(11) **EP 2 031 185 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: **27.06.2012 Bulletin 2012/26**

(51) Int Cl.: **F01D** 5/18 (2006.01)

(43) Date of publication A2: **04.03.2009 Bulletin 2009/10**

(21) Application number: 08162441.3

(22) Date of filing: 14.08.2008

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR

HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR
Designated Extension States:

AL BA MK RS

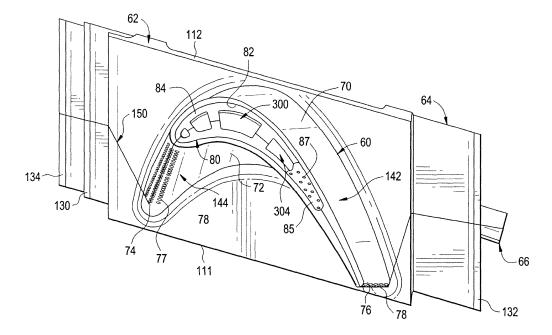
(30) Priority: 30.08.2007 US 896157

(71) Applicant: General Electric Company Schenectady, NY 12345 (US)

- (72) Inventor: Moors, Thomas Greenville, SC 29615-4614 (US)
- (74) Representative: Illingworth-Law, William Illingworth
 Global Patent Operation Europe
 GE International Inc.
 15 John Adam Street
 London WC2N 6LU (GB)
- (54) Multi-part cast turbine engine component having an internal cooling channel and method of forming a multi-part cast turbine engine component
- (57) A multi-part cast component for a turbine engine includes a first component section having a main body portion including at least one cooling flow passage section, and a second component section having a main body including at least one cooling flow passage section.

The first and second component sections are joined along a parting line to form a turbine engine component with the at least one cooling flow passage section of the first component section aligning with the at least one cooling flow passage of the second component section to form a cooling flow channel.

FIG. 3



EP 2 031 185 A3



EUROPEAN SEARCH REPORT

Application Number EP 08 16 2441

	DOCUMENTS CONSID					
Category	Citation of document with in of relevant passa	dication, where appropriate, ages	where appropriate, Relevant to claim		CLASSIFICATION OF THE APPLICATION (IPC)	
X	JP 11 114662 A (ISH IND) 27 April 1999 * abstract * * figure 2 *		TAVY 1-11		INV. F01D5/18	
X	GB 2 095 589 A (ROL 6 October 1982 (198 * figure 4 * * abstract * * claim 3 *		1-11			
X	GB 926 084 A (ROLLS 15 May 1963 (1963-0 * figure 3 * * claim 1 *		1-11			
X	US 5 993 156 A (BAI ET AL) 30 November * figure 11 * * column 3, line 44	1999 (1999-11-30)	R] 1-11		TECHNICAL FIELDS SEARCHED (IPC)	
	The present search report has b	peen drawn up for all claims				
	Place of search	Date of completion of the se	earch		Examiner	
The Hague		16 May 2012		Bura	Burattini, Paolo	
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another including the same category inclogical background written disclosure rediate document	E : earlier pa after the t ner D : documer L : documer	of the same pater	ut publisl ication easons	ned on, or	

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 08 16 2441

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-05-2012

FR 2503006 A1 08-10-19 GB 2095589 A 06-10-19 JP 57178622 A 02-11-19 GB 926084 A 15-05-1963 NONE US 5993156 A 30-11-1999 DE 69817094 D1 18-09-20 DE 69817094 T2 17-06-20 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19	GB 2095589 A 06-10-1982 DE 3211777 A1 14-10-19 FR 2503006 A1 08-10-19 GB 2095589 A 06-10-19 JP 57178622 A 02-11-19 GB 926084 A 15-05-1963 NONE US 5993156 A 30-11-1999 DE 69817094 D1 18-09-26 DE 69817094 T2 17-06-26 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19 JP 3735201 B2 18-01-26 JP 11072003 A 16-03-19 RU 2146766 C1 20-03-26	Patent document cited in search report		Publication date		Patent family member(s)	Publication date
FR 2503006 A1 08-10-19 GB 2095589 A 06-10-19 JP 57178622 A 02-11-19 GB 926084 A 15-05-1963 NONE US 5993156 A 30-11-1999 DE 69817094 D1 18-09-20 DE 69817094 T2 17-06-20 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19	FR 2503006 A1 08-10-19 GB 2095589 A 06-10-19 JP 57178622 A 02-11-19 GB 926084 A 15-05-1963 NONE US 5993156 A 30-11-1999 DE 69817094 D1 18-09-26 DE 69817094 T2 17-06-26 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19 JP 3735201 B2 18-01-26 JP 11072003 A 16-03-19 RU 2146766 C1 20-03-26	JP 11114662	Α	27-04-1999	NONE		1
US 5993156 A 30-11-1999 DE 69817094 D1 18-09-20 DE 69817094 T2 17-06-20 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19	US 5993156 A 30-11-1999 DE 69817094 D1 18-09-20 DE 69817094 T2 17-06-20 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19 JP 3735201 B2 18-01-20 JP 11072003 A 16-03-19 RU 2146766 C1 20-03-20	GB 2095589	A	06-10-1982	FR GB	2503006 A1 2095589 A	14-10-198 08-10-198 06-10-198 02-11-198
DE 69817094 T2 17-06-20 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19	DE 69817094 T2 17-06-26 EP 0887515 A1 30-12-19 FR 2765265 A1 31-12-19 JP 3735201 B2 18-01-26 JP 11072003 A 16-03-19 RU 2146766 C1 20-03-26	GB 926084	Α	15-05-1963	NONE		
JP 11072003 A 16-03-19 RU 2146766 C1 20-03-20	US 5993156 A 30-11-19	US 5993156	А	30-11-1999	DE EP FR JP JP RU	69817094 T2 0887515 A1 2765265 A1 3735201 B2 11072003 A 2146766 C1	18-09-200 17-06-200 30-12-199 31-12-199 18-01-200 16-03-199 20-03-200 30-11-199

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

3