

Title (en)

METHOD FOR PRODUCING A TRANSISTOR WITH A HIGH DEGREE OF ELECTRON MOBILITY, AND PRODUCED TRANSISTOR

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES TRANSISTORS MIT HOHER ELEKTRONENBEWEGLICHKEIT UND HERGESTELLTER TRANSISTOR

Title (fr)

PROCÉDÉ DE FABRICATION D'UN TRANSISTOR À HAUT DEGRÉ DE MOBILITÉ D'ÉLECTRONS, ET TRANSISTOR PRODUIT

Publication

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Application

EP 21820487 A 20211125

Priority

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- EP 2021082913 W 20211125

Abstract (en)

[origin: WO2022112378A1] The invention relates to a method for producing a transistor with a high degree of electron mobility and to a transistor with a high degree of electron mobility. The method is characterized in that an epitaxial layer is first grown on a flat substrate, and the flat substrate is then completely removed from the bottom of the epitaxial layer, wherein a thermally conductive layer is applied onto the bottom of the epitaxial layer such that the thermally conductive layer contacts at least 80%, preferably at least 90%, particularly preferably at least 95%, in particular 100%, of the bottom of the epitaxial layer. The method is simple and inexpensive to carry out and provides a transistor which has a high degree of electron mobility, an improved electric output without backgating, and an improved heat dissipation. The method additionally allows a transistor to be provided with a vertical transistor structure.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2022112378A1

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