

Title (en)

Length-mode drop-on-demand ink jet printhead for ejecting orthogonally directed droplets at improved operating speeds

Title (de)

Auf Abruf arbeitender Tintenstrahldruckkopf mit langgestrecktem Kanal zum Ausstossen von orthogonal gerichteten Tröpfchen mit verbesserter Arbeitsgeschwindigkeit

Title (fr)

Tête d'impression à jet d'encre du type gouttelettes à la demande à canal allongé pour éjection de gouttelettes en direction orthogonale à des vitesses de fonctionnement améliorées

Publication

EP 0716926 B1 20020313 (EN)

Application

EP 95309100 A 19951214

Priority

US 35772594 A 19941216

Abstract (en)

[origin: EP0716926A2] A length-mode ink jet printhead which includes an active lower body portion, a series of active intermediate body portions and an inactive upper body portion which collectively define a series of generally parallel channels which extend between front and rear side surfaces of the printhead. Each channel is bounded by first and second sidewalls, each comprised of a lower body projection and an intermediate body portion conductively mounted thereto. Formed in the upper body portion are a series of ink ejection orifices, each of which extends from the top side surface to a corresponding one of the series of channels and is located midway between the front and rear side surfaces of the printhead. Mounted on the front and rear side surfaces of the printhead are acoustic pressure wave reflection interfaces for respectively reflecting forwardly and rearwardly propagating pressure waves generated in the series of channels. An orthogonally directed droplet of ink is ejected from an ink ejection orifice by imparting an acoustic pressure wave to a selected channel in communication with the ink ejection orifice. <IMAGE>

IPC 1-7

B41J 2/16; **B41J 2/045**

IPC 8 full level

B41J 2/045 (2006.01); **B41J 2/055** (2006.01); **B41J 2/14** (2006.01); **B41J 2/16** (2006.01)

CPC (source: EP)

B41J 2/14209 (2013.01); **B41J 2202/18** (2013.01)

Cited by

EP1029678A3; JP2016034720A; US6568797B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0716926 A2 19960619; **EP 0716926 A3 19970416**; **EP 0716926 B1 20020313**; DE 69525821 D1 20020418; DE 69525821 T2 20020919; JP H08230187 A 19960910

DOCDB simple family (application)

EP 95309100 A 19951214; DE 69525821 T 19951214; JP 34829995 A 19951218