

Title (en)
Drop-on demand ink-jet head apparatus and method

Title (de)
Auf Abruf arbeitender Tintenstrahlkopf und Verfahren

Title (fr)
Tête à jet d'encre à la demande et méthode

Publication
EP 0648606 B1 19980701 (EN)

Application
EP 94307663 A 19941019

Priority
US 13934993 A 19931019

Abstract (en)
[origin: EP0648606A2] An ink-jet apparatus (10) and method provides high-resolution, high-speed printing by providing a transducer drive waveform (160) having a spectral energy distribution (170) that concentrates energy (172) around a frequency associated with a dominant (Helmholtz) ink drop ejection mode and that suppresses energy (174) at resonant frequencies associated with ink inlet (18) and ink outlet structures (24, 26, 28, 14) of the ink-jet head. Spectral energy distribution principles used to shape the transducer drive waveform can be used to enhance the jetting performance of many conventional ink-jet heads. <IMAGE>

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IPC 8 full level
B41J 2/175 (2006.01); **B41J 2/015** (2006.01); **B41J 2/045** (2006.01); **B41J 2/055** (2006.01)

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US 5170117 A 19921208 - CHIO CHUY-NAN [TW]

Cited by
EP0925922A1; EP0721840A3; EP0775579A3; EP0738602A3; CN107443917A; EP0947325A1; US5933168A; EP0787589A3; EP1832425A3; EP1034928A3; US6241345B1; WO9910178A1; US7600861B2; US6629741B1; US6217159B1; US6382754B1; US10232632B2; US10336088B2

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