

Title (en)  
MEMBRANE PUMP

Title (de)  
MEMBRANPUMPE

Title (fr)  
POMPE À MEMBRANE

Publication  
**EP 3327287 B1 20240515 (DE)**

Application  
**EP 16002479 A 20161123**

Priority  
EP 16002479 A 20161123

Abstract (en)  
[origin: US2018142684A1] A diaphragm pump has at least one pump chamber, the pump chamber being connected to an inlet chamber via an inlet valve and to an outlet chamber via an outlet valve. The inlet valve has an inlet opening which can be closed by an inlet valve body, and the outlet valve has an outlet opening which can be closed by an outlet valve body. The outlet opening surrounds the inlet opening, or the inlet opening surrounds the outlet opening.

IPC 8 full level  
**F04B 43/00** (2006.01); **F04B 43/02** (2006.01); **F04B 53/10** (2006.01)

CPC (source: EP US)  
**F04B 43/0009** (2013.01 - EP US); **F04B 43/0045** (2013.01 - US); **F04B 43/026** (2013.01 - EP US); **F04B 53/1065** (2013.01 - EP US); **F04B 53/1067** (2013.01 - EP US); **F04B 53/1072** (2013.01 - US); **F04B 45/043** (2013.01 - US)

Citation (examination)

- US 2016040664 A1 20160211 - ZHANG KUNLIN [CN]
- WO 2015179087 A1 20151126 - CAI YING LIN [CN], et al

Cited by  
WO2020182921A1; DE102018008036A1; WO2020074576A1; EP4328448A2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3327287 A1 20180530; EP 3327287 B1 20240515**; JP 2018084233 A 20180531; JP 2024023352 A 20240221; JP 7446702 B2 20240311; US 11085433 B2 20210810; US 2018142684 A1 20180524

DOCDB simple family (application)  
**EP 16002479 A 20161123**; JP 2017223908 A 20171121; JP 2023196915 A 20231120; US 201715807289 A 20171108