

ABSTRACT

Provided is a technology configured such that a pressure controller: fully opens a first pressure adjustment valve disposed in a bypass line and reduces the pressure in a processing chamber wherein a substrate is processed from atmospheric pressure to a second prescribed pressure; adjusts the degree of opening of the first pressure adjustment valve and maintains the second prescribed pressure; fully opens the first pressure adjustment valve and reduces the pressure in the processing chamber to a first prescribed pressure which is lower than the second prescribed pressure; at the time at which the first prescribed pressure is reached, detects the pressure in the processing chamber in a state of at least the first pressure adjustment valve and a second pressure adjustment valve disposed in an exhaust line being closed for a first prescribed time; fully opens the second pressure adjustment valve and reduces the pressure in the processing chamber to a third prescribed pressure; and adjusts the degree of opening of the second pressure adjustment valve and maintains a processing pressure at which the substrate is processed.

FIG. 4