

Title (en)
MICROFLUIDIC DEVICE FOR PROCESSING AND ALIQUOTING A SAMPLE LIQUID, METHOD AND CONTROLLER FOR OPERATING A MICROFLUIDIC DEVICE, AND MICROFLUIDIC SYSTEM FOR CARRYING OUT AN ANALYSIS OF A SAMPLE LIQUID

Title (de)
MIKROFLUIDISCHE VORRICHTUNG ZUM PROZESSIEREN UND ALIQUOTIEREN EINER PROBENFLÜSSIGKEIT, VERFAHREN UND STEUERGERÄT ZUM BETREIBEN EINER MIKROFLUIDISCHEN VORRICHTUNG UND MIKROFLUIDISCHES SYSTEM ZUM DURCHFÜHREN EINER ANALYSE EINER PROBENFLÜSSIGKEIT

Title (fr)
DISPOSITIF MICROFLUIDIQUE POUR LE TRAITEMENT ET LE FRACTIONNEMENT EN ALIQUOTE D'UN ÉCHANTILLON LIQUIDE, PROCÉDÉ ET APPAREIL DE COMMANDE PERMETTANT DE FAIRE FONCTIONNER UN DISPOSITIF MICROFLUIDIQUE ET SYSTÈME MICROFLUIDIQUE POUR L'EXÉCUTION D'UNE ANALYSE D'UN ÉCHANTILLON LIQUIDE

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Abstract (en)
[origin: WO2021001355A1] The invention relates to a microfluidic device (100) for processing and aliquoting a sample liquid (10). The microfluidic device (100) has a dividing chamber (115) for receiving a starting volume of the sample liquid (10). The dividing chamber (115) has a plurality of cavities (140) for receiving sub-volumes of the sample liquid (10), said sub-volumes being usable for analytical reactions. The microfluidic device (100) also has a microfluidic network for using the dividing chamber (115) in a fluid-mechanical manner and a pump device (121) for pumping fluids (10, 20) within the device (100). The at least one pump device (121) and the microfluidic network are designed to pump the sample liquid (10), as a first phase, and a sealing liquid (20), as a second phase, through the microfluidic network and into the dividing chamber (115) in order to seal the sub-volumes of the sample liquid (10) in the cavities (140) by means of the sealing liquid (20).

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