

Title (en)

Adaptive control of print head to medium distance in ink-jet printers.

Title (de)

Selbstanpassende Steuerung des Abstandes zwischen Druckkopf und Aufzeichnungsträger in Tintenstrahldruckern.

Title (fr)

Commande auto-ajustable de l'espace entre la tête d'impression et le support d'enregistrement dans les imprimantes par jet d'encre.

Publication

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Application

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Priority

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Abstract (en)

In order to optimize print quality, it is desirable to minimize the distance between a inkjet printhead (26) and the medium (90) that is being printed on. On the other hand, large dense areas of ink such as typically occurs in high quality color graphics will cause buckling of the print medium, and will be scraped and smeared by the printhead as the ink is applied unless a greater distance is maintained between the printhead and the nominal location of the print medium than is desirable for optimal quality of black on white text. Color inkjet printers (10) commonly employ a plurality of print cartridges (22), usually either two or four, mounted in the printer carriage (20) to produce a full spectrum of colors. It is therefore advantageous if at least the black print cartridge is closer to the print medium when printing text than is at least the color cartridge when printing color graphics. Accordingly, a pen carriage with adjustable printhead-to-medium spacing (44, 115, Fig 8) is disclosed. A controller (120) tells the printer to decrease the printhead-to-medium spacing when text printing is being performed and to increase the printhead-to-medium spacing when printing color graphics and/or large dense area, based on the current print mode, the type of ink being used and/or the density of the ink being deposited, to thereby enable at least the black printhead to be as close to the medium as possible during the printing of black on white text, so that the print quality of conventional text will be optimized. <IMAGE>

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