

Title (en)

Electrostatic ink jet printer having gate electrode and printing head thereof

Title (de)

Elektrostatistischer Tintenstrahldrucker mit Gateelektrode und Druckkopf dafür

Title (fr)

Imprimante électrostatique à jet d'encre comportant une électrode de grille et tête d'impression pour cette imprimante

Publication

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Application

**EP 97109878 A 19970617**

Priority

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- JP 20236396 A 19960731

Abstract (en)

[origin: EP0813965A2] An electrostatic ink jet printer of the present invention comprises a printing head including an ink chamber for storing an ink and a plurality of ink ejection electrodes arranged in a plurality of ink ejection portions to which the ink is ejected from the ink chamber, an opposite electrode arranged oppositely to the ink ejection portions and the gate electrode arranged between the ink ejection portions of the printing head and the opposite electrode and has an opening which is maintained at a potential for attracting toner particles in the ink ejection portions by Coulomb force generated by an electric field between the ink ejection electrodes and the opposite electrode and which allow ink jetted from the ink ejection portions by Coulomb force to pass through. <IMAGE>

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IPC 8 full level

**B41J 2/06** (2006.01)

CPC (source: EP)

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Citation (search report)

- [X] US 3060429 A 19621023
- [X] US 4504844 A 19850312 - EBI YUTAKA [JP], et al
- [X] US 4333086 A 19820601 - EBI YUTAKA
- [X] US 4477869 A 19841016 - RUDD III ROBERT E [US]
- [X] US 4571597 A 19860218 - KOCOT RAYMOND H [US]
- [X] US 4271416 A 19810602 - SHIMIZU TOSHIO, et al
- [E] WO 9727056 A1 19970731 - TONEJET CORP PTY LTD [AU], et al
- [A] EP 0703081 A2 19960327 - TOSHIBA KK [JP]

Cited by

EP0838335A3; DE102006001223A1; AU720468B2; US6224193B1; US8079671B2; US6409313B1; WO2007039762A1; WO9842515A1; US9221275B2

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