

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
19 August 2021 (19.08.2021)



(10) International Publication Number
WO 2021/162641 A1

(51) International Patent Classification:

G06T 19/00 (2011.01) G02B 27/01 (2006.01)
F41H 7/00 (2006.01) G06F 1/16 (2006.01)
G05D 1/00 (2006.01)

(21) International Application Number:

PCT/SG2021/050074

(22) International Filing Date:

11 February 2021 (11.02.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10202001213X 11 February 2020 (11.02.2020) SG

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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, 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,

(54) Title: TACTICAL ADVANCED ROBOTIC ENGAGEMENT SYSTEM

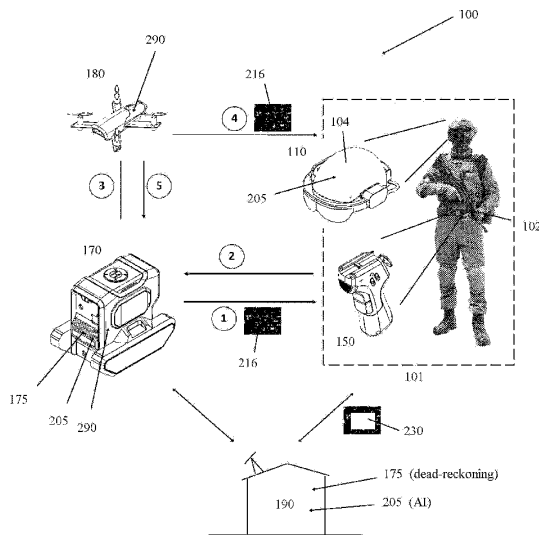


FIG. 1A

(57) Abstract: This invention describes a tactical advanced robotic engagement system (ARES) (100) for combat or rescue mission by employing advanced electronics, AI and AR capabilities. In ARES, a user carries a weapon or tool (102) equipped with a hand-operable controller (150) for controlling an associated UGV (170), UAV (180) or UUV. The UGV, UAV is equipped with a camera (290) to obtain real-time photographs or videos and to relay them to a heads-up display (HUD) (110) mounted on the user's helmet (104). The HUD (110) system provides intuitive UIs (132) for communication and navigation of the UGV, UAV; AR information reduces visual cognitive and mental loads on the user, thereby enhancing situation awareness and allowing the user to maintain heads-up, eyes-out and hands-on trigger readiness. The HUD (110) also provides intuitive UIs to connect up with peers and/or a Command Centre (190).

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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))*

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*