

Title (en)

A thermal head.

Title (de)

Thermischer Druckkopf.

Title (fr)

Tête d'imprimeur thermique.

Publication

EP 0092005 A1 19831026 (EN)

Application

EP 82302017 A 19820420

Priority

EP 82302017 A 19820420

Abstract (en)

A thermal head for high speed printing at high temperature comprises a dielectric substrate (10, 15), a first thin SiO₂ layer (20) formed on the substrate, a heater layer (30) on the first SiO₂ layer, conductive layers (40) for coupling the heater layers to an external circuit, a second thin SiO₂ layer (50) on the heater layer, and a protection layer (60) over the second SiO₂ layer. The width of the heater layer is less than 30 μm. The preferable thickness of the SiO₂ layers is less than 2 μm. Preferably, the heater layer is made of tantalum nitride. The presence of the first SiO₂ layer (20) and the narrow width of the heater layer (30) allow the heater to operate at a higher input power, and hence at a higher temperature.

IPC 1-7

B41J 3/20

IPC 8 full level

B41J 2/335 (2006.01); **B41J 2/345** (2006.01)

CPC (source: EP)

B41J 2/3351 (2013.01); **B41J 2/33515** (2013.01); **B41J 2/33525** (2013.01); **B41J 2/3353** (2013.01); **B41J 2/33535** (2013.01);
B41J 2/33545 (2013.01); **B41J 2/3355** (2013.01); **B41J 2/3357** (2013.01); **B41J 2/345** (2013.01)

Citation (search report)

- [AD] GB 1524347 A 19780913 - OKI ELECTRIC IND CO LTD
- [A] GB 2022019 A 19791212 - IBM

Cited by

EP0157185A3; EP0159642A3; GB2139565A; EP0310378A1; EP0202877A3; JP2019031038A; JP2019166824A

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0092005 A1 19831026; EP 0092005 B1 19850327; DE 3262754 D1 19850502

DOCDB simple family (application)

EP 82302017 A 19820420; DE 3262754 T 19820420