

Title (en)

Fluid jet print head.

Title (de)

Flüssigkeitsstrahldruckkopf.

Title (fr)

Tête d'impression à jet fluide.

Publication

EP 0126649 A2 19841128 (EN)

Application

EP 84303437 A 19840521

Priority

- US 49615983 A 19830519
- US 49632983 A 19830519

Abstract (en)

A fluid jet print head for producing a plurality of jet drop streams of fluid includes a manifold (10) defining an elongated cavity (14) and an orifice plate (20) defining a plurality of orifices (22), arranged in at least one row, which communicate with the cavity (14). A transducer arrangement, including a piezoelectric means (27), is mounted in the cavity and is spaced from the orifice plate so as to define a fluid reservoir therebetween. The transducer arrangement further includes acoustic isolation material (28) which surrounds the piezoelectric means and supports the piezoelectric means in the cavity. The transducer means, when electrically excited, produces pressure waves of substantially uniform wave front which travel through the fluid in the reservoir toward the orifice plate and cause break up into jet drop streams of fluid flowing through the orifices (22). The piezoelectric means may include an elongated transducer (27) which has a plurality of slots extending alternately from opposite sides of the transducer partially therethrough. Each of the slots is substantially perpendicular to the row of orifices (22). The slots prevent wave propagation along the transducer.

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B41J 3/04

IPC 8 full level

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CPC (source: EP)

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Cited by

US6286942B1; EP0624469A1; US5764257A; EP0563678A3; EP0550030A3; US5517225A; US5630274A; EP0795404A3; EP0709193A1; WO9612622A1

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