

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

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
03 March 2022 (03.03.2022)



(10) International Publication Number  
**WO 2022/043984 A1**

(51) International Patent Classification:  
*B64C 1/22* (2006.01) *B64D 9/00* (2006.01)

(21) International Application Number:  
PCT/IL2021/050803

(22) International Filing Date:  
30 June 2021 (30.06.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
276940 25 August 2020 (25.08.2020) IL

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

(72) Inventors: **PINHASI, Uri**; C/O ISRAEL AEROSPACE INDUSTRIES LTD., Ben-Gurion International Airport, 7010000 Lod (IL). **SKLADMAN, Rami**; C/O ISRAEL AEROSPACE INDUSTRIES LTD., Ben-Gurion International Airport, 7010000 Lod (IL). **OZ, Gali**; C/O ISRAEL AEROSPACE INDUSTRIES LTD., Ben-Gurion International Airport, 7010000 Lod (IL). **GOLODRIGA, Igor**; C/O ISRAEL AEROSPACE INDUSTRIES LTD., Ben-Gurion International Airport, 7010000 Lod (IL). **MILO, Meital**; C/O ISRAEL AEROSPACE INDUSTRIES LTD., Ben-Gurion International Airport, 7010000 Lod (IL). **ARZI, Shai**; C/O ISRAEL AEROSPACE INDUSTRIES LTD., Ben-Gurion International Airport, 7010000 Lod (IL). **ZAPHIR, Rami**; C/O ISRAEL AEROSPACE INDUSTRIES LTD., Ben-Gurion International Airport, 7010000 Lod (IL). **HASID, Michele Esther**; C/O ISRAEL AEROSPACE

(54) Title: AIRCRAFT

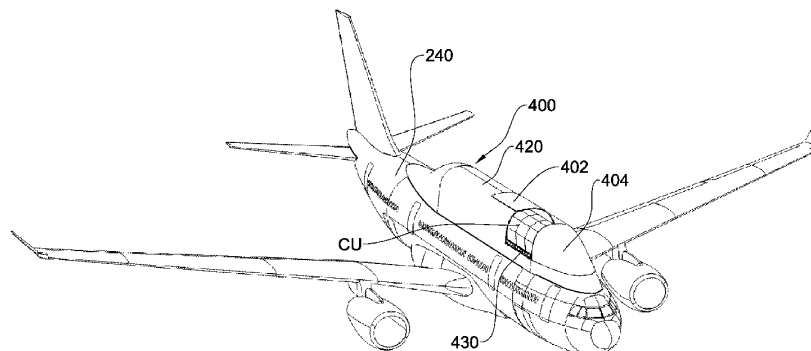


Fig. 3A

(57) **Abstract:** There are provided examples of an enhanced cargo capacity aircraft, converted from a datum aircraft. The enhanced cargo capacity aircraft includes the datum aircraft and a cargo module. The datum aircraft includes at least a fuselage having a dorsal fuselage part. The cargo module is affixed to the datum aircraft, thereby converting the datum aircraft to the enhanced cargo capacity aircraft. The datum aircraft is designed for aerodynamic flight capability absent the cargo module. The enhanced cargo capacity aircraft is capable of aerodynamic flight. The cargo module provides enhanced cargo capacity to the datum aircraft. The cargo module includes an external aerodynamic fairing defining an internal cargo volume, and is configured for being conformally affixed in overlying relationship with respect to the dorsal fuselage part. The cargo module includes a cargo handling floor and at least one access door, and a cargo handling system configured for transporting and securing at least one cargo unit within the cargo volume. The cargo unit includes a standard

[Continued on next page]

INDUSTRIES LTD., Ben-Gurion International Airport,  
7010000 Lod (IL).

(74) **Agent:** SERUYA, Yehuda; Reinhold Colm & Partners, PO  
BOX 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, 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))