

Title (en)

Printing methods and apparatus for reducing banding due to paper transport

Title (de)

Druckverfahren und Gerät zum Mindern des Bandeffektes verursacht durch Papiertransport

Title (fr)

Méthodes d'impression et appareil pour réduire l'effet de bande occasionné par le transport de papier

Publication

EP 1308292 A1 20030507 (EN)

Application

EP 01000585 A 20011031

Priority

EP 01000585 A 20011031

Abstract (en)

A dot matrix printing method is provided for printing an image on a printing medium with reduced banding, by moving, with respect to the printing medium, a printing head in a fast scan direction during a plurality of printing passes. The method comprises the step of writing the image during the plurality of printing passes by mutually interstitial printing steps and/or interlacing steps, wherein the writing step comprises moving the printing medium with a transport distance step in a slow scan direction perpendicular to the fast scan direction between the printing passes of the at least two sub-images. The sum of all transport distance steps after writing one swath of each sub-image is exactly one head length, and the transport distance steps are performed in at least two different step lengths. An apparatus for dot matrix printing an image by means of sub-images, by means of transport distance steps with at least two different step lengths, is also provided. <IMAGE>

IPC 1-7

B41J 2/21; **B41J 19/78**

IPC 8 full level

B41J 2/01 (2006.01); **B41J 2/21** (2006.01); **B41J 2/325** (2006.01); **B41J 11/42** (2006.01)

CPC (source: EP)

B41J 2/2132 (2013.01); **B41J 11/42** (2013.01); **B41J 11/425** (2013.01)

Citation (applicant)

- US 4967203 A 19901030 - DOAN ALPHA N [US], et al
- US 4198642 A 19800415 - GAMBLIN RODGER L [US]
- EP 1014297 A2 20000628 - SEIKO EPSON CORP [JP]
- EP 1014299 A2 20000628 - SEIKO EPSON CORP [JP]
- US 5940093 A 19990817 - BOLASH JOHN PHILIP [US], et al
- US 6068366 A 20000530 - BOLASH JOHN PHILIP [US], et al

Citation (search report)

- [A] EP 0917955 A1 19990526 - SEIKO EPSON CORP [JP]
- [A] EP 1132213 A2 20010912 - HEWLETT PACKARD CO [US]
- [A] EP 0961222 A2 19991201 - CANON KK [JP]

Cited by

CN115447284A; EP1925457A3; CN111439031A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1308292 A1 20030507; EP 1642723 A2 20060405; EP 1642723 A3 20061115; EP 1642723 B1 20120523; JP 2003182066 A 20030703

DOCDB simple family (application)

EP 01000585 A 20011031; EP 05111886 A 20011031; JP 2002314752 A 20021029