DESCRIPTION

~~SOI WAFER FABRICATION METHOD~~

TECHNICAL FIELD

[0001]

The present invention relates to a method for manufacturing an SOI wafer, and more particularly to a method for manufacturing an SOI wafer by boning a silicon single crystal wafer having hydrogen ions implanted therein to a base wafer that serves as a support substrate through an oxide film and then delaminating the silicon single crystal wafer.

BACKGROUND ART

[0002]

In recent years, as a method for manufacturing an SOI wafer, a method for manufacturing an SOI wafer by bonding an ion-implanted bond wafer and then delaminating the same (an ion implantation delamination method: a technology that is also called a smart cut method (a registered trademark)) has newly begun to attract attention. This ion implantation delamination method is a technology for, e.g., forming an oxide film (an insulator film) on at least one of two wafers, implanting gas ions such as hydrogen ions or rare gas ions from an upper surface of one silicon wafer (a bond wafer), forming a micro bubble layer (a sealed layer) in the wafer, then adhering the ion implanted surface to the other silicon wafer (a base wafer) through the oxide film, subsequently applying a heat treatment (a delamination heat treatment) to delaminate one wafer (the bond wafer) into a thin film form with the use of the micro bubble layer as a cleavage

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