

Title (en)

Thermal printhead

Title (de)

Thermodruckkopf

Title (fr)

Tête d' imprimante thermique

Publication

EP 1104700 A1 20010606 (EN)

Application

EP 99204069 A 19991201

Priority

EP 99204069 A 19991201

Abstract (en)

A thermal head comprising a heatsink (31), heating elements (39) made of a heating material (36), electrodes (48, 49), and optionally additional layers, wherein the heating elements are optically transparent by having, within wavelengths ranging from 350 to 1200 nm, a transparency higher than 70 %. The heating material is selected from a group consisting of In₂O₃ optionally doped; Sn_xO₂ optionally doped; ZnO optionally doped; Cd₂SnO₄, or CdSnO₃; Bi₂O₃ ; MoO₃ ; TiO₂; WO₂; RhO₂; ReO₂; NaxWO₃; Zn₂SnO₄, and V₂O₅. Alternatively, the heating material is a conductive polymer. Also disclosed is the use of a such a thermal head in e.g. thermography and in photothermography. <IMAGE>

IPC 1-7

B41J 2/335

IPC 8 full level

B41J 2/335 (2006.01)

CPC (source: EP)

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

Citation (applicant)

- EP 0724964 A1 19960807 - AGFA GEVAERT NV [BE]
- EP 0627319 A1 19941207 - AGFA GEVAERT NV [BE]
- US 5635974 A 19970603 - YASUTOMI TSUYOSHI [JP], et al
- EP 0654355 A1 19950524 - AGFA GEVAERT NV [BE]
- DE 19636235 A1 19980319 - AGFA GEVAERT AG [DE]
- WO 9810333 A1 19980312 - AGFA GEVAERT AG [DE], et al

Citation (search report)

- [X] JP S60208787 A 19851021 - OKI ELECTRIC IND CO LTD & US 4763136 A 19880809 - ISOBE MINORU [JP]
- [A] US 4841120 A 19890620 - YAGINO MASAMORI [JP], et al
- [A] US 4539571 A 19850903 - SUZUKI KUNIAKI [JP]
- [A] US 4947188 A 19900807 - NOZAKI MINEO [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 010, no. 181 (M - 492) 25 June 1986 (1986-06-25)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 04 30 April 1996 (1996-04-30)

Cited by

CN100441419C; CN107221835A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1104700 A1 20010606; EP 1104700 B1 20051012; DE 69927693 D1 20051117; DE 69927693 T2 20060713; JP 2001162848 A 20010619

DOCDB simple family (application)

EP 99204069 A 19991201; DE 69927693 T 19991201; JP 2000360936 A 20001128