

ABSTRACT

The object of the present invention is an electroplating composition intended in particular for coating a copper-diffusion barrier layer in the fabrication of interconnects for integrated circuits.

According to the invention, this composition comprises, in solution in a solvent:

- a source of copper ions, in a concentration of between 0.4 and 40mM;
- at least one copper complexing agent chosen from the group comprising primary aliphatic amines, secondary aliphatic amines, tertiary aliphatic amines, aromatic amines, nitrogen heterocycles and oximes;
- the copper/complexing agent(s) molar ratio being between 0.1 and 2.5, preferably between 0.3 and 1.3; and
- the pH of the said composition being less than 7, preferably between 3.5 and 6.5.

Application: microelectronics field