Title (en)

APPARATUS FOR MONITORING AND ADJUSTING LIQUID JETS IN INK JET PRINTERS.

Title (de)

VORRICHTUNG ZUR REGELUNG DER GESPRITZTEN MENGE IN TINTENSTRAHLDRUCKVORRICHTUNG.

Title (fr)

APPAREIL DE CONTROLE ET DE REGLAGE DE JETS DE LIQUIDE DANS DES IMPRIMANTES A JET D'ENCRE.

Publication

EP 0204773 A4 19890426 (EN)

Application

EP 86900018 A 19851205

Priority

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Abstract (en)

[origin: WO8603457A1] The production of uniform droplets (5) in ink jet printers is effected by introducing a periodic variscosity into the liquid stream (3) which leaves each jet body (2) of the printer. Effective printing with these droplets (5) requires the correct synchronism between breakoff of droplets from the liquid stream and the application of a charge to the droplets, via a charging electrode (4). To enable compensation to be made to ensure this synchronism remains correct, despite variations in the properties of the printing liquid, droplets from one printing jet (monitor jet) are monitored. Whenever the monitor jet observation shows that the synchronism has varied, a correction signal (ADV, RTD) is generated to cause the application of variscosity, or the application of charge, to be altered to compensate for the drift in synchronism. A preferred monitor jet construction includes a collector (6) for charged droplets, which receives droplets (5) from the monitor jet and periodically discharges collected liquid (7). A sense amplifier (11) is responsive to the net charge on the collector (6), and the signal from the sense amplifier (11) is used to generate the correction signal.

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CPC (source: EP)

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Citation (search report)

- [A] US 4016571 A 19770405 - YAMADA TAKAHIRO
- See references of WO 8603457A1

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