

Title (en)
SCHOTTKY-DIODE SEMICONDUCTOR DEVICE

Title (de)
HALBLEITER SCHOTTKYDIODE

Title (fr)
DISPOSITIF SEMI-CONDUCTEUR DU TYPE DIODE SCHOTTKY

Publication
EP 1273046 A2 20030108 (FR)

Application
EP 01923789 A 20010410

Priority

- FR 0101101 W 20010410
- FR 0004583 A 20000410

Abstract (en)
[origin: WO0178152A2] The invention concerns a Schottky-diode semiconductor device, comprising a substrate consisting of first (2) and second (3) semiconductor layers having the same type of conduction tiered up in said substrate, the second layer (3) being more highly doped than the first (2), said substrate having first (4) and second (5) main surfaces in contact with first (8) and second (6) electrodes, a Schottky barrier being formed between the first electrode (8) and said first layer. The invention is characterised in that the plurality of islands (9) having a type of conduction opposite to that of the first layer (2) are arranged in beds spaced apart in the thickness of said layer (2).

IPC 1-7
H01L 29/872

IPC 8 full level
H01L 29/06 (2006.01); **H01L 29/47** (2006.01); **H01L 29/861** (2006.01); **H01L 29/872** (2006.01)

CPC (source: EP KR US)
H01L 29/0623 (2013.01 - EP US); **H01L 29/0634** (2013.01 - EP US); **H01L 29/872** (2013.01 - EP KR US); **H01L 29/0619** (2013.01 - EP US)

Citation (search report)
See references of WO 0178152A2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0178152 A2 20011018; WO 0178152 A3 20020207; AU 5047701 A 20011023; EP 1273046 A2 20030108; FR 2807569 A1 20011012;
FR 2807569 B1 20040827; JP 2003530700 A 20031014; KR 20030011820 A 20030211; US 2004046224 A1 20040311

DOCDB simple family (application)
FR 0101101 W 20010410; AU 5047701 A 20010410; EP 01923789 A 20010410; FR 0004583 A 20000410; JP 2001574907 A 20010410;
KR 20027013518 A 20021009; US 23962903 A 20030320