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(54) **Reciprocating compressor, in particular of the semi-hermetic type**

(57) The compressor (1) comprises: an electric motor (4), a drive shaft (7) driven by said electric motor (4); at least one piston (9) to compress the refrigerating fluid (R) driven by said shaft (7); and an oil lubrication circuit

supplied by an oil slinger (2). To make operation of the compressor more regular even at a low number of revolutions, the oil slinger (2) is dimensioned to act also as a flywheel.

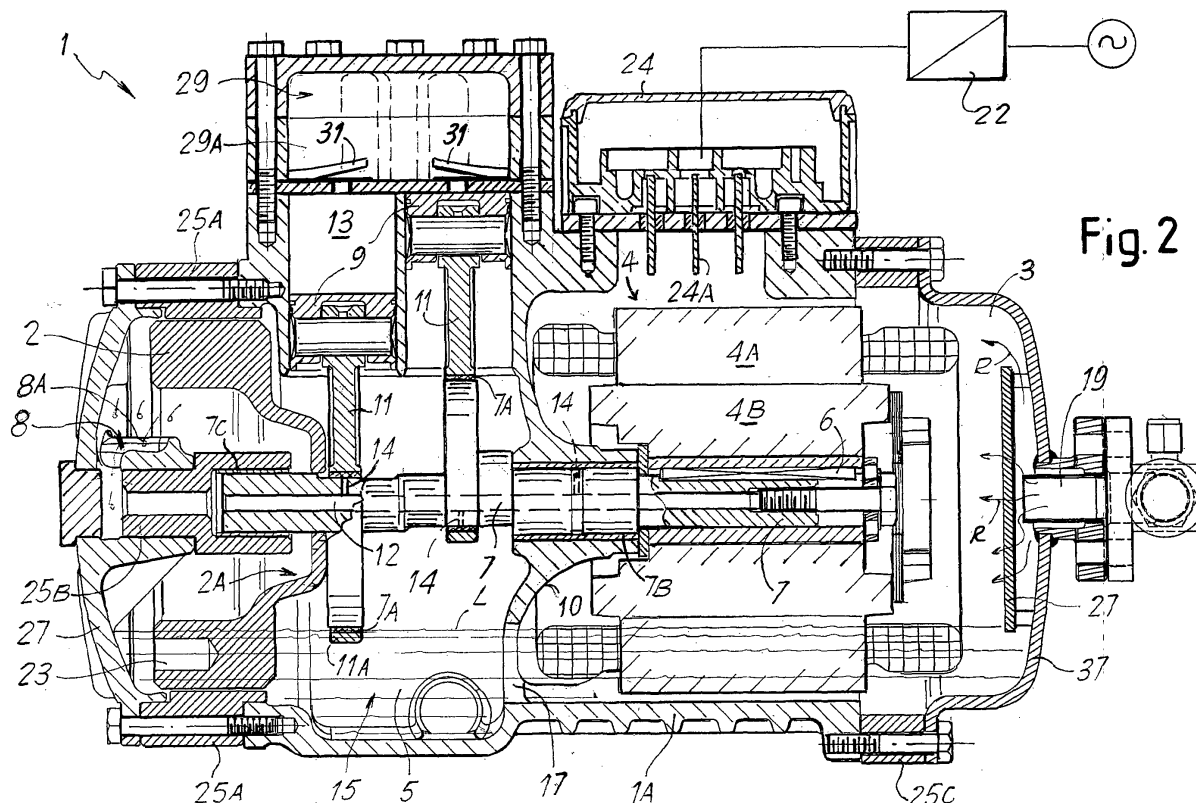


Fig. 2



EUROPEAN SEARCH REPORT

Application Number
EP 08 42 5019

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2006/104838 A1 (WOOD MARK W [US]) 18 May 2006 (2006-05-18)	1-12, 15, 17, 18, 22-24	INV. F04B39/02 F04B39/12
Y	* abstract; figures 1,3,4 *	13, 14, 16, 19-21, 36-41	
	* paragraphs [0027], [0028], [0030] *		
Y	FR 1 156 598 A (POUR TOUS APP MECANIKES SA) 19 May 1958 (1958-05-19)	13, 14, 19-21, 36-41	
	* the whole document *		
Y	US 2006/104839 A1 (BURKHOLDER ROBERT F [US]) 18 May 2006 (2006-05-18)	16	
	* figures 1,5 *		
Y	GB 762 293 A (GRATZMULLER JEAN LOUIS) 28 November 1956 (1956-11-28)	13, 14, 19, 20, 36-41	
	* page 2, lines 111-115; figure 1 *		TECHNICAL FIELDS SEARCHED (IPC)
A	DE 76 19 092 U1 (FRENZEL GMBH + CO, 7129 ILSFELD) 11 November 1976 (1976-11-11)		F04B
	* figure 2 *		
<p>3 The present search report has been drawn up for all claims</p>			
Place of search Munich		Date of completion of the search 16 November 2009	Examiner Olona Laglera, C
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.02 (P04/C01)



Application Number

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

see additional sheet(s)

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-24,36-41

Compressor having an oil lubrication circuit supplied by an oil slinger which acts also as flywheel.

2. claims: 25-30,42-46

Hermetic or semi-hermetic reciprocating compressor having a supply inlet positioned axially with respect to the drive shaft and at the motor side.

3. claims: 31-35,47-50

Hermetic or semi-hermetic reciprocating compressor having a compression chamber in fluid connection with the compression cylinder. The volume of the said compression chamber is variable or adjustable.

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

EP 08 42 5019

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
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16-11-2009

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2006104838	A1	18-05-2006	NONE	
FR 1156598	A	19-05-1958	NONE	
US 2006104839	A1	18-05-2006	NONE	
GB 762293	A	28-11-1956	NONE	
DE 7619092	U1	11-11-1976	NONE	