

704 through rotation of the main rotation shaft. Note that as a scheme similar to the carousel scheme, for example, a circular rail may be used instead of the carousel. A plurality of drive sections (top ring motors 114) are disposed on the rail. At this time, the drive sections can move on the rail.

[0245] As an embodiment of the present invention, a polishing apparatus may be a polishing apparatus for polishing a polishable object, the polishing apparatus including a polishing table for holding a polishing pad, a first electric motor for driving to rotate the polishing table, a holding section for holding the polishable object and pressing the polishable object against the polishing pad, a film thickness sensor for measuring an amount dependent on a film thickness of the polishable object and generating a first output (e.g., an optical sensor for projecting light onto the polishable object as shown in Fig. 7, measuring intensity of reflected light from the polishable object (amount dependent on a film thickness of the polishable object)) and generating a first output (intensity of reflected light), a first processing section that obtains ~~the film thickness intensity of reflected light~~ corresponding to the first output from the first output using first data indicating a correspondence relationship between the ~~film thickness intensity of the reflected light~~ and the first output, and a second processing section that obtains a second output corresponding to the ~~film thickness intensity of the reflected light~~ obtained by the first processing section using second data indicating a correspondence relationship between the ~~film thickness intensity of the reflected light~~ obtained by the first processing section and the second output.

[0246] The aforementioned embodiments focus attention on the fact that the current value of the motor changes depending on the contact pressure and focus attention on the fact that the magnitude of an eddy current and the intensity of reflected light or the like in a film thickness sensor such as an eddy current sensor or an optical sensor do not directly depend on the contact pressure, but change directly depending on the film thickness. According to the aforementioned embodiments, the first relational expression and the second relational expression are relational expressions between a contact pressure and a current value of the motor. According to the present embodiment, the first relational expression and the second