

Title (en)

METHOD AND INSTALLATION FOR CORRECTING INTEGRATED CIRCUIT FAULTS WITH AN ION BEAM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR FEHLERKORREKTUR INTEGRIERTER SCHALTKREISEN MITTELS IONENSTRÄHLEN

Title (fr)

PROCEDE ET INSTALLATION DE CORRECTION DES DEFAUTS DE CIRCUITS INTEGRES PAR UN FAISCEAU D'IONS

Publication

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Application

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Abstract (en)

[origin: FR2778493A1] The system uses a positive ion beam to remove or deposit material in the correction of faults in the manufacture of integrated circuits. The correction of faults in integrated circuits (14) uses a focused beam of positive ions directed on to the surface (23) of the integrated circuit. The beam is directed with an incident energy greater than or equal to 20 keV, and may be used for etching or deposition without a mask. It is used in conjunction with a potential contrast imaging system using secondary electrons. Immediately above the surface of the integrated circuit a local electric field is created to oppose the accumulation of cationic species on the surface, without canceling the detection electric field of the secondary electrons. This local field is maintained during the application of the ion beam on to the integrated circuit surface.

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