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(54) Rotor thrust balancing apparatus and method

(57) Apparatus and method of balancing thrust bearing load on a rotor thrust bearing (40) employ a first thrust balance piston cavity for exerting an aft directed thrust

balancing force and a second balance piston cavity (42) for exerting an independently controlled forward directed thrust balancing force to allow flexible and wide range balancing of thrust load on the rotor thrust bearing (40).

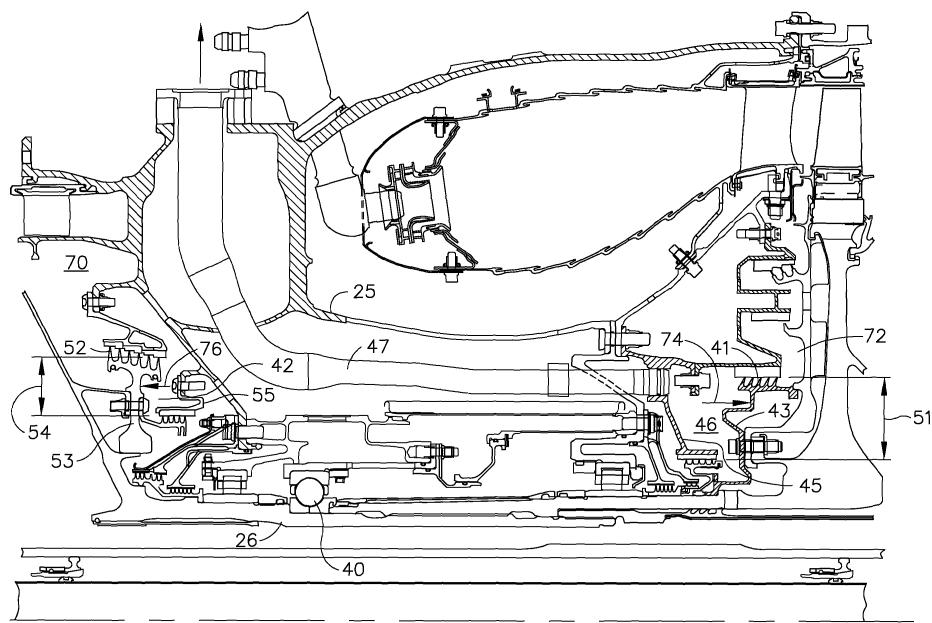


FIG. 3



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 1 281 836 A2 (ATLAS COPCO ENERGAS [DE]) 5 February 2003 (2003-02-05) * paragraph [0016]; figure 2 *	1,4 -----	INV. F01D3/04
A	US 4 907 943 A (KELCH GEORGE W [US]) 13 March 1990 (1990-03-13) * column 3, line 27 - column 4, line 61; figure 2 *	2,3,5-9 -----	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
2	Place of search	Date of completion of the search	Examiner
	Munich	14 September 2007	OECHSNER DE CONINCK
CATEGORY OF CITED DOCUMENTS		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	
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			

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

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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.

14-09-2007

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