

Title (en)

FLOW-THROUGH EJECTION SYSTEM INCLUDING COMPLIANT MEMBRANE TRANSDUCER

Title (de)

DURCHFLUSSAUSSTOSSSYSTEM MIT WANDLER MIT NACHGIEBIGER MEMBRAN

Title (fr)

SYSTÈME D'ÉJECTION À ÉCOULEMENT TRAVERSANT COMPRENANT UN TRANSDUCTEUR À MEMBRANE ÉLASTIQUE

Publication

**EP 2699424 A1 20140226 (EN)**

Application

**EP 12716851 A 20120404**

Priority

- US 201113089582 A 20110419
- US 201113089563 A 20110419
- US 2012032074 W 20120404

Abstract (en)

[origin: WO2012145166A1] A liquid dispenser (310) includes a substrate (339 ). A first portion of the substrate defines a liquid dispensing channel (312) including an outlet opening (326). A second portion of the substrate defines an outer boundary of a cavity(390). Other portions of the substrate define a liquid supply channel (311) and a liquid return channel (313). A liquid supply(324) provides a continuous flow of liquid from the liquid supply through the liquid supply channel through the liquid dispensing channel through the liquid return channel and back to the liquid supply. A diverter member (320) is selectively actuatable to divert a portion of the liquid flowing through the liquid dispensing channel through outlet opening of the liquid dispensing channel. The diverter member includes a MEMS transducing member. A first portion of the MEMS transducing member is anchored to the substrate. A second portion of the MEMS transducing member extends over at least a portion of the cavity and is free to move relative to the cavity. A compliant membrane (130) is positioned in contact with the MEMS transducing member. A first portion of the compliant membrane covers the MEMS transducing member. A second portion of the compliant membrane is anchored to the substrate such that the compliant membrane forms a portion of a wall of the liquid dispensing channel. The wall is positioned opposite the outlet opening.

IPC 8 full level

**B41J 2/14** (2006.01)

CPC (source: EP)

**B41J 2/14282** (2013.01); **B41J 2/14427** (2013.01); **B41J 2002/14403** (2013.01); **B41J 2202/12** (2013.01)

Citation (search report)

See references of WO 2012145166A1

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)

**WO 2012145166 A1 20121026**; CN 103476590 A 20131225; EP 2699424 A1 20140226

DOCDB simple family (application)

**US 2012032074 W 20120404**; CN 201280019295 A 20120404; EP 12716851 A 20120404