



(51) International Patent Classification:
F42B 10/00 (2006.01)

(21) International Application Number:
PCT/IB2010/003543

(22) International Filing Date:
17 June 2011 (17.06.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/912,252 26 October 2010 (26.10.2010) US

(71) Applicant (for all designated States except US): **KMS CONSULTING LLC** [US/US]; 14 Cottagewood Lane, Kennebunk, Maine 04043 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MARTINEZ, Marce-
lo, Edgardo** [AR/AR]; Lincoln 38, 5152 Carlos Paz, Cor-
doba (AR).

(74) Agent: **MILDE, Karl, F., Jr.**; Eckert Seamans Cherin &
Mellott, LLC, U.S. Steel Tower, 600 Grant Street-44th
Fl., Pittsburgh, PA 15219-2788 (US).

(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, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD,
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, 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, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- with amended claims (Art. 19(1))
- with information concerning one or more priority claims
considered void (Rule 26bis.2(d))

(54) Title: ROLLING PROJECTILE WITH EXTENDING AND RETRACTING CANARDS

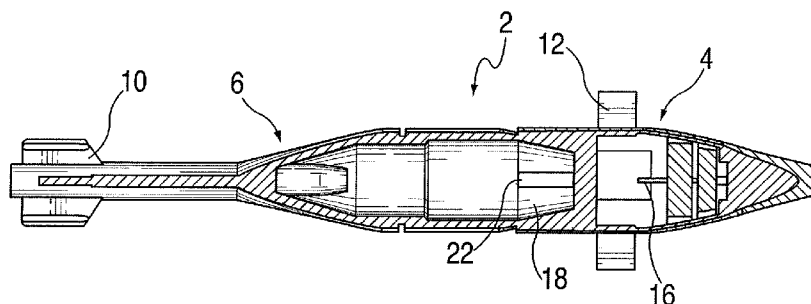


FIG. 1

(57) **Abstract:** A slow rolling projectile comprises a projectile body has a forward section and a rear section and having a longitudinal axis. Two or more canards in the forward section are capable of being extended from and retracted into the projectile body at predetermined frequencies and/or for predetermined times. Two or more tail fins in the rear section are fixed coextensive to or at an angle to the longitudinal axis, and an actuator extends and retracts the canards. The canards are capable of being extended and retracted at a rate based on the rotation of the projectile sufficient to correct for lateral movement. A GPS or INS navigational system activates an actuator to extend and retract the canards.

