

Title (en)

A METHOD AND DEVICE FOR DISPENSING OF DROPLETS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR DISPENSION VON TROPFEN

Title (fr)

PROCEDE ET DISPOSITIF DE DISTRIBUTION DE GOUTTELETTES

Publication

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Application

EP 02727994 A 20020502

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Abstract (en)

[origin: WO02092228A2] A conventional syringe pump (10) is used to dispense liquids of less than 5 μm^3 in volume is a dispensing assembly (1). There is a divider barrier formed by a flexible elastomer membrane (5) clamped between an inner part (3) and an outer part (4) of dispenser (2). The dispenser (2) has a bore divided into a system liquid reservoir (6) and a sample liquid reservoir (7). The system liquid reservoir (6) connects to the pump (10) and the sample liquid reservoir (7) communicates with a nozzle (15) having a dispensing tip (16). The membrane (5) is virtually incompressible and therefore the pump (10) can dispense accurately. Electrostatic drop detachment using an electrode (25) electrically coupled to the dispensing tip (16) and a conducting plate (19) forming a receiving electrode below a substrate (20) is provided. The dispensing assembly is particularly useful for multi-nozzle dispensing assemblies.

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