Title (en)

POSITIVE-DISPLACEMENT PUMP

Publication

EP 0455696 B1 19930804 (EN)

Application

EP 90902412 A 19900124

Priority

SE 8900237 A 19890124

Abstract (en)

[origin: WO9008898A1] A submersible positive-displacement pump comprises a pump housing (10A/10B) having an inlet (11) at its lower portion and an outlet (17-19) at its upper portion, a variable-volume pump chamber (21) which is provided at the lower portion (10A) of the pump housing and communicates with the inlet through an annular passage (29) having a one-way inlet valve (23) and communicating with the outlet through an opening (20) controlled by a one-way outlet valve (30). A displacement member (27) below the pump chamber (21) is connected with a lifting member (28) which extends upwardly from the pump housing and is connected to a driving device. By means of the lifting member the displacement member can be reciprocated vertically for reducing and increasing the volume of the pump chamber. The pump chamber (21) is defined partly by a circumferentially extending pump housing wall (22) and partly by a sealing coolar (23) which bridges the annular passage (29) and one circumferential end of which is movable in the pump chamber towards and away from the pump housing wall (22) in order to open and close the passage under the influence of a pressure differential between the pump chamber (21) and the inlet (11).

IPC 1-7

F04B 47/02

IPC 8 full level

F04B 43/00 (2006.01); **F04B 47/02** (2006.01)

CPC (source: EP)

F04B 43/0018 (2013.01); **F04B 43/0027** (2013.01)

Cited by

EP0803173A4

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

WO 9008898 A1 19900809; AT E92593 T1 19930815; AU 4952590 A 19900824; AU 631181 B2 19921119; BR 9007049 A 19911105; DE 69002613 D1 19930909; DE 69002613 T2 19940113; DK 0455696 T3 19931227; EP 0455696 A1 19911113; EP 0455696 B1 19930804; ES 2044558 T3 19940101; JP H04503985 A 19920716; SE 467795 B 19920914; SE 8900237 D0 19890124; SE 8900237 L 19900725

DOCDB simple family (application)

SE 9000053 W 19900124; AT 90902412 T 19900124; AU 4952590 A 19900124; BR 9007049 A 19900124; DE 69002613 T 19900124; DK 90902412 T 19900124; EP 90902412 A 19900124; ES 90902412 T 19900124; JP 50241190 A 19900124; SE 8900237 A 19890124