSON, Thomas A.; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (US). HILPISCH, Kathryn; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (US).

(74) Agent: BARRY, Carol F. et al.; 710 Medtronic Parkway N.E., Minneapolis, Minnesota 55432 (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,

(54) Title: INTERVENTIONAL MEDICAL DEVICES, DEVICE SYSTEMS, AND FIXATION COMPONENTS THEREOF

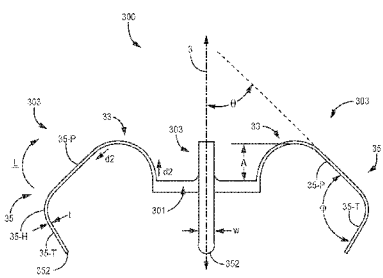


FIG. 3A

(57) Abstract: A fixation mechanism of an implantable medical device is formed by a plurality of tines fixedly mounted around a perimeter of a distal end of the device. Each tine may be said to include a first segment fixedly attached to the device, a second segment extending from the first segment, and a third segment, to which the second segment extends. When the device is loaded in a lumen of a delivery tool and a rounded free distal end of each tine engages a sidewall that defines the lumen, to hold the tines in a spring-loaded condition, the first segment of each tine, which has a spring-biased pre-formed curvature, becomes relatively straightened, and the third segment of each tine, which is terminated by the free distal end, extends away from the axis of the device at an acute angle.

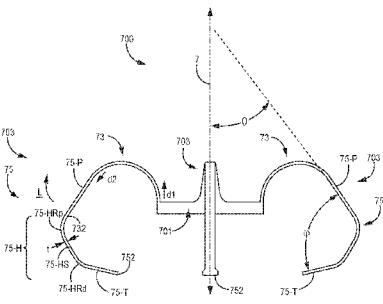


FIG. 6A

WO 2017/127701 A8

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))*
- *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))*

**(48) Date of publication of this corrected version:**

22 February 2018 (22.02.2018)

**(15) Information about Correction:**

see Notice of 22 February 2018 (22.02.2018)