

Title (en)

Ink controlling and regulating device for a continuous ink jet printer.

Title (de)

Tintensteuer- und -regelvorrichtung für einen kontinuierlich arbeitenden Tintenstrahldrucker.

Title (fr)

Dispositif de contrôle et de régulation d'une encre et de son traitement dans une imprimante à jet d'encre continu.

Publication

EP 0362101 B1 19931103 (FR)

Application

EP 89460031 A 19890922

Priority

FR 8812935 A 19880929

Abstract (en)

[origin: WO9003271A1] In a continuous ink jet printer wherein a jet (J) is fractionated into droplets charged in a charge electrode (6) and which then pass between deflection electrodes, a sensor (8) is provided which includes a conductor element (8c) consisting of two parts which are symmetrical with respect to the projectory of the droplets. According to the invention, the device comprises a circuit (9) which determines and processes the first I(t) and second J(t) derivatives with respect to the time of the charge induced in the conductor element by charged droplets (Gc) in order to determine their speed. The device also includes means for regulating the speed of droplets and means for regulating the ink quality.

IPC 1-7

B41J 2/07

IPC 8 full level

B41J 2/175 (2006.01); **B41J 2/07** (2006.01); **B41J 2/115** (2006.01); **B41J 2/125** (2006.01); **B41J 2/195** (2006.01)

CPC (source: EP KR US)

B41J 2/07 (2013.01 - KR); **B41J 2/125** (2013.01 - EP US); **B41J 2/175** (2013.01 - EP US); **B41J 2/195** (2013.01 - EP US)

Citation (examination)

- PATENT ABSTRACTS OF JAPAN, vol. 4, no. 49 (M-7)[531], page 135; JP-A-55 19 514 (RICOH K.K.) 12-02-1980
- PATENT ABSTRACTS OF JAPAN, vol. 10, no. 130 (M-478)[2187], 14 mai 1986, page 31; JP-A-60 255 443 (RICOH K.K.) 17-12-1985

Cited by

WO2012107560A1; US8998391B2; WO2011012641A1; FR2934810A1; FR2971451A1; FR2971452A1; EP0588698A1; FR2695704A1; US5555005A; FR3048199A1; US8888209B2; WO2013041589A1; EP3098075A1; FR3036650A1; EP3495147A1; WO2010018169A3; WO9513192A1; WO2011076810A1; US9102157B2; US10647122B2; US8511802B2; US8814330B2; US9044941B2

Designated contracting state (EPC)

AT BE DE ES FR GB GR IT NL SE

DOCDB simple family (publication)

EP 0362101 A1 19900404; EP 0362101 B1 19931103; AT E96736 T1 19931115; AU 4323689 A 19900418; AU 615803 B2 19911010; CA 1313972 C 19930302; DE 68910459 D1 19931209; DE 68910459 T2 19940303; ES 2045529 T3 19940116; FR 2636884 A1 19900330; FR 2636884 B1 19901102; JP H02504375 A 19901213; JP H0667621 B2 19940831; KR 900701538 A 19901203; US 5160939 A 19921103; WO 9003271 A1 19900405

DOCDB simple family (application)

EP 89460031 A 19890922; AT 89460031 T 19890922; AU 4323689 A 19890922; CA 614147 A 19890928; DE 68910459 T 19890922; ES 89460031 T 19890922; FR 8812935 A 19880929; FR 8900484 W 19890922; JP 51022789 A 19890922; KR 900701065 A 19900522; US 46033790 A 19900517