

ABSTRACT OF THE DISCLOSURE

COMPOSITION FOR TiN HARD MASK REMOVAL AND ETCH RESIDUE CLEANING

- 5 Composition, method and system for TiN hard mask removal from electronic circuitry devices, such as advanced pattern wafers have been disclosed. The cleaning compositions preferably comprise an etchant agent (also referred to as a base), an oxidizing agent, an oxidizing stabilizer (also referred to as a chelating agent), an ammonium salt, a corrosion inhibitor, and a solvent. Other optional additives could be
- 10 provided. It is preferable that the pH of the cleaning composition be greater than 5.5. The cleaning composition is preferably free from dimethyl sulfoxide and tetramethylammonium hydroxide.

[No suitable figure]