

ABSTRACT

The invention provides a connecting material comprising metallic particles with an oxygen state ratio of less than 15% as measured by X-ray photoelectron spectroscopy, and especially a connecting material comprising metallic particles that have been subjected to treatment for removal of the surface oxide film and to surface treatment with a surface protective material, for the purpose of providing a connecting material having a high coefficient of thermal conductivity even when joined at a curing temperature of up to 200°C without application of a load, and that has sufficient bonding strength even when the cured product has been heated at 260°C, as well as a semiconductor device employing it.