

DESCRIPTION

~~DOUBLE-HEADED WORKPIECE GRINDING METHOD~~

TECHNICAL FIELD

[0001]

The present invention relates to a workpiece double-disc grinding method that can reduce nanotopography especially formed in a slicing step.

BACKGROUND ART

[0002]

In recent years, semiconductor wafers such as silicon wafers have a problem of the magnitude of surface waviness components, which are called "nanotopography". Nanotopography is a kind of surface shapes of semiconductor wafers and shows a wavelength component with λ of 0.2 to 2.0 mm, which is shorter than the wavelength of "Sori" or "Warp" and longer than the wavelength of "surface roughness". The nanotopography has an extremely shallow waviness with a peak-to-valley (PV) value of 0.1 μm to 0.2 μm .

[0003]

Nanotopography of mirror-polished semiconductor wafers obtained through a double-side polishing step, which is a final step in processing of semiconductor wafers, is usually measured by an optical interference measurement apparatus. However, this reflection interference measurement apparatus fails to measure nanotopography of semiconductor wafers having a non-mirror main surface, which are on an intermediate step, such as a slicing step or a double-disc grinding step, and not subjected to mirror polishing.

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