

Title (en)

Inkjet recording apparatus having electrostatic actuating means and method of controlling it.

Title (de)

Tintenstrahlaufzeichnungsgerät mit elektrostatischem Betätiger und Verfahren zu seiner Steuerung.

Title (fr)

Appareil d'enregistrement par jet d'encre avec actionneur électrostatique et son procédé de commande.

Publication

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Application

EP 94109195 A 19940615

Priority

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Abstract (en)

An inkjet recording apparatus is provided with an inkjet head having a nozzle (4) , an ink passage (6, 7, 8) that is connected to the nozzle, and an electrostatic actuator composed of a diaphragm (5) that is provided in a part of the ink passage and an electrode (21) placed outside of the ink passage opposite to the diaphragm. Recording is performed by moving the diaphragm by means of an electrostatic force generated by applying a voltage to the actuator thereby ejecting ink droplets from the nozzle. A drive circuit for the actuator comprises a timing pulse generator, a charge circuit and a discharge circuit. The drive circuit controls an amount of charge to be supplied to the actuator as well as the charge rate, preferably corresponding to environmental operating conditions of the recording apparatus. Thus a durably stable and precise ink ejection can be realized.

<IMAGE>

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IPC 8 full level

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Cited by

EP0933213A1; US6000785A; EP0671372A3; EP0876915A3; US6164759A; US5894316A; EP0738601A3; AU743278B2; EP0738600A3; EA001475B1; US6750589B2; US6474762B2; WO03063332A3; US6634815B2; US6234607B1; WO9915336A1

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