

**ABSTRACT****METHOD AND APPARATUS FOR REMOVAL OF MOLD FLASH**

A method and apparatus for the removal of mold flash from an IC device using a non-thermal laser ablation method. Ablation is achieved under conditions in which the mold flash is converted to plasma under short laser pulses which do not give sufficient time or energy for significant thermal processes to occur. As a result, the heat sink underneath the mold flash is prevented from heating up due to lack of heat transfer, thereby protecting the heat sink from heat damages. According to one feature of the invention, a mask is provided to protect the molded packaging of the IC device from the laser beam. The mask has at least one hole which corresponds to the heat sink of the device wherethrough the laser beam can pass. According to another feature of the invention, a large beam diameter is provided to increase the efficiency of the deflashing process.

FIGURE 2