

ETCHING METHOD OF MULTILAYERED FILM

ABSTRACT

Deterioration of a verticality of a space forming a multilayered film needs to be suppressed on a partial region of a processing target object. An etching method of etching the multilayered film includes etching the multilayered film by generating plasma within a processing vessel of a plasma processing apparatus. In the etching of the multilayered film, a first processing gas containing a hydrogen gas, a hydrogen bromide gas, a fluorine-containing gas, a hydrocarbon gas, a hydrofluorocarbon gas and a fluorocarbon gas is supplied from a first supply unit configured to supply a gas toward a central region of the processing target object and a second supply unit configured to supply a gas toward outer region than the central region; a second processing gas containing a hydrocarbon gas and a fluorocarbon gas is supplied from either one of the first supply unit and the second supply unit; and the first processing gas and the second processing gas are excited.

Fig. 1