SUBSTRATE PROCESSING METHOD AND SUBSTRATE PROCESSING APPARATUS

ABSTRACT

In removing a silicon-containing film formed on a surface of a substrate, a removal process is performed with high uniformity at respective portions within the surface of the substrate. An etching method includes supplying a process gas including a halogen-containing gas and a basic gas into a processing container in which a substrate having a silicon-containing film formed on a surface thereof is stored to modify the silicon-containing film and generate a reaction product, supplying an inert gas into the processing container and exhausting the processing container in a state where supply of the process gas into the processing container is stopped, in order to remove a portion of the reaction product, repeating the first operation and the second operation alternately, and controlling an internal pressure of the processing container to be higher than 200 Pa in each execution of the second operation such that, in a second or subsequent execution of the first operation in the repeating, the process gas is supplied to the substrate on which the reaction product remains.

(Fig. 4B)