

Title (en)

Method and apparatus for maintaining a substantially constant ink pressure at a remotely fed ink printhead.

Title (de)

Verfahren und Gerät zur Aufrechterhaltung eines im wesentlichen konstanten Tintendruckes in einem getrennt geführten Tintendruckkopf.

Title (fr)

Procédé et appareil pour maintenir la pression d'encre substantiellement constante dans une tête d'impression à jet d'encre transportée à distance.

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Application

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Priority

US 84259386 A 19860320

Abstract (en)

Pressure surging and variations in ink supply in a remote source reservoir ink jet printing system are eliminated in a unique method and implementing apparatus employing a simple elastically suspended reservoir. The weight of the reservoir is kept negligibly small in relation to the weight of the ink. The elastic constant is selected so that the reservoir rises as the ink supply diminishes maintaining the surface of the ink at a relatively constant height with respect to the printhead, independantly of the depth of the ink in the reservoir. This maintains the hydrostatic pressure head (slightly negative in this application) relatively constant in relation to the printhead which is supplied by the reservoir. Any elastic system operating in tension, compression, bending, torsion and so on is contemplated.

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Cited by

US6158849A; US6341853B1; US5929882A; US6003984A; US5929883A; EP0745482A3; US6139135A; EP0606047A3; EP2025519A3; EP1593519A3; US6065829A; US6030073A; US5992985A; EP2463103A1; US5818484A; CN1082894C; EP0770488A3; US6012806A; US6099112A; US6106109A; US6076920A; US8025379B2; US8042925B2; US7628476B2; WO9710106A1

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