

Title (en)
Vacuum microelectronic field-emission device

Title (de)
Mikroelektronische Feldemissionsvorrichtung

Title (fr)
Dispositif d'émission de champ microélectronique

Publication
EP 0490536 B1 19980114 (EN)

Application
EP 91311052 A 19911128

Priority

- JP 6157491 A 19910326
- JP 31049191 A 19911126
- JP 33241190 A 19901128
- JP 33241290 A 19901128

Abstract (en)
[origin: EP0490536A1] A vacuum microelectronic field-emission device comprises: a substrate (1); an emitter portion (2) formed to have at least a wedge portion extending in parallel to the substrate, the emitter portion being supported by the substrate; a gate portion (4) formed a first given distance apart from the tip of the emitter portion, the gate portion being supported by the substrate, the gate portion being electrically insulated (3) from the emitter portion; and a collector portion (5) formed a second given distance apart from a tip of the emitter portion, the collector portion being supported by the substrate, the second given distance is equal to or larger than the first given distance, the collector portion being electrically insulated (3) from the emitter portion and the gate portion. <IMAGE>

IPC 1-7
H01J 21/10; **H01J 1/30**

IPC 8 full level
H01J 3/02 (2006.01); **H01J 21/10** (2006.01)

CPC (source: EP)
H01J 3/022 (2013.01); **H01J 21/105** (2013.01)

Cited by
DE19609234A1; CN113345781A; WO9733295A3

Designated contracting state (EPC)
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EP 0490536 A1 19920617; **EP 0490536 B1 19980114**; DE 69128702 D1 19980219; DE 69128702 T2 19980423

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