

Title (en)

ONE-DIRECTIONAL MICROBALL VALVE FOR A MICROFLUIDIC DEVICE

Title (de)

EINWEGE-MIKROKUGELVENTIL FÜR MIKROFLUIDVORRICHTUNG

Title (fr)

SOUPAPE A MICROBILLE MONODIRECTIONNELLE DESTINEE A UN APPAREIL MICROFLUIDIQUE

Publication

**EP 1534982 A4 20060208 (EN)**

Application

**EP 03771653 A 20030717**

Priority

- US 0322470 W 20030717
- US 39877702 P 20020726
- US 39877802 P 20020726
- US 39885202 P 20020726
- US 39894602 P 20020726
- US 40364003 A 20030331
- US 40365203 A 20030331
- US 41417903 A 20030414
- US 42658703 A 20030430

Abstract (en)

[origin: WO2004011143A2] A microfluidic device that includes a micro ball valve is provided. The microball valve is capable of preventing or interrupting fluid flow through the microfluidic device. The microfluidic device can include a substrate layer, and a microfluidic pathway that includes the microball valve. Methods are provided for manipulating fluids using the microfluidic device.

IPC 1-7

**F16K 31/00**

IPC 8 full level

**F15C 5/00** (2006.01); **F16K 15/04** (2006.01); **F16K 31/00** (2006.01); **F16K 99/00** (2006.01)

IPC 8 main group level

**B01L** (2006.01)

CPC (source: EP)

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**F16K 2099/008** (2013.01)

Citation (search report)

- [XY] US 4911616 A 19900327 - LAUMANN JR CARL W [US]
- [PY] WO 02097422 A1 20021205 - ELECTRON BIO INC [KR], et al
- [PX] US 2003116738 A1 20030626 - O'CONNOR STEPHEN D [US], et al
- See references of WO 2004011143A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

**WO 2004011143 A2 20040205**; **WO 2004011143 A3 20040916**; AU 2003253998 A1 20040216; CA 2488997 A1 20040205;  
EP 1534982 A2 20050601; EP 1534982 A4 20060208; JP 2006511762 A 20060406

DOCDB simple family (application)

**US 0322470 W 20030717**; AU 2003253998 A 20030717; CA 2488997 A 20030717; EP 03771653 A 20030717; JP 2004524639 A 20030717