

Title (en)

PRINTING INSTALLATION WITH AN ELECTROTHERMALLY-DRIVEN PRINTING HEAD

Publication

**EP 0377599 B1 19921125 (DE)**

Application

**EP 88907115 A 19880805**

Priority

DE 3730110 A 19870908

Abstract (en)

[origin: WO8902367A1] A printing installation with an electrothermally-driven printing head (10) shaped as a bubble-jet ink printing head or as a thermal transfer printing head has a plurality of heating elements (11) individually controllable by impulses. During typing, a writing medium is locally heated by means of the heating elements (11), according to a given character, and is transferred to a recording medium (12) by a change of state of the aggregate. A sensor device (S) provided for detecting the change of state of the writing medium at each heating element (11), that can be formed as a device independent of the printer, generates a sensor signal that depends on the point in time when the change of state takes place. The operational frequency of the printing installation is controlled according to the sensor signals. The change of state of the writing medium is detected by measuring the temperature of the heating elements.

IPC 1-7

**B41J 2/04**; **B41J 2/17**

IPC 8 full level

**B41J 2/04** (2006.01); **B41J 2/05** (2006.01); **B41J 2/125** (2006.01); **B41J 2/17** (2006.01)

CPC (source: EP US)

**B41J 2/04563** (2013.01 - EP US); **B41J 2/04565** (2013.01 - EP US); **B41J 2/0458** (2013.01 - EP US); **B41J 2202/17** (2013.01 - EP US)

Citation (examination)

- PATENT ABSTRACT OF JAPAN, Band 11, nr. 278 (M-623) (2725) 9 September 1987; JP - A - 62 077 945 (CANON INC.) 10 April 1987
- PATENT ABSTRACT OF JAPAN, Band 11, nr. 278 (M-623) (2725) 9 September 1987; JP - A - 62 077 946 (CANON INC.) 10 April 1987
- PATENT ABSTRACT OF JAPAN, Band 11, nr. 281 (M-624) (2728) 11 September 1987; JP - A - 62 082 043 (RICOH CO. LTD) 15 April 1987
- PATENT ABSTRACT OF JAPAN, Band 10, nr. 231 (M-506) (2287) 12 August 1986; JP - A - 61 064 468 (MITSUBISHI ELECTRIC CORP.) 2 April 1986
- PATENT ABSTRACT OF JAPAN, Band 10, nr. 189 (M-494) (2245) 3 Juli 1986; JP - A - 61 032 769 (SEIKO EPSON CORP.) 15 Februar 1986
- IBM TECHNICAL DISCLOSURE BULLETIN, Band 16, nr. 5, Oktober 1973 (New York, US) J.H. HONG: "Thermal printer chip protection circuit" Seiten 1422-1423

Designated contracting state (EPC)

CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

**WO 8902367 A1 19890323**; DE 3730110 A1 19890316; DE 3876244 D1 19930107; EP 0377599 A1 19900718; EP 0377599 B1 19921125; JP H03500149 A 19910117; US 5122816 A 19920616

DOCDB simple family (application)

**DE 8800484 W 19880805**; DE 3730110 A 19870908; DE 3876244 T 19880805; EP 88907115 A 19880805; JP 50654988 A 19880805; US 49067790 A 19900308