TWO STEP ETCHING OF A BOTTOM ANTI-REFLECTIVE COATING LAYER IN DUAL DAMASCENE APPLICATION

ABSTRACT

Methods for removing a BARC layer from a feature are provided in the present invention. In one embodiment, the method includes providing a substrate having a feature filled with a BARC layer in an etching chamber, supplying a first gas mixture comprising NH_3 gas into the chamber to etch a first portion of the BARC layer filling in the feature, and supplying a second gas mixture comprising O_2 gas into the etching chamber to etch the remaining portion of the BARC layer disposed in the feature.

(Fig. 3)