

ABSTRACT

In filling fine via holes or trenches of the wiring (LSI) pattern formed on a semiconductor wafer, a copper
5 electroplating is carried out by using a copper electroplating solution containing an azole or a silane coupling agent, or a copper electroplating is carried out after the immersion into a pretreatment solution containing an azole or a silane coupling agent. As illustratively shown above, the addition
10 of a component having the action to inhibit the dissolution of copper to an electroplating solution or the pretreatment by a solution containing a component having the action to inhibit the dissolution of copper can inhibit the dissolution of a copper seed layer covering poorly, and thus can prevent
15 the occurrence of defects such as voids and seams.