

Title (en)  
**MEMBRANE PUMP**

Publication  
**EP 0279931 B1 19920311 (DE)**

Application  
**EP 87118372 A 19871211**

Priority  
DE 3706338 A 19870227

Abstract (en)  
[origin: US4828464A] In a diaphragm pump including a first chamber for liquid to be pumped separated from a second chamber for drive fluid by a diaphragm which is driven by a piston alternatively placing the drive fluid under pressure and releasing the pressure from the drive fluid, a signal generator or magnet is located in the diaphragm while a signal detector is located within the pump housing to enable detection of displacement of the diaphragm and, accordingly, the displaced volume of the diaphragm pump. Detection of the displaced volume is used by a regulator to generate a drive signal which, in turn, is used to drive a motor operator connected to a pressure relief valve to control drive fluid pressure and, accordingly, the displaced volume.

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

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

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

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• DD 112601 A5 19750420  
• DE 2104783 B2 19780518

Cited by  
EP3092408A4; FR2828530A1; EP1907806A4; DE19548949A1; DE19548949C2; US11950677B2; US9677550B2; US9677549B2

Designated contracting state (EPC)  
DE FR IT

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