

ABSTRACT**A MICRO-ELECTROMECHANICAL FLUID EJECTION DEVICE
INCORPORATING A MOVABLE NOZZLE STRUCTURE**

A micro-electromechanical fluid ejection device includes a substrate that incorporates drive circuitry and defines a plurality of ink inlet channels. A plurality of nozzle arrangements is positioned on the substrate. Each nozzle arrangement includes an elongate actuator that is fast at one end to the substrate, an opposite end being displaceable relative to the substrate when an electrical signal is received by the actuator. A movable nozzle chamber structure is connected to the elongate actuator. The movable nozzle chamber structure defines a fluid ejection port. A fixed nozzle chamber structure bounds a respective ink inlet channel and, together with the movable nozzle chamber structure defines a nozzle chamber in fluid communication with the ink inlet channel, such that when the actuator and thus the movable nozzle chamber structure is displaced relative to the substrate, fluid is ejected from the fluid ejection port.

Fig 1