

ABSTRACT

This invention provides a method for converting residual chlorine, remaining after using a chlorine specie etchant to etch metal electrodes in an integrated circuit device, to a stable polymer thereby eliminating any possibility for residual chlorine to cause corrosion of the metal electrodes. In conventional processing residual chlorine ions can combine with moisture and cause immediate corrosion of metal electrodes or can cause corrosion over time resulting in a degradation of device reliability. This invention provides a method of baking the integrated circuit device in an atmosphere of CF_4 , O_2 , or CF_4 and O_2 at elevated temperature, thereby converting any residual chlorine to a stable polymer. Since all the available chlorine is stabilized free chlorine is no longer available as a corrosion hazard.

