

NITROGEN-CONTAINING COMPOUNDS FOR ETCHING SEMICONDUCTOR STRUCTURES

ABSTRACT

A method for etching silicon-containing films is disclosed. The method includes the steps of introducing a vapor of a nitrogen containing etching compound into a reaction chamber containing a silicon-containing film on a substrate, wherein the nitrogen containing etching compound is an organofluorine compound containing at least one $C\equiv N$ or $C=N$ functional group; introducing an inert gas into the reaction chamber; and activating a plasma to produce an activated nitrogen containing etching compound capable of etching the silicon-containing film from the substrate.

[No Figure]