

Title (en)

Ink jet print head, ink jet printer and method for maintaining ink jet print head

Title (de)

Tintenstrahldruckkopf, Tintenstrahldruckvorrichtung und Verfahren zur Wartung eines Tintenstrahldruckkopfes

Title (fr)

Tête d'impression à jet d'encre, imprimante à jet d'encre et procédé de maintenance d'une tête d'impression à jet d'encre

Publication

EP 0774356 A2 19970521 (EN)

Application

EP 96118185 A 19961113

Priority

JP 29546795 A 19951114

Abstract (en)

In an ink supply member including an ink supply passage for supplying ink to a common reservoir , a plurality of gas hold portions are formed to be respectively in communication with only the common reservoir and are capable of holding gas therein. Pressure caused by air bubbles generated in heat elements not only causes ink to be jetted out from nozzles but also is transmitted to the common reservoir, so that the internal pressure of the common reservoir is caused to vary. Also, when ink is refilled, the internal pressure of the common reservoir is caused to vary reversely. These pressure variations are absorbed by the expansion/compression of gas held within the gas hold portions, thereby being able to restrict the pressure variations within the common reservoir as well as prevent generation of undesirable phenomena such as unprinted areas, density variations, and the like. <IMAGE>

IPC 1-7

B41J 2/175

IPC 8 full level

B41J 2/18 (2006.01); **B41J 2/05** (2006.01); **B41J 2/14** (2006.01); **B41J 2/175** (2006.01); **B41J 2/185** (2006.01)

CPC (source: EP)

B41J 2/14145 (2013.01); **B41J 2/1707** (2013.01); **B41J 2002/14379** (2013.01)

Citation (applicant)

- JP S63128947 A 19880601 - CANON KK
- JP H06344558 A 19941220 - CANON KK
- JP H01308644 A 19891213 - CANON KK

Cited by

EP1361062A3; EP1362703A3; EP1078760A3; EP1658978A1; CN101927607A; US7862142B2; US6979078B2; US7401905B2; US6557989B1; US6752492B2; US6808252B2; US10071553B2; US10744767B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0774356 A2 19970521; EP 0774356 A3 19971001; EP 0774356 B1 20020502; DE 69620979 D1 20020606; DE 69620979 T2 20021010; JP 3102324 B2 20001023; JP H09136415 A 19970527

DOCDB simple family (application)

EP 96118185 A 19961113; DE 69620979 T 19961113; JP 29546795 A 19951114