

**PROCESSING METHOD, METHOD OF MANUFACTURING SEMICONDUCTOR
DEVICE, PROCESSING APPARATUS, AND PROGRAM**

ABSTRACT

There is provided a technique that includes: (a) preparing a substrate including a nitrogen-containing film, which is formed to be thicker by a thickness T_2 than a target thickness T_1 , and an oxide film on a surface of the substrate; and (b) etching the oxide film on the surface of the substrate using a substance X generated by supplying a fluorine-containing substance to the substrate and chemically reacting the nitrogen-containing film with the fluorine-containing substance.

Figs. 4A and 4D