~~SUBSTRATE PROCESSING METHOD FOR SUPPORTING A CATALYST PARTICLE FOR PLATING PROCESS~~

Technical Field

[0001]

The present invention relates to a treatment method usable when a metal layer such as a barrier layer or an electrode layer is formed by plating on a substrate such as an LSI substrate. More particularly, the invention relates to a treatment method of supporting, on a substrate, metal particles that act as a catalyst for forming a plating layer on the substrate.

Background Art

[0002]

In the processes for producing printed boards, LSI substrates and the like that are mounted in various electronic devices, electroconductive metal layers that constitute wirings, electrodes and the like are formed. These electroconductive metal layers have been conventionally formed by using combinations of thin metal film forming processes based on physical deposition methods such as a vapor deposition method and a sputtering method, or chemical deposition methods such as a CVD method, and patterning processes such as photolithography and etching.

[0003]

Furthermore, along with the higher density of electronic devices in recent years, the number of exemplary applications of multilayer LSI substrates and 3D-ICs that use TSVs (through-silicon vias) is ever increasing. The TSVs used in these are formed by sequentially laminating a barrier layer, a seed layer,

METHOD FOR TREATING SUBSTRATE THAT SUPPORTS CATALYST PARTICLES FOR PLATING PROCESSING

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