

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
17 August 2023 (17.08.2023)



(10) International Publication Number
WO 2023/152737 A1

(51) International Patent Classification:

F41A 17/08 (2006.01) *F41A 17/46* (2006.01)
F41G 3/08 (2006.01) *F41A 19/59* (2006.01)

(21) International Application Number:

PCT/IL2023/050131

(22) International Filing Date:

07 February 2023 (07.02.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

290443 08 February 2022 (08.02.2022) IL

(71) Applicant: **SMART SHOOTER LTD** [IL/IL]; 3006500
Yagur (IL).

(72) Inventors: **KRUPNIK, Hagai**; Haemek 251, 3600100
Nofit (IL). **EIHLICH, Avshalom**; POB 155, 1923800
Ramat Hashofet (IL). **MEGEL, Yevgeni**; Globerman 11,
3499803 Haifa (IL). **PICK, Shir Ahuvia**; Ha'Rakafot 9,
3474509 Haifa (IL).

(74) Agent: **ROBINSON, Abraham** et al.; LUZZATTO &
LUZZATO, P.O. BOX 5352, 8415202 Beer Sheva (IL).

(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, 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, 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).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

— with international search report (Art. 21(3))

(54) Title: SYSTEMS AND METHODS FOR RESTRICTING A FIREARM TO LESS LETHAL SHOOTING

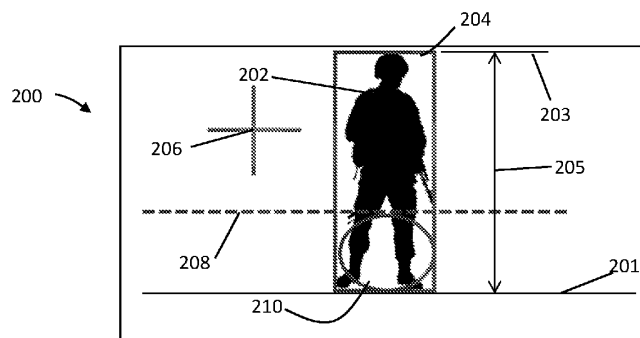


Fig. 2A

(57) Abstract: A system for restricting a firearm to less lethal shooting includes an image sensor, at least one non-transitory memory storing instructions, and at least one processor that executes the instructions to cause the performance of the following steps: processing images to detect potential targets within a scene; locking onto and tracking at least one of the potential targets; defining a safety line relative to the scene; defining one or more aiming regions on the at least one locked-on target below the safety line; and controlling discharge of the firearm, so as to permit discharge of the firearm when a projectile discharged from the firearm will impact the scene or the target at one of the defined aiming regions, and to prevent discharge of the firearm when a projectile discharged from the firearm will impact the scene or target outside one of the aiming regions.



WO 2023/152737 A1