

Title (en)
Hydraulically actuated membrane pump

Title (de)
Hydraulisch angetriebene Membranpumpe

Title (fr)
Pompe à membrane entraînée hydrauliquement

Publication
EP 0641936 B1 19970910 (DE)

Application
EP 94108470 A 19940601

Priority
DE 4327969 A 19930819

Abstract (en)
[origin: EP0641936A1] A hydraulically actuated diaphragm pump has a diaphragm (1) which consists of at least two individual layers (1a, 1b). In the central zone of the diaphragm (1) a shape-retaining (inherently stable) stiffening element (25, 26; 42) is provided which is kept in contact with the diaphragm (1) and moves together with the diaphragm (1). The inlet and outlet ducts (14, 15) of the diaphragm pump in this arrangement debouch, at least for the greater part, radially within the stiffening element (25, 26; 42) into the discharge chamber, so that they are correspondingly covered by the stiffening element (25, 26; 42).

IPC 1-7
F04B 43/067; F04B 43/00

IPC 8 full level
F04B 43/02 (2006.01); **F04B 43/00** (2006.01); **F04B 43/06** (2006.01); **F04B 43/067** (2006.01)

CPC (source: EP US)
F04B 43/0054 (2013.01 - EP US); **F04B 43/009** (2013.01 - EP US); **F04B 43/067** (2013.01 - EP US)

Cited by
FR2780476A1; EP1101941A3; US6264436B1; WO0000743A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 4327969 A1 19950302; DE 4327969 C2 19970703; DE 59404014 D1 19971016; EP 0641936 A1 19950308; EP 0641936 B1 19970910;
JP H0777164 A 19950320; US 5810567 A 19980922

DOCDB simple family (application)
DE 4327969 A 19930819; DE 59404014 T 19940601; EP 94108470 A 19940601; JP 19566094 A 19940819; US 87902497 A 19970619