

Title (en)  
MICRO-DIAPHRAGM PUMP

Title (de)  
MIKROMEMBRANPUMPE

Title (fr)  
MICROPOMPE A MEMBRANE

Publication  
**EP 0741839 B1 19980415 (DE)**

Application  
**EP 95903302 A 19941129**

Priority  
• DE 4402119 A 19940125  
• EP 9403954 W 19941129

Abstract (en)  
[origin: DE4402119A1] The invention relates to a micro-diaphragm pump consisting of an upper (1) and lower (2) section of a pump housing and a diaphragm (3) fitted between them, together forming a pump chamber (16), two valves (8, 9, 10, 12, 13, 14) and flow channels. It is the purpose of the invention to design the pump in such a way that it can be assembled by simple methods in few operations. This purpose is attained by means of heating element (4) secured to the pump diaphragm (3).

IPC 1-7  
**F04B 43/06**; **F04B 43/04**

IPC 8 full level  
**B81B 3/00** (2006.01); **F04B 43/02** (2006.01); **F04B 43/04** (2006.01); **F04B 43/06** (2006.01); **F16K 7/17** (2006.01)

CPC (source: EP US)  
**F04B 43/043** (2013.01 - EP US)

Cited by  
WO2019072467A1

Designated contracting state (EPC)  
CH DK FR IT LI NL

DOCDB simple family (publication)  
**DE 4402119 A1 19950727**; **DE 4402119 C2 19980723**; DK 0741839 T3 19980511; EP 0741839 A1 19961113; EP 0741839 B1 19980415; JP 3066925 U 20000307; JP H09503569 A 19970408; US 5725363 A 19980310; WO 9520105 A1 19950727

DOCDB simple family (application)  
**DE 4402119 A 19940125**; DK 95903302 T 19941129; EP 9403954 W 19941129; EP 95903302 A 19941129; JP 51930695 A 19941129; JP 649499 U 19990826; US 66910696 A 19960624