

Title (en)

FORMATION AND TREATMENT OF A SIGE STRUCTURE

Title (de)

Title (fr)

FORMATION ET TRAITEMENT D'UNE STRUCTURE EN SIGE

Publication

EP 1839332 A2 20071003 (FR)

Application

EP 06703581 A 20060117

Priority

- EP 2006050261 W 20060117
- FR 0500524 A 20050119
- US 14548205 A 20050602

Abstract (en)

[origin: WO2006077216A2] The invention relates to a method for forming a structure (30) provide with a layer (2) removed from a donor plate (10) comprising, prior to removal, a first Si_{1-x}Ge_xlayer (1) and a second layer (2) placed on the first Si_{1-y}Ge_ylayer (1) (x and y ranges, respectively, from 0 to 1, and x differs from y). The inventive method consists: a) in implanting atomic species in such a way that an embrittlement area (4) under the second (2), b) in gluing the donor plate (10) to a receiving plate (20), c) in heating for detaching the removed layers (1', 2) from the donor plate (10) in the embrittlement area (4), d) in carrying out a rapid thermal annealing (also called RAT) at a temperature equal to or greater than about 1000 °C for a time equal to or less than 5 minutes and e) in selectively etching the remaining part of the first layer (1') in front of the second layer (2).

IPC 8 full level

H01L 21/324 (2006.01); **H01L 21/265** (2006.01); **H01L 21/762** (2006.01)

CPC (source: EP KR US)

H01L 21/20 (2013.01 - KR); **H01L 21/26506** (2013.01 - EP US); **H01L 21/76254** (2013.01 - EP)

Citation (search report)

See references of WO 2006077216A2

Citation (examination)

JP 2003168789 A 20030613 - SHINETSU HANDOTAI KK

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006077216 A2 20060727; WO 2006077216 A3 20070208; EP 1839332 A2 20071003; KR 20070090251 A 20070905

DOCDB simple family (application)

EP 2006050261 W 20060117; EP 06703581 A 20060117; KR 20077016429 A 20070718