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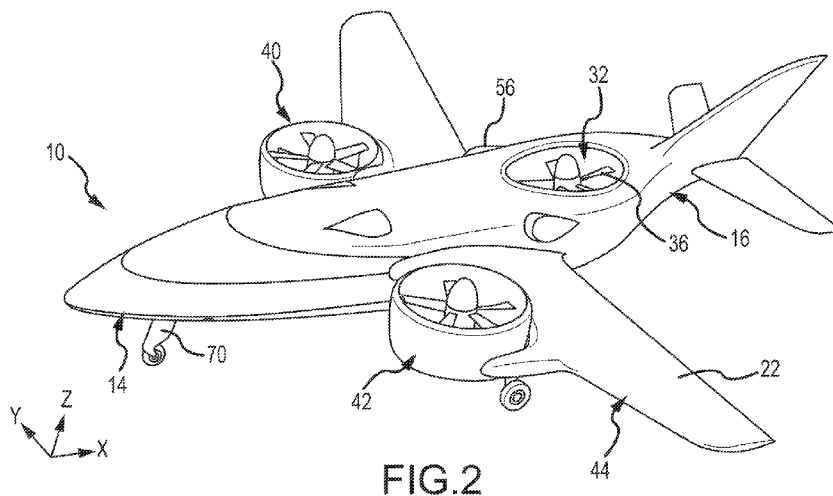
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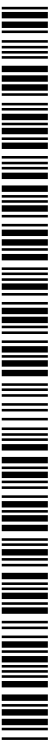
- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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(54) Title: VTOL AIRCRAFT



(57) Abstract: A vertical takeoff and landing aircraft includes a pair of ducted lift/thrust fans that are rotatably movable between a first vertical lift position and a second horizontal thrust position. The lift/thrust fans are disposed within curvilinear fan recesses formed within leading edge portions of the aircraft's wings. A downwardly exhausting, ducted lift fan is disposed within the aircraft's fuselage, aft of the aircraft's pitch axis. A power plant, disposed within the fuselage, is coupled with the lift/thrust fans and the lift fan by a transmission system. The lift/thrust fans and lift fan are positioned with respect to one another to be triangulated about the aircraft's center of gravity and the aircraft's center of lift.



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A. CLASSIFICATION OF SUBJECT MATTER

B64C 29/00(2006.01)i, B64C 27/20(2006.01)i, B64C 11/00(2006.01)i, B64D 27/00(2006.01)i, B64C 27/12(2006.01)i, B64D 35/04(2006.01)i, B64D 31/00(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)

B64C 29/00; B64C 15/02; B64D 27/00; B64C 27/20; B64C 11/00; B64C 27/12; B64D 35/04; B64D 31/00

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: vertical take off and landing(VTOL), aircraft, ducted fan, wing, controller, thrust, lift

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2012-102698 A1 (SMITH, FRICK, A.) 02 August 2012 See abstract; paragraphs [0016], [0058], [0061], [0070]-[0085]; and figures 1-6.	1-25
Y	US 2007-0057113 A1 (PARKS, ROBERT) 15 March 2007 See abstract; paragraphs [0063]-[0067], [0073], [0090]; and figures 2A-2B, 4, 6-8B, 8I, 9B-9C, 15A-15B, 17A-17B.	1-25
A	US 2006-0016930 A1 (PAK, STEVE) 26 January 2006 See abstract; paragraphs [0043]-[0044], [0050]; and figures 1-10H.	1-25
A	US 2004-0245374 A1 (MORGAN, BRIAN H.) 09 December 2004 See abstract; paragraphs [0024]-[0029]; and figures 1-8.	1-25
A	US 2007-0018035 A1 (SAIZ et al.) 25 January 2007 See abstract; paragraphs [0025]-[0032]; and figures 1-7.	1-25

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

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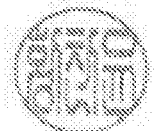
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2012-102698 A1	02/08/2012	CA 2825188 A1 EP 2668097 A1	02/08/2012 04/12/2013
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