

Title (en)

Electrostatic ink jet printer and head

Title (de)

Elektrostatistischer Tintenstrahldrucker und Tintenstrahlkopf

Title (fr)

Imprimante et tête électrostatique à jet d'encre

Publication

EP 0836943 A2 19980422 (EN)

Application

EP 97118084 A 19971017

Priority

JP 27451396 A 19961017

Abstract (en)

An ink jet printing head has a protrusion member extending from an electrophoretic electrode in an ink chamber of a base plate to an orifice, and the top end of convex portion thereof protrudes passing through the orifice to the opposite electrode. Accordingly, an ink droplet of an ink always flies from the top end of the protrusion member in the orifice and the flying direction is stabilized. Further, since the top end of the convex portion of the protrusion member projects passing through the orifice, it can be prevented that the ink meniscus retracts into the orifice to form a concave portion after the flying of the ink droplet. Further, since the protrusion member is secured to the electrophoretic electrode opposed to the orifice, the toner particles in the chamber can be moved along the protrusion member to the orifice when a biased voltage is applied to the electrophoretic electrode, and the degree of concentration of the toner particles to the orifice can be increased. <IMAGE>

IPC 1-7

B41J 2/06

IPC 8 full level

B41J 2/06 (2006.01); **B41J 2/16** (2006.01)

CPC (source: EP)

B41J 2/06 (2013.01); **B41J 2002/061** (2013.01)

Cited by

EP0933214A3; CN100391739C; EP1386739A3; US6908177B2; US9291927B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0836943 A2 19980422; **EP 0836943 A3 19990526**; JP 2826535 B2 19981118; JP H10119289 A 19980512

DOCDB simple family (application)

EP 97118084 A 19971017; JP 27451396 A 19961017