

Title (en)

MONOLITHIC SEMI-CONDUCTOR SUBSTRATE BASED ON SILICON, DIVIDED INTO SUB-CELLS

Title (de)

MONOLITHISCHES HALBLEITERSUBSTRAT AUF DER BASIS VON SILICIUM, IN UNTERZELLEN UNTERTEILT

Title (fr)

SUBSTRAT SEMI-CONDUCTEUR MONOLITHIQUE À BASE DE SILICIUM, DIVISÉ EN SOUS-CELLULES

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Application

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Abstract (en)

[origin: WO2014136083A1] The invention relates to a monolithic semi-conductor substrate (10) based on silicon, vertically divided into sub-cells that are isolated from each other, comprising a type-p or type-n silicon base (1) having an interstitial oxygen concentration of between 10¹⁷ and 2.10¹⁸ cm⁻³, and including, on at least one of the faces thereof, n+ and/or p+ overdoped boxes that are non-contiguous in relation to each other, characterised in that at least one substrate region, inserted between two successive boxes and extending over the entire thickness of the substrate, is an electrical insulation region (3) having a thermal donor concentration based on interstitial oxygen different from that of the base (1). The invention also relates to methods for producing such a substrate.

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