

Title (en)

METHOD FOR PRODUCING A FLAT FREE CONTACTING SURFACE FOR SEMICONDUCTOR NANOSTRUCTURES

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER PLANEN FREIEN KONTAKTIERFLÄCHE FÜR HALBLEITERNANOSTRUKTUREN

Title (fr)

PROCÉDÉ DE PRODUCTION D'UNE SURFACE DE MISE EN CONTACT PLANE LIBRE POUR NANOSTRUCTURES SEMI-CONDUCTRICES

Publication

**EP 3384533 A1 20181010 (DE)**

Application

**EP 16798073 A 20161022**

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Abstract (en)

[origin: WO2017092723A1] The invention relates to a method for producing a flat free contacting surface for semiconductor nanostructures, wherein at least one nanostructure (2) is arranged on the surface of a transfer substrate (1). A first layer (3) in which at least one nanostructure (2) is embedded is applied onto the same surface of the transfer substrate (1), and a second substrate (5) is applied onto the first layer (3). The transfer substrate (1) is then separated from the first layer (3) such that the at least one nanostructure (2) embedded in the first layer has a flat free surface. According to the invention, prior to applying the at least one nanostructure (2) onto the transfer substrate (1), an additional layer (6) which can be removed by means of a solvent is applied onto the surface of the transfer substrate (1), and the transfer substrate (1) is removed from the first layer (3) using a solvent. In this manner, a planarization/layering of nanostructures and a subsequent simplified electric contacting process is allowed. When the method steps are applied in iterations, multilayers can be constructed advantageously from horizontally aligned nanowire networks for example (figure 5B).

IPC 8 full level

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