

ABSTRACT

LIQUID CLEANER FOR THE REMOVAL OF POST-ETCH RESIDUES

Cleaning compositions and processes for cleaning post-plasma etch residue from a microelectronic device having said residue thereon. The composition achieves highly efficacious cleaning of the residue material, including titanium-containing, copper-containing, tungsten-containing, and/or cobalt-containing post-etch residue from the microelectronic device while simultaneously not damaging the interlevel dielectric, metal interconnect material, and/or capping layers also present thereon. In addition, the composition may be useful for the removal of titanium nitride layers from a microelectronic device having same thereon.

Figure 1