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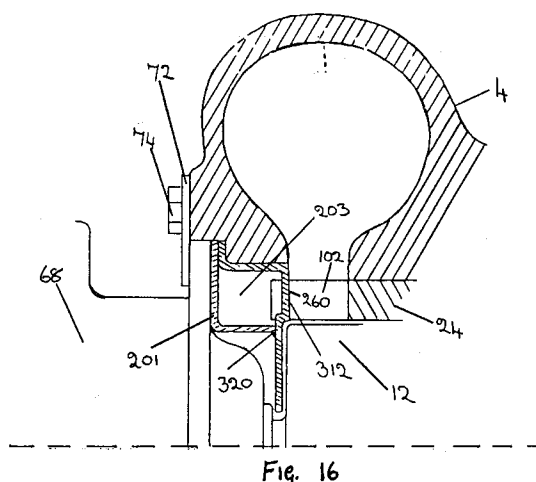
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(54) **Turbocharger apparatus.**

(57) Variable turbocharger apparatus (2) comprising a compressor housing (64), a compressor (6) mounted for rotation in the housing (64), a turbine housing (4), a turbine (12) mounted for rotation in the housing (4), a first inlet (16) for enabling air to be conducted to the compressor (6), an outlet (18) for air from the compressor (6), a second inlet (20) for enabling exhaust gases from an engine to be conducted to the turbine (12), a chamber (22) which surrounds the turbine (12) and which receives the exhaust gases from the second inlet (20) before the exhaust gases are conducted to the turbine (12), a piston (24) which is positioned between the turbine (12) and the housing (4) and which is slidable backwards and forwards to form a movable wall separating the turbine (12) from the chamber (22) which surrounds the turbine (12), a bearing assembly (68) for allowing the rotation of the compressor (6) and the turbine, and a heat shield, (201) for shielding the bearing assembly (68) from the exhaust gases, and the piston (24) having a plurality of vanes (102) which enter into slots (260) in the heat shield (201).

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EUROPEAN SEARCH REPORT

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EP 95 10 7138

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.4)
X	US-A-4 403 914 (ROGO CASIMIR ET AL) 13 September 1983 * column 3, line 17 - column 5, line 9; figure 1 * ---	1-9	F01D17/14 F01D17/16 F02C6/12
X	JOURNAL OF PROPULSION AND POWER, vol. 2, no. 1, February 1986 NEW YORK US, pages 73-80, ROGO & BENSTEIN 'Variable Cycle Turbohaft Technology for Rotocraft of the '90s' * page 75, column 2, paragraph 1 - page 75, column 2, paragraph 2; figure 13 * ---	1-9	
A	DE-B-12 64 675 (JASSNIKER) 28 March 1968 * the whole document * ---	1-9	
A	DE-A-32 44 190 (DAIMLER BENZ AG) 20 October 1983 ---	1-9	
A	US-A-2 996 996 (JASSNIKER) 22 August 1961 * the whole document * -----	1	TECHNICAL FIELDS SEARCHED (Int.Cl.4) F01D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 September 1995	Examiner Iverus, D
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			