

Title (en)

Ink-jet recording head, method for fabricating same and method for ejecting ink droplets

Title (de)

Tintenstrahlaufzeichnungskopf, Verfahren zur Herstellung und Verfahren zum Ausstossen von Tintentröpfchen

Title (fr)

Tête d'enregistrement à jet d'encre, procédé pour sa fabrication et procédé d'éjection de gouttelettes d'encre

Publication

EP 1070589 A2 20010124 (EN)

Application

EP 00114942 A 20000718

Priority

- JP 20521499 A 19990719
- JP 26909499 A 19990922

Abstract (en)

An ink-jet recording head including a plurality of pressure chambers (12a, 12b, 12c) connected to one another, a plurality of first piezoelectric elements (18a, 18b, 18c) and a plurality of second piezoelectric elements (19a, 19b, 19c). Each pair of the first piezoelectric element and the second piezoelectric element is independent of the other pairs. Accordingly, since the transmission of the stress generated during the printing in the piezoelectric pair to the nearby pair is completely or almost completely prevented because the adjacent pairs are completely separated or connected with an elastic material absorbing the stress. <IMAGE>

IPC 1-7

B41J 2/14

IPC 8 full level

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

CPC (source: EP)

B41J 2/04525 (2013.01); **B41J 2/04541** (2013.01); **B41J 2/04581** (2013.01); **B41J 2/04588** (2013.01); **B41J 2/14274** (2013.01);
B41J 2/1612 (2013.01); **B41J 2/1623** (2013.01); **B41J 2/1632** (2013.01); **B41J 2/1643** (2013.01); **B41J 2/1646** (2013.01)

Citation (applicant)

- JP H1110867 A 19990119 - RICOH KK
- JP H06174836 A 19940624 - MITSUBISHI PRECISION CO LTD
- JP H09174837 A 19970708 - NEC CORP
- JP H0757545 A 19950303 - DAINIPPON PRINTING CO LTD

Cited by

EP1859943A1; EP1834782A3; CN105313472A; EP1518684A1; US6601948B1; US7871153B2; US7677708B2; US6505917B1; US6769158B2;
US7665831B2; US10889110B2; US11498327B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1070589 A2 20010124; EP 1070589 A3 20010718; CN 1280917 A 20010124

DOCDB simple family (application)

EP 00114942 A 20000718; CN 00121089 A 20000719