Title (en)

INK JET HEAD, METHOD FOR PRODUCING THE SAME AND METHOD FOR DRIVING THE SAME

Title (de)

TINTENSTRAHLDRUCKKOPF, VERFAHREN ZUR HERSTELLUNG UND VERFAHREN ZUM STEUERN DESSELBEN

Title (fr)

TETE A JET D'ENCRE, SON PROCEDE DE PRODUCTION ET PROCEDE DE COMMANDE ASSOCIE

Publication

EP 0723866 A4 19970326 (EN)

Application

EP 94929664 A 19941014

Priority

- JP 9401730 W 19941014
- JP 28037193 A 19931014
- JP 11131294 A 19940525

Abstract (en)

[origin: EP0897803A2] An ink-jet head is provided, comprising a base plate (11), a plurality of partitions (10) formed by laminating a plurality of plate-shaped piezoelectric material layers (1a - 1c) polarized in a direction of thickness with conductive material layers (2a - 2d) interposed among them, a cover (14), and a sealing member (22), wherein said plural partitions (10) are arranged with given gaps (20, 21, 29) interposed between them on said base plate (11) said gaps (20, 21, 29) being closed by said cover (14) at upper portions thereof and by said sealing member (22) at side portions thereof to form pressurizing chambers (15), and a nozzle hole (23) is formed at a portion of each of said pressurizing chambers (15), and said partitions (10) are laminated piezoelectric actuators each of which has a piezoelectric strain coefficient d₃₃ and is deformed in the direction of thickness when voltage is applied thereto.

IPC 1-7

B41J 2/045

IPC 8 full level

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CPC (source: EP)

B41J 2/14274 (2013.01); **B41J 2/1612** (2013.01); **B41J 2/1623** (2013.01); **B41J 2/1632** (2013.01); **B41J 2/1634** (2013.01); **B41J 2/1642** (2013.01); B41J 2002/14387 (2013.01)

Citation (search report)

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- [A] EP 0402171 A2 19901212 - SHARP KK [JP]
- [A] EP 0548984 A1 19930630 - SEIKO EPSON CORP [JP]
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- [A] PATENT ABSTRACTS OF JAPAN vol. 004, no. 102 (M - 022) 22 July 1980 (1980-07-22)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 015, no. 235 (M - 1125) 17 June 1991 (1991-06-17) & US 5260723 A 19931109 - NARUSE OSAMU [JP], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 306 (M - 1276) 6 July 1992 (1992-07-06)
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- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 569 (M - 1343) 9 December 1992 (1992-12-09)
- [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 497 (M - 1192) 16 December 1991 (1991-12-16)
- [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 090 (M - 1218) 5 March 1992 (1992-03-05)
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 235 (M - 1257) 29 May 1992 (1992-05-29)
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