

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 December 2024 (05.12.2024)



(10) International Publication Number
WO 2024/249900 A3

(51) International Patent Classification:

G05D 1/244 (2024.01) G05D 109/18 (2024.01)
G05D 1/43 (2024.01) G05D 111/10 (2024.01)
G05D 105/00 (2024.01) G05D 111/50 (2024.01)
G05D 107/90 (2024.01) G01S 17/894 (2020.01)

(21) International Application Number:

PCT/US2024/032056

(22) International Filing Date:

31 May 2024 (31.05.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/470,622 02 June 2023 (02.06.2023) US

(71) Applicant: **RUGGED ROBOTICS INC.** [US/US]; 210 East 13th Street, Houston, TX 77008 (US).

(72) Inventors: **FARRELL, Logan**; 1814 Diamond Brook Dr., Houston, TX 77062 (US). **CHEN, Kevin**; 12310 Deerbrook Trail, Austin, TX 78750 (US). **SWAIN, Dikshya**; 12214 Texas Trumpet Trail, Humble, TX 77346 (US). **STRAWSER, Philip**; 3206 Pleasant Cove Ct., Houston, TX 77059 (US). **VALLE, Paul**; 814 Chimney Rock Rd., Houston, TX 77056 (US). **SKOLAUT, Matthew**; 7926 Bayou Forest Dr., Houston, TX 77088 (US). **SANCHEZ, Jairo**; 3401 Snowblossom Ct., Pearland, TX 77581 (US). **NGUYEN, Vienny**; 1506 Richland Hollow Lane, Friendswood, TX 77546 (US). **MORSE, Derrick**; 210 East 13th Street, Houston, TX 77008 (US). **WIJESINGHE, Dhiren**; 210 East 13th Street, Houston, TX 77008 (US).

(74) Agent: **ALAM, Saad** et al.; Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA 02210-2206 (US).

(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, 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))
- 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))

(88) Date of publication of the international search report:

16 January 2025 (16.01.2025)

(54) Title: SENSOR SYSTEM FOR MOBILITY PLATFORM AND METHOD FOR SHAPE BASED LANDMARK RECOGNITION

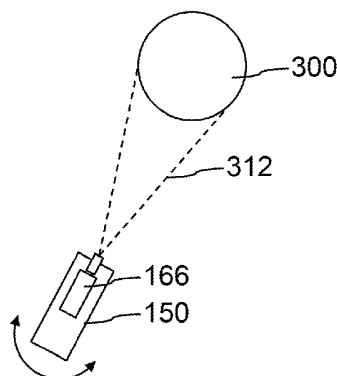


FIG. 12A

(57) Abstract: A mobility platform is configured to execute one or more tasks in a worksite including a passive landmark. A mobility platform may include a first laser rangefinder and at least one processor configured to sweep the first passive landmark with the first laser rangefinder to collect a first plurality of distance measurements for a first plurality of yaw angles, fit a first shape to the first plurality of distance measurements based on a predetermined shape of the first passive landmark, and determine a position of a geometric center of the first passive landmark relative to the first location of the first laser rangefinder based on the fit first shape.

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