Title (en)

METHOD FOR TEXTURING A SURFACE OF A SEMICONDUCTOR SUBSTRATE AND DEVICE FOR CARRYING OUT THE METHOD

Title (de)

VERFAHREN ZUM TEXTURIEREN EINER OBERFLÄCHE EINES HALBLEITERSUBSTRATES SOWIE VORRICHTUNG ZUM DURCHFÜHREN DES VERFAHRENS

Title (fr)

PROCÉDÉ DE TEXTURATION D'UNE SURFACE DE SUBSTRAT SEMI-CONDUCTEUR, ET DISPOSITIF PERMETTANT LA MISE EN OEUVRE DUDIT PROCÉDÉ

Publication

EP 2436027 A1 20120404 (DE)

Application

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Priority

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Abstract (en)

[origin: WO2010136387A1] The invention relates to a method for texturing a surface of a semiconductor substrate. The surface is etched with an etching solution that etches the semiconductor substrate material, wherein a wetting agent that contains water-soluble polymers, in particular in the form of polyvinyl alcohol, is added to the etching solution. The process temperatures of the etching solution can be increased compared to traditional texturing methods, whereby the process duration can be shortened. The process control is simplified and the process stability is increased. A suitable texturing device for carrying out the method can also contain, in addition to a tank (6) for accommodating the etching solution (7) and a heater (9) for heating the etching solution (7) to at least 85°C, an optionally heatable drainage assembly (12) for draining the etching solution from the tank (6), a removal assembly (14, 15) for removing crystallized water-soluble polymers from the etching solution (7), and a circulating assembly (18) for circulating the etching solution.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2010136387A1

Citation (examination)

- US 5565060 A 19961015 - AUSTIN LARRY W [US], et al
- US 2007175497 A1 20070802 - LEE BYEONG-CHU [KR], et al
- JP 2005019605 A 20050120 - NAOETSU ELECTRONICS CO LTD, et al

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