

Title (en)
MICROEJECTION PUMP

Title (de)
MIKROEJEKTIONSPUMPE

Title (fr)
POMPE A MICROEJECTION

Publication
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Application
EP 97951842 A 19971211

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• DE 9702874 W 19971211
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Abstract (en)
[origin: WO9826179A1] The present invention relates to a microejection pump for obtaining microdrops, which includes a pump casing consisting of a silicon chip and a piezoelectrically operated silicon membrane above the pump casing. Said pump casing is connected to at least one inlet passage and an outlet passage with an ejection opening, while a glass chip placed opposite the silicon membrane blanks off the pump casing. The invention aims at developing a microejection pump which enables fluids or suspensions or liquefiable media to be handled in an order of magnitude of some picoliters to some hundreds of microliters and is highly frequency stable. It is also characterized in that the inlet passage (7) located in the silicon chip (2) and extending in the direction of the pump casing (4) is designed, at least partly, as a scattering element (11). A heating may be provided to act in connection with heating contacts (18, 19) upon the silicon membrane (5) of the pump casing (4).

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Cited by
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WO 9826179 A1 19980618; AT E218194 T1 20020615; DE 29724735 U1 20031113; DE 59707378 D1 20020704; EP 0956449 A1 19991117; EP 0956449 B1 20020529; JP 2001505640 A 20010424; US 6179584 B1 20010130

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