

Title (en)

Driving apparatus for a thermal print head, and driving method for the same.

Title (de)

Steueranordnung und -verfahren für Thermodruckkopf.

Title (fr)

Dispositif et méthode de commande pour tête d'imprimante thermique.

Publication

EP 0473191 A1 19920304 (EN)

Application

EP 91114657 A 19910830

Priority

JP 22866890 A 19900830

Abstract (en)

A driving apparatus for a thermal print head comprises a data supplying circuit (11, 12) for supplying a line of dot data to the thermal print head (13) in each drive cycle, which data specifies which one of heating elements (14) of the thermal print head is (13) used to print a dot, and enabling the thermal print head (13) to energize the heating elements (14) specified by the dot data line for a first energizing time from the time when the dot data line is supplied. In the driving apparatus, a replacing circuit (21, 22) is provided to replace the dot data line supplied to the thermal print head (13) by inverted data of the dot data line supplied in the drive cycle preceded by one cycle when a second energizing time has elapsed from the time at which the line of dot data is supplied from the data supplying circuit (11, 12) to the thermal print head (13), wherein the second energizing time is set to a length suitable for printing a dot by the heating element (14) in a preheated state, and the first energizing time is set longer than the second energizing time by a length suitable for preheating the heating element (14). <IMAGE>

IPC 1-7

B41J 2/355

IPC 8 full level

B41J 2/36 (2006.01); **B41J 2/355** (2006.01); **B41J 2/38** (2006.01)

CPC (source: EP)

B41J 2/355 (2013.01)

Citation (search report)

- [XP] JP H01160657 A 19890623 - TOSHIBA CORP
- [X] US 4560993 A 19851224 - HAKOYAMA AKIYOSHI [JP]
- [X] EP 0367833 A1 19900516 - SONY CORP [JP]
- [X] US 4634063 A 19870106 - WATANABE HIDEJI [JP], et al

Cited by

US2018257394A1; EP0774358A1; US5809214A; EP2335933A3; EP1608508A4; US10350906B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0473191 A1 19920304; JP H04110167 A 19920410

DOCDB simple family (application)

EP 91114657 A 19910830; JP 22866890 A 19900830