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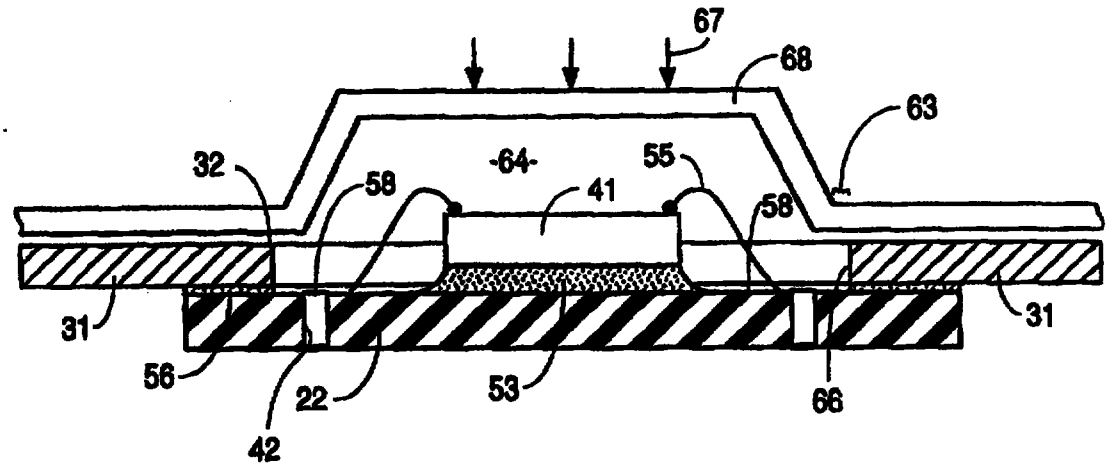

(57) Abstract

A grid array assembly method uses a semi-flexible substrate printed circuit board and includes steps of providing a series of conforming boards each board including bonding pads and metallization on a first surface and conductive vias in the board extending to a second opposite surface containing a contact pad array, testing the boards and determining acceptable boards. A carrier strip with longitudinally aligned apertures mounts individual accepted boards. The strip with mounted boards is passed to a station where an IC die is mounted on the board first surface, wire bonds are placed from the die to the bonding pads and the assembly encapsulated by automolding against a board first surface portion using the strip as the mold gate to form a package body. Subsequently interconnecting balls or bumps are placed on the contact pads and the assembly is removed from the strip.