

Title (en)
EFFICIENT INKJET NOZZLE ASSEMBLY

Title (de)
EFFIZIENTE TINTENSTRAHLDÜSENANORDNUNG

Title (fr)
ENSEMBLE BUSE À JET D'ENCRE EFFICACE

Publication
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Application
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Abstract (en)
[origin: WO2010034050A1] An inkjet nozzle assembly comprising: a nozzle chamber for containing ink, the chamber having a nozzle opening and an ink inlet; a pair of electrical contacts positioned at one end of the assembly and connected to drive circuitry; and a thermal bend actuator for ejecting ink through the nozzle opening, the actuator comprising an active beam connected to the electrical contacts and extending longitudinally away from the contacts, the active beam defining a bent current flow path between the contacts; and a passive beam fused to the active beam, such that when a current is passed through the active beam, the active beam heats and expands relative to the passive beam resulting in bending of the actuator, wherein the actuator has a working face for generating a positive pressure pulse in the ink during the bending of the actuator, the working face having an area of less than 800 square microns.

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