

Title (en)  
THERMAL HEAD PRINTER

Publication  
**EP 0413413 A3 19910814 (EN)**

Application  
**EP 90306180 A 19900607**

Priority  
JP 21271689 A 19890818

Abstract (en)  
[origin: EP0413413A2] A thermal print head (20) includes a plurality, e.g., three delay shift registers (31,32,33) operating by a clock-controlled shift scan to receive dot print signals (D) from a dot print signal generating circuit (10). The delay registers (31,32,33) have a number of addresses corresponding to the number of dot print elements (21) in the printer head (20). The dot print signals (D) from the delay shift registers (31,32,33) are applied to an OR gate (34) connected to shift registers (24) for the dot print elements (21). With this construction, the shift scan cycle it is set so that  $t \leq T/(n + 1)$ , where T is the least print cycle under normal printing conditions and n is the number of delay shift registers (31,32,33). The real time signals are obtained by sampling an analogue wave as a digitized value and counting the number of clock pulse needed to equal this digitized value, at which time a signal is given.

IPC 1-7  
**B41J 2/355**

IPC 8 full level  
**B41J 2/355** (2006.01); **B41J 2/36** (2006.01); **G01D 15/10** (2006.01); **H04N 1/23** (2006.01)

CPC (source: EP)  
**B41J 2/355** (2013.01)

Citation (search report)  
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• [A] US 4630068 A 19861216 - IMS J ROBERT [US]  
• [A] PATENT ABSTRACTS OF JAPAN vol. 11, no. 172 (M-595)(2619), 3 June 1987; & JP - A - 62003970 (KYOCERA CORP.) 09.01.1987  
• [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 116 (M-684)(2963), 13 April 1988; & JP - A - 62244664 (MATSUSHITA ELECTRIC IND CO LTD) 26.10.1987  
• [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 360 (M-541)(2417), 3 December 1986; & JP - A - 61158476 (MATSUSHITA ELECTRIC IND CO LTD) 18.07.1986

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Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0413413 A2 19910220; EP 0413413 A3 19910814; EP 0413413 B1 19940921**; AT E111817 T1 19941015; DE 69012714 D1 19941027; DE 69012714 T2 19950202; JP 2753632 B2 19980520; JP H0376659 A 19910402

DOCDB simple family (application)  
**EP 90306180 A 19900607**; AT 90306180 T 19900607; DE 69012714 T 19900607; JP 21271689 A 19890818