

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
29 July 2021 (29.07.2021)



(10) International Publication Number
WO 2021/148972 A1

(51) International Patent Classification:

G01B 11/10 (2006.01) G01B 5/00 (2006.01)
G01B 11/245 (2006.01) G06T 7/593 (2017.01)
G01B 21/04 (2006.01) G01B 11/24 (2006.01)

(21) International Application Number:

PCT/IB2021/050446

(22) International Filing Date:

21 January 2021 (21.01.2021)

(25) Filing Language:

Italian

(26) Publication Language:

English

(30) Priority Data:

102020000001060 21 January 2020 (21.01.2020) IT

(71) Applicants: **VISIONTEK ENGINEERING S.R.L.**
[IT/IT]; Via Fortunato Zeni, 8, 38068 Rovereto, Trento

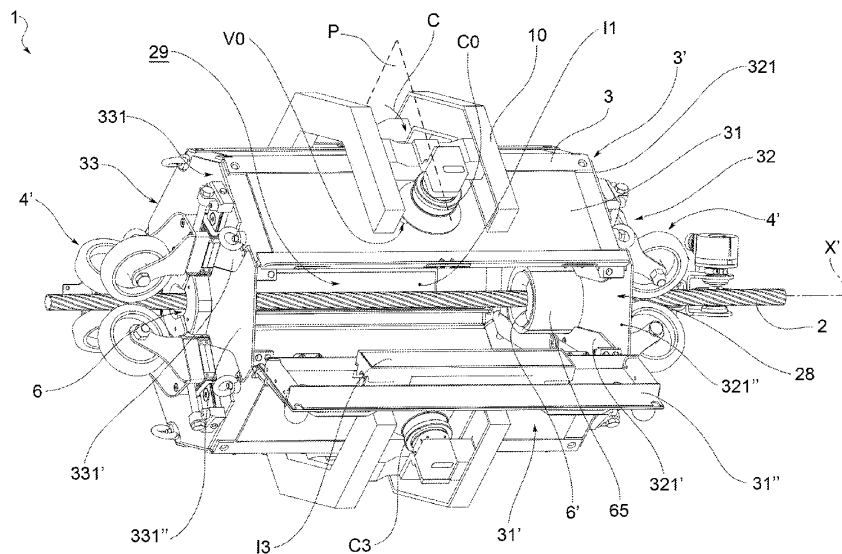
(IT). **BRIDON INTERNATIONAL LTD** [GB/GB]; Icon Building, Balby Carr Bank, Doncaster, South Yorkshire DN4 5JQ (GB).

(72) Inventors: **BONETTI, Cristiano**; c/o Visiontek Engineering S.r.l., Via Fortunato Zeni, 8, 38068 Rovereto, Trento (IT). **VANLANDEGHEM, Bart**; Ouwegemsesteenweg, 245, 9770 Kruisem (BE). **NEWTON, Christopher John**; 45, Kingsway, Banbury, Oxfordshire OX16 9NX (GB).

(74) Agent: **DE LORENZO, Danilo** et al.; c/o Jacobacci & Partners S.p.A., Piazza della Vittoria, 11, 25122 Brescia (IT).

(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,

(54) Title: THREE-DIMENSIONAL OPTICAL MEASURING APPARATUS FOR ROPES WITH LIGHTING DEVICE



HR, HU, ID, IL, IN, IR, IS, IT, 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, ST, SV, SY, TH, 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, 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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *of inventorship (Rule 4.17(iv))*

Published:

- *with international search report (Art. 21(3))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

perpendicular to the main extension axis of the rope (2), the image acquisition devices (C0, C1, C2, C3) are arranged on the frame (3') circumferentially spaced apart from one another along said circumferential direction (C). A lighting device (I0, I1, I2, I3) adapted to illuminate at least one region of the rope (2) is arranged along the circumferential direction (C) between a pair of adjacent image acquisition devices (C0, C1; C1, C2; C2, C3; C3, C1).