

Title (en)

Electric-circuit arrangement for controlling writing jets.

Title (de)

Schaltungsanordnung zum Ansteuern von Schreibdüsen.

Title (fr)

Circuit électrique pour commander des jets à écrire.

Publication

**EP 0048942 A2 19820407 (DE)**

Application

**EP 81107540 A 19810922**

Priority

DE 3036922 A 19800930

Abstract (en)

[origin: US4398204A] A circuit for operating recording nozzles in ink mosaic recorders, each nozzle having an associated ink channel cylindrically surrounded by a piezoelectric transducer having a diameter which expands upon the application of a voltage thereto having a polarity which is opposite to the direction of polarization of the transducer and contracts upon the application of a voltage having a polarity in the direction of the transducer polarization, has a charging circuit which connects the transducers in a rest state to a common voltage source having a polarity in the direction of polarization of the transducers so that the transducers assume a state of contracted diameter. The circuit further includes a discharging circuit operated by a control input for each transducer operable for discharging an ink droplet from the nozzles after ink is drawn into the channels by operation of the charging circuit. The charging circuit contains a switching arrangement so that the charging circuit can be interrupted independently of the operation of the discharging circuit.

Abstract (de)

Zur Ansteuerung von piezoelektrischen Antriebselementen für Tintenmosaikschreibeinrichtungen werden die dafür erforderlichen Spannungsimpulse durch eine individuell steuerbare Entladung der im Ruhezustand in Polarisationsrichtung über eine gemeinsame Spannungsquelle aufgeladenen Piezoelemente gebildet. Die Anschaltung der Steuerschaltungen für die Piezoelemente erfolgt über Widerstände oder über Stromkonstantenschaltungen. Zum Abgleich ist in beiden Fällen die Entladenspannung und/oder die Ladesteilheit regelbar.

IPC 1-7

**B41J 3/04**

IPC 8 full level

**F02P 7/02** (2006.01); **B41J 2/015** (2006.01); **B41J 2/045** (2006.01); **B41J 2/055** (2006.01)

CPC (source: EP US)

**B41J 2/04513** (2013.01 - EP US); **B41J 2/04541** (2013.01 - EP US); **B41J 2/04581** (2013.01 - EP US); **B41J 2/04588** (2013.01 - EP US)

Cited by

EP0126325A3; EP0126325A2; WO2009138232A1

Designated contracting state (EPC)

CH FR GB IT LI NL SE

DOCDB simple family (publication)

**EP 0048942 A2 19820407**; **EP 0048942 A3 19830518**; AU 7573881 A 19820408; BR 8106234 A 19820615; DE 3036922 A1 19820513; JP S57126670 A 19820806; US 4398204 A 19830809; ZA 816729 B 19820929

DOCDB simple family (application)

**EP 81107540 A 19810922**; AU 7573881 A 19810929; BR 8106234 A 19810929; DE 3036922 A 19800930; JP 15224781 A 19810928; US 29697181 A 19810827; ZA 816729 A 19810929