

ABSTRACT

In a method of polishing a silicon wafer, a final polishing step includes an upstream polishing step and a subsequent finish polishing step.

5 In the upstream polishing step, as a polishing agent, a first alkaline aqueous solution containing abrasive grains with a density of $1 \times 10^{14}/\text{cm}^3$ or more is first supplied, and the supply is then switched to a supply of a second alkaline aqueous solution containing a water-soluble polymer and abrasive grains with a density of $5 \times 10^{13}/\text{cm}^3$ or less. In the finish polishing step, as a polishing

10 agent, a third alkaline aqueous solution containing a water-soluble polymer and abrasive grains with a density of $5 \times 10^{13}/\text{cm}^3$ or less is supplied. Thus, the formation of not only PIDs but also scratches with small depth can be suppressed.