



**A. CLASSIFICATION OF SUBJECT MATTER****F02K 3/072(2006.01)i, F02K 3/04(2006.01)i, F02C 7/04(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)

F02K 3/072; F02C 3/67; F02C 7/36; F02C 3/067; F02K 3/04; F01D 1/26; B64C 11/48; F16H 1/28; F02C 7/04

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) &amp; Keywords:gas turbine engine, shaft, inner and outer rotor, low pressor turbine and gear

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2009-0191045 A1 (SUCIU et al.) 30 July 2009 See abstract; paragraphs [0002],[0010],[0013]; claims 1-3 and figures 1,2.	1-4,7-16,18-20
A		5,6,17
Y	US 4,969,325 A (ADAMSON et al.) 13 November 1990 See abstract; column 2 lines 27-32, column 3 line 33 - column 4 line 30; figure 2.	1-4,7-16,18-20
A		5,6,17
A	US 2006-0090451 A1 (MONIZ et al.) 04 May 2006 See abstract; paragraphs [0013],[0015],[0018],[0019],[0022],[0023]; figures 1-3.	1-20
A	US 2007-0240399 A1 (ORLANDO et al.) 18 October 2007 See abstract; paragraphs [0011],[0013],[0016],[0017],[0019]-[0023],[0026]; figures 1-4.	1-20
A	US 2011-0243735 A1 (BALK et al.) 06 October 2011 See abstract; paragraphs [0032],[0034],[0035],[0037]-[0046]; figures 1-3.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"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

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

"&amp;" document member of the same patent family


Date of the actual completion of the international search

11 November 2013 (11.11.2013)

Date of mailing of the international search report

**12 November 2013 (12.11.2013)**

Name and mailing address of the ISA/KR

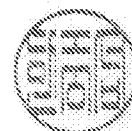

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.  
**PCT/US2013/026266**

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