

Title (en)

Device for sequential transport of liquids by capillary forces

Title (de)

Vorrichtung zum schrittweisen Transport von Flüssigkeit unter Ausnutzung von Kapillarkräften

Title (fr)

Dispositif pour le transport de liquide avec des forces capillaires

Publication

EP 1419818 A1 20040519 (DE)

Application

EP 03025615 A 20031106

Priority

DE 10254874 A 20021114

Abstract (en)

The apparatus (10) to move fluid samples in steps, using capillary forces, has a capillary channel (14) for the interconnected reaction chambers. At least two closed ventilation openings (38,40,42) are located at intervals along the channel, with channel connections (22,24,26) for fluid flows, and which divide the capillary channel into sections (44,46,48). The apparatus (10) to move fluid samples in steps, using capillary forces, has a capillary channel (14) for the interconnected reaction chambers. At least two closed ventilation openings (38,40,42) are located at intervals along the channel, with channel connections (22,24,26) for fluid flows, and which divide the capillary channel into sections (44,46,48). The ventilation openings are opened separately, to give flows between the channel sections. Each channel section has at least one chamber (50,52,54) in front of the ventilation connection, in the flow direction.

Abstract (de)

Die Vorrichtung (10) zum schrittweisen Transport von Flüssigkeit, insbesondere von zu untersuchender Probenflüssigkeit, durch mehrere strömungstechnisch in Reihe liegende Reaktionskammern unter Ausnutzung von Kapillarkräften weist mindestens einen Kanal (14) auf, durch den Flüssigkeit auf Grund von Kapillarkräften transportierbar ist. Ferner weist die Vorrichtung (10) mindestens zwei verschlossene Entlüftungsöffnungen (38,40,42) auf, die an längs des Kanals (14) voneinander beabstandeten Verbindungsstellen (22,24,26) in Fluidverbindung mit dem Kanal (14) stehen. Die Verbindungsstellen (22,24,26) unterteilen den Kanal (14) in mehrere Kanalabschnitte (44,46,48). Die Fluidverbindungen zwischen jeweils einem Kanalabschnitt (44,46,48) und der diesem zugeordneten Entlüftungsöffnungen (38,40,42) können einzeln geöffnet werden. <IMAGE>

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