

ABSTRACT

The present invention relates to a cyber-physical system for optimizing a simulation model for chemical mechanical polishing based on actual measurement data of chemical mechanical polishing. The chemical mechanical polishing system includes a polishing apparatus (1) for polishing the workpiece (W) and an arithmetic system (47).
5 The arithmetic system (47) includes a simulation model including at least a physical model configured to output an estimated polishing physical quantity including an estimated polishing rate of the workpiece (W). The arithmetic system (47) is configured to: input polishing conditions for the workpiece (W) into the simulation model; output the
10 estimated polishing physical quantity of the workpiece (W) from the simulation model; and determine model parameters of the simulation model that bring the estimated polishing physical quantity closer to a measured polishing physical quantity of the workpiece (W).

FIG. 1