DESCRIPTION

~~CHAMFERING DEVICE AND NOTCHLESS WAFER MANUFACTURING METHOD~~

TECHNICAL FIELD

[0001]

The present invention relates to a chamfering apparatus and a method for manufacturing a notchless wafer.

BACKGROUND ART

[0002]

It has been conventional to form a cut called notch on an outer circumference of a wafer such as a single crystal silicon wafer having a diameter of 300 mm or more in order to align the wafer in a manufacturing process. The wafer is sliced along a certain crystal orientation so as to make the crystal structure most appropriate for the operation of a semiconductor device to be manufactured. The notch position is determined, depending on a conductivity type and a crystal orientation, in a direction of the crystal orientation such as <110> and <100>.

[0003]

Recently, along with a high integration of a semiconductor device such as DRAM, NAND flash memory, and MPU and a diameter enlargement of a wafer, there is increased a stress applied to the wafer during heat treatment in the process for manufacturing a semiconductor device, and there arises a problem of slipping, which causes a junction leak. In particular, the stress concentration is easily generated at a

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