

Title (en)

Semiconductor device for generating an electron current.

Title (de)

Halbleiteranordnung zum Erzeugen eines Elektronenstromes.

Title (fr)

Dispositif semiconducteur pour engendrer un courant d'électrons.

Publication

EP 0404246 A1 19901227 (EN)

Application

EP 90201575 A 19900618

Priority

NL 8901590 A 19890623

Abstract (en)

The efficiency of semiconductor cathodes based on avalanche breakdown is enhanced by using " delta -doping" structures. The quantisation effects introduced thereby decrease the effective work function.

IPC 1-7

H01J 1/30; **H01L 29/66**

IPC 8 full level

H01J 1/30 (2006.01); **H01J 1/308** (2006.01); **H01J 29/04** (2006.01)

CPC (source: EP)

H01J 1/308 (2013.01)

Citation (search report)

- [A] EP 0241956 A1 19871021 - PHILIPS NV [NL]
- [A] EP 0257460 A2 19880302 - CANON KK [JP]

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

EP 0404246 A1 19901227; **EP 0404246 B1 19940601**; DE 69009303 D1 19940707; DE 69009303 T2 19941208; JP H0330230 A 19910208; NL 8901590 A 19910116

DOCDB simple family (application)

EP 90201575 A 19900618; DE 69009303 T 19900618; JP 16002990 A 19900620; NL 8901590 A 19890623