ABSTRACT

WIRE BONDING PROCESS FOR INSULATED WIRES

A process for bonding insulated wires is provided wherein a conforming free air ball is formed from an insulated wire to create a ball bond. A tip of the insulated wire is first positioned close to an electronic flame-off device and a first electric discharge is produced from the electronic flame-off device to melt the tip of the insulated wire and produce a pilot ball. The electric discharge is then terminated. A second electric discharge is then generated to produce the conforming free air ball, and thereafter, the conforming free air ball is attached to a bonding surface to create the ball bond.

(FIG. 5)