

ABSTRACT

SEMICONDUCTOR INGOT INSPECTING METHOD AND APPARATUS, AND LASER PROCESSING APPARATUS

Disclosed herein is an inspecting method for a semiconductor ingot in which modified layers parallel to an upper surface of the ingot and cracks extending from each modified layer are previously formed as a separation start point. The inspecting method includes a light applying step of applying light from a light source to the upper surface of the ingot, the light impinging on the upper surface at a predetermined incidence angle, a projected image forming step of reflecting the light on the upper surface of the ingot to obtain reflected light and then forming a projected image from the reflected light, the projected image showing the emphasis of asperities generated on the upper surface of the ingot due to the formation of the modified layers and the cracks inside the ingot, an imaging step of detecting the projected image to form a detected image, and a determining step of comparing the detected image with preset conditions to determine the condition of the modified layers and the cracks.

[Figure 8]