

Title (en)

Field emission electron source and display device with such a source

Title (de)

Feldemissionselektronenquelle und Bildschirm mit solcher Feldemissionselektronenquelle

Title (fr)

Source d'électrons à micropointes et dispositif de visualisation avec telle source

Publication

EP 0856868 B1 20030702 (FR)

Application

EP 98201095 A 19950424

Priority

- EP 95400910 A 19950424
- FR 9404948 A 19940425
- FR 9413972 A 19941122

Abstract (en)

[origin: FR2719156A1] A micro-tip electron source has micro-tips, each of which consists of a first frusto-conical portion (20) of a first conductive material and a second conical tip portion deposited on the first portion and made of a second conductive material which can be thinned by selective etching w.r.t. the first material. Pref. the first material is Nb and the second material is Mo, Si, Cr, Fe or Ni. Also claimed is a cathodoluminescent display device including the above micro-tip electron source. Pref. the height of the first portion (20) is such that its top is at the same level as the lower plane (I) of the grids (10a) of the source. The micro-tips are pref. subjected to cleaning and the second tip portion is subjected to thinning by surface etching.

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H01J 1/30; **H01J 9/02**

IPC 8 full level

H01J 1/304 (2006.01); **H01J 9/02** (2006.01)

CPC (source: EP US)

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FR 2719156 A1 19951027; **FR 2719156 B1 19960524**; CA 2146528 A1 19951026; DE 69514576 D1 20000224; DE 69514576 T2 20000810; DE 69531220 D1 20030807; DE 69531220 T2 20040527; EP 0689222 A2 19951227; EP 0689222 A3 19960207; EP 0689222 B1 20000119; EP 0856868 A2 19980805; EP 0856868 A3 19980930; EP 0856868 B1 20030702; US 5635790 A 19970603

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