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(21) International Application Number: PCT/US92/01825 (22) International Filing Date: 4 March 1992 (04.03.92) (30) Priority data: 667,689 8 March 1991 (08.03.91) US (71) Applicant: ALLIED-SIGNAL INC. [US/US]; Law Department (C.A. McNally), P.O. Box 2245R, Morristown, NJ 07962-2245 (US). (72) Inventor: GU, Alston, Lee-Van ; 5832 Sunmist Drive, Rancho Palos Verdes Estates, CA 90274 (US). (74) Agent: ROONEY, Gerard, P.; Allied-Signal Inc., Law Department (C.A. McNally), P.O. Box 2245R, Morristown, NJ 07962 (US).		(81) Designated States: AT (European patent), BE (European patent), CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, LU (European patent), MC (European patent), NL (European patent), SE (European patent). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 12 November 1992 (12.11.92)
(54) Title: THRUST BEARING UNDERSPRING (57) Abstract A foil thrust bearing (10, 14, 16, 18, 20) including a thrust bearing underspring disk (16) having a radially increasing spring force or load capacity. A plurality of spring sections (30, 32, 34, 36) formed in the underspring disk provide improved load capacity and pressure force distribution.		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 92/01825

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ⁶		
According to International Patent Classification (IPC) or to both National Classification and IPC		
Int.Cl. 5 F16C27/02		
II. FIELDS SEARCHED		
Minimum Documentation Searched ⁷		
Classification System	Classification Symbols	
Int.Cl. 5	F16C	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁸		
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹		
Category ¹⁰	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³
A	EP,A,0 228 251 (THE GARRETT CORPORATION) 8 July 1987 see figures 7,8 & US,A,4682900 cited in the application ---	1
A	US,A,4 213 657 (GRAY) 22 July 1980 cited in the application see the whole document ---	1
A	US,A,4 277 112 (HESHMAT) 7 July 1981 cited in the application see the whole document ---	1
A	US,A,4 331 365 (MILLER) 25 May 1982 see the whole document ---	1
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IV. CERTIFICATION		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
08 SEPTEMBER 1992	14 SEP 1992	
International Searching Authority	Signature of Authorized Officer	
EUROPEAN PATENT OFFICE	ORTHLIEB C.H.E.	

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

US 9201825
SA 60482

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on
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		CA-A- 1279085	15-01-91
		JP-A- 62147117	01-07-87
		US-A- 4776077	11-10-88
US-A-4213657	22-07-80	None	
US-A-4277112	07-07-81	None	
US-A-4331365	25-05-82	None	