

Title (en)

A component for use in a three-dimensional microfluidic device, a three-dimensional microfluidic device, and a method for manufacturing a three-dimensional microfluidic device

Title (de)

Komponente zur Verwendung in einer dreidimensionalen mikrofluidischen Vorrichtung, dreidimensionale mikrofluidische Vorrichtung und Verfahren zur Herstellung einer dreidimensionalen mikrofluidischen Vorrichtung

Title (fr)

Composant à utiliser dans un dispositif microfluide tridimensionnel, dispositif microfluide tridimensionnel et procédé de fabrication d'un dispositif microfluide tridimensionnel

Publication

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Application

EP 11187407 A 20111101

Priority

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Abstract (en)

A component (2, 3) for use in a three-dimensional microfluidic device, characterized in that it comprises: $\#c$ at least one layer (1) which is manufactured by causing a hydrophobic substance (21, 22) to permeate a porous material (24) so that the hydrophobic substance (21, 22) is absorbed into the porous material (24) of the layer (1) in such a way as to delimit at least one boundary (22) of a channel (K) free of the hydrophobic substance; and $\#c$ at least one channel floor and/or ceiling area (51, 81) which is at least partially on top of, or which extends to the top of, an above-mentioned channel (K), and which is manufactured by spreading a hydrophobic substance (51, 81) on the surface of the material (24) of a mentioned layer (1) so that the floor area (L) forms at its location a barrier to the advance of fluid below the layer (1) and/or that the ceiling area (M) forms at its location a barrier to the advance of fluid above the layer (1). The patent application also contains an independent claim for a three-dimensional microfluidic device and a method of manufacturing a component for use in a three-dimensional microfluidic device.

IPC 8 full level

B01L 3/00 (2006.01)

CPC (source: EP US)

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Citation (applicant)

WO 2010102294 A1 20100910 - HARVARD COLLEGE [US], et al

Citation (search report)

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- [Y] WO 2010022324 A2 20100225 - HARVARD COLLEGE [US], et al
- [Y] WO 2010003188 A1 20100114 - UNIV MONASH [AU], et al
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