Title (en)
  MEMBRANE VACUUM PUMP

Title (de)
  MEMBRANVAKUUMPUMPE

Title (fr)
  POMPE SOUS VIDE À MEMBRANE

Publication
  EP 2354546 B1 20190612 (DE)

Application
  EP 11000369 A 20110119

Priority
  DE 202010002145 U 20100209

Abstract (en)
  [origin: EP2354546A1] The pump has an outlet valve assembly (11) provided with an electrical, hydraulic or pneumatic exhaust actuator (16'), where a part (17') of the actuator is fixedly mounted at a housing head. Another part (18') of the actuator is coupled, driven and movable with an outlet valve body (15). The actuator is arranged opposite to the valve assembly, so that a direction of movement of the movable part of the actuator caused by the actuator opposite to a movement direction of the mounted part of the actuator coincides with a direction of movement of the outlet valve body caused by a gas flow. The actuator is designed as a solenoid integrated with a return spring, or a piezoelectric actuator such as piezo-bending actuator, or a magnetostrictive actuator.

IPC 8 full level
  F01L 3/20 (2006.01); **F01L 3/00** (2006.01); **F01L 9/10** (2021.01); **F01L 9/20** (2021.01); **F01L 25/02** (2006.01); **F04B 7/00** (2006.01); **F04B 7/02** (2006.01); **F04B 23/06** (2006.01); **F04B 41/06** (2006.01); **F04B 43/02** (2006.01); **F04B 45/04** (2006.01)

CPC (source: EP US)
  F01L 9/10 (2021.01 - EP); **F01L 9/20** (2021.01 - EP); **F04B 7/0076** (2013.01 - EP); **F04B 7/0266** (2013.01 - EP US); **F04B 23/06** (2013.01 - EP); **F04B 41/06** (2013.01 - EP); **F04B 43/02** (2013.01 - EP US); **F04B 45/04** (2013.01 - EP US); F01L 3/205 (2013.01 - EP); F01L 25/02 (2013.01 - EP); F01L 2003/25 (2013.01 - EP)

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  JP 2001304114 A 20011031 - ULVAC CORP

Cited by
  EP3029324A1; DE102014117793A1; EP2918835A1; EP2918835B1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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