

Title (en)
SELF-PRIMING ROTARY PUMP, PARTICULARLY FOR BRINGING LIQUIDS TO THEIR BOILING POINT

Publication
EP 0045483 B1 19831123 (DE)

Application
EP 81105972 A 19810729

Priority
DE 3029604 A 19800805

Abstract (en)
[origin: ES8206774A1] The invention relates to a centrifugal pump having a first centrifugal pump stage (2), which is located on the suction side and is not self-priming, and having a pump inlet nozzle (6), which is located axially at the level of the horizontal shaft (1), and having at least one centrifugal pump stage (3). which is located downstream and which, operating with the aid of auxiliary liquid, is self-priming. According to the invention, the self-priming capability and reliability of the pump, in particular for conveying media in the vicinity of their boiling point, are improved by arranging a liquid reservoir (13), of sufficient size, between two pump stages, the connection from this reservoir to the preceding centrifugal pump stage being located in the geodetically upper portion of the reservoir, and a seal (16) for closing the shaft clearance being located between the liquid reservoir (13) and the preceding centrifugal pump stage.

IPC 1-7
F04D 9/04; **F04D 5/00**

IPC 8 full level
F04D 5/00 (2006.01); **F04D 9/04** (2006.01); **F04D 15/02** (2006.01)

CPC (source: EP US)
F04D 5/002 (2013.01 - EP US); **F04D 5/006** (2013.01 - EP US); **F04D 9/04** (2013.01 - EP US); **F04D 15/0218** (2013.01 - EP US)

Cited by
US6082960A; EP0222233A3; DE4113029A1; DE3425656A1; AT402333B; WO9708461A1; WO9218775A1

Designated contracting state (EPC)
AT BE CH FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0045483 A2 19820210; **EP 0045483 A3 19820217**; **EP 0045483 B1 19831123**; AT E5433 T1 19831215; AU 542218 B2 19850214; AU 7369181 A 19820211; CA 1165624 A 19840417; DK 149932 B 19861027; DK 149932 C 19871012; DK 346881 A 19820206; ES 504574 A0 19820816; ES 8206774 A1 19820816; HK 39685 A 19850531; NZ 197872 A 19850320; US 4390317 A 19830628

DOCDB simple family (application)
EP 81105972 A 19810729; AT 81105972 T 19810729; AU 7369181 A 19810805; CA 383142 A 19810804; DK 346881 A 19810804; ES 504574 A 19810805; HK 39685 A 19850523; NZ 19787281 A 19810728; US 28890181 A 19810731