



**EUROPEAN PATENT APPLICATION**

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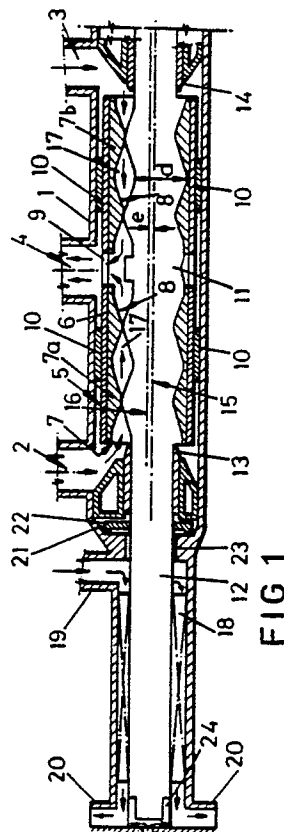
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Improvements in or relating to rotary positive displacement fluid machines.

A positive displacement pump is described which is particularly suitable for pumping a multiphase fluid mixture, for example, production oil, water, gas or solids in suspension from offshore or onshore oil fields. The pump has a casing (1) within which is disposed an outer rotor (5) having internal helical lobes (8) and an internal rotor (11) disposed within the outer rotor (5) and having external helical lobes which co-operate to define cavities (17) therebetween. The outer rotor (5) and inner rotor (11) are both rotatable relative to each other about respective fixed axes (15,16) which are parallel but spaced from each other so that a working medium can be axially conveyed, via the cavities, through the machine. In a preferred arrangement the inner (11) and outer rotor (5) have portions of opposed hand whereby the working medium is conveyed in opposed directions between each end of the machine and an intermediate location. The pump can be connected in series or parallel with like pumps to form multi-pump arrangements.



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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:  
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- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

**X LACK OF UNITY OF INVENTION**

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

namely:

- 1) Claims 1-7,16-18: Pump construction and application
- 2) Claims 8-10,14,15: Drive means
- 3) Claims 11-13: Arrangement and driving of a plurality of pumps

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- 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 has 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: 1-7,16-18

