

## ABSTRACT

### POST CHEMICAL MECHANICAL PLANARIZATION (CMP) CLEANING

Provided are formulations that offer a high cleaning effect on inorganic particles, organic residues, chemical residues, reaction products on the surface due to interaction of the wafer surface with the Chemical Mechanical Planarization (CMP) slurry and elevated levels of undesirable metals on the surface left on the semiconductor devices after the CMP. The post-CMP cleaning formulations comprise one or more organic acid, one or more polymer and a fluoride compound with pH <7 and optionally a surfactant with two sulfonic acid groups.

[No suitable figure]