

ABSTRACT

WAFER PROCESSING METHOD

A wafer processing method for dividing a wafer into individual device chips is disclosed. The wafer is formed from an SiC substrate having a first surface and a second surface. The wafer processing method includes a division start point forming step of forming a division start point having a depth corresponding to the finished thickness of each device chip along each division line formed on the first surface, a separation start point forming step of setting the focal point of a laser beam having a transmission wavelength to the SiC substrate inside the SiC substrate at a predetermined depth from the second surface, and next applying the laser beam to the second surface as relatively moving the focal point and the SiC substrate to thereby form a modified layer parallel to the first surface and cracks extending from the modified layer along a c-plane, thus forming a separation start point, and a wafer separating step of applying an external force to the wafer, thereby separating the wafer into a first wafer having the first surface and a second wafer having the second surface.

(Figure 11)