

ABSTRACT

METHOD OF PRODUCING SiC WAFER

A method of generating an SiC wafer from an SiC ingot includes a peel-off plane generating step for generating a peel-off plane by performing a separation layer forming process for forming a separation layer made up of a modified layer and cracks extending from the modified layer along a c-plane, a plurality of times by indexing-feeding a focused point of a pulsed laser beam and the SiC ingot relatively to each other in a direction in which an off-angle is formed, thereby forming a plurality of separation layers to generate the peel-off plane. The peel-off plane generating step includes relatively moving the focused point from an end to an opposite end of the SiC ingot in a forward stroke and relatively moving the focused point from the opposite end to the end of the SiC ingot in a backward stroke to trace back the separation layer that has already been formed in the forward stroke.

(Figure 5A)