

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

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
05 January 2023 (05.01.2023)



(10) International Publication Number  
**WO 2023/277816 A2**

(51) International Patent Classification:  
Not classified

(21) International Application Number:  
PCT/SG2022/050453

(22) International Filing Date:  
29 June 2022 (29.06.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10202107146V 29 June 2021 (29.06.2021) SG

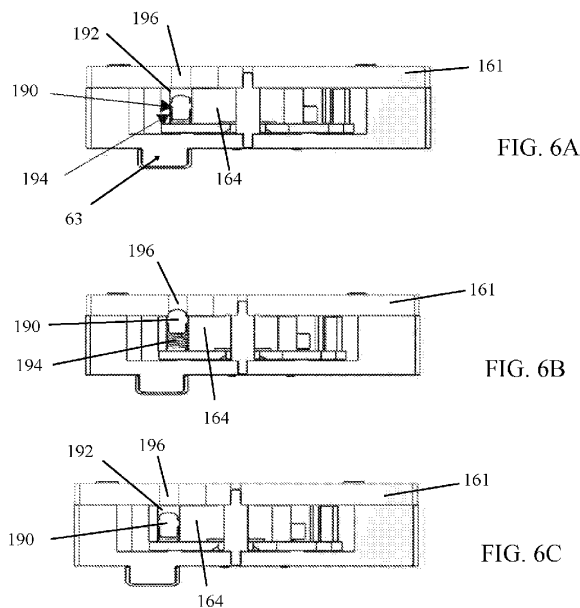
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, 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,

(54) Title: SAFE-AND-ARM DEVICE



(57) Abstract: The present invention describes a safe-and-arm device, mechanism or assembly (160) for a projectile (100, 102) equipped with a second-stage propellant (124). The second-stage propellant (124) is ignited after the projectile has been ejected out from a launcher barrel. A lockpin (190), being urged by a spring (194), is responsive to ignition of the second-stage propellant; after the lockpin (190) and spring (194) sense and respond to the second propulsion, an unbalanced rotor (164) forming part of the safe-and-arm device or assembly (160), is released to rotate from a "safe" state to an "armed" state, as the projectile continues traveling along its trajectory to a target. In one embodiment, the projectile is configured with a 40mm cartridge containing a first propellant (122). An impact sensor may trigger an electric detonator or a point detonator may trigger a stab detonator to set off explosives disposed in the projectile. FIGS. 6A-6C for publication.

[Continued on next page]

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).

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