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(54) Title: IMPROVED ALKALINE CHEMISTRY FOR POST-CMP CLEANING

(57) Abstract: This disclosure discusses cleaning of semiconductor wafers after the Chemical-Mechanical Planarization (CMP) of the wafer during the manufacturing of semiconductor devices. Disclosed is an alkaline chemistry for the post-CMP cleaning of wafers containing metal, particularly copper, interconnects. Residual slurry particles, particularly copper or other metal particles, are removed from the wafer surface without significantly etching the metal, leaving deposits on the surface, or imparting significant contamination to the wafer while also protecting the metal from oxidation and corrosion. Additionally, at least one strong chelating agent is present to complex metal ions in solution, facilitating the removal of metal from the dielectric and preventing re-deposition onto the wafer.



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