ABSTRACT

REDUCING DAMAGE TO LOW-K MATERIALS DURING PHOTORESIST STRIPPING

A method of forming features in a porous low-k dielectric layer disposed below a patterned organic mask is provided. Features are etched into the porous low-k dielectric layer through the patterned organic mask, and then the patterned organic mask is stripped. The stripping of the patterned organic mask includes providing a stripping gas comprising COS, forming a plasma from the stripping gas, and stopping the stripping gas. A cap layer may be provided between the porous low-k dielectric layer and the patterned organic mask. The stripping of the patterned organic mask leaves the cap layer on the porous low-k dielectric layer.

FIG. 3