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(54) **An oil pump for a hermetic compressor**

(57) An oil pump for lifting lubrication oil from an oil sump is disclosed, said oil pump comprising a cylindrical shaft, an outer pump element comprising a cylindrical bore larger in diameter than the shaft, one or more spiral grooves arranged in the outer surface of the shaft and/or in the inner surface of the bore, and means to cause a relative rotation between the shaft and the bore around their common longitudinal axis. Furthermore, a compressor comprising such an oil pump and a hermetic compressor comprising a closed vessel, a part of which vessel consists of a rupture disk dimensioned to burst at a predefined bursting pressure are disclosed.

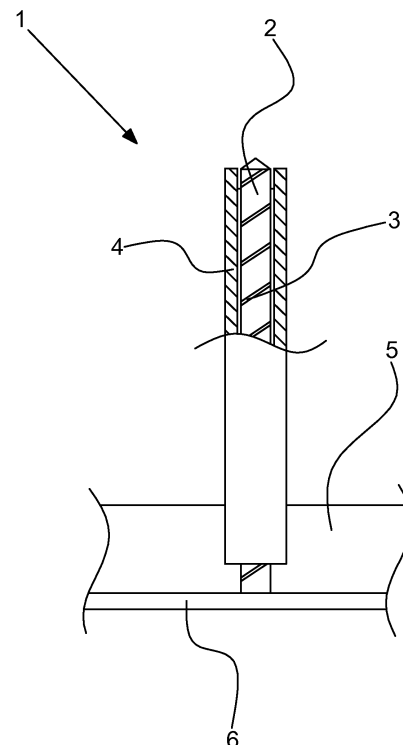


Fig. 1



EUROPEAN SEARCH REPORT

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EP 13 19 1544

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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)
X	WO 2012/062860 A1 (ARCELIK AS [TR]; KERPICCI HUSNU [TR]; YAGCI ALPER [TR]) 18 May 2012 (2012-05-18) * figure 1 * * paragraph [0016] *	1-9	INV. F04B39/02 F04D3/00
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X	US 2002/172607 A1 (KIM TAE-MIN [KR]) 21 November 2002 (2002-11-21) * figures 2-4 *	1-9	
X	EP 0 728 946 A1 (ZANUSSI ELETTRODOMESTICI [IT]) 28 August 1996 (1996-08-28) * figures 1,2 *	1-9	
X	GB 768 058 A (HEINZ TEVES; ERNST AUGUST TEVES) 13 February 1957 (1957-02-13) * figure 1 *	1-9	
X	US 2011/027114 A1 (KAKUDA MASAYUKI [JP] ET AL) 3 February 2011 (2011-02-03) * figure 1 * * paragraph [0033] *	1,8,9	TECHNICAL FIELDS SEARCHED (IPC) F04B F04D
<p>The present search report has been drawn up for all claims</p>			
Place of search The Hague		Date of completion of the search 27 June 2017	Examiner Ingelbrecht, Peter
<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 & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.82 (P04C01)



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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:

1-9

☐ 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**

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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: 1-9

Oil pump using spiral grooves for lifting lubrication oil

2. claim: 10

Hermetic compressor comprising a rupture disk

**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
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