

ABSTRACT

The present invention relates to a substrate cleaning apparatus for performing scrub cleaning of a surface of a substrate by rotating both of the substrate and a roll cleaning member while keeping the roll cleaning member in contact with the surface of the substrate. The substrate cleaning apparatus includes a roll holder (42) configured to support and rotate a roll cleaning member (46), a vertical movement mechanism (60), having a vertically movable unit (58) vertically movable by actuation of an actuator (56) having a regulating device (62), configured to vertically move the roll holder (42) coupled to the vertically movable unit (58) so that the roll cleaning member (46) applies a roll load to the substrate W at the time of cleaning the substrate, a load cell (54) provided between the vertically movable unit (58) of the vertical movement mechanism (60) and the roll holder (42) and configured to measure the roll load, and a controller (66) configured to perform feedback control of the roll load through the regulating device (62) of the actuator (56) based on a measured value of the load cell (54).

(Figure 3)