

ABSTRACT OF THE DISCLOSURE

A wafer producing method for producing a hexagonal single crystal wafer from a hexagonal single crystal ingot is disclosed. The wafer producing method includes a separation start point forming step of setting the focal point of a laser beam having a transmission wavelength to the ingot inside the ingot at a predetermined depth from the upper surface of the ingot, which depth corresponds to the thickness of the wafer to be produced, and next applying the laser beam to the upper surface of the ingot as relatively moving the focal point and the ingot to thereby form a modified layer parallel to the upper surface and cracks extending from the modified layer along a c-plane in the ingot, thus forming a separation start point. The wafer producing method further includes a wafer separating step of immersing the ingot in water after forming the separation start point in the ingot, and then applying ultrasonic vibration to the ingot to thereby separate a plate-shaped member corresponding to the wafer from the ingot.

(Fig. 10)