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(71) Applicant: United Technologies Corporation
Hartford, CT 06101 (US)

(72) Inventors:

- Tholen, Susan M.
Kennebunk, Maine 04043 (US)
- Thompson, Ralph J.
Wells, Maine 04090 (US)

(74) Representative: Leckey, David Herbert
Dehns
St Bride's House
10 Salisbury Square
London
EC4Y 8JD (GB)

(54) **Feather seal and gas turbine engine system involving such seals**

(57) Feather seals (250) and gas turbine engine systems involving such seals (250) are provided. In this regard, a representative feather seal (250) for a gas turbine engine includes: an elongate body portion (254); and a locating tab (256) extending longitudinally along the body

portion (254) and extending outwardly therefrom. The tab (256) locates between adjacent outer air seal segments (240,242). A gas turbine engine (100) comprising an outer air seal assembly (124) having such a feather seal (250) is also provided.

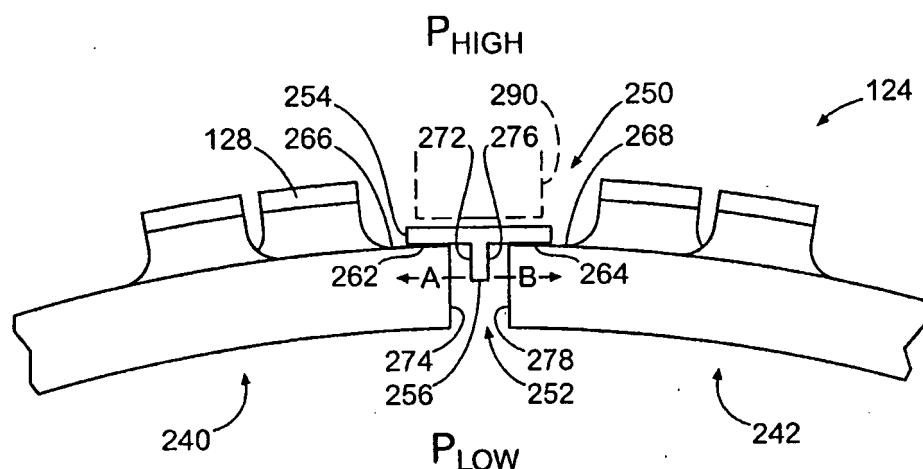


FIG. 3



EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	EP 1 221 539 A2 (MITSUBISHI HEAVY IND LTD [JP]) 10 July 2002 (2002-07-10) * paragraph [0002] - paragraph [0017]; figures 1-4C * * paragraph [0019] - paragraph [0035] * -----	1,2,4-6, 9-14 3,7,8	INV. F01D11/08 F01D11/00
Y	US 2005/082768 A1 (IGUCHI TETSUYA [JP] ET AL) 21 April 2005 (2005-04-21) * paragraph [0001] - paragraph [0009]; figures 6,12 * * paragraph [0044] - paragraph [0045] * -----	1,2,4-6, 9-14	
X	US 2005/135925 A1 (SHIOZAKI SHIGEHIRO [JP] ET AL) 23 June 2005 (2005-06-23) * paragraph [0036] - paragraph [0056]; figures 11-12, 14-15 * -----	1,5,6, 9-14	
Y	EP 1 431 518 A2 (GEN ELECTRIC [US]) 23 June 2004 (2004-06-23) * paragraph [0001] - paragraph [0007]; figures 1-3 * * paragraph [0009] - paragraph [0014] * -----	3,7,8	TECHNICAL FIELDS SEARCHED (IPC)
A	EP 1 783 328 A2 (GEN ELECTRIC [US]) 9 May 2007 (2007-05-09) * the whole document * -----	1-14	F01D
The present search report has been drawn up for all claims			
1	Place of search The Hague	Date of completion of the search 23 January 2012	Examiner Herdemann, Claire
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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

EP 08 25 3503

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.

23-01-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1221539	A2	10-07-2002	CA 2366717 A1 DE 60210684 T2 EP 1221539 A2 JP 2002201913 A US 2002090296 A1	09-07-2002 16-05-2007 10-07-2002 19-07-2002 11-07-2002
US 2005082768	A1	21-04-2005	CN 1590815 A JP 4322600 B2 JP 2005076802 A US 2005082768 A1	09-03-2005 02-09-2009 24-03-2005 21-04-2005
US 2005135925	A1	23-06-2005	NONE	
EP 1431518	A2	23-06-2004	EP 1431518 A2 JP 2004204839 A US 2004120808 A1	23-06-2004 22-07-2004 24-06-2004
EP 1783328	A2	09-05-2007	CN 1959066 A EP 1783328 A2 JP 2007127127 A US 2007098546 A1	09-05-2007 09-05-2007 24-05-2007 03-05-2007