

Title (en)

Drop generator for long array ink jet printer

Title (de)

Tropfenerzeuger für Tintenstrahldrucker mit einer langen Düsenreihe

Title (fr)

Générateur de gouttes pour imprimante à jet d'encre à longue rangée d'orifices

Publication

**EP 1013422 A3 20010404 (EN)**

Application

**EP 99309513 A 19991129**

Priority

US 21105998 A 19981214

Abstract (en)

[origin: EP1013422A2] A drop generator for use in an ink jet printer is capable of stimulating long ink jet arrays at high operating frequencies. The drop generator comprises a substantially uniform cross section for a central portion and two end sections with different cross sections. The end sections have features to adjust a resonant frequency of the end sections to match that of the central portion. In particular, these features comprise cuts on a top of the drop generator. The drop generator utilizes multi-lobed radial bending modes for vibration of an array of orifices, and the vibrational modes are driven by at least two rows of transducers which extend substantially the length of the drop generator. The transducers are placed consistent with a lobe structure of an operational radial bending mode. <IMAGE>

IPC 1-7

**B41J 2/025**

IPC 8 full level

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CPC (source: EP)

**B41J 2/025** (2013.01); **B41J 2/03** (2013.01); **B41J 2/04** (2013.01)

Citation (search report)

- [A] US 4587528 A 19860506 - BEAUDET WILLIAM R [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 011, no. 114 (M - 579) 10 April 1987 (1987-04-10)

Cited by

US7584539B2; US8797373B2; US9682556B2

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