

Title (en)

Ink recording device with variable character quality.

Title (de)

Tintenschreibeinrichtung zur Darstellung von Zeichen unterschiedlicher Schriftqualität.

Title (fr)

Dispositif d'enregistrement par encre pour obtenir des caractères de qualité variable.

Publication

EP 0159402 A1 19851030 (DE)

Application

EP 84115424 A 19841214

Priority

DE 3415787 A 19840427

Abstract (en)

1. Ink recording device having a print head, the ink channels of which, directed with the outlet openings towards the recording medium, are in each case assigned a transducer element, which uses trigger pulses, formed in a control circuit corresponding to the characters or patterns to be represented, to effect a discharge of ink in the form of droplets, having drive devices for the print head and for the recording medium in order to generate a relative movement between print head and recording medium, the matrix assigned to the individual characters or graphic patterns being varied for the representation of characters or graphic patterns of different type quality and, depending on signals for different type qualities, the volume of the individual ink droplets sprayed against the recording medium being adjustable according to the type quality by an alteration of the amplitude or of the duration of the control pulses, characterized in that the adjustment of the droplets size for different type quality is such that the volume of a droplet, and thus the diameter (d1, d2, d3) of an image dot on the recording medium (P) is largest in the draft quality operating mode, smallest in the letter quality operating mode, and in that, for each chosen type quality, the diameter (d1, d2, d3) of the ink dots applied to the recording medium (P), which can be controlled by the control signals (S1, S2, S3) is such that the ink dots in each case at least touch in the matrix (x, y), predetermined for the chosen type quality, on the recording medium (P).

Abstract (de)

Zur Darstellung von Zeichen mit unterschiedlicher, einstellbarer Schriftqualität (Entwurfs-, Standard-, Schönschriftqualität) mit einer Tintenschreibeinrichtung, wird das Tröpfchenvolumen der ausgestoßenen Tintentröpfchen abhängig von der gewählten Schriftqualität verändert und der Durchmesser (d1, d2, d3) der einzelnen Tintenpunkte auf dem Aufzeichnungsträger (P) in der für die gewählte Schriftqualität entsprechenden Matrix (X, Y) derart eingestellt, daß sich die einzelnen Tintenpunkte bei jeder Schriftqualität zumindest berühren.

IPC 1-7

B41J 3/04; **B41J 3/02**

IPC 8 full level

B41J 2/205 (2006.01); **B41J 2/07** (2006.01); **B41J 2/21** (2006.01); **B41J 2/505** (2006.01)

CPC (source: EP)

B41J 2/2128 (2013.01); **B41J 2/5056** (2013.01)

Citation (search report)

- [A] GB 2050252 A 19810107 - CANON KK
- [A] DE 3012552 A1 19801009 - CANON KK
- [A] US 4216480 A 19800805 - BUEHNER WILLIAM L [US], et al
- [A] US 4302761 A 19811124 - YAMAMOTO YOICHI
- [A] US 4353079 A 19821005 - KAWANABE TSUYOSHI
- [A] DE 3009333 A1 19810917 - SIEMENS AG [DE]
- [A] IBM TECHNICAL DISCLOSURE BULLETIN, Band 24, Nr. 8, Januar 1982, Seite 4181, Armonk, US; J.R. BERTSCHY u.a.: "Ink jet printing method"

Cited by

EP0916494A3; EP0816103A3; DE4001879A1; EP0396855A1; US5132702A; EP0588616A1; US6065830A; CN1071198C; DE4004543A1; DE4012355A1; US5117371A; US4803500A; US6575568B1; US6359701B1; WO8806524A1; WO2012064476A1; US6264298B1; EP1294578B2

Designated contracting state (EPC)

DE IT NL SE

DOCDB simple family (publication)

EP 0159402 A1 19851030; **EP 0159402 B1 19890301**; DE 3476860 D1 19890406; JP S60239249 A 19851128

DOCDB simple family (application)

EP 84115424 A 19841214; DE 3476860 T 19841214; JP 8766485 A 19850425