

Title (en)

System, control circuit and method for electronic correction of pen misalignment in ink jet printers.

Title (de)

Anordnung, Steuerschaltung und Verfahren zur elektronischen Korrektur des Schiefstandes von Schreibstiften in Farbstrahlendrucker.

Title (fr)

Système, circuit de contrôle et méthode pour la correction électronique du désalignement des éléments d'écriture dans les imprimantes par jet d'encre.

Publication

EP 0674993 A3 19970625 (EN)

Application

EP 95302069 A 19950328

Priority

US 22134294 A 19940331

Abstract (en)

[origin: EP0674993A2] An ink-jet printing system includes a print head which, due to mechanical misalignment, produces images having a rotational theta -Z error if left uncorrected. The printing system has an error correction circuit which causes sets of nozzles within the print head to fire at slightly different times. The result of this is a printed image having one portion offset relative to another portion. The relative offset has the visual effect of reducing the theta -Z error. Several techniques for achieving the time spaced nozzle firing and resultant image offset are described. A method for correcting the theta -Z error in a printed image is also described. <IMAGE>

IPC 1-7

B41J 2/05

IPC 8 full level

B41J 2/01 (2006.01); **B41J 2/05** (2006.01); **B41J 2/07** (2006.01); **B41J 2/51** (2006.01)

CPC (source: EP)

B41J 2/04505 (2013.01); **B41J 2/04541** (2013.01); **B41J 2/04543** (2013.01); **B41J 2/04573** (2013.01); **B41J 2/0458** (2013.01); **B41J 2/04581** (2013.01); **B41J 25/001** (2013.01)

Citation (search report)

- [X] JP H05294015 A 19931109 - FUJI XEROX CO LTD & US 5442383 A 19950815 - FUSE TAKESHI [JP]
- [X] EP 0396982 A2 19901114 - CANON KK [JP]
- [X] EP 0257570 A2 19880302 - SIEMENS AG [DE]
- [PX] EP 0630750 A2 19941228 - CANON KK [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 103 (M - 1221) 13 March 1992 (1992-03-13)
- [X] PATENT ABSTRACTS OF JAPAN vol. 017, no. 664 (M - 1523) 8 December 1993 (1993-12-08)
- [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 027 (M - 662) 27 January 1988 (1988-01-27)
- [A] PATENT ABSTRACTS OF JAPAN vol. 001, no. 066 (E - 026) 27 June 1977 (1977-06-27)

Cited by

EP1424200A1; EP1386749A1; EP1741560A3; EP1359013A1; EP1859946A1; EP1057647A3; DE19755873A1; DE19755873C2; US7296872B2; DE19755874C1; EP0938973A3; EP2008830A3; EP0791472A3; EP1048472A4; EP1100682A4; EP3741567A1; CN111976294A; AU2004298513B2; EP1697141A4; EP2939841A1; EP1741560A2; WO2005120835A1; US7735944B2; US7914107B2; US7607757B2; US7934800B2; US10052897B2; US7600843B2; US7325900B2; US7281330B2; US8016379B2; US7275805B2; US7390071B2; US7757086B2; US7891766B2; US7243193B2; US7832842B2; US8011747B2; US8384944B2; US7370932B2; US7810733B2; US7866778B2; US11584122B2; US7322666B2; US7093989B2; US7163345B2; US7798607B2; US7434910B2; US7188928B2; US7266661B2; US7959257B2; US7631190B2; US7314261B2; US7448707B2; US7953982B2; US7524007B2; US6439686B2; US7862149B2; US8511779B2; US10022962B1; US10589522B2; US7104624B2; US7758147B2; US7986439B2; US7549718B2; US7557941B2; US7618107B2; US7467836B2; US7281777B2; US6607261B1; US7988248B2; US8184342B2; US7465002B2; US7328956B2; US6942311B2; US7758143B2; US7762639B2; US8007063B2; WO2005058602A2; US7350888B2; US6659581B2; US7726758B2; US7802862B2; US7549715B2; US7690750B2; US7472978B2; US7465016B2; US7374266B2; US7290852B2; US7377609B2; US7252353B2; US7029084B2; US7794048B2; US7837284B2; US7971949B2; US7980647B2; US7566111B2; US7556331B2; US7427117B2; US7267417B2; US6213580B1; US6457800B1; US7735948B2; US7740334B2; US7775616B2; US7901037B2; US8123318B2; US7484831B2; US7517036B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0674993 A2 19951004; EP 0674993 A3 19970625; JP H07309007 A 19951128

DOCDB simple family (application)

EP 95302069 A 19950328; JP 7154795 A 19950329