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- **Miura, Shigeki**
TOKYO, 108-8215 (JP)
- **Esaki, Ikuo**
TOKYO, 108-8215 (JP)
- **Uno, Masanari**
TOKYO, 108-8215 (JP)
- **Muroi, Yuichi**
AICHI, 453-0862 (JP)

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(74) Representative: **Intès, Didier Gérard André et al**
Cabinet Beau de Loménie
158, rue de l'Université
75340 Paris Cedex 07 (FR)

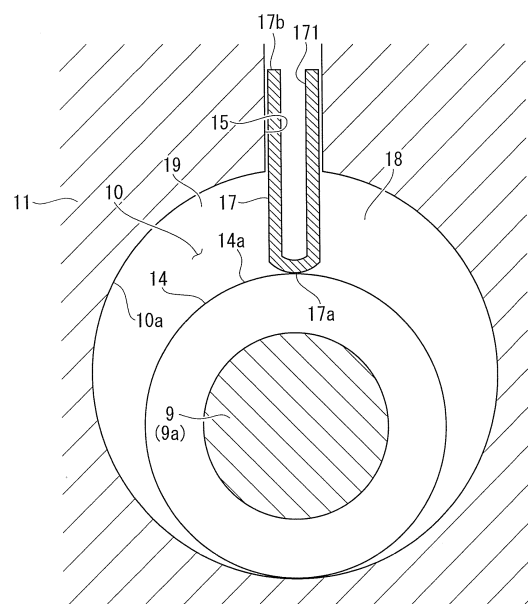
(71) Applicant: **MITSUBISHI HEAVY INDUSTRIES, LTD.**
Tokyo 108-8215 (JP)

(72) Inventors:
• **Ogawa, Makoto**
TOKYO, 108-8215 (JP)

(54) **ROTARY COMPRESSOR**

(57) A rotary compressor includes: a cylinder main body (11) that forms a cylinder chamber (10); a rotor (14) fitted onto an eccentric part (9a) of a rotating shaft (9), orbits in the cylinder chamber (10) in accordance with rotation of the rotating shaft, and whose outer circumferential surface (14a) is brought into sliding contact with an inner circumferential surface; and a blade (17) whose front end portion (17a) is brought into contact with the outer circumferential surface (14a) of the rotor and that slides in a blade groove (15) provided in the cylinder main body in accordance with orbiting of the rotor. The blade (17) has a hollow portion (171) therein that allows the blade to be bent in a thickness direction thereof, and the hollow portion is open to a rear end portion (17b) and both side portions of the blade.

FIG. 4





EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	JP H07 189924 A (HITACHI LTD) 28 July 1995 (1995-07-28) * abstract * * figure 7 *	1	INV. F04C18/356 F01C1/356
A	GB 424 555 A (KARL STEINMANN; GUSTAV CLAUS) 22 February 1935 (1935-02-22) * the whole document *	1	
A	JP 2006 233975 A (SANYO ELECTRIC CO) 7 September 2006 (2006-09-07) * paragraphs [0033] - [0038] * * figure 14 *	1	
A	FR 2 034 144 A1 (BONNEAU ROLAND) 11 December 1970 (1970-12-11) * page 2, line 11 - line 38 * * figure 1 *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			F04C F01C
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 September 2015	Examiner Lange, Christian
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	
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP H07189924 A	28-07-1995	NONE	
GB 424555 A	22-02-1935	NONE	
JP 2006233975 A	07-09-2006	JP 4401365 B2 JP 2006233975 A	20-01-2010 07-09-2006
FR 2034144 A1	11-12-1970	NONE	

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