

Title (en)

High fidelity print modes.

Title (de)

Wiedergabetreue Aufzeichnungsbetriebsarten.

Title (fr)

Modes d'enregistrement haute fidélité.

Publication

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Application

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Priority

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Abstract (en)

In an ink jet printing system (10), improved gray scale and color resolution is achieved without modifying the printing grid resolution by reducing the ink droplet volume to a level below the unit droplet volume selected to cover a nominal printing grid location. Multiple passes of the print head are used to print an integer multiple number of the reduced-volume droplets, thereby forming effective dots with greater gray scale resolution. Multiple different droplet volumes are provided in a printing system so as to achieve enhanced resolution without a linear increase in the number of print passes. Another aspect of the invention is to reduce the ink concentration or dye load again to improve gray scale resolution without changing the printing grid. Multiple different dye load concentrations may be provided for further enhancements in resolution again without a linear increase in the number of print passes required. Finally, the invention includes printing with a reduced-volume droplet of a reduced-dye load ink, called a hifi droplet, for still further improvements in print quality, resulting in printed images approximating those produced by continuously variable color densities.

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IPC 8 full level

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