

Title (en)

FLOW-THROUGH EJECTION SYSTEM INCLUDING COMPLIANT MEMBRANE TRANSDUCER

Title (de)

DURCHFLOSSAUSSTOSSSYSTEM 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

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- 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

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CPC (source: EP)

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Citation (search report)

See references of WO 2012145166A1

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