

Title (en)

Thermal head for printers

Title (de)

Thermischer Kopf für Drucker

Title (fr)

Tête thermique pour imprimantes

Publication

EP 0649748 B1 19990414 (EN)

Application

EP 94116818 A 19941025

Priority

- JP 26681593 A 19931026
- JP 5698494 A 19940328
- JP 14500294 A 19940627
- JP 14500694 A 19940627
- JP 14500794 A 19940627

Abstract (en)

[origin: EP0649748A2] The invention relates to a thermal head for ink-jet printers or thermal printers, which has an array of heat generating zones on a substrate having an insulating surface. Each heat generating zone is defined between two opposite electrodes which are formed by patterning a conductor film deposited on the insulating surface of the substrate. That is, in the heat generating zones the conductor film is absent. A patterned resistor film, which is an anodically oxidizable film such as tantalum film, covers the electrodes and the insulating surface in the heat generating zones, and a surface layer of the resistor film is anodically oxidized to provide a protective layer. In this thermal head the anodic oxidation of the resistor film can be performed under optimal conditions since the conductor film is entirely covered with the resistor film. Therefore the thermal head becomes very good in durability, and it is possible to greatly reduce the thickness of the unoxidized part of the resistor film to thereby enhance responsiveness and reduce power consumption. <IMAGE>

IPC 1-7

B41J 2/335; B41J 2/16

IPC 8 full level

B41J 2/335 (2006.01)

CPC (source: EP)

B41J 2/33515 (2013.01); **B41J 2/3353** (2013.01); **B41J 2/33545** (2013.01); **B41J 2/3355** (2013.01); **B41J 2/3357** (2013.01)

Cited by

FR2769260A1; GB2329872B; US7559630B2; US6345886B1; US6428150B1; US6460975B2; US6485129B2; US6517194B2

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

EP 0649748 A2 19950426; EP 0649748 A3 19970122; EP 0649748 B1 19990414; DE 69417835 D1 19990520; DE 69417835 T2 19990819

DOCDB simple family (application)

EP 94116818 A 19941025; DE 69417835 T 19941025