

Title (en)
Printing method and apparatus for back-up of defective marking elements

Title (de)
Druckverfahren und -vorrichtung zum Austauschen defekter Druckelemente

Title (fr)
Méthode d'impression et appareil pour remplacer les éléments d'impression défectueux

Publication
EP 1344651 B1 20060329 (EN)

Application
EP 02100264 A 20020315

Priority
EP 02100264 A 20020315

Abstract (en)
[origin: EP1344651A1] A dot matrix printer and printing method for being able to print a dot matrix (65) on a printing medium (66) using a plurality of marking elements (1-16) on a printing head (50) is described. A set of combinations of firing order of the plurality of marking elements (1-16) is determined as well as a sequence of relative translation movements between the printing medium (66) and the printing head (50) so that all the dots in the dot matrix (65) can be printed by application of each of the set of combinations, and any dot in the dot matrix (65) can be printed by at least a first and a second equivalent marking element (1 and 9) from a set of equivalent marking elements. For printing sets of dots in the dot matrix (65), a first equivalent marking element (1) is selected from the set of equivalent marking elements to print the set of dots as part of a first firing order. If a pre-set number of equivalent marking elements (1, 9) of the set of equivalent marking elements are defective, the printing head (50) is reconfigured so that other sets of at least first and second equivalent marking elements are determined. <IMAGE>

IPC 8 full level
B41J 2/01 (2006.01); **B41J 2/165** (2006.01); **B41J 2/21** (2006.01); **B41J 2/485** (2006.01); **B41J 2/505** (2006.01)

CPC (source: EP)
B41J 2/2135 (2013.01); **B41J 2/2139** (2013.01)

Cited by
CN100363800C; US7036900B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1344651 A1 20030917; **EP 1344651 B1 20060329**; DE 60210208 D1 20060518; DE 60210208 T2 20061228; JP 2003266795 A 20030924

DOCDB simple family (application)
EP 02100264 A 20020315; DE 60210208 T 20020315; JP 2003059738 A 20030306