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(54) Title: GOLD-TIN-INDIUM SOLDER FOR PROCESSING COMPATIBILITY WITH LEAD-FREE TIN-BASED SOLDER

(57) Abstract: Disclosed in this specification is a lead-free soldering alloy made of gold, tin and indium. The tin is present in a concentration of 17.5% to 20.5%, the indium is present in a concentration of 2.0% to 6.0% and the balance is gold and the alloy has a melting point between 290 °C and 340 °C and preferably between 300 °C and 340 °C. The soldering alloy is particularly useful for hermetically sealing semiconductor devices since the melting temperature is sufficiently high to permit post-seal heating and sufficiently low to allow sealing of the semiconductor without causing damage.



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