

Title (en)
PISTON DIAPHRAGM PUMP

Publication
EP 0280745 B1 19910626 (DE)

Application
EP 87102867 A 19870228

Priority
EP 87102867 A 19870228

Abstract (en)
[origin: US4773831A] A diaphragm plunger pump comprises a housing, element forming a pump chamber associated with the housing, a plunger working chamber arranged to be filled with hydraulic fluid during operation, a sealingly clamped diaphragm separating the pump chamber from the plunger working chamber, a plunger sealing displaceable in the plunger working chamber for alternating stroke plunger working chamber for alternating stroke deflection of the diaphragm, a supply chamber for hydraulic liquid and connectable with the plunger working chamber, a valve arranged to connect the supply chamber with the working chamber, the plunger having a central opening provided with a valve seat and serving for communication of the plunger working chamber with the supply chamber, the valve having a valve body which cooperates with the valve seat and is coaxially displaceable relative to the latter, element for sealingly pressing the valve body against the valve seat, and abutment element arranged to lift the valve body from the valve seat when the plunger is at less than a predetermined axial distance from its rear dead point.

IPC 1-7
F04B 43/06

IPC 8 full level
F04B 43/067 (2006.01)

CPC (source: EP US)
F04B 43/067 (2013.01 - EP US)

Designated contracting state (EPC)
DE ES FR IT

DOCDB simple family (publication)
EP 0280745 A1 19880907; EP 0280745 B1 19910626; DE 3771065 D1 19910801; ES 2022824 B3 19911216; US 4773831 A 19880927

DOCDB simple family (application)
EP 87102867 A 19870228; DE 3771065 T 19870228; ES 87102867 T 19870228; US 3590487 A 19870402