

ABSTRACT

The invention is directed to a chamfering apparatus for a silicon wafer to chamfer outer edge of a silicon wafer by using a chamfering grindstone, the chamfering apparatus including at least: a holder holding and rotating a silicon wafer; a chamfering grindstone chamfering the outer edge of the silicon wafer held by the holder; and a control apparatus for controlling a chamfered shape by controlling a relative position of the outer edge of the silicon wafer and the chamfering grindstone by numerical control, wherein the control apparatus controls and changes the relative position of the outer edge of the silicon wafer and the chamfering grindstone at the time of chamfering depending on the circumferential position of the silicon wafer held by the holder, a production method, and an etched silicon wafer. This provides a silicon wafer chamfering apparatus, production method and an etched silicon wafer that can suppress variations in the cross-sectional shape dimensions of a chamfered portion after an etching process.