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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 October 2011 (20.10.2011)

PCT

(10) International Publication Number
WO 2011/128836 A2

(51) International Patent Classification:
G08G 5/00 (2006.01)

(21) International Application Number:
PCT/IB2011/051559

(22) International Filing Date:
12 April 2011 (12.04.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/IB2010/051557 12 April 2010 (12.04.2010) IB

(71) Applicant *(for all designated States except US)*: **FLIGHT FOCUS PTE. LTD.** [SG/SG]; 17 Changi Business Park Central 1, #06-09 Honeywell Building, Singapore 486073 (SG).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **CABOS, Ralf** [AU/SG]; c/o 17 Changi Business Park Central 1, #06-09 Honeywell Building, Singapore 486073 (SG).

(74) Agents: **SCHWEIGER, Martin** et al.; Schweiger & Partners (Singapore) LLP, 105 Cecil Street, #03-02 The Octagon, Singapore 069534 (SG).

(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:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

(54) Title: ONBOARD FLIGHT PLANNING SYSTEM

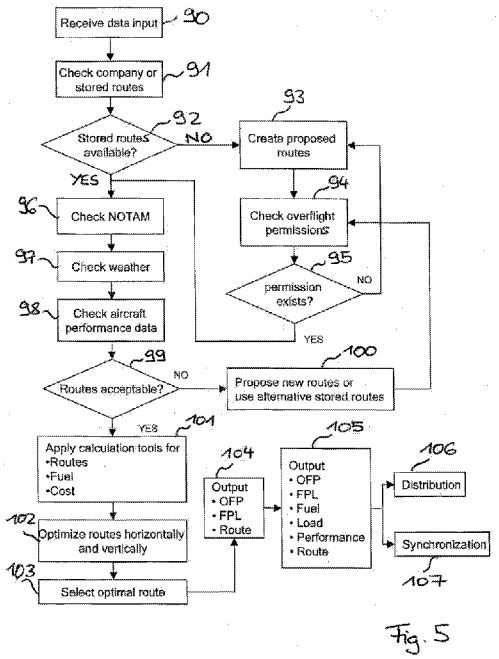

Fig. 5

(57) Abstract: According to the application, a method for generating a flight route of an aircraft by an aircraft based computer system is disclosed. The method comprises the execution the following steps, which are executed by the aircraft based computer system. A mission specific data subset is received from a ground system. It is checked whether there are predefined routes from a departure airport to a destination airport. If it is determined that predefined route are available which are in accordance with over-flight permissions the predefined routes are used as a set of candidate routes for de- riving a flight route. Otherwise, a set of proposed flight routes is generated which comprises at least one proposed flight route. Over-flight permissions are checked for the set of proposed flight routes. The steps of generating a set of proposed flight routes and of checking the over-flight permissions are repeated until at least one proposed flight route is found to be in accordance with the over-flight permissions. The one or more flight routes which are in accordance with the over- flight permissions are used as a set of candidate routes for deriving a flight route. A flight route is derived from the set of candidate routes.

WO 2011/128836 A2