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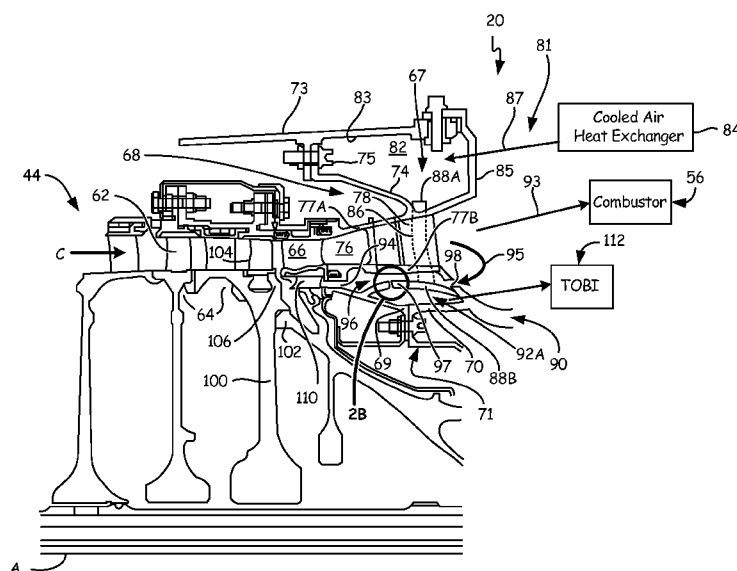


Fig. 2A

(57) Abstract: A flow system for use in a gas turbine engine includes a diffuser case strut defining a first opening at a first radial end, a second opening at a second radial end, and a strut passage radially therethrough between the first and second openings. A first chamber wall and a second chamber wall define a first mixing chamber disposed radially inward of the diffuser case strut in fluid communication with the strut passage. A third chamber wall extends between the second flowpath wall and the second chamber wall to define a second mixing chamber disposed between the diffuser case strut and the first mixing chamber. The second flowpath wall and the second chamber wall are shaped to form a venturi in the second mixing chamber.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/071261**A. CLASSIFICATION OF SUBJECT MATTER****F02C 7/12(2006.01)i, F02C 7/18(2006.01)i, F01D 25/12(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 7/12; F02K 1/36; F02C 6/04; F23R 3/54; F02C 6/08; F02C 1/00; F02K 7/00; F02C 7/18; F01D 25/12

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, diffuser, chamber, mixing, cooling and venturi

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005-0022535 A1 (PALMISANO et al.) 03 February 2005 See abstract, paragraphs [0020]-[0032] and figures 1, 2.	1-23
A	US 6672072 B1 (GIFFIN, III, ROLLIN G.) 06 January 2004 See abstract, column 3, line 42 - column 5, line 65 and figures 1, 2.	1-23
A	US 2006-0213202 A1 (FUKUTANI, MASAYUKI) 28 September 2006 See abstract, paragraphs [0032]-[0053] and figures 1-5.	1-23
A	US 5417057 A (ROBEY, MARVIN L.) 23 May 1995 See abstract, column 9, line 35 - column 12, line 31 and figures 1-5.	1-23
A	US 5515680 A (FUJIMURA et al.) 14 May 1996 See abstract, column 3, line 37 - column 6, line 22 and figures 1, 3, 9.	1-23



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2014/071261

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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