

CLEANING CHEMICAL COMPOSITION FOR THE REMOVAL OF AN AMORPHOUS PASSIVATION LAYER AT THE SURFACE OF CRYSTALLINE MATERIALS

ABSTRACT

5

This invention relates to a cleaning chemical composition suitable for removing, from a substrate (1A, 1B, 4), a passivation layer (2) comprising etching residues resulting from etching of said substrate (1A, 1B, 4), comprising:

10

- a weak acid comprising acetic acid, the weak acid content being between 20% by weight and 95% by weight, preferably between 50% by weight and 80% by weight, relative to the weight of the chemical composition,

15

- a non-oxidising strong acid comprising methanesulphonic acid, the non-oxidising strong acid content being between 5% by weight and 50% by weight, preferably between 15% by weight and 50%, relative to the weight of the chemical composition,

- hydrofluoric acid, whose content is between 0.2% by weight and 2% by weight relative to the weight of the chemical composition,

20

- water whose content is between 2% by weight and 20% by weight relative to the weight of the chemical composition.

Another object of the invention relates to a cleaning method for removing, from a substrate (1A, 1B, 4), a passivation layer (2) comprising etching residues resulting from etching of said substrate (1A, 1B, 4), comprising the following steps:

25

- providing a cleaning chemical composition which complies with the above composition,

- bringing the cleaning chemical composition into contact with the passivation layer (2) for a time that is sufficient to remove said passivation layer (2) from the substrate (1A, 1B, 4).

30

(no suitable figure)