

Title (en)
METHOD AND APPARATUS FOR THE INK SUPPLY IN AN INK JET PRINTER

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Abstract (en)
[origin: US4612553A] A method and apparatus for monitoring and regulating the ink droplet velocity in the ink supply system of an ink jet printer is proposed which essentially comprises an ink jet propulsion member, a charging electrode, a charge detector, a deflection electrode and an ink droplet catch gutter. In the method, during a non-writing or non-recording dead-time interval (PHASING), a first relatively small number of ink droplets is relatively weakly charged and a second, nearly twice as great, number of droplets remains uncharged. A signal is detected which is nearly proportional to the droplet velocity of the first, weakly charged, ink droplets and is employed for monitoring and regulating the ink droplet velocity or for pressure-dependently regulating an ink jet velocity or both. The apparatus further comprises a control unit with an input conductor for a feedback signal from the charge detector and at least a first output conductor for signals from the control unit for regulating the electrostatic charge on the charging electrode.

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Citation (search report)

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