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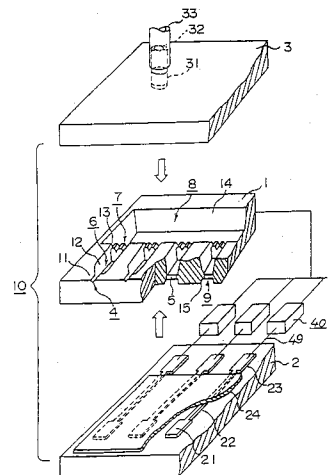
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D-82166 Gräfelfing (DE)(54) **Inkjet recording apparatus having electrostatic actuating means and method of controlling it.**

(57) 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.

FIG. 1

**EP 0 629 503 A3**



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EUROPEAN SEARCH REPORT

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EP 94 10 9195

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
Y	EP-A-0 479 441 (SEIKO EPSON CORPORATION) * the whole document * ---	1,2,5-7, 16,17	B41J2/045 B41J2/015
Y	US-A-4 398 204 (DIETRICH ET AL.) * the whole document * ---	1,2,5-7, 16,17	
A	US-A-4 275 402 (KERN) * the whole document * ---	11	
A	US-A-4 282 535 (KERN ET AL.) * the whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			B41J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 13 June 1995	Examiner Meulemans, J-P
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			