



(43) International Publication Date
5 December 2013 (05.12.2013)

- (51) International Patent Classification:
F02C 7/32 (2006.01) *F04D 25/02* (2006.01)
F02C 7/00 (2006.01)
- (21) International Application Number:
PCT/US2013/030123
- (22) International Filing Date:
11 March 2013 (11.03.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
13/419,660 14 March 2012 (14.03.2012) US
- (71) Applicant: UNITED TECHNOLOGIES CORPORATION [US/US]; One Financial Plaza, Hartford, Connecticut 06103 (US).
- (72) Inventors: SUCIU, Gabriel L.; 27 Tanglewood Drive, Glastonbury, Connecticut 06033 (US). MERRY, Brian D.; 220 Bear Swamp Road, Andover, Connecticut 06232 (US). GLAHN, Jorn A.; 379 Meadowbrook Drive, Manchester, Connecticut 06042 (US). DYE, Christopher M.; 17 Prospect Street, Apt. 2N, Glastonbury, Connecticut 06033 (US).
- (74) Agent: KELMACHTER, Barry L.; Bachman & LaPointe, P.C., c/o CPA Global, P.O. Box 52050, Minneapolis, Minnesota 55403 (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, BN, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, RW, SD, SL, 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, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

- (88) Date of publication of the international search report:
23 January 2014

(54) Title: CONSTANT SPEED PUMP SYSTEM FOR ENGINE ECS LOSS ELIMINATION

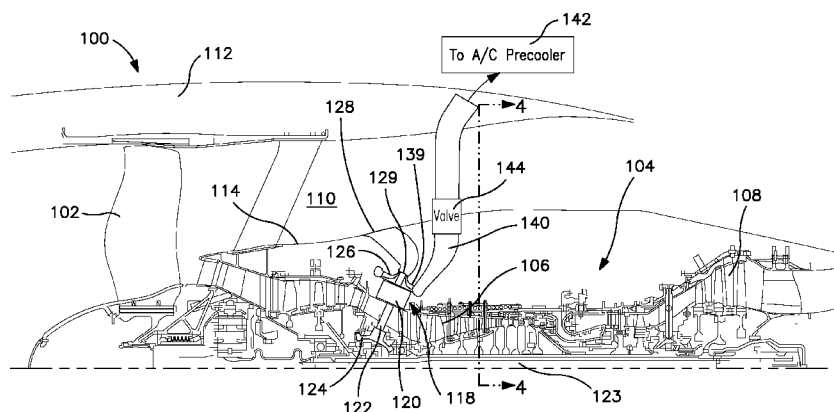


FIG. 3

(57) Abstract: A gas turbine engine has an impeller pump for delivering air to an environmental control system and a speed control pump connected to the impeller pump for driving the impeller pump at a constant speed.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/030123**A. CLASSIFICATION OF SUBJECT MATTER****F02C 7/32(2006.01)i, F02C 7/00(2006.01)i, F04D 25/02(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F02C 7/32; F28B 9/00; F02C 6/04; F02C 6/08; F02C 6/06; B64D 13/02; F02C 6/14; F02C 7/268; F02C 7/00; F04D 25/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: aircraft, engine, fan, precooler, pump, ECS and spool

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,442,905 A (CLAEYS et al.) 22 August 1995 See abstract; column 2, lines 23-68; claim 1 and figure 1.	1-20
A	US 7,805,947 B2 (MOULEBHAR, DJAMAL) 05 October 2010 See column 32, lines 30-45; claim 1.	1-20
A	US 2011-0203293 A1 (GLAHN, JORN A.) 25 August 2011 See paragraphs [0009]-[0013],[0017].	1-20
A	US 6,128,896 A (SAIZ, MANUEL MUNOZ) 10 October 2000 See column 1, lines 31-52; claim 1.	1-20
A	US 7,578,136 B2 (DEROUINEAU et al.) 25 August 2009 See abstract; column 7, lines 46-56.	1-20



Further documents are listed in the continuation of Box C.



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Date of the actual completion of the international search

04 December 2013 (04.12.2013)

Date of mailing of the international search report

04 December 2013 (04.12.2013)

Name and mailing address of the ISA/KR

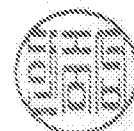
Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City,
302-701, Republic of Korea

Facsimile No. +82-42-472-7140

Authorized officer

HAN, Joong Sub

Telephone No. +82-42-481-5606



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2013/030123

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