Abstract

Method for the Production of a Semiconductor Structure

Method for producing a semiconductor structure, comprising the provision of a 3C-SiC semiconductor layer structure containing a monocrystalline 3C-SiC layer, generated by implantation of carbon in silicon, on a first silicon substrate and application of an epitaxial layer of a nitride compound semiconductor, suitable for the generation of optoelectronic components, onto the 3C-SiC semiconductor layer structure, characterized in that the epitaxial layer of a nitride compound semiconductor is transferred onto a second substrate by bonding the nitride layer onto the surface of the second substrate and mechanically or chemically removing the silicon, and the layers containing SiC, of the 3C-SiC semiconductor layer structure, the second substrate being a metal alloy with a high reflectivity of greater than or equal to 80% or a substantially transparent substrate.

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