

TITLE OF INVENTION: METAL-CONTAINING FILM PATTERNING
PROCESS

ABSTRACT

The present invention is a patterning process for forming a pattern on a substrate, including the steps of: (I-1) applying a composition for forming a metal-containing film onto a substrate on which a film to be processed has been formed, followed by heating to form a metal-containing film; (I-2) forming a pattern directly or indirectly in the metal-containing film; (I-3) subjecting the pattern of the metal-containing film to plasma irradiation; and (I-4) forming the pattern directly or indirectly in the film to be processed while using the plasma-irradiated pattern of the metal-containing film as an etching mask. This can provide a method that makes it possible to form a pattern having excellent edge roughness in a film to be processed by using a plasma-irradiated metal-containing film pattern as an etching mask.

[FIG. 1]