Title (en)
METHOD FOR CLEANING A SILICON SUBSTRATE SURFACE AND USE FOR MAKING INTEGRATED ELECTRONIC COMPONENTS

Title (de)
VERFAHREN ZUR REINIGUNG DER OBERFLÄCHE EINER SILIZIUMSCHEIBE UND VERWENDUNG FÜR DIE HERSTELLUNG VON INTEGRIERTEN ELEKTRONISCHEN ANORDNUNGEN

Title (fr)
PROCEDE DE NETTOYAGE D'UNE SURFACE DE SUBSTRAT DE SILICIUM ET APPLICATION A LA FABRICATION DE COMPOSANTS ELECTRONIQUES INTEGRES

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Application
EP 00925372 A 20000503

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Abstract (en)
[origin: FR2793264A1] The invention concerns a method for cleaning a silicon substrate surface with 100 orientation for integrated electronic components. The method is characterised in that it consists in carrying out the cleaning step after polishing by producing under vacuum a flux of positive ions (30) moderately loaded, with low energy level and predetermined density. The flux is directed towards the surface (21) of the silicon substrate (20), and the kinetic energy of the ions (30) is controlled so that their speed is substantially null at a predetermined distance from said surface. The ejection of soils (10, 11) present on the substrate surface and the elimination of punctiform crystalline defects (40) is then brought about by the generation of repulsive forces of sufficient intensity within said soil and said defects, thereby producing a perfectly planar surface.

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