

(43) International Publication Date
30 December 2021 (30.12.2021)



(10) International Publication Number
WO 2021/260688 A1

(51) International Patent Classification:
B64C 3/56 (2006.01)

(21) International Application Number: PCT/IL2021/050753

(22) **International Filing Date:** 21 June 2021 (21.06.2021)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
275576 22 June 2020 (22.06.2020) IL

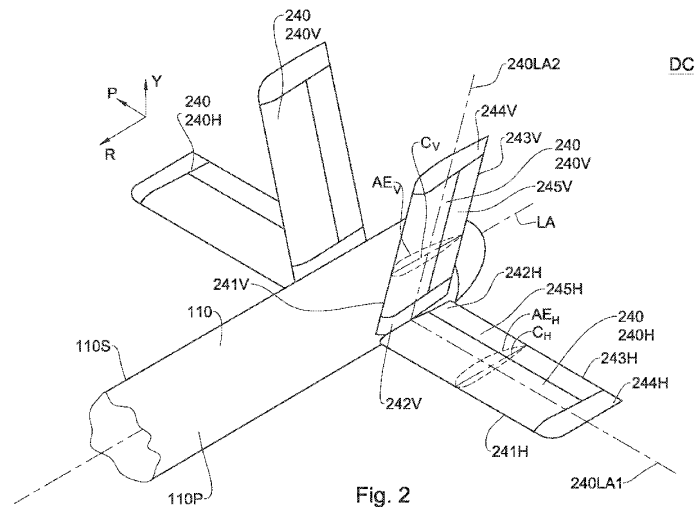
(71) Applicant: ISRAEL AEROSPACE INDUSTRIES LTD.
[IL/IL]; Ben-Gurion International Airport, 7010000 Lod
(IL).

(72) **Inventors:** **ALEXANDRONI, Shay**; C/O Israel Aerospace Industries Ltd., Ben Gurion International Airport, 7010000 Lod (IL). **VAISMAN, Gaby**; C/O Israel Aerospace Industries Ltd., Ben Gurion International Airport, 7010000 Lod (IL). **OHANA, Ofek**; C/O Israel Aerospace Industries Ltd., Ben Gurion International Airport, 7010000 Lod (IL).

(74) **Agent: SERUYA, Yehuda;** Reinhold Cohn & Partners,
POB 13239, 6113102 Tel-Aviv (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, 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, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,

(54) Title: WING MODULE FOR AIR VEHICLE



(57) **Abstract:** A wing system is provided for an air vehicle, the air vehicle having a fuselage including a fuselage section and a fuselage longitudinal axis, the wing system having at least one wing deployment module. Each wing deployment module includes a set of wing elements, including at least a first wing element having a first wing element longitudinal axis, and a second wing element having a second wing element longitudinal axis. Each wing deployment module is configured for selectively transitioning between a respective stowed configuration and a respective deployed configuration. In the stowed configuration, the first wing element and the second wing element are in overlying relationship such that the first wing element longitudinal axis and the second wing element longitudinal axis are nominally parallel with one another. In the deployed configuration, the first wing element is oriented with respect to the second wing element such that the first wing element longitudinal axis is non-parallel with respect to the second wing element longitudinal axis.

[Continued on next page]

WO 2021/260688 A1

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))
