

Title (en)

MOS-TRANSISTOR STRUCTURE WITH A TRENCH-GATE ELECTRODE AND A REDUCED SPECIFIC CLOSING RESISTOR AND METHODS FOR PRODUCING AN MOS TRANSISTOR STRUCTURE

Title (de)

MOS-TRANSISTORSTRUKTUR MIT EINER TRENCH-GATE-ELEKTRODE UND EINEM VERRINGERTEN SPEZIFISCHEN EINSCHALTWIDERSTAND UND VERFAHREN ZUR HERSTELLUNG EINER MOS-TRANSISTORSTRUKTUR

Title (fr)

STRUCTURE DE TRANSISTOR MOS COMPRENANT UNE ELECTRODE DE GRILLE DE TRANCHEE ET PRESENTANT UNE RESISTANCE D'ENCLenchement SPECIFIQUE REDUITE, ET PROCEDE DE PRODUCTION D'UNE STRUCTURE DE TRANSISTOR MOS

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Application

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Abstract (en)

[origin: DE19913375A1] The invention relates to an MOS transistor structure with a trench gate electrode and a reduced specific closing resistor. The integral of the doping concentration of the body region in the lateral direction between two adjacent drift regions is greater than or equal to the integral of the doping concentration in a drift region in the same lateral direction. The invention also relates to methods for producing an MOS transistor structure. Body regions and drift regions are produced by means of epitaxial growth and implantation, repeated epitaxial growth or by filling trenches with doped conduction material.

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