Title (en)

SEMICONDUCTOR POWER COMPONENT WITH ENHANCED LATCH-UP RESISTANCE

Title (de)

HALBLEITER-LEISTUNGSBAUELEMENT MIT ERHÖHTER LATCH-UP-FESTIGKEIT

Title (fr)

COMPOSANT DE PUISSANCE A SEMI-CONDUCTEUR PRESENTANT UNE RESISTANCE ELEVEE AU VERROUILLAGE A L'ETAT PASSANT

Publication

EP 1019967 A1 20000719 (DE)

Application

EP 98958170 A 19980924

Priority

- DE 9802859 W 19980924
- DE 19743265 A 19970930

Abstract (en)

[origin: DE19743265A1] The invention relates to a semi-conductor power component with enhanced latch-up resistance as a result of suppression of a parasitic thyristor, comprising a first conduction type semi-conductor body (2) forming a base area, wherein a second conduction-type base area (3) is also provided. A charge carrier-recombination area (8) made of metal or polycrystalline silicon is embedded in the second base area (3), whereby a first conduction type highly doped area (9) is provided between the charge-carrier-recombination area (8) and the base area (2). Another insulation layer can be arranged below the second base area (3).

IPC 1-7

H01L 29/739; H01L 29/74

IPC 8 full level

H01L 27/06 (2006.01); **H01L 29/06** (2006.01); **H01L 29/739** (2006.01); **H01L 29/749** (2006.01); **H01L 29/78** (2006.01)

CPC (source: EP)

H01L 27/0617 (2013.01); **H01L 29/0649** (2013.01); **H01L 29/7395** (2013.01); **H01L 29/7396** (2013.01)

Citation (search report)

See references of WO 9917373A1

Designated contracting state (EPC)

DE FR GB IE IT

DOCDB simple family (publication)

DE 19743265 A1 19990408; EP 1019967 A1 20000719; JP 2001518717 A 20011016; WO 9917373 A1 19990408

DOCDB simple family (application)

DE 19743265 A 19970930; DE 9802859 W 19980924; EP 98958170 A 19980924; JP 2000514338 A 19980924