

Title (en)

PN DIODE BASED ON SILICON CARBIDE AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

PN-DIODE AUF DER BASIS VON SILICIUMCARBID UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

DIODE PN A BASE DE CARBURE DE SILICIUM ET SON PROCEDE DE FABRICATION

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Application

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Abstract (en)

[origin: WO2005088728A1] The invention relates to a pn diode based on SiC and exhibiting an avalanche behaviour, said diode containing an anode and a cathode and interlying n-conductive and p-conductive layers with pn junctions. According to the invention, a cell field (22) is created on said diode by means of at least one cavity-like feature (22ik). Preferably, a structure of tightly arranged cells is created. The invention also relates to a corresponding production method whereby an n-doped layer is epitaxially grown on the wafer, followed by a p-doped layer, and the cell field regions are deep-etched to a pre-determined depth.

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