

Title (en)

MAGNETICALLY ACTUATED FLUID PUMP AND PULSE REDUCING APPARATUS

Title (de)

MAGNETISCH BETÄTIGTE FLÜSSIGKEITSPUMPE UND PULSREDUZIERUNGSVORRICHTUNG

Title (fr)

POMPE À FLUIDE À ACTIONNEMENT MAGNÉTIQUE ET APPAREIL DE RÉDUCTION DE PULSATION

Publication

EP 2834522 A4 20160713 (EN)

Application

EP 12869781 A 20120906

Priority

- US 201213411231 A 20120302
- US 201261693940 P 20120828
- US 2012053913 W 20120906

Abstract (en)

[origin: WO2013130128A1] An integrated fluid management system is provided with capability to deliver precise flow rate and fluid dosing capability over a wide range of operator set parameters. A magnetically actuated pump head is low cost, affords simple installation, and is potentially disposable. Multiple pump heads may be docked to a single drive module or control module to provide concurrent metering of multiple fluids and to maintain precise volume ratio of the multiple fluids to one another. The magnetic pump head may be integrated with radio frequency Identification devices (RFID) and Hall Effect Sensors to provide customized control and fail safe operation. A pressure pulse reducing apparatus improves pump delivery accuracy and may employ a sensor to monitor pump operation and send an error message to indicate a malfunction has occurred.

IPC 8 full level

F04B 17/00 (2006.01); **F04B 11/00** (2006.01); **F04B 13/02** (2006.01)

CPC (source: EP)

F04B 11/0008 (2013.01); **F04B 11/0033** (2013.01); **F04B 13/02** (2013.01); **F04B 17/00** (2013.01)

Citation (search report)

- [X] US 6135734 A 20001024 - ISOZUMI SHUZO [JP], et al
- [X] EP 1342911 A2 20030910 - HITACHI LTD [JP], et al
- [X] WO 9920898 A2 19990429 - SHURFLO PUMP MANUFACTURING CO [US]
- [X] US 3900276 A 19750819 - DILWORTH JOHN LEWIS
- See references of WO 2013130128A1

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

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