

Title (en)  
DIAPHRAGM PUMP AND METHOD FOR CONTROLLING SAME

Title (de)  
MEMBRANPUMPE UND VERFAHREN ZUR STEUERUNG DERSELBEN

Title (fr)  
POMPE A MEMBRANE ET METHODE POUR REGULER CETTE DERNIERE

Publication  
**EP 1088166 B1 20020731 (DE)**

Application  
**EP 99926372 A 19990522**

Priority

- DE 19826610 A 19980616
- EP 9903541 W 19990522

Abstract (en)  
[origin: US6554578B1] The invention relates to a diaphragm pump with a device for controlling the position of a diaphragm separating the conveying chamber from the displacement chamber. As a replacement of the mechanical control of the refilling process, a pressure sensor is arranged in the displacement chamber, which is connected with an evaluation unit designed for generating a refill signal, which is switched so it actuates a refill valve through an operative connection. Advantageously, a second sensor for detecting the piston travel is provided, whose signal is linked with the signal from the pressure sensor. The invention furthermore relates to a method for controlling the position of a diaphragm.

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

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

CPC (source: EP US)  
**F04B 43/0081** (2013.01 - EP US); **F04B 43/067** (2013.01 - EP US); **F04B 2203/0903** (2013.01 - EP US); **F04B 2205/03** (2013.01 - EP US)

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)  
**US 6554578 B1 20030429**; AT E221620 T1 20020815; DE 19826610 A1 19991223; DE 59902205 D1 20020905; EP 1088166 A1 20010404; EP 1088166 B1 20020731; ES 2183566 T3 20030316; JP 2002518635 A 20020625; JP 4153166 B2 20080917; WO 9966204 A1 19991223

DOCDB simple family (application)  
**US 71965001 A 20010409**; AT 99926372 T 19990522; DE 19826610 A 19980616; DE 59902205 T 19990522; EP 9903541 W 19990522; EP 99926372 A 19990522; ES 99926372 T 19990522; JP 2000554993 A 19990522