

Title (en)  
MEMBRANE PUMP, ESPECIALLY FOR DOSING LIQUIDS

Publication  
**EP 0175105 B1 19871014 (DE)**

Application  
**EP 85109557 A 19850730**

Priority  
DE 3430721 A 19840821

Abstract (en)  
[origin: US4619589A] In the case of a diaphragm pump, as is more particularly used for dosing or metering liquids and which is provided on the one hand with a dosing chamber with a suction and pressure valve and on the other with a hydraulic working chamber with drive piston and pressure relief valve, both chambers being separated by the working diaphragm, an effective diaphragm protection against excessive deflection and consequently overstressing is obtained in that the diaphragm defines a chamber connected to the working chamber by means of at least one overflow channel and in the vicinity of the overflow channel is guided a valve unit comprising a tappet with in each case one valve disk for the facing openings of the overflow channel and which is in operative connection with the diaphragm.

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); **F04B 43/14** (2013.01 - EP US)

Cited by  
EP0375848A1; EP0547404A1; CN109458316A; US10190583B2; WO2015018570A1; WO2023083419A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0175105 A1 19860326**; **EP 0175105 B1 19871014**; DE 3430721 A1 19860306; DE 3560776 D1 19871119; JP S6161990 A 19860329; US 4619589 A 19861028

DOCDB simple family (application)  
**EP 85109557 A 19850730**; DE 3430721 A 19840821; DE 3560776 T 19850730; JP 18194885 A 19850821; US 76761885 A 19850820