

Title (en)

Semiconductor electron emitting device whose active layer has a doping gradient.

Title (de)

Halbleiterelektronenemissionsvorrichtung deren aktive Schicht einen Dotierungsgradient aufweist.

Title (fr)

Dispositif semiconducteur, émetteur d'électrons, dont la couche active possède un gradient de dopage.

Publication

EP 0066926 A1 19821215 (FR)

Application

EP 82200648 A 19820527

Priority

FR 8110993 A 19810603

Abstract (en)

[origin: US4518980A] An electron emitting device including an active semiconductor layer having a surface from which electrons are emitted. The layer is doped with impurity atoms at a density which decreases with distance from the surface.

Abstract (fr)

L'invention concerne un dispositif semiconducteur capable d'émettre des électrons dans le vide par une de ses surfaces, remarquable en ce qu'il comporte une couche semiconductrice dite active (3), affleurant la surface émettrice dont le dopage croît lorsque la distance à ladite surface émettrice diminue. Application: photocathodes, dynodes.

IPC 1-7

H01J 1/34

IPC 8 full level

H01J 1/30 (2006.01); **H01J 1/308** (2006.01); **H01J 1/32** (2006.01); **H01J 1/34** (2006.01)

CPC (source: EP US)

H01J 1/32 (2013.01 - EP US); **H01J 1/34** (2013.01 - EP US); **H01J 2201/3423** (2013.01 - EP US)

Citation (search report)

- [A] US 3910803 A 19751007 - HOWORTH JONATHAN ROSS, et al
- [A] US 4099198 A 19780704 - HOWORTH JONATHAN ROSS, et al
- [A] FR 2291610 A1 19760611 - VARIAN ASSOCIATES [US]

Cited by

EP1024513A4; EP0413482A3; GB2170648A; US4677342A; GB2170648B

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0066926 A1 19821215; **EP 0066926 B1 19850213**; DE 3262303 D1 19850328; FR 2507386 A1 19821210; FR 2507386 B1 19840504; JP H0411973 B2 19920303; JP S57210539 A 19821224; US 4518980 A 19850521

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EP 82200648 A 19820527; DE 3262303 T 19820527; FR 8110993 A 19810603; JP 9227582 A 19820601; US 38063382 A 19820521