**Method For CuO Reduction By Using Two Step Nitrogen Oxide and Reducing Plasma Treatment**

## Abstract

A method for cleaning a copper interconnect after a chemical-mechanical polishing that comprises: a) treating the surface of said copper interconnect with a nitrogen and oxygen containing treatment; and b) without breaking vacuum, treating the copper interconnect with a $NH_3$ or $H_2$ plasma treatment. Next a cap layer is formed over the copper interconnect.

FIGURE 4