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(54) Title: ETCHING SOLUTION AND METHOD

(57) Abstract: An etching solution of Hydrogen Fluoride (HF), carboxylic acid and water having a high etch selectivity for silicon oxide relative to metal, polysilicon and nitride. The etching solution is created by injecting anhydrous HF into a carboxylic acid having a precisely controlled minimal amount of water. The etching solution is useful in the fabrication of Micro Electro-Mechanical System (MEMS) devices, as well as the fabrication of MEMS devices in combination with integrated electronics on the same chip.