

CHEMICAL ETCHING SOLUTION AND METHOD FOR SELECTIVELY ETCHING TITANIUM

ABSTRACT

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The invention relates to a solution for chemical etching of a titanium-based material comprising:

- from 26% by weight to 39% by weight of hydrogen peroxide,
- from 1% by weight to 6% by weight of tribasic potassium phosphate (K_3PO_4),
- 10 - from 0.015% by weight to 0.2% by weight of a compound selected from diethylenetriamine-pentamethylenephosphonic acid (DTPMP), aminotrimethylenephosphonic acid (ATMP) and mixtures thereof
- water,

the percentages by weight being expressed relative to the weight of the chemical etching
15 solution,

said solution having a pH of 6.5 to 8.6.

The invention also relates to a method for chemically etching a layer of a titanium-based material on a microelectronic device using said etching solution as well as a method for preparing said etching solution.

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[Fig. 5B]