

COPPER CORROSION INHIBITION SYSTEM

ABSTRACT OF THE DISCLOSURE

- 5 There are provided metal corrosion inhibition cleaning compositions, methods and system for copper (Cu), tungsten(W), titanium(Ti), tantalum(Ta), cobalt (Co), and aluminum(Al). The metal corrosion inhibition cleaning compositions provide corrosion inhibition effects by use a combination of two chemicals - at least one multi-functional amine that has more than one amino groups; and at least one multi-functional acid that
- 10 has more than one carboxylate groups. The metal corrosion inhibition cleaning compositions are effective for cleaning the residues deriving from high density plasma etching followed by ashing with oxygen containing plasmas; and slurry particles and residues remaining after chemical mechanical polishing (CMP).