

Title (en)

SCALABLE PUMPING MECHANISM UTILIZING ANTI-SYNCHRONIZED POLY-DIAPHRAGM STACK

Title (de)

SKALIERBARER PUMPMECHANISMUS MIT EINEM ANTISYNCHRONISIERTEN MEHRFACHMEMBRANSTAPEL

Title (fr)

MÉCANISME DE POMPAGE POUVANT ÊTRE ADAPTÉ À LA TAILLE UTILISANT UN EMPILEMENT DE POLY-DIAPHRAGMES ANTI-SYNCHRONISÉS

Publication

EP 3060806 A4 20170712 (EN)

Application

EP 14852826 A 20141010

Priority

- US 201361889899 P 20131011
- US 2014060077 W 20141010

Abstract (en)

[origin: US2015104336A1] A diaphragm pump including at least three body plates and at least two diaphragm assemblies positioned between the at least three body plates. A series of drive fluid passages communicate with a drive side of the two diaphragm assemblies and a series of pumped fluid passages communicate with a pump side of the two diaphragm assemblies. There is an inlet check valve communicating with the series of pumped fluid passages and an outlet check valve communicating with the series of pumped fluid passages. At least one of the body plates is a doubled faced plate having either drive fluid passages on both faces or pumped fluid passages on both faces.

IPC 8 full level

F04B 43/02 (2006.01); **F04B 15/04** (2006.01); **F04B 43/00** (2006.01); **F04B 43/06** (2006.01)

CPC (source: EP US)

F04B 15/04 (2013.01 - EP); **F04B 43/0054** (2013.01 - EP); **F04B 43/067** (2013.01 - EP US); **F04B 43/0736** (2013.01 - EP US)

Citation (search report)

- [X] US 5292235 A 19940308 - EICKMANN KARL [JP]
- [A] US 2007071615 A1 20070329 - NAKAJIMA JIRO [JP], et al
- See references of WO 2015054598A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

US 2015104336 A1 20150416; AU 2014331733 A1 20160519; EP 3060806 A1 20160831; EP 3060806 A4 20170712; WO 2015054598 A1 20150416

DOCDB simple family (application)

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