

Title (en)

TEST STRUCTURE FOR ELECTRICALLY VERIFYING THE DEPTHS OF TRENCH-ETCHINGS IN AN SOI WAFER, AND ASSOCIATED WORKING METHODS

Title (de)

TESTSTRUKTUR ZUR ELEKTRISCHEN UEBERPRUEFUNG DER TIEFEN VON TRENCH-AETZUNGEN IN EINEM SOI WAFER UND ZUGEHOEERIGE ARBEITSVERFAHREN

Title (fr)

STRUCTURE D'ESSAI PERMETTANT DE CONTROLER ELECTRIQUEMENT LA PROFONDEUR DE GRAVURES DE TRANCHEES D'ISOLATION DANS UNE TRANCHE SOI ET PROCEDES DE MISE EN OEUVRE ASSOCIES

Publication

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Application

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Abstract (en)

[origin: WO2004095570A2] The aim of the invention is to discover a simple to implement and reliable recognition of the moment at which insulating trenches reach the buried insulating layer during an etching operation. The technological reliability during the etching of these trenches should be increased, the production of refuse should be prevented, and costs should be reduced. To these ends, the invention provides a test structure for verifying an insulating trench etching in an SOI wafer. After an etching of insulating trenches, this test structure has a row of connected islands, whereby each island is surrounded by a trench. This trench has a different width from island to island (A, B; B, C) while including a trench width that appears in the form of an insulating trench in an active circuit. A section of the surrounding trench (a, b) of each island (A, B) forms a common piece with the trench of adjacent islands. The respective section has, in the inner islands, the width of the adjacent trench having the next larger or next smaller measure of width in the row.

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