

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
03 October 2024 (03.10.2024)



(10) International Publication Number
WO 2024/205501 A1

(51) International Patent Classification:

A61B 17/11 (2006.01) A61B 17/122 (2006.01)
A61B 17/115 (2006.01) A61B 17/068 (2006.01)

(21) International Application Number:

PCT/SG2024/050184

(22) International Filing Date:

27 March 2024 (27.03.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10202300825Q 27 March 2023 (27.03.2023) SG

(71) Applicants: NICE SURGICAL SOLUTIONS PTE LTD

[—/SG]; 77 Ayer Rajah Crescent, #02-21/26, Singapore 139954 (SG). ALEXANDRA HEALTH PTE. LTD.
[—/SG]; 90 Yishun Central, Singapore 768828 (SG).

(72) Inventors: ZHOU, Fangzhou; c/o Nice Surgical Solutions

PTE LTD, 77 Ayer Rajah Crescent, #02-21/26, Singapore

139954 (SG). YONG, Zhi Qi; c/o Nice Surgical Solutions PTE LTD, 77 Ayer Rajah Crescent, #02-21/26, Singapore 139954 (SG). MANTOO, Surendra Kumar; c/o Alexandra Health PTE. LTD., 90 Yishun Central, Singapore 768828 (SG).

(74) Agent: VIERING, JENTSCHURA & PARTNER LLP; P.O. Box 1088, Rochor Post Office, Rochor Road, Singapore 911833 (SG).

(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, 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, ST, SV, SY, TH,

(54) Title: SURGICAL DEVICE, METHOD OF MANUFACTURING, AND METHOD OF USING THE SURGICAL DEVICE

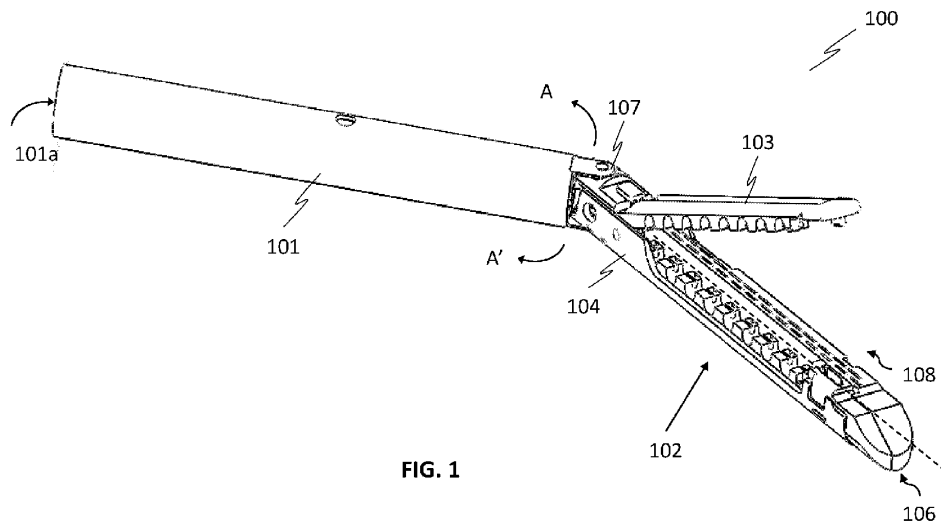


FIG. 1

(57) Abstract: Disclosed is a surgical device, the surgical device comprises a first jaw coupled with a second jaw to define a clamp for receiving a tissue; a purse-string suture profile formed along a first longitudinal portion of the clamp, the purse-string suture profile adapted to receive a pair of purse-string suture needles; a staple anvil formed on the first jaw and along a second longitudinal portion of the clamp; a stapling unit formed on the second jaw along the second longitudinal portion of the clamp; and an anchor attachment assembly operable to urge the pair of purse-string suture needles to deliver a suture through the tissue to form an anchorage.

[Continued on next page]

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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))