

Title (en)

Recording methods using electro-sensitive movable fluids, and recording apparatuses

Title (de)

Aufzeichnungsverfahren unter Benutzung von elektrosensitiven beweglichen Flüssigkeiten und Aufzeichnungsgeräte

Title (fr)

Procédés d'enregistrement utilisant des fluides électro-sensitifs mobiles et appareils d'enregistrement

Publication

**EP 0911164 A2 19990428 (EN)**

Application

**EP 98308685 A 19981023**

Priority

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Abstract (en)

In the method of using an ink-jet recording ink composition and the recording apparatus according to the invention, by the application of a voltage between one or plural ink jet electrodes (16) and one or plural source electrodes (17) which are provided in the vicinity of bottom ends of the ink jet electrodes and are electrically insulated from the ink jet electrodes, an ink-jet recording ink composition comprising an electrosensitive movable fluid and a colorant dissolved or dispersed in the fluid is moved in the direction of the source electrodes to the ink jet electrodes and is jetted from tips of the ink jet electrodes. An ink attraction electrode may be further arranged in the present invention, whereby the ink composition jetted from the ink jet electrodes can be attracted by the ink attraction electrode and thereby more precise printing can be carried out. A gate electrode may be furthermore arranged between the ink attraction electrode and the ink jet electrode, whereby printing can be carried out with controlling the jet line of the ink composition. <IMAGE>

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Citation (applicant)

- JP S55117663 A 19800910 - NIPPON ELECTRIC CO
- JP H02172746 A 19900704 - SEIKO EPSON CORP
- JP H03162494 A 19910712 - RICOH KK
- JP H04257485 A 19920911 - RICOH KK

Cited by

EP1439064A1; EP1645423A3; US2012251945A1; US8753795B2; US7559627B2; US7264337B2; US7377622B2; WO2021008699A1

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