

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 August 2022 (25.08.2022)



(10) International Publication Number
WO 2022/177612 A1

- (51) **International Patent Classification:**
F41B 11/80 (2013.01) *F41H 13/00* (2006.01)
- (21) **International Application Number:**
PCT/US2021/055854
- (22) **International Filing Date:**
20 October 2021 (20.10.2021)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
17/179,341 18 February 2021 (18.02.2021) US
- (71) **Applicant: WRAP TECHNOLOGIES, INC.** [US/US];
1817 W. 4th Street, Tempe, AZ 85281 (US).
- (72) **Inventors: CEROVIC, Milan;** 1817 W. 4th Street, Tempe,
AZ 85281 (US). **RICHTER, David, T.;** 1817 W. 4th Street,
Tempe, AZ 85281 (US). **CHIANG, Andrew;** 1817 W. 4th
Street, Tempe, AZ 85281 (US). **NORRIS, Elwood, G.;**
16101 Blue Crystal Trail, Poway, CA 92064 (US).
- (74) **Agent: JONES, Jason, R.** et al.; Thorpe North & Western,
8180 S 700 E, Ste 350, Sandy, UT 84070 (US).

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).

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

(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,

(54) **Title:** PROJECTILE LAUNCHING SYSTEMS WITH ANCHORS HAVING DISSIMILAR FLIGHT CHARACTERISTICS

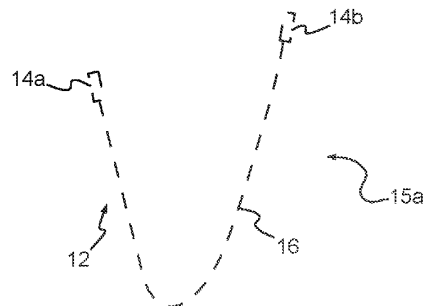


FIG. 3A

(57) **Abstract:** A projectile deployment system includes an entangling projectile (12) having a pair of anchors (14a, 14b) and a tether (16) connecting the pellets. A projectile casing (44) includes a pair of sockets (30a, 30b), each socket sized to carry one of the pair of anchors. At least one pressure source (50) is capable of expelling one or both of the anchors from the projectile casing toward a subject (100). At least one of the entangling projectile (12) or the projectile casing (44) can be configured such that the pair of anchors (14a, 14b) travel toward the subject (100) with differing flight characteristics after being expelled from the projectile casing (44).



WO 2022/177612 A1