Title (en)

METHOD AND APPARATUS FOR INK TRANSFER PRINTING.

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Application

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Abstract (en)

[origin: EP0600712A2] An ink transfer printing devide in which ink transfer is controlled by a viscosity change in ink includes an ink reservoir (2) for retaining ink held under pressure. The ink reservoir (2) is associated with an ink transfer surface (4) which has a plurality of perforations (6). Under ambient conditions, the viscosity of the ink prevents flow of the ink through the perforations (6). The ink transfer printing device also includes a viscosity control unit (8, 20, 25, 26, 32, 38, 42, 46) for inducing a change in the viscosity of the ink near certain perforations thereby enabling a controlled amount of the ink near each of these certain perforations (6) to flow through these certain perforations to an outer surface of the ink transfer surface (4). Techniques for controlling the ink dot size using concentric regions (72, 74, 76, 78, 80, 82) about each of the perforations (6) are disclosed. The ink which has flowed onto the outer surface can then be transferred to an intermediate surface (54) or a printing media (10). A method for viscosity-driven ink transfer printing is also disclosed. The present invention enables a printer, a copier, or the like to provide low cost, high speed, high resolution printed images.

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Citation (search report)

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- [A] PATENT ABSTRACTS OF JAPAN vol. 11, no. 310 (M - 630)<2757> 9 October 1987 (1987-10-09)
- [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 78 (M - 675)<2925> 11 March 1988 (1988-03-11)
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