

ABSTRACT

The present invention relates to a technique of calculating a responsiveness of a polishing rate to change in a pressure to press a workpiece, such as a wafer, a substrate, or a panel, for use in manufacturing of semiconductor devices, against a polishing pad. A method includes: performing simulation to calculate a pressing-pressure responsiveness profile indicating a distribution of pressing pressure, which is to be applied from the workpiece to a polishing pad (2), changed in response to a change in unit pressure in the pressure chamber of a polishing head (7); pressing the workpiece against the polishing pad to polish the workpiece, while a predetermined pressure is maintained in the pressure chamber; creating a polishing-rate profile indicating a distribution of polishing rate of the polished workpiece; and creating the polishing-rate responsiveness profile based on the pressing-pressure responsiveness profile, the predetermined pressure, and the polishing-rate profile.

FIG. 3