

LASER BEAM FOCAL POSITION DETECTING METHOD

ABSTRACT OF THE DISCLOSURE

Disclosed herein is a laser beam focal position detecting method. A pulsed laser beam having an absorption wavelength to a test wafer is applied to the test wafer as changing the focal position of the pulsed laser beam in a vertical direction, thereby forming a plurality of laser spots at different vertical positions such that a spacing is defined between any adjacent ones of the plural laser spots in a feeding direction. Thereafter, each laser spot is imaged by an imaging unit, and the outline of each laser spot is extracted from an image obtained by the imaging unit. Thereafter, the degree of similarity of the outline of each laser spot to an ideal outline previously stored in a memory is calculated. Finally, the focal position corresponding to a largest value for the degree of similarity is decided as a just focus position. The step of extracting the outline, the step of calculating the degree of similarity, and the step of deciding the focal position are performed by a control unit.

[FIGURE 4]