ABSTRACT

METHOD FOR TREATING INNER SURFACE OF CHLORINE TRIFLUORIDE SUPPLY PASSAGE IN APPARATUS USING CHLORINE TRIFLUORIDE

Provided is a method for treating the inner surface of a chlorine trifluoride supply passage that enables reliable prevention of the reduction in the concentration of ClF_3 in a reaction chamber during process operation.

The method includes: integrally connecting a gas supply passage (2) and a gas discharge passage (3) to a processing chamber (1) of a processing apparatus in which chlorine trifluoride is used as an etching gas; and applying chlorine trifluoride gas having a concentration equal to or higher than the concentration of chlorine trifluoride gas supplied during etching process operation on inner surfaces of at least the processing chamber (1) and the gas supply passage (2) among the processing chamber (1), the gas supply passage (2), and the gas discharge passage (3), which are integrally formed, to coat the inner surfaces of at least the processing chamber (1) and the gas supply passage (2) with a fluoride film.

Fig. 1