

Title (en)
Ink-jet head and ink-jet printer having ink-jet head

Title (de)
Tintenstrahlkopf und damit versehene Druckvorrichtung

Title (fr)
Tête d'impression jet d'encre et imprimante l'utilisant

Publication
EP 1336488 A2 20030820 (EN)

Application
EP 03003697 A 20030218

Priority
• JP 2002045110 A 20020221
• JP 2002040524 A 20020218

Abstract (en)
An ink-jet head includes a passage unit (4) comprising a plurality of pressure chambers (10) each connected with a nozzle (8) and arranged in a matrix in a plane to form a plurality of pressure chamber rows in a first direction in the plane, and a plurality of common ink passages (5a) each extending along the first direction and communicating with the pressure chambers. The pressure chamber rows include first pressure chamber rows (11a) each constituted by pressure chambers each connected with a nozzle deviated on one side thereof with respect to a second direction crossing the first direction, and second pressure chamber rows (11b) each constituted by pressure chambers each connected with a nozzle deviated on the other side thereof with respect to the second direction, when viewing from a third direction perpendicular to the plane. Each of the common ink passages including at least a boundary region between one of the first pressure chamber rows and one of the second pressure chamber rows neighboring each other so that nozzles connected with the pressure chambers in the each pressure chamber rows face outward each other when viewing from the third direction, and each of the common ink passages not overlapping any of the nozzles. <IMAGE>

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IPC 8 full level
B41J 2/14 (2006.01); **B41J 2/145** (2006.01)

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Citation (applicant)
US 5757400 A 19980526 - HOISINGTON PAUL A [US]

Cited by
EP1512533A1; US9144967B2; US7163280B2

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