

Title (en)
INKJET PRINthead WITH OPPOSING ACTuator ELECTRODE POLARITIES

Title (de)
TINTENSTRAHLDRUCKKOPF MIT ENTGEGENGESETZTEN STELLGLIEDELEKTRODENPOLARITÄTEN

Title (fr)
TÊTE D'IMPRESSION À JET D'ENCRE ET POLARITÉS D'ÉLECTRODE D'ACTIONNEUR OPPOSÉES

Publication
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Application
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Priority
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Abstract (en)
[origin: WO2009015406A1] An inkjet printhead that has an array of nozzles arranged in adjacent rows, each nozzle having an ejection aperture and a corresponding actuator for ejecting printing fluid through the ejection aperture, each actuator having electrodes spaced from each other in a direction transverse to the rows. It also has drive circuitry for transmitting electrical power to the electrodes. The electrodes of the actuators in adjacent rows have opposing polarities such that the actuators in adjacent rows have opposing current flow directions. By reversing the polarity of the electrodes in adjacent rows, the punctuations in the power plane of the CMOS can be kept to the outside edges of the adjacent rows. This moves one line of narrow resistive bridges between the punctuations to a position where the electrical current does not flow through them. This eliminates their resistance from the actuators drive circuit. By reducing the resistive losses for actuators remote from the power supply side of the printhead IC, the drop ejection characteristics are consistent across the entire array of nozzles.

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