

Title (en)

An ink-jet head, a substrate for an ink-jet head, and an ink-jet apparatus

Title (de)

Tintenstrahlkopf, Substrat für einen Tintenstrahlkopf und Tintenstrahlgerät

Title (fr)

Tête à jet d'encre, couche de base pour tête à jet d'encre et appareil à jet d'encre

Publication

**EP 0729834 A3 19970521 (EN)**

Application

**EP 96103179 A 19960301**

Priority

- JP 7086695 A 19950303
- JP 7239195 A 19950306

Abstract (en)

[origin: EP0729834A2] A substrate for an ink-jet head provides a protective layer which can assuredly cover electrothermal transducers even if the thickness of the layer is small. A thin intermediate layer is provided between a heating resistive layer and electrodes. The thin intermediate layer is an insulator on heating portions of the heating resistive layer. According to such a configuration, the life of the heating resistive layer becomes long, and occurrence of burnt deposits is suppressed. Since steps at portions where the thin intermediate layer is provided are small, an excellent film quality can be obtained even if the thickness of the protective layer is relatively small, and an excellent protective property is obtained. <IMAGE>

IPC 1-7

**B41J 2/05**; **B41J 2/14**; **B41J 2/16**

IPC 8 full level

**B41J 2/14** (2006.01); **B41J 2/16** (2006.01)

CPC (source: EP)

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Citation (search report)

- [XY] EP 0396315 A1 19901107 - XEROX CORP [US]
- [X] US 4951063 A 19900821 - HAWKINS WILLIAM G [US], et al
- [XY] EP 0596705 A2 19940511 - XEROX CORP [US]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 004, no. 125 (M - 030) 3 September 1980 (1980-09-03)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 004, no. 125 (M - 030) 3 September 1980 (1980-09-03)
- [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 055 (M - 669) 19 February 1988 (1988-02-19)

Cited by

US7836598B2; EP1968797A4; EP0951999A3; US6155664A; KR100866270B1; US6293654B1; US7838155B2; US6331049B1; WO02083424A1; US7025894B2; US7517060B2; US7182440B2; KR100440109B1

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