

Title (en)

MULTI-LAYERED DIAPHRAGM WITH LEAKAGE OFFTAKE FOR DIAPHRAGM PUMPS

Title (de)

MEHRLAGEN-MEMBRAN MIT LECKAGE-ABLEITUNG FÜR MEMBRANPUMPEN

Title (fr)

MEMBRANE A COUCHES MULTIPLES A CONDUIT D'EVACUATION DE FUITES POUR POMPES A MEMBRANES

Publication

EP 0582628 B1 19970122 (DE)

Application

EP 92909856 A 19920504

Priority

- DE 9200351 W 19920504
- DE 4114439 A 19910503

Abstract (en)

[origin: WO9219866A1] A multi-layered diaphragm with leakage offtake for diaphragm pumps, in particular hydraulic pumps, has at least two superposed individual diaphragms (1, 2) fixed to a rotating clamping site. A space (10) is located between adjacent individual diaphragms (1, 2). At least one space (10) contains at least one fold-free and force-free layer (9) made of a nonwoven, knitted, or woven hard-filament fabric which follows the deformation of the individual diaphragms. When under pressure, this layer (9) is also permeable to liquid. The space (10) containing this (these) layer(s) is connected, in the region of the clamping site, to a leakage offtake (12, 13) surrounded by a housing. The layer (9) can, however, also consist of a fibre reinforcement consisting of a nonwoven, knitted, or woven hard-filament fabric which projects from the diaphragm surface facing the adjacent individual diaphragm. A combination of these types of layers is also possible.

IPC 1-7

F04B 43/00

IPC 8 full level

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

CPC (source: EP)

F04B 43/009 (2013.01)

Cited by

DE10231920B4

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

WO 9219866 A1 19921112; AT E148202 T1 19970215; DE 59207956 D1 19970306; EP 0582628 A1 19940216; EP 0582628 B1 19970122; JP 3133067 B2 20010205; JP H06506998 A 19940804

DOCDB simple family (application)

DE 9200351 W 19920504; AT 92909856 T 19920504; DE 59207956 T 19920504; EP 92909856 A 19920504; JP 50895392 A 19920504