

Title (en)

Method and apparatus for the control of thermal ink jet printers.

Title (de)

Verfahren und Vorrichtung zur Überwachung von Thermo-Tintenstrahl-Druckern.

Title (fr)

Méthode et appareil pour la commande d'une imprimante thermique par jet d'encre.

Publication

EP 0600648 A3 19950104 (EN)

Application

EP 93309242 A 19931119

Priority

US 98300992 A 19921130

Abstract (en)

[origin: EP0600648A2] The volume of drops ejected from thermal ink jet printheads varies with the temperature of the printhead (20). The variation in drop volume degrades print quality by causing variations in the darkness in black and white text, the contrast of gray scale images, and variations in the chroma, hue, and lightness of color images. The present invention reduces the range of drop volume variation by reducing the range of printhead (20) temperature variation during the print cycle by keeping the printhead temperature above a reference temperature. When the printhead temperature falls below the reference temperature during a print cycle the printhead is heated with nonprinting pulses. <IMAGE>

IPC 1-7

B41J 2/05

IPC 8 full level

B41J 2/175 (2006.01); **B41J 2/05** (2006.01); **B41J 2/21** (2006.01); **B41J 2/36** (2006.01)

CPC (source: EP)

B41J 2/04528 (2013.01); **B41J 2/04563** (2013.01); **B41J 2/0458** (2013.01); **B41J 2/2128** (2013.01); **B41J 2/36** (2013.01)

Citation (search report)

- [XAY] EP 0416557 A1 19910313 - CANON KK [JP]
- [YA] GB 2169856 A 19860723 - CANON KK
- [A] WO 9010541 A1 19900920 - SIEMENS AG [DE]
- [A] EP 0511602 A1 19921104 - HEWLETT PACKARD CO [US]
- [A] GB 2169855 A 19860723 - CANON KK
- [A] US 5036337 A 19910730 - REZANKA IVAN [US]

Cited by

US5736995A; CN115056578A; EP0650836A3; EP0694392A3; US5838340A; EP0654351A3; US7782350B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0600648 A2 19940608; EP 0600648 A3 19950104; EP 0600648 B1 20011024; DE 69330991 D1 20011129; DE 69330991 T2 20020404; JP 3408302 B2 20030519; JP H06278291 A 19941004; SG 47457 A1 19980417

DOCDB simple family (application)

EP 93309242 A 19931119; DE 69330991 T 19931119; JP 32600793 A 19931130; SG 1996001818 A 19931119