

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 January 2025 (16.01.2025)



(10) International Publication Number
WO 2025/014419 A1

(51) International Patent Classification:

G01C 3/22 (2006.01) G06G 7/80 (2006.01)
F41G 3/06 (2006.01) G06T 7/70 (2017.01)

(21) International Application Number:

PCT/SE2024/050678

(22) International Filing Date:

10 July 2024 (10.07.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2300064-9 12 July 2023 (12.07.2023) SE

(71) Applicant: BAE SYSTEMS HÄGGLUNDS AKTIEBO-
LAG [SE/SE]; 891 82 Örnsköldsvik (SE).

(72) Inventor: SUNDQUIST, Rikard; Täfteå 318, 891 95
Ärnäsfall (SE).

(74) Agent: ZACCO SWEDEN AB; P.O. Box 5581, Löjtnants-
gatan 21, 114 85 Stockholm (SE).

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, 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))

(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,

(54) Title: METHOD AND SYSTEM, AT A GROUND COMBAT VEHICLE, FOR TARGET DISTANCE MEASUREMENT

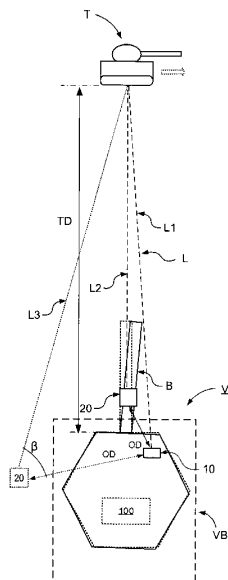


Fig. 3a

(57) Abstract: The present invention relates to a method, at a ground combat vehicle (V), for passive target distance measurement, the method being performed by means of: a master image sensor device (10) for observing a target (T); and a slave image sensor device (20), said master image sensor device (10) and said slave image sensor device (20) being arranged spaced apart by an offset distance (OD) from each other, said method comprising: controlling an orientation of said at least one slave image sensor device (20); determining whether a line-of-sight (L2) of said slave image sensor device (20) intersects a line-of-sight (L1) of said master image sensor device (10) at a location of a target (T); and, if so, receiving: first angular data representing orientation of the master image sensor device (10); and second angular data representing orientation of the slave image sensor device (20). The method further comprises determining a target distance (TD), representing a distance between the combat vehicle and the target, based on the offset distance (OD) and the received angular data. The invention also relates to a system and a ground combat vehicle.