

Title (en)

COVER WITH MICRO-CONTAINER INTERFACE FOR COVERING A MICROFLUIDIC GAP

Title (de)

DECKEL MIT MIKROBEHÄLTERSCHNITTSTELLE ZUR ABDECKUNG EINES MIKROFLUIDIKSPALTES

Title (fr)

COUVERCLE AVEC INTERFACE DE MICRO-CONTENANT POUR RECOUVRIR UN ESPACE MICROFLUIDIQUE

Publication

EP 3377223 A1 20180926 (EN)

Application

EP 16704826 A 20160210

Priority

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Abstract (en)

[origin: WO2017084766A1] A cover (10) for use in a digital microfluidics system (16) for manipulating samples in liquid portions or droplets is provided. The digital microfluidics system (16) comprises a first substrate (18) with an array of electrodes (24) and a central control unit (20) for controlling the selection and for providing a number of said electrodes with voltage for manipulating liquid portions or droplets by electrowetting. A working gap (30) with a gap height is located parallel to the array of electrodes (24) and in-between first and second hydrophobic surfaces (26,28) that face each other at least during operation of the digital microfluidics system (16). The cover (10) comprises on one side the second hydrophobic surface (28) and on another side at least one micro-container interface (32), which comprises at least one cone (34). The inner surface of the cone (34) is formed to provide a sealing form fit contact with an outer surface of an inserted micro-container nozzle (36), by which a liquid is transferrable through a fluidic access hole (38) formed into the cover (10) and interconnecting each cone (34) and the gap (30). The cover (10) may be part of a disposable cartridge (14) or may be provided separately.

IPC 8 full level

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