

PLASMA ETCHING METHOD

ABSTRACT

A plasma etching method includes a first process of applying, while applying a first high frequency power to a lower electrode, a second high frequency power to the lower electrode while switching the second high frequency power ON and OFF cyclically; and a second process of applying, while applying the first high frequency power to the lower electrode, the second high frequency power to the lower electrode while maintaining the second high frequency power ON continuously. The first process and the second process are alternately performed. If the deposits are formed on a bottom portion of an inner surface of the hole formed by the etching, the inner surface of the hole is protected by the deposits from the ions introduced into the hole. Therefore, the etching of the inner surface of the hole can be suppressed, and, thus, the twisting of the hole can also be suppressed.

Figure 1