

Title (en)
Thermal printer

Title (de)
Thermodrucker

Title (fr)
Imprimante thermique

Publication
EP 0841176 A1 19980513 (EN)

Application
EP 97308059 A 19971010

Priority
JP 27118096 A 19961014

Abstract (en)
Miniaturisation of a thermal head incorporated in a printer is attained without risking damage to electrical components by contact with paper being fed through the printer. A platen 2 is rotatably axially supported between left and right faces L and R of a frame 1. A thermal head 3 is also swingably supported between the left and right faces of the frame 1, and opens and closes with respect to the platen 2. The thermal head 3 comprises a ceramic substrate 11 and a support body 12 for fixing the ceramic substrate 11. A heater, a semiconductor device 13 for driving the heater, and sealing resin 14 for protecting the semiconductor device 13 are formed on the ceramic substrate 11 on the side facing the platen 2. In case a straight path is adopted, recording paper is fed between the platen 2 and the thermal head 3 from a bottom face D of the frame, and a sheet 16 for preventing recording paper from contacting with the exposed sealing resin 14 is attached along the straight path. When a curled path is adopted, recording paper is fed between the platen 2 and the thermal head 3 from a rear face B of the frame, and another sheet 15 for preventing recording paper from contacting with the exposed sealing resin 14 is attached at a different place along the curled path. <IMAGE>

IPC 1-7
B41J 2/32; **B41J 13/10**

IPC 8 full level
B41J 2/32 (2006.01); **B41J 2/335** (2006.01); **B41J 13/00** (2006.01); **B41J 13/10** (2006.01)

CPC (source: EP)
B41J 13/00 (2013.01)

Citation (search report)
• [A] FR 2706359 A1 19941223 - SEIKO INSTR INC [JP]
• [A] DE 4438600 A1 19950524 - ASAHI OPTICAL CO LTD [JP]
• [A] EP 0437724 A1 19910724 - TONAMI ELECTRIC ENGINEERING CO [JP]
• [A] DE 2331194 A1 19740117 - CANON KK

Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
EP 0841176 A1 19980513; **EP 0841176 B1 20021211**; CA 2216267 A1 19980414; CN 1082898 C 20020417; CN 1180617 A 19980506; DE 69717769 D1 20030123; DE 69717769 T2 20030528; JP 2926478 B2 19990728; JP H10114116 A 19980506; KR 19980032739 A 19980725; SG 73472 A1 20000620; TW 387343 U 20000411

DOCDB simple family (application)
EP 97308059 A 19971010; CA 2216267 A 19971010; CN 97122775 A 19971013; DE 69717769 T 19971010; JP 27118096 A 19961014; KR 19970052108 A 19971010; SG 1997003670 A 19971006; TW 88213080 U 19971006