

# (12) International Application Status Report

**Received at International Bureau:** 21 December 2019 (21.12.2019)

**Information valid as of:** 26 February 2020 (26.02.2020)

**Report generated on:** 28 September 2020 (28.09.2020)

**(10) Publication number:**

WO2020/117865

**(43) Publication date:**

11 June 2020 (11.06.2020)

**(26) Publication language:**

English (EN)

**(21) Application Number:**

PCT/US2019/064324

**(22) Filing Date:**

03 December 2019 (03.12.2019)

**(25) Filing language:**

English (EN)

**(31) Priority number(s):**

62/774,377 (US)

**(31) Priority date(s):**

03 December 2018 (03.12.2018)

**(31) Priority status:**

Priority document received (in compliance with PCT Rule 17.1)

**(51) International Patent Classification:**

A61M 25/09 (2006.01); A61M 25/01 (2006.01); A61M 25/088 (2006.01)

**(71) Applicant(s):**

THE BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM [US/US]; 210 West 7th Street Austin, Texas 78701 (US) *(for all designated states)*

**(72) Inventor(s):**

NASCIMBENE, Angelo; 210 West 7th Street Austin, Texas 78701 (US)

**(74) Agent(s):**

THOMAS HORSTEMEYER LLP; Attn.: David R. RISLEY 3200 Windy Hill Road SE Suite 1600E Atlanta, Georgia 30339 (US)

**(54) Title (EN):** SYSTEMS AND METHODS FOR TREATING CHRONIC TOTAL OCCLUSION OF AN ARTERY

**(54) Title (FR):** SYSTÈMES ET PROCÉDÉS DE TRAITEMENT DE L'OCCLUSION TOTALE CHRONIQUE D'UNE ARTÈRE

**(57) Abstract:**

**(EN):** In one embodiment, a system includes a small-diameter tube having an elongated body, a distal tip, and an inner lumen that extends the length of the tube, the distal tip including a magnetic element that generates a strong focal magnetic field, and a crossing wire having an elongated body and a distal tip, the distal tip of the crossing wire including a ferromagnetic element that is magnetically attracted to the distal tip of the small-diameter tube when the distal tip of the crossing wire is placed in proximity to the distal tip of the small-diameter tube so as to facilitate alignment of the distal tips.

**(FR):** L'invention concerne, selon un mode de réalisation, un système comprenant un tube de petit diamètre présentant un corps allongé, une pointe distale, et une lumière interne qui s'étend sur la longueur du tube, la pointe distale comprenant un élément magnétique qui génère un champ magnétique focal fort, et un fil traversant présentant un corps allongé et une pointe distale, la pointe distale du fil traversant comprenant un élément ferromagnétique qui est magnétiquement attiré vers la pointe distale du tube de petit diamètre lorsque la pointe distale du fil traversant est placée à proximité de la pointe distale du tube de petit diamètre afin de faciliter l'alignement des pointes distales.

**International search report:**

Received at International Bureau: 10 February 2020 (10.02.2020) [US]

**International Report on Patentability (IPRP) Chapter II of the PCT:**

Not available

**(81) Designated States:**

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, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : 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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG  
African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

**Declarations:**

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

Declaration made as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America