

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 October 2019 (24.10.2019)



(10) International Publication Number
WO 2019/202339 A1

(51) International Patent Classification:

A61B 17/34 (2006.01) A61B 34/20 (2016.01)
A61B 90/00 (2016.01) A61B 17/11 (2006.01)

(21) International Application Number:

PCT/GB2019/051132

(22) International Filing Date:

23 April 2019 (23.04.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1806457.6	20 April 2018 (20.04.2018)	GB
1806644.9	24 April 2018 (24.04.2018)	GB
1806642.3	24 April 2018 (24.04.2018)	GB

(71) Applicant: **STENT TEK LIMITED** [GB/GB]; 1 Square Rigger Row, London SW11 3TZ (GB).

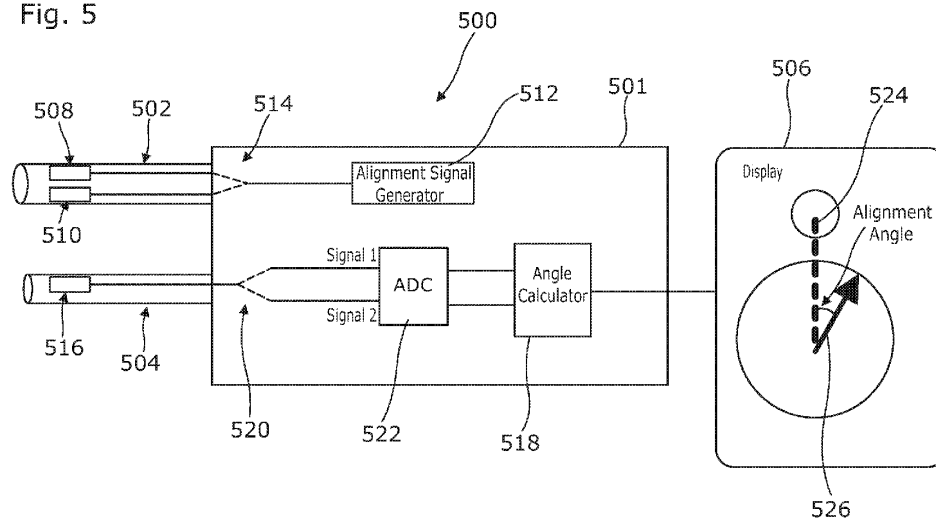
(72) Inventors: **POPA, Sorin**; 15 Avonmore Road, London W14 8RP (GB). **DICKINSON, Robert**; 51 West Hill Road, Wandsworth, London SW18 1LE (GB).

(74) Agent: **GOODACRE, Jonathan** et al.; Keltie LLP, No. 1 London Bridge, London SE1 9BA (GB).

(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, 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,

(54) Title: APPARATUS FOR ORIENTATION DISPLAY AND ALIGNMENT IN PERCUTANEOUS DEVICES

Fig. 5



(57) **Abstract:** Aspects of the present invention relate to apparatus for determining alignment between a source device and a target device. The apparatus comprises the source device, the target device, and a processing system. The source device comprises a first spatially variant field generator for generating a first spatially variant electric field, and a second spatially variant field generator for generating a second spatially variant electric field, wherein the second spatially variant electric field is angularly offset with respect to the first spatially variant electric field. The target device comprises at least one sensor configured to detect a first signal from the first spatially variant electric field and a second signal from the second spatially variant electric field. The processing system is configured to determine alignment between the first source device and the target device based on the first and second signals from the first and second spatially variant electric fields by the target device. The inventions further relates to the method of use of the apparatus and the processing system of the apparatus.

[Continued on next page]

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:

- *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))*