

Title (en)
MICRODIAPHRAGM PUMP

Title (de)
MIKROMEMBRANPUMPE

Title (fr)
POMPE À MICRODIAPHRAGME

Publication
EP 2762725 A1 20140806 (EN)

Application
EP 11873526 A 20110927

Priority
JP 2011072056 W 20110927

Abstract (en)
A microdiaphragm pump having a diaphragm chamber in contact with one side of an intake valve and one side of a discharge valve. The microdiaphragm includes two valve plate sheets 12, in each of which a valve plate 14 of one of an intake valve 26 and a discharge valve 28 and a flow path aperture 16 that provides a passage of the other valve are formed and which are laminated in directions that are opposite from each other; two valve seat sheets 18, which are laminated to the laminate and in which valve seats 20 and valve stoppers 22 are formed; a base plate 32; a frame 34; a diaphragm 36; and a drive element 42. The microdiaphragm pump has extremely small external dimensions and provides high productivity, high flow control accuracy, a smooth operation, large suction and discharge forces, and high reliability.

IPC 8 full level
F04B 43/04 (2006.01)

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F04B 53/16 (2013.01 - KR); **F05B 2210/11** (2013.01 - KR)

Cited by
EP3321506A1; US10683861B2; US10746169B2; US10615329B2; US10451051B2; US10655620B2; US10487821B2; US10487820B2;
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