This Sheet Has Been Replaced



THIS SHEET HAS BEEN REPLACED

ABSTRACT

BUMP BONDING METHOD AND BUMP BONDING APPARATUS

The present invention provides a bump bonding method that can prevent bumps from being inappropriately shaped. The bump bonding method comprises forming a gold ball (16) at the tip of a gold wire (1) that is inserted through a capillary (3), lowering the capillary (3) while using a displacement detection sensor to detect the vertical displacement of the capillary (3), detecting the position of that portion of an IC (11) in which an electrode is formed, based on the displacement of the capillary (3) detected by the displacement detection sensor when the gold ball (16) abuts the IC (11), pressing the gold ball (16) against the electrode forming portion to form a bump pedestal (17), elevating the capillary (3) a specified amount while moving it in the horizontal direction a specified amount, setting the height S of a position at which the capillary (3) is stopped based on the height H1 of the bump pedestal (17) detected by the displacement detection sensor, again lowering the capillary (3) down to the stop position height S to join the gold wire (1) to the bump pedestal (17), and then lifting the gold wire (1) to break the joint between the bump pedestal (17) and the gold wire (1).