

ABSTRACT OF THE DISCLOSURE

POLISHING APPARATUS

5 A polishing apparatus capable of stably controlling a pressure in a pressure chamber of a top ring is disclosed. The polishing apparatus includes: a rotatable polishing table for supporting a polishing pad; a rotatable top ring having a pressure chamber for pressing a substrate against the polishing pad; a pressure regulator configured to regulate a pressure of a gas in the pressure chamber; and a buffer tank
10 provided between the pressure chamber and the pressure regulator. The pressure regulator includes a pressure-regulating valve, a pressure gauge configured to measure the pressure of the gas at a downstream side of the pressure-regulating valve, and a valve controller configured to control an operation of the pressure-regulating valve so as to minimize a difference between a target value of the pressure in the pressure chamber and
15 a pressure value measured by the pressure gauge.

FIG. 17