

Title (en)
PIEZOELECTRICALLY ACTUATED WRITING HEAD

Publication
EP 0128456 B1 19881207 (DE)

Application
EP 84106141 A 19840529

Priority
DE 3320441 A 19830606

Abstract (en)
[origin: US4539575A] In an illustrated transducer construction, electric potential changes applied to the transducer effect piezoelectric movement for causing recording fluid to be ejected through a jet orifice and applied on a recording carrier. In order to increase the maximum drop frequency and in order to improve the drop formation and drop speed, in accordance with the disclosure the linear distance of the connection points of the two ends of each transducer with the orifice plate is smaller than the length between the connection points as measured along the transducer. The transducers are thus mechanically prestressed to assume an arcuate configuration so that, in the rest state, recording fluid is disposed between the transducer and the plate. Given an electric driving pulse the transducers are shortened and conform with the plate in a planar fashion. Immediately after the excitation, each transducer returns to its arcuate initial configuration.

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B41J 3/04

IPC 8 full level
B41J 2/045 (2006.01); **B41J 2/055** (2006.01); **B41J 2/14** (2006.01); **B41J 2/16** (2006.01)

CPC (source: EP US)
B41J 2/14201 (2013.01 - EP US); **B41J 2002/14387** (2013.01 - EP US)

Citation (examination)
PATENTS ABSTRACTS OF JAPAN, Band 7, Nr. 145 (M-224)[1290], 24. Juni 1983; & JP - A - 58 55 253 (RICOH K.K.) 01.04.1983 (Kat. A)

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DE19639436A1; DE19639436C2; US5988799A

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DE FR GB IT

DOCDB simple family (publication)
EP 0128456 A2 19841219; EP 0128456 A3 19851030; EP 0128456 B1 19881207; DE 3320441 A1 19841206; DE 3475501 D1 19890112; JP 2548751 Y2 19970924; JP H0674337 U 19941021; JP S606469 A 19850114; US 4539575 A 19850903

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