

Title (en)

TEMPERATURE CONTROL DEVICE FOR A PRINTHEAD OR A HAMMERBANK WITH ELECTROMAGNETS

Publication

EP 0395189 A3 19910821 (DE)

Application

EP 90250075 A 19900319

Priority

DE 3914217 A 19890427

Abstract (en)

[origin: EP0395189A2] The needle matrix printer has a head (20) that has a large number of needles (1) and activated by a separate electromagnetic stage (3). Each needle actuator receives a drive signal from a drive circuit (21). Coupled to the drive circuit is a temperature monitoring circuit that has a constant current source (25) switched in during a pause period to cause a voltage drop that can be compared with a reference (27). A high or low signal can be latched into a 'D' type stage (30) and if the temperature is too high a cooling fan can be emerged.

IPC 1-7

B41J 2/30

IPC 8 full level

B41J 29/377 (2006.01); **B41J 2/30** (2006.01)

CPC (source: EP US)

B41J 2/30 (2013.01 - EP US)

Citation (search report)

- [A] US 4778293 A 19881018 - TESHIMA MINORU [JP], et al
- [A] US 4797017 A 19890110 - OKOUCHI SATOSHI [JP]
- [A] RESEARCH DISCLOSURE. no. 283, November 1987, HAVANT GB Seite 642 "INDIVIDUAL PRINT HEAD COIL TEMPERATURE CONTROL SYSTEM"
- [A] PATENT ABSTRACTS OF JAPAN vol. 11, no. 258 (M-618)(2705) 21 August 1987, & JP-A-62 62770 (YOSHINO) 19 März 1987,
- [A] RESEARCH DISCLOSURE. no. 281, September 1987, HAVANT GB Seite 527 "CONSTANT CURRENT SIGNAL FOR DRIVING A PRINT HEAD COIL USING PREDICTIVE PULSE WIDTH MODULATION"
- [A] RESEARCH DISCLOSURE. no. 266, Juni 1986, HAVANT GB Seite 349 "BIASING OF A SOLENOID ARMATURE THROUGH CONTROL OF COIL CURRENT"

Cited by

US6141028A; EP0570909A3; US5639169A

Designated contracting state (EPC)

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EP 0395189 A2 19901031; EP 0395189 A3 19910821; EP 0395189 B1 19950531; AT E123256 T1 19950615; DE 3914217 A1 19901115; DE 3914217 C2 19910926; DE 59009173 D1 19950706; JP H02299857 A 19901212; US 5042375 A 19910827

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