

Title (en)  
METHOD AND MICROFLUIDIC DEVICE FOR ALIQUOTING A SAMPLE LIQUID USING A SEALING LIQUID, METHOD FOR PRODUCING A MICROFLUIDIC DEVICE AND MICROFLUIDIC SYSTEM

Title (de)  
VERFAHREN UND MIKROFLUIDISCHE VORRICHTUNG ZUR ALIQUOTIERUNG EINER PROBENFLÜSSIGKEIT UNTER VERWENDUNG EINER VERSIEGELUNGSFLÜSSIGKEIT, VERFAHREN ZUM HERSTELLEN EINER MIKROFLUIDISCHEN VORRICHTUNG UND MIKROFLUIDISCHES SYSTEM

Title (fr)  
PROCÉDÉ ET DISPOSITIF MICROFLUIDIQUE POUR ALIQUOTER UN ÉCHANTILLON LIQUIDE AU MOYEN D'UN LIQUIDE DE SCELLEMENT, PROCÉDÉ DE FABRICATION D'UN DISPOSITIF MICROFLUIDIQUE ET SYSTÈME MICROFLUIDIQUE

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Application  
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Abstract (en)  
[origin: WO2019185508A1] The invention relates to a method for aliquoting a sample liquid (10) using a sealing liquid (20) in a microfluidic device (1). The sample liquid (10) and the sealing liquid (20) have different wetting behaviors and can be combined to give a two-phase system consisting of two phases separated from one another by a boundary surface. The microfluidic device (1) comprises a chamber (100) with at least one inlet channel (101) for introducing the sample liquid (10) and the sealing liquid (20) and a plurality of cavities (105) that can be filled via the inlet channel (101), wherein the inlet channel (101) and the cavities (105) have a geometry that is defined in dependence on the respective wetting behaviors of the sample liquid (10) and the sealing liquid (20). In the method, first the sample liquid (10) is introduced. This forms a meniscus of the sample liquid (10) that is suitably formed by the defined geometry, e.g. concave, to fill the cavities (105) with the sample liquid (10). Then, in a further step, the sealing liquid (20) is introduced. This forms a meniscus of the sealing liquid (20) that is suitably formed by the existing, greater contact angle and the defined geometry, e.g. convex, to cover the filled cavities (105) with the sealing liquid (20).

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Citation (search report)  
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