

ABSTRACT

SiC SUBSTRATE SEPARATING METHOD

Disclosed herein is an SiC substrate separating method for separating an SiC substrate into at least two parts in a planar manner, the SiC substrate having a first surface and a second surface opposite to the first surface. The SiC substrate separating method includes an adhesive tape attaching step of attaching a transparent adhesive tape to the first surface of the SiC substrate, a support member attaching step of attaching a support member to the second surface of the SiC substrate, and a separation start point forming step of setting the focal point of a laser beam having a transmission wavelength to the SiC substrate and the adhesive tape inside the SiC substrate at a predetermined depth from the adhesive tape and next applying the laser beam to the adhesive tape as relatively moving the focal point and the SiC substrate to thereby form a modified layer parallel to the first surface of the SiC substrate and cracks propagating from the modified layer, thus forming a separation start point. (Figure 8)