

Title (en)

SEMICONDUCTOR COMPONENT AND METHOD OF MANUFACTURING ITS TERMINATION REGION

Title (de)

HALBLEITERBAUELEMENT UND VERFAHREN ZUR HERSTELLUNG DESSEN RANDABSCHLUSSES

Title (fr)

COMPOSANT SEMI-CONDUCTEUR ET PROCÉDÉ DE FABRICATION DE SA REGION DE TERMINAISON

Publication

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Application

EP 98963372 A 19981123

Priority

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- DE 19752020 A 19971124

Abstract (en)

[origin: WO9927582A2] The invention relates to a semiconductor component which is capable of blocking such as an (IGBT), a thyristor, a GTO or diodes, especially schottky diodes. An insulator profile section (10a, 10b, 10c, 10d, 11) provided in the border area of an anode metallic coating (1, 31) is fixed (directly in the edge area) on the substrate (9) of the component. The insulator profile has a curved area (KB) and a base area (SB), said curved area having a surface (OF) which begins flat and curves outward and upward in a steadily increasing manner. A metallic coating (MET1; 30a, 30b, 30c, 30d, 31b) is deposited on the surface (OF). Said coating directly follows the surface curvature and laterally extends the inner anode metallic coating. The upper end of the curved metallic coating (MET1; 30a, 30b...) is distanced and insulated from one of these surrounding outer metallic coatings (MET2; 3) by the surrounding base area (SB) of the insulator profile (10a,...,11) such that an extensively constant course of the line of force which evades extreme values results between both metallic coatings (1, 31, MET1; 3, MET2) when reverse voltage or blocking voltage is applied between the interspaced metallic coatings.

IPC 1-7

H01L 29/06

IPC 8 full level

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Citation (search report)

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