

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
15 December 2022 (15.12.2022)



(10) International Publication Number
WO 2022/259131 A1

(51) International Patent Classification:

F41A 9/02 (2006.01) F41A 27/00 (2006.01)
F41A 9/04 (2006.01)

(21) International Application Number:

PCT/IB2022/055273

(22) International Filing Date:

07 June 2022 (07.06.2022)

(25) Filing Language:

Italian

(26) Publication Language:

English

(30) Priority Data:

102021000014819 08 June 2021 (08.06.2021) IT

(71) Applicant: **LEONARDO S.P.A.** [IT/IT]; Piazza Monte Grappa, 4, 00195 Roma (IT).

(72) Inventors: **D'EUSEBIO, Manuel**; C/o Leonardo S.P.A., Department: Divisione Sistemi di Difesa, Via Valdilocchi, 15, 19136 La Spezia (IT). **NARDI, Claudio**; C/o Leonardo S.P.A., Department: Divisione Sistemi di Difesa, Via Valdilocchi, 15, 19136 La Spezia (IT). **MINEO, Luca**; C/o Leonardo S.p.A., Department: Divisione Elettronica, Via Valdilocchi, 15, 19136 La Spezia (IT).

(74) Agent: **BARZANO' & ZANARDO MILANO SPA**; Corso Vittorio Emanuele II, 61, I-10128 Torino (IT).

(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, IQ, IR, IS, IT, JM, 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).

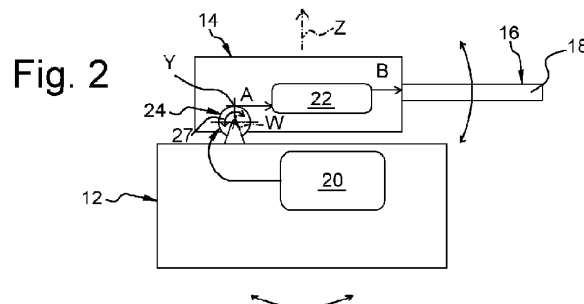
Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

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

(54) Title: LOADING SYSTEM FOR LINKLESS AMMUNITION



(57) Abstract: The installation comprises a traversing portion (12) configured to be rotatably mounted and supported on a stationary support structure, so as to rotate about a traversing axis (Z). There is an elevating portion (14) rotatably supported by the traversing portion (12) about an elevating axis (Y) perpendicular to the traversing axis (Z). A firearm assembly (16) supported by the elevating portion (14) comprises a barrel (18) configured to fire linkless ammunitions (A) through itself. A magazine (20) is configured to contain a plurality of linkless ammunitions (A) to be fed to the barrel (18). A feeding assembly (22) is configured to transfer the linkless ammunitions (A) from the magazine (20) to the barrel (18). The magazine (20) is carried by the traversing portion (12) and is operatively integral therewith. The feeding assembly (22) is carried by said elevating portion (14) and is operatively integral therewith. A transfer device (24) mounted on the traversing portion (12) is configured to transfer the linkless ammunitions (A) from the magazine (20) to the feeding assembly (22).



WO 2022/259131 A1