

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 B1 20090930 (EN)**

Application

**EP 03003697 A 20030218**

Priority

- JP 2002045110 A 20020221
- JP 2002040524 A 20020218

Abstract (en)

[origin: EP1336488A2] 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>

IPC 8 full level

**B41J 2/14** (2006.01); **B41J 2/145** (2006.01)

CPC (source: EP)

**B41J 2/14209** (2013.01); **B41J 2/145** (2013.01); **B41J 2002/14217** (2013.01); **B41J 2002/14225** (2013.01); **B41J 2002/14306** (2013.01); **B41J 2002/14459** (2013.01); **B41J 2002/14491** (2013.01); **B41J 2202/20** (2013.01)

Citation (examination)

- EP 1316425 A2 20030604 - BROTHER IND LTD [JP]
- EP 1316426 A1 20030604 - BROTHER IND LTD [JP]
- EP 1316427 A1 20030604 - BROTHER IND LTD [JP]
- EP 1518686 A1 20050330 - BROTHER IND LTD [JP]

Cited by

EP1512533A1; US7163280B2; US9144967B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1336488 A2 20030820**; **EP 1336488 A3 20031105**; **EP 1336488 B1 20090930**; CN 1273298 C 20060906; CN 1442299 A 20030917; CN 2677153 Y 20050209; DE 60329430 D1 20091112; EP 2213456 A2 20100804; EP 2213456 A3 20100901; EP 2213456 B1 20131023

DOCDB simple family (application)

**EP 03003697 A 20030218**; CN 03106113 A 20030218; CN 03203410 U 20030218; DE 60329430 T 20030218; EP 09167614 A 20030218