

Title (en)

METHOD FOR MOVING A FLUID OF INTEREST IN A CAPILLARY TUBE AND FLUIDIC MICROSYSTEM

Title (de)

VERFAHREN ZUR FÖRDERUNG EINER FLÜSSIGKEIT IN EINER KAPILLARE UND FLUIDISCHES MIKROSYSTEM

Title (fr)

PROCEDE DE DEPLACEMENT D'UN FLUIDE D'INTERET DANS UN CAPILLAIRE ET MICROSYSTEME FLUIDIQUE

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Application

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Abstract (en)

[origin: WO03026798A1] The invention concerns a method for moving a fluid of interest in a capillary tube and a fluidic microsystem. More particularly, it concerns the field of microfluidics, and in particular fluidic microsystems. The method comprises steps which consist in: providing in said capillary tube (1) at least a ferrofluid stream (3), said ferrofluid assembly (3) comprising a ferrofluid plug (5), and arranged at least at one of the two ends of the ferrofluid plug (5) and integral therewith, a liquid plug (7) non-miscible with the ferrofluid and with the fluid of interest; providing in said capillary tube, proximate to the ferrofluid assembly and on the side of the liquid plug (7) non-miscible with the ferrofluid and the fluid of interest, the fluid of interest (9); and controlling the displacement of the fluid of interest in said capillary tube by the action on said ferrofluid assembly of a magnetic field generated by a magnetic system arranged outside the capillary tube.

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