

Title (en)  
CONTROLLED CRINKLE DIAPHRAGM PUMP

Title (de)  
GESTEUERTE FALTENMEMBRANPUMPE

Title (fr)  
CIRCULATEUR A MEMBRANE ONDULANTE PILOTEE

Publication  
**EP 3721091 A1 20201014 (FR)**

Application  
**EP 18811053 A 20181205**

Priority  
• FR 1761679 A 20171205  
• EP 2018083704 W 20181205

Abstract (en)  
[origin: CA3084583A1] Crinkle diaphragm pump (1) comprising: a body (2) inside which there is an internal chamber (2a) comprising an inlet opening and an outlet opening for fluid (22); a flexible diaphragm (3) placed inside the chamber in which it can crinkle. The pump further comprises: an actuating mechanism (4) comprising at least one motor (M) and a mechanical connection piece (41) connecting the motor (M) to the first edge of the diaphragm (31) in order to move it in a reciprocating motion. The pump also comprises a detection device (5) for detecting at least one value indicative of a movement of the diaphragm (3), a power supply unit delivering an electric power supply signal to the motor on the basis of a detection signal (Sd).

IPC 8 full level  
**F04B 43/00** (2006.01); **F04B 43/04** (2006.01)

CPC (source: EP US)  
**F04B 43/0018** (2013.01 - EP); **F04B 43/0081** (2013.01 - EP US); **F04B 43/04** (2013.01 - EP US); **F04B 43/14** (2013.01 - EP US)

Citation (search report)  
See references of WO 2019110695A1

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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DOCDB simple family (publication)  
**FR 3074544 A1 20190607**; **FR 3074544 B1 20211022**; CA 3084583 A1 20190613; CA 3084583 C 20220823; CN 111788390 A 20201016; CN 111788390 B 20230110; DK 3721091 T3 20220425; EP 3721091 A1 20201014; EP 3721091 B1 20220209; ES 2912293 T3 20220525; JP 2021505813 A 20210218; US 11649815 B2 20230516; US 2020386219 A1 20201210; WO 2019110695 A1 20190613

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