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ABSTRACT

SUBSTRATE CLEANING METHOD AND SUBSTRATE CLEANING APPARATUS

The present invention provides a substrate cleaning method capable of reducing non-uniformity of a removal efficiency of particles between lots with a simple procedure. The substrate cleaning method comprises: a step of supplying a gas into a cleaning tank, while an irradiation of ultrasonic waves to the cleaning liquid in the cleaning tank is being stopped, so as to increase a dissolved gas concentration of the gas dissolved in the cleaning liquid in the cleaning tank to a saturated concentration; and a step of irradiating ultrasonic waves to the cleaning liquid in the cleaning tank so as to clean a substrate immersed in the cleaning liquid in the cleaning tank. In the step of increasing the dissolved gas concentration to the saturated concentration, the gas is supplied to the cleaning tank so as to increase the dissolved gas concentration of the cleaning liquid in the cleaning tank to the saturated concentration. In addition, in the step of increasing the dissolved gas concentration to the saturated concentration, the irradiation of the ultrasonic waves to the cleaning liquid in the cleaning tank is stopped.

FIG. 3