



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
23.02.2000 Bulletin 2000/08

(51) Int Cl.7: **F04C 2/12**

(43) Date of publication A2:
19.08.1998 Bulletin 1998/34

(21) Application number: **98301015.8**

(22) Date of filing: **11.02.1998**

(84) Designated Contracting States:
**AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

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(30) Priority: **12.02.1997 GB 9702852**

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(54) **Rotary pump**

(57) Traditionally the pump inlet and outlet ports are in a horizontal orientation. However, for some applications the ports of the pump are required to be in a vertical orientation.

A rotary pump assembly 1 comprises a rotary pump 2 and pump mounting means 4. The rotary pump 2 comprises a rotor containing assembly 6 and a gear containing assembly 8.

The rotor containing assembly 6 comprises a pair of inter-engaging piston/lobe rotors 10, 12 mounted for contra-rotation within a rotor case portion 7 about sub-

stantially parallel axes 13, 14; the rotor case portion is formed with an inlet port 9 and an outlet port 11 and comprises a circular cover plate 111.

Substantially parallel shafts 15, 16 also mounted for rotation about the axes 13, 14 respectively, are connected to the respective rotors 10, 12.

The rotors 10, 12 are secured on to the respective shafts 15, 16 by clamping/retaining nuts 17, 18.

The shafts 15, 16 extend from the rotor containing assembly 6 along the axes 13, 14 through the mounting means 4 and into the gear containing assembly 8.

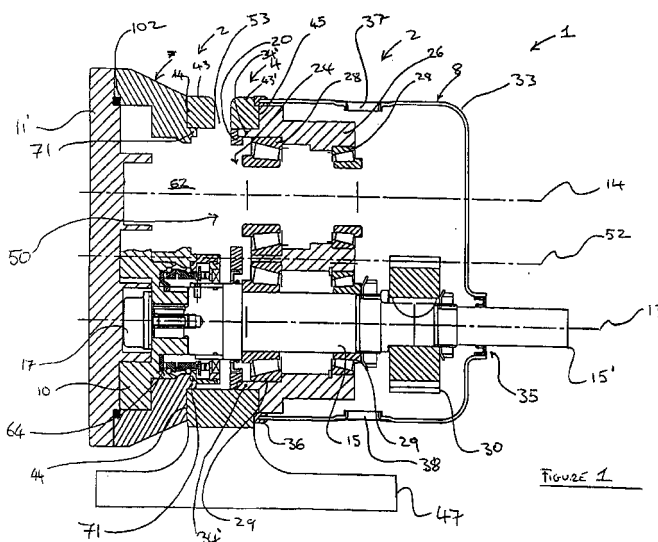


FIGURE 1



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 1015

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F04C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 December 1999	Examiner Kapoulas, T
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			

EPO FORM 1503 03 82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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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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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82