

Title (en)

Electrostatic ink jet recording head

Title (de)

Elektrostatistischer Tintenstrahlaufzeichnungskopf

Title (fr)

Tête d'enregistrement à jet d'encre électrostatique

Publication

EP 0822075 B1 20011107 (EN)

Application

EP 97113252 A 19970731

Priority

- JP 20176096 A 19960731
- JP 20236496 A 19960731

Abstract (en)

[origin: EP0822075A2] An electrostatic ink jet recording head ejects toner particles in liquid ink at a high rate operation and with a stabilized ink ejection. The head body of the ink jet recording head comprises a base plate, head substrate having a stripe protrusion and channel regions alternately arranged with a constant pitch for serving as meniscus elements, and an ejecting electrode disposed on the top surface of the protrusion. A stable ink meniscus can be formed in the channel region due to the capillary function of the channel region. The channel region can be formed by mechanical dicing or laser machining of the head substrate or a photolithography of a photosensitive layer formed on the head substrate. <IMAGE>

IPC 1-7

B41J 2/06

IPC 8 full level

B41J 2/06 (2006.01)

CPC (source: EP)

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

Cited by

US6905188B1; US6919169B2; EP1095772A1; AU762103B2; KR100753197B1; WO0130576A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0822075 A2 19980204; EP 0822075 A3 19981230; EP 0822075 B1 20011107; DE 69707988 D1 20011213; DE 69707988 T2 20020404

DOCDB simple family (application)

EP 97113252 A 19970731; DE 69707988 T 19970731