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(54) Title: GEARED TURBOFAN PRIMARY AND SECONDARY NOZZLE INTEGRATION GEOMETRY

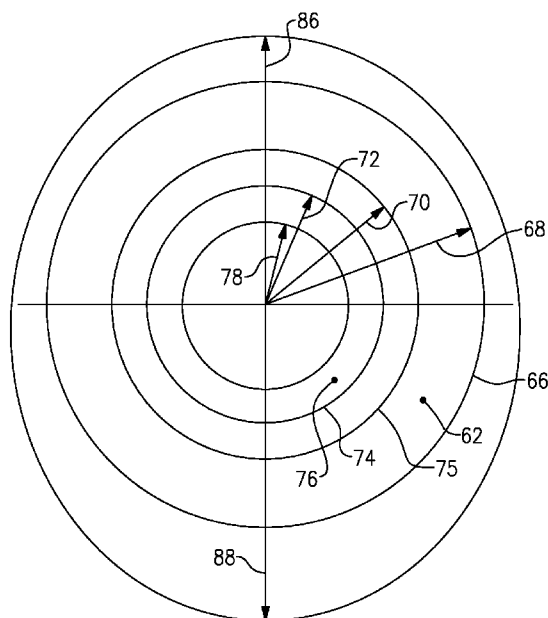


FIG. 3

(57) Abstract: A disclosed example geared turbofan engine includes a fan section including a plurality of fan blades rotatable about an axis and a core engine section defined about an engine axis. The core engine section includes a primary nozzle including a primary outer diameter at a primary nozzle trailing edge and a primary maximum inner diameter forward of the primary trailing edge. A bypass passage a secondary nozzle that includes an outer diameter at a secondary nozzle trailing edge and a secondary maximum inner diameter forward of the secondary trailing edge. A ratio between the maximum inner diameter of the primary nozzle and an outer diameter at the trailing edge of the primary nozzle and a ratio between the maximum inner diameter of the secondary trailing edge and the outer diameter at the trailing edge of the secondary nozzle are both less than about 0.700.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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PCT/US2013/061927**A. CLASSIFICATION OF SUBJECT MATTER****F02C 9/16(2006.01)i, F02C 7/20(2006.01)i, F02C 3/04(2006.01)i, F02K 3/06(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 9/16; F01D 25/28; F02K 1/34; F02K 3/02; F02K 1/00; F02C 7/20; F02C 3/04; F02K 3/06

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: gas turbine engine, core engine, bypass passage, primary, secondary, nozzle, trailing edge, diameter, and ratio

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6178740 B1 (SU et al.) 30 January 2001 See column 1, lines 12-29, column 3, lines 25-64, and figures 2, 5.	1-4, 8, 16-17
Y		5-7, 9-15, 18
Y	US 2011-0120079 A1 (SCHWARK, JR. et al.) 26 May 2011 See paragraphs [0018]-[0020] and figure 1.	5-6, 9-15
Y	US 2009-0277181 A1 (DRUON et al.) 12 November 2009 See claim 4 and figures 2A-8.	7, 11, 18
A	US 2010-0050651 A1 (DINDAR et al.) 04 March 2010 See paragraphs [0026]-[0028], [0055]-[0059] and figures 1-6.	1-18
A	US 2008-0271431 A1 (PORTE, ALAIN) 06 November 2008 See paragraphs [0054]-[0064] and figures 1-3.	1-18



Further documents are listed in the continuation of Box C.



See patent family annex.

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"&" document member of the same patent family

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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
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