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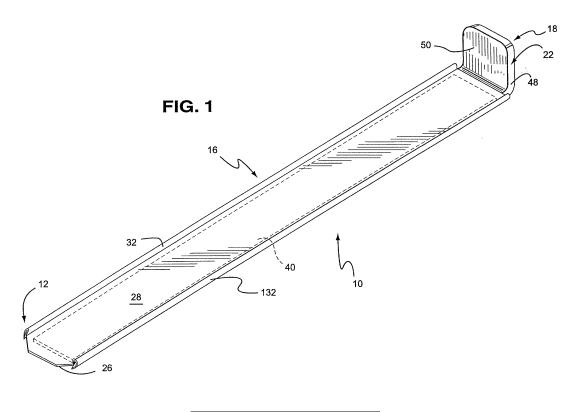
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#### (54) Transition piece side sealing element and turbine assembly containing such seal

(57) The gas-path leakage seal is provided for generally sealing a gas-path leakage-gap between spaced-apart first and second members of a turbine. The seal includes an elongated seal member (10) having an elongated, imperforate, and flexible first portion (16), and a rigid second portion (18) that defines a mounting bracket (22). The first portion has first and second surfaces (28)

and raised longitudinal edges (32, 132) that extend a generally identical distance above the first surface and generally the aforesaid identical distance below the second surface. A cloth layer (40) having a thickness generally equal to or slightly greater than the aforesaid identical distance is superimposed on the second surface between the raised edges (32, 132).





## **EUROPEAN SEARCH REPORT**

Application Number EP 02 25 5697

	DOCUMENTS CONSIDERE	D TO BE RELEVANT			
Category	Citation of document with indicat of relevant passages	ion, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
D,Y	US 5 934 687 A (BAGEPA SAMPATHKUMARA [US] ET 10 August 1999 (1999-0 * the whole document *	AL) 8-10)	1-10	INV. F01D11/00 F16J15/02	
D,Y	US 6 162 014 A (BAGEPA SAMPATHKUMAR [US] ET A 19 December 2000 (2000 * the whole document *	L) -12-19)	1-10		
A	US 5 868 398 A (MAIER 9 February 1999 (1999- * figures 1-7 *	 M STEFAN [US] ET AL) 02-09) 	1-8,10		
				TECHNICAL FIELDS SEARCHED (IPC) F01D F16J F02C	
	The present search report has been	•			
Place of search  Munich		Date of completion of the search  5 May 2009	Kor	Examiner ch, Rafael	
X : parti Y : parti docu A : tech	ATEGORY OF CITED DOCUMENTS ioularly relevant if taken alone ioularly relevant if combined with another iment of the same category nological background -written disclosure mediate document	T : theory or princip E : earlier patent do after the filing da D : document cited L : document cited	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document oited 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 02 25 5697

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.

05-05-2009

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5934687	Α	10-08-1999	NONE	
US 6162014	Α	19-12-2000	EP 0989287 A2 JP 2000136731 A KR 20000023246 A TW 399120 B	29-03-200 16-05-200 25-04-200 21-07-200
US 5868398	A	09-02-1999	NONE	

 $\stackrel{\text{O}}{\sqsubseteq}$  For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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