

ABSTRACT

DRY ETCHING METHOD

5 A dry etching method according to the present disclosure is for forming a
through hole in a laminated film of silicon oxide layers and silicon nitride layers on a
substrate in a direction vertical to the laminated film by plasmatizing a dry etching agent to
generate a plasma and etching the laminated film by the plasma through a mask having a
predetermined opening pattern under a negative direct-current self-bias voltage whose
10 absolute value is 500 V or greater, wherein the dry etching agent contains at least C_3F_6 , a
hydrogen-containing saturated fluorocarbon represented by $C_xH_yF_z$ and an oxidizing gas,
and wherein the volume of the hydrogen-containing saturated fluorocarbon contained in
the dry etching agent is in a range of 0.1 to 10 times the volume of C_3F_6 contained in the
dry etching agent.

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FIG. 1