

ABSTRACT

DRY ETCHING METHOD, METHOD FOR MANUFACTURING SEMICONDUCTOR
DEVICE, AND ETCHING DEVICE

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The dry etching method of the present invention etches a metal film formed on a surface of a workpiece by bringing etching gases each containing a β -diketone into contact with the metal film. The method includes: a first
10 etching step of bringing a first etching gas containing a first β -diketone into contact with the metal film; and a second etching step of bringing a second etching gas containing a second β -diketone into contact with the metal film after the first etching step. The first β -diketone is
15 a compound capable of forming a first complex through a reaction with the metal film. The second β -diketone is a compound capable of forming a second complex having a lower sublimation point than the first complex through a reaction with the metal film.

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FIG.2