

ABSTRACT

MANAGING BUBBLES IN A FLUID-DELIVERY DEVICE

Methods and systems for managing bubbles (602) in a micro electro mechanical systems device are described. One exemplary system includes a fluid-feed channel (330) configured to supply fluid to a plurality of ejection chambers (318), individual ejection chambers (318) comprising a resistor (313) configured to eject fluid from the individual ejection chamber (318). The system further includes a processor (102) configured to cause an individual resistor (313) to be energized at a first intensity sufficient to eject fluid from a respective ejection chamber (318), the processor (102) further configured to cause the resistor (313) to be energized at a second lower intensity which heats the resistor (313) but does not cause fluid to be ejected from the respective ejection chamber (318), and wherein the processor (102) can energize, at the second lower intensity level, individual resistors (313) in a pattern designed to detach a bubble (602) from a surface (604) defining a portion of the fluid-feed channel (330).

(Fig. 6)