LASER ANNEALING METHOD AND LASER ANNEALING APPARATUS

ABSTRACT

In laser annealing using a solid state laser, a focus position of a minor axial direction of a rectangular beam is easily corrected depending on positional variation of a laser irradiated portion of a semiconductor film. By using a minor-axis condenser lens 29 condensing incident light in a minor axial direction and a projection lens 30 projecting light, which comes from the minor-axis condenser lens 29, onto a surface of a semiconductor film 3, laser beam 1 is condensed on the surface of the semiconductor film 3 in the minor axial direction of a rectangular beam. The positional variation of a vertical direction of the semiconductor film 3 in a laser irradiated portion of the semiconductor film 3 is detected by a positional variation detector 31, and the minor-axis condenser lens 29 is moved in an optical axis direction based on a value of the detection.

Fig. 1B