

Title (en)

Field emission display fabrication method

Title (de)

Herstellungsverfahren einer Feldemissionsanzeigevorrichtung

Title (fr)

Procédé de fabrications d'un dispositif de visualisation à émission de champ

Publication

**EP 0757372 A1 19970205 (EN)**

Application

**EP 96302725 A 19960418**

Priority

US 547595 P 19950731

Abstract (en)

A process for fabricating vacuum microelectronic devices (especially field-emission displays) using a maskless self-aligned dense patterning step to define the emitter locations. This maskless patterning step is performed by applying charged particles to a pattern-transfer layer. Coulombic repulsion provides some self-regulating control of spacing, to approximate uniform density. Once the particles have thus been deposited, they can be used as the mask for an etching technique which will form the pointed cathode structures used for field emission displays. Thus, the present invention provides maskless patterning of one key step, and a corresponding reduction in cost. <IMAGE>

IPC 1-7

**H01J 9/02**

IPC 8 full level

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CPC (source: EP)

**H01J 9/025** (2013.01)

Citation (search report)

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- [A] WO 9119023 A2 19911212 - SAVIN CORP [US]
- [A] HUANG Z ET AL: "200-NM GATED FIELD EMITTERS", IEEE ELECTRON DEVICE LETTERS, vol. 14, no. 3, 1 March 1993 (1993-03-01), pages 121/122, XP000424038

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