

ABSTRACT

SiC WAFER PRODUCING METHOD

Disclosed herein is an SiC wafer producing method for producing an SiC wafer from a single crystal SiC ingot. The SiC wafer producing method includes a separation layer forming step of setting a focal point of a pulsed laser beam having a transmission wavelength to the ingot inside the ingot at a predetermined depth from a flat surface of the ingot, the predetermined depth corresponding to the thickness of the wafer to be produced, and next applying the pulsed laser beam to the ingot to thereby form a separation layer for separating the wafer from the ingot. The SiC wafer producing method further includes a wafer separating step of separating the wafer from the ingot along the separation layer, and a flat surface forming step of grinding an upper surface of the ingot as a rough separation surface left after separating the wafer, thereby removing the roughness of the upper surface of the ingot to flatten the upper surface of the ingot.

(Figure 6A)