

Title (en)

METHOD AND APPARATUS FOR CONTROLLING FLUID FLOW

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STEUERUNG EINES FLÜSSIGKEITSFLUSSES

Title (fr)

MÉTHODE ET APPAREIL DE CONTRÔLE DE L'ÉCOULEMENT DE FLUIDE

Publication

EP 2016286 A4 20120718 (EN)

Application

EP 07794396 A 20070427

Priority

- US 2007010277 W 20070427
- US 41314306 A 20060427

Abstract (en)

[origin: US2007253832A1] A method and apparatus for controlling bi-directional fluid flow. The apparatus has a pump that operates in a continuous pump cycle having a pressure phase and a vacuum phase. A conduit connects a common pump port to a utility port. An electrically-controlled valve regulates air flow through the conduit. The valve operates between a first position isolating the pump and the utility port, and a second position connecting the pump and the utility port in fluid communication. A detector continuously detects and communicates a signal identifying whether the pump is operating in the pressure or vacuum phase of the pump cycle. A controller uses the detector signal to synchronize actuation of the valve with the pump cycle to generate either continuous positive or continuous negative pressure at the utility port.

IPC 8 full level

F04B 17/00 (2006.01); **B01L 3/02** (2006.01); **F04B 43/00** (2006.01); **F04B 45/04** (2006.01); **F04B 45/047** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP US)

B01L 3/021 (2013.01 - EP US); **B01L 3/0213** (2013.01 - EP US); **F04B 43/0081** (2013.01 - EP US); **F04B 45/047** (2013.01 - EP US); **F04B 53/16** (2013.01 - EP US); **B01L 2400/0487** (2013.01 - EP US); **B01L 2400/0633** (2013.01 - EP US); **F04B 2201/0201** (2013.01 - EP US); **F04B 2201/1208** (2013.01 - EP US)

Citation (search report)

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- [XII] US 4475666 A 19841009 - BILBREY ROBERT A [US], et al
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Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

US 2007253832 A1 20071101; CN 101443551 A 20090527; CN 101443551 B 20130327; EP 2016286 A2 20090121; EP 2016286 A4 20120718; EP 2016286 B1 20180905; JP 2009535557 A 20091001; JP 5185256 B2 20130417; WO 2007127389 A2 20071108; WO 2007127389 A3 20080731

DOCDB simple family (application)

US 41314306 A 20060427; CN 200780015293 A 20070427; EP 07794396 A 20070427; JP 2009507827 A 20070427; US 2007010277 W 20070427