

Title (en)

HIGH-VOLTAGE EDGE TERMINATION FOR PLANAR STRUCTURES

Title (de)

HOCHVOLT-RANDABSCHLUSS FÜR PLANARSTRUKTUREN

Title (fr)

ELEMENT DE TERMINAISON MARGINAL HAUTE TENSION POUR STRUCTURES DE TYPE PLANAR

Publication

EP 0996981 A1 20000503 (DE)

Application

EP 99917767 A 19990303

Priority

- DE 9900568 W 19990303
- DE 19815851 A 19980408

Abstract (en)

[origin: WO9953550A1] The invention relates to a high-voltage edge termination for planar structures which comprise a semiconductor body (1 to 4) of a first conduction type. At least one of the magnetoresistors (7, 17) which is separated from the semiconductor body by an insulating layer (9) is provided on the same in the edge area thereof. Floating regions (5, 15, 25) of the second conduction type are provided in the edge area of the semiconductor body (1 to 4). The floating regions are separated from one another in such a way that the zones between the floating regions (5, 15, 25) are cleared when a voltage which is lower in comparison to the breakdown voltage of the semiconductor body (1 to 4) is applied to the floating regions (5, 15, 25).

IPC 1-7

H01L 29/06

IPC 8 full level

H01L 29/872 (2006.01); **H01L 29/06** (2006.01); **H01L 29/40** (2006.01); **H01L 29/47** (2006.01); **H01L 29/739** (2006.01); **H01L 29/78** (2006.01);
H01L 29/861 (2006.01)

CPC (source: EP US)

H01L 29/0623 (2013.01 - EP US); **H01L 29/0634** (2013.01 - EP US); **H01L 29/402** (2013.01 - EP US); **H01L 29/7811** (2013.01 - EP US);
H01L 29/7813 (2013.01 - EP US); **H01L 29/0615** (2013.01 - EP US); **H01L 29/0653** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IE IT

DOCDB simple family (publication)

WO 9953550 A1 19991021; EP 0996981 A1 20000503; JP 2002503401 A 20020129; US 6376890 B1 20020423

DOCDB simple family (application)

DE 9900568 W 19990303; EP 99917767 A 19990303; JP 55101699 A 19990303; US 45722599 A 19991208