

**METHOD AND APPARATUS FOR INSULATING
MOISTURE SENSITIVE PBGA'S**

ABSTRACT

A Method (300,400) and apparatus (200) for removing a component (100) having a solder ball grid array to a circuitized substrate (150) is disclosed. The solder balls (112) have a first temperature at which they melt. The component (100) has a second temperature, greater than the first temperature, over which the component (100) is damaged. The method (400) includes a step (402) of placing a thermal shield (114) over the component (100). In a next step (404), the circuitized substrate (150) and the component (100) are heated to a third temperature lower than the first temperature. In a next step (406), a stream of hot gas of a fourth temperature is directed for a predetermined time about the periphery of the thermal shield (114) such that the solder balls (112) reach the first temperature thereby reflowing the solder joints or balls (112), while other parts of the component (100) reach less than the second temperature. The component (100) can then be attached to the circuitized substrate (150) or removed therefrom.

FIG.3