

Title (en)
Diaphragm pump

Title (de)
Membranpumpe

Title (fr)
Pompe à membrane

Publication
EP 1850005 B1 20091007 (EN)

Application
EP 06112980 A 20060424

Priority
EP 06112980 A 20060424

Abstract (en)
[origin: EP1850005A1] A diaphragm pump comprising a pressure chamber arranged such that the volume of the pressure chamber is expanded and contracted by oscillation of a diaphragm (5), a suction-side check valve (7) for sucking air into the pressure chamber and a discharge-side check valve (8) for discharging air from the pressure chamber. The suction-side check valve is arranged to close by a valve body (17) being elastically deformed and brought into close contact with a valve seat, and open by the valve body elastically returning to the normal shape and coming out of contact with the valve seat. The discharge-side check valve is arranged to open by a valve body (18) being elastically deformed and producing a space relative to a valve seat, and close by the valve body elastically returning to the normal shape and coming into close contact with the valve seat.

IPC 8 full level
F04B 39/10 (2006.01); **F04B 35/04** (2006.01); **F04B 45/04** (2006.01)

CPC (source: EP US)
F04B 35/045 (2013.01 - EP US); **F04B 39/1073** (2013.01 - EP); **F04B 45/04** (2013.01 - EP US)

Cited by
CH703813A1; CN103118718A; KR20130140633A; AU2011301698B2; AU2011301698C1; US12029549B2; US8790094B2; WO2012034238A1; US11027051B2; US11534540B2; US11623039B2; TWI580866B; US10143783B2; US11253639B2; US11648342B2; US10299964B2; US10702418B2; US9642955B2; US10130526B2; US10682446B2; US10737002B2; US10780202B2; US10973965B2; US11141325B2; US11654228B2

Designated contracting state (EPC)
DE GB NL

DOCDB simple family (publication)
EP 1850005 A1 20071031; EP 1850005 B1 20091007; DE 602006009626 D1 20091119

DOCDB simple family (application)
EP 06112980 A 20060424; DE 602006009626 T 20060424