

Title (en)
PERISTALTIC MICROPUMP

Title (de)
PERISTALTISCHE MIKROPUMPE

Title (fr)
MICROPOMPE PERISTALTIQUE

Publication
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Application
EP 03792417 A 20030822

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Abstract (en)
[origin: WO2004018875A1] The invention concerns a peristaltic micropump comprising a first membrane zone (12) provided with a first piezoelectric actuator (22) for actuating said first membrane zone (12), a second membrane zone (14) provided with a second piezoelectric actuator (24) for actuating said second membrane zone (14), and a third membrane zone (16) provided with a third piezoelectric actuator (26) for actuating said third membrane zone (16). A pump body (30) forms, with the first membrane zone (12), one first valve (62) whereof the passage orifice (32) is open when the first membrane zone (12) is not actuated and is closed when the first membrane zone (12) is operating. The pump body (30) forms, with the second membrane zone (14), a pumping cavity (42) whereof the volume decreases when the second membrane zone (14) is operating. Said pump body (30) forms, with the third membrane zone (16), a second valve (64) whereof the passage orifice (34) is open when the third membrane zone (16) is not actuated and is closed when the third membrane zone (16) is operating. The first and second valves (62, 64) are in fluid connection with the pumping cavity (42).

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