

Title (en)

RELAXATION OF A THIN LAYER AT A HIGH TEMPERATURE AFTER ITS TRANSFER

Title (de)

RELAXATION EINER DÜNNSCHICHT BEI EINER HOHEN TEMPERATUR NACH IHREM TRANSFER

Title (fr)

RELAXATION D'UNE COUCHE MINCE A UNE TEMPERATURE ELEVEE APRES SON TRANSFERT

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Application

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Abstract (en)

[origin: WO2004077553A1] The invention relates to a method for forming a relaxed or pseudo-relaxed layer on a substrate, the relaxed layer being in a material selected from among semiconductor materials, comprising the following steps: a) growing on a donor substrate (1) an elastically strained layer (2) constituted by at least a material chosen from among the semiconductor materials; b) forming on the strained layer (2), or on a receiver substrate (7), a vitreous layer (4) made of a material which is viscous above a viscosity temperature of more than about 900°C; c) bonding the receiver substrate (7) to the strained layer (2) by means of the vitreous layer (4) formed in step (b); d) removing the donor substrate (1), so as to form a structure (20) comprising the receiver substrate, the vitreous layer (4) and the strained layer (2); e) thermal treating the structure at a temperature close to or above the viscosity temperature, so as to relax at least a part of the constraints in the strained layer (2).

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