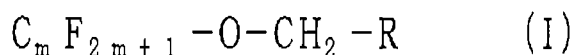


CLAIMS

1. A plasma etching method that is implemented under plasma conditions using a process gas, the plasma etching method selectively etching silicon oxide when silicon
oxide and at least one material selected from a group consisting of silicon nitride,
silicon, and an organic material are simultaneously subjected to etching,
wherein at least one gas selected from a hydrofluoroether represented by a formula (I) is
used as the process gas,



wherein R represents a hydrogen atom or a fluoroalkyl group represented by $C_n F_{2n+1}$,
and m and n represent integers that satisfy $1 \leq m \leq 3$ and $3 \leq (m+n) \leq 4$.

2. The plasma etching method according to claim 1, wherein the hydrofluoroether
is at least one hydrofluoroether selected from a group consisting of

1,1,2,2,3,3,3-heptafluoropropyl methyl ether and heptafluoroisopropyl methyl ether.

3. The plasma etching method according to claim 1 or 2, wherein the process gas
comprises the hydrofluoroether represented by the formula (I) and a rare gas, the
process gas comprising the rare gas in a ratio of 20 to 3,000 parts by volume based on
100 parts by volume of the hydrofluoroether represented by the formula (I).