

Title (en)

SYSTEM AND METHOD OF MICRO-FLUIDIC HANDLING AND DISPENSING USING MICRO-NOZZLE STRUCTURES

Title (de)

SYSTEM UND VERFAHREN ZUR MIKROFLUIDISCHEN BEHANDLUNG UND ABGABE DURCH VERWENDUNG VON MIKRODÜSENSTRUKTUREN

Title (fr)

SYSTEME ET PROCEDE DE GESTION ET DE DISTRIBUTION DE MICROFLUIDES AU MOYEN DE STRUCTURES DE MICROBUSES

Publication

**EP 1461796 A1 20040929 (EN)**

Application

**EP 02807998 A 20021031**

Priority

- US 0234859 W 20021031
- US 33519401 P 20011031

Abstract (en)

[origin: WO2004049287A1] A fluid-dispensing device comprises substrate (212) and a plurality of nozzles (204) formed in the substrate (212). Each nozzle has (204) has an open-ended tip and a fluid-conducting channel (220) between the tip and a source of fluid. A non-conducting spacer is on the substrate (212) and electrically isolates a gate electrode (208) from the substrate (212). The gate electrode is located adjacent to the tip of at least one of the nozzles (204) to effect dispensing of the fluid in that nozzle (204) in response to a voltage applied between the gate electrode (208) and the nozzle (204) or fluid in the nozzle (204). The gate electrode (208) includes a plurality of individually addressable gate electrodes used for selectively actuating nozzles (204).

IPC 1-7

**G09G 3/10**

IPC 8 full level

**B01J 19/00** (2006.01); **B01L 3/02** (2006.01); **G01N 30/72** (2006.01); **G01N 35/10** (2006.01); **G01N 37/00** (2006.01); **G09G 3/10** (2006.01)

CPC (source: EP)

**B01L 3/0268** (2013.01); **G01N 30/7266** (2013.01); **B01L 2300/0819** (2013.01); **B01L 2400/027** (2013.01); **B01L 2400/0415** (2013.01)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**WO 2004049287 A1 20040610**; AU 2002356877 A1 20040618; EP 1461796 A1 20040929; EP 1461796 A4 20061115; JP 2005532166 A 20051027

DOCDB simple family (application)

**US 0234859 W 20021031**; AU 2002356877 A 20021031; EP 02807998 A 20021031; JP 2004555221 A 20021031