

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 September 2020 (24.09.2020)



(10) International Publication Number
WO 2020/190387 A1

(51) International Patent Classification:
G06T 19/00 (2011.01) *G01S 5/00* (2006.01)
H04W 4/02 (2018.01)

(21) International Application Number:
PCT/US2020/015753

(22) International Filing Date:
30 January 2020 (30.01.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
16/357,582 19 March 2019 (19.03.2019) US

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(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, 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).

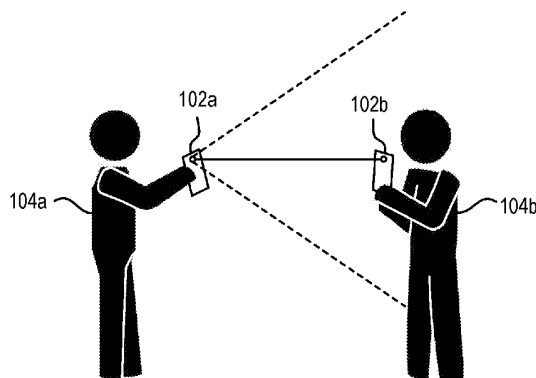
Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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))

(54) Title: RELATIVE SPATIAL LOCALIZATION OF MOBILE DEVICES



(57) Abstract: To obtain a relative localization between a plurality of mobile devices, a first mobile device observes a second mobile device within a field of view of the first mobile device's camera at time t1, determines a first position of the first mobile device at t1, and receives from the second mobile device a second position of the second mobile device at t1. The first mobile device determines information about the first mobile device's orientation with respect to the second mobile device at t1 based at least in part on the first position and the observation of the second mobile device. The first mobile device identifies two constraints that relate the mobile devices' coordinate systems based at least in part on the second position and the orientation information. The first mobile device's pose relative to the second mobile device may be calculated once at least six constraints are accumulated.

FIG. 1A

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