

SUBSTRATE POLISHING APPARATUS AND FILM THICKNESS CALCULATING METHOD

ABSTRACT

An object is to accurately measure, during polishing of a substrate, thickness of a film which is an object of polishing.

A substrate polishing apparatus comprises: a polishing table which is provided with an eddy current sensor and is constructed to be able to be rotated; a polishing head which is positioned to be opposite to the polishing table, is constructed to be able to be rotated, and allows a substrate to be attached to a surface which is positioned to be opposite to the plating table, and a controller. The controller is constructed to obtain waveform data of output signals of the eddy current sensor during polishing of the substrate; detect minimum points or maximum points in the waveform data; correct, based on the detected minimum points or the detected maximum points, the waveform data; and calculate, based on the corrected waveform data, thickness of a film on a surface of the substrate.

REPRESENTATIVE DRAWING

Fig. 4