

Title (en)

DEVICE FOR CAPILLARY TRANSPORT OF LIQUIDS, USE AND METHOD OF THE PRODUCTION OF SUCH A DEVICE

Title (de)

VORRICHTUNG ZUM KAPILLAREN TRANSPORT VON FLÜSSIGKEITEN, VERWENDUNG SOWIE VERFAHREN ZUR HERSTELLUNG EINER SOLCHEN VORRICHTUNG

Title (fr)

DISPOSITIF DE TRANSPORT PAR CAPILLARITÉ DE LIQUIDES, UTILISATION ET PROCÉDÉ DE PRODUCTION D'UN TEL DISPOSITIF

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2014000735A1] Disclosed is a device for the directed capillary transport of liquids, comprising at least two capillaries (8, 9, 33, 54, 55), the at least two capillaries (8, 9, 33, 54, 55) being designed such that the liquid can be transported in at least some regions in a passive, directed and capillary manner, characterised in that at least two of the capillaries (8, 9, 33, 54, 55) are interconnected in the direction of transport of the liquid via at least one capillary passage conduit (20, 23, 28, 29, 34, 40, 41, 59, 63). The invention is intended for use in the separation of components from a fluidic substance and/or in oil/water separation. A production method is characterised in that at least one part of the capillary structure is generated by means of laser irradiation, by means of a moulding tool, in particular a sintering mould, by means of a milling process, in particular by means of a micro-milling process, or by means of EDM.

IPC 8 full level

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CPC (source: EP US)

B01L 3/5027 (2013.01 - US); **F04B 19/006** (2013.01 - EP US); **F04F 7/00** (2013.01 - EP US); **B01L 2400/0406** (2013.01 - US)

Citation (examination)

PHILIPP COMANNS ET AL: "Moisture harvesting and water transport through specialized micro-structures on the integument of lizards", BEILSTEIN JOURNAL OF NANOTECHNOLOGY, 1 January 2011 (2011-01-01), Germany, pages 204 - 214, XP055258023, Retrieved from the Internet <URL:file:///C:/Users/NF21809/AppData/Roaming/Mozilla/Firefox/Profiles/NF21809/CiteNPLTemp/CiteNPLWebPage.pdf> [retrieved on 20160314], DOI: 10.3762/bjnano.2.24

Cited by

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