

UNITED STATES PATENT

Granted on March 26, 1996

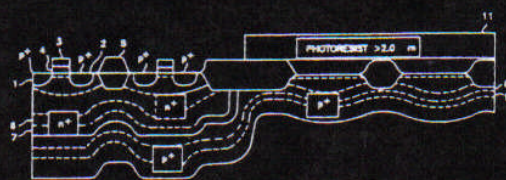
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INVENTOR

5,501,993

METHOD OF CONSTRUCTING CMOS VERTICALLY MODULATED WELLS (VMW) BY CLUSTERED MEV BILLI (BURIED IMPLANTED LAYER FOR LATERAL ISOLATION) IMPLANTATION

*The
United
States
of
America*



1. That method of manufacturing a semiconductor device comprising the following steps:
 - applying a first mask
 - forming isolation or active areas
 - removing the first mask and applying a second mask
 - placing the wafer in a treatment chamber
 - performing a clustered series of irradiation steps while the wafer remains in said treatment chamber and before said wafer is removed therefrom each of which comprises irradiating said wafer through said second mask with ions of a conductivity type and an energy, wherein the energy of the ions in any one irradiation step differs from that in the other irradiation steps, and wherein the energy of the ions in one of the irradiation steps is higher than that in the other irradiation steps.

The Commissioner of Patents and Trademarks has received an application for a patent for a new and useful invention. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law. Therefore, this

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Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.



Bruce Lehman *marcia J. Ampsey*

Commissioner of Patents and Trademarks

Attest: