

Title (en)  
MULTIPLE MEMBRANE PUMP

Title (de)  
MEHRFACHMEMBRANPUMPE

Title (fr)  
POMPE À MEMBRANES MULTIPLES

Publication  
**EP 4050213 C0 20230607 (DE)**

Application  
**EP 22152137 A 20220119**

Priority  
DE 102021104548 A 20210225

Abstract (en)  
[origin: US2022268267A1] Multiple diaphragm pumps are known in the art that are operated by compressed air and in which the valves are controlled by a slide element. The slide element is magnetically actuated without mechanical engagement involved in the actuation. This has the consequence that only a small amount of force can be applied which may not be sufficient due to static friction of the valve seal. The invention presents a hybrid solution which facilitates a mechanical actuation of a valve piston provided for valve control as well as a magnetic overcoming of a dead center that may be reached by the valve piston and the diaphragm piston that actuates the diaphragms of the multiple diaphragm pump.

IPC 8 full level  
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CPC (source: CN EP US)  
**F01L 25/08** (2013.01 - EP US); **F04B 43/073** (2013.01 - CN); **F04B 43/0736** (2013.01 - EP US); **F04B 43/023** (2013.01 - US)

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