

Title (en)

A METHOD TO FORM A DEVICE BY CONSTRUCTING A SUPPORT ELEMENT ON A THIN SEMICONDUCTOR LAMINA

Title (de)

VERFAHREN ZUR FORMUNG EINER VORRICHTUNG DURCH HERSTELLUNG EINES TRÄGERELEMENTS AUF EINEM DÜNNEN HALBLEITERPLÄTTCHEN

Title (fr)

PROCÉDÉ POUR FORMER UN DISPOSITIF EN CONSTRUISANT UN ÉLÉMENT DE SUPPORT SUR UNE LAMELLE À SEMI-CONDUCTEUR

Publication

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Application

EP 11852246 A 20111222

Priority

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Abstract (en)

[origin: WO2012092145A2] A semiconductor assembly is described in which a support element is constructed on a surface of a semiconductor lamina. Following formation of the thin lamina, which may have a thickness about 50 microns or less, the support element is formed, for example by plating, or by application of a precursor and curing in situ, resulting in a support element which may be, for example, metal, ceramic, polymer, etc. This is in contrast to a rigid or semi-rigid pre-formed support element which is affixed to the lamina following its formation, or to a donor wafer from which the lamina is subsequently cleaved. Fabricating the support element in situ may avoid the use of adhesives to attach the lamina to a permanent support element; such adhesives may be unable to tolerate processing temperatures and conditions required to complete the device. In some embodiments, this process flow allows the lamina to be annealed at high temperature, then to have an amorphous silicon layer formed on each face of the lamina following that anneal. A device may be formed which comprises the lamina, such as a photovoltaic cell.

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

- [X1] US 2010224238 A1 20100909 - HILALI MOHAMMED M [US], et al
- [XA] US 2009242010 A1 20091001 - HERNER S BRAD [US]
- See references of WO 2012092145A2

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