EXHAUST FLOW RATE CONTROL APPARATUS AND SUBSTRATE PROCESSING APPARATUS PROVIDED THEREWITH

ABSTRACT OF THE DISCLOSURE

The present invention is intended to set the temperature of a predetermined location inside a processing space in which a polishing pad and the like are disposed to within a predetermined temperature range, for example, a temperature range in which a polishing rate is maximum. A substrate processing apparatus 1 of the present embodiment includes a CMP apparatus 10 and an exhaust flow rate control apparatus 30 configured to be capable of exhausting a polishing space 20 in which the CMP apparatus 10 is disposed. The exhaust flow rate control apparatus 30 is provided with a first exhaust line 31a, a first exhaust flow rate-variable device 32a capable of adjusting the exhaust flow rate of the first exhaust line 31a, and an exhaust control unit 33 used to control the first exhaust flow rate-variable device 32a. The exhaust control unit 33 includes a storage device storing control data on previously-calculated exhaust flow rates necessary to set the temperature of a predetermined location of the CMP apparatus 10, for example, a surface of the polishing pad 14 to within a certain range, and controls the first exhaust flow rate-variable device 32a on the basis of this control data.

Figure 1