

ABSTRACT

LASER PROCESSING APPARATUS

A laser beam irradiation unit of laser processing apparatus includes a pulse laser beam oscillating unit, a condenser that condenses a pulse laser beam and emits the pulse laser beam to a workpiece held by a chuck table, a dichroic mirror disposed between the pulse laser beam oscillating unit and the condenser, a strobe light irradiation unit that emits light to a path on which the dichroic mirror and the condenser are disposed, a beam splitter disposed between the strobe light irradiation unit and the dichroic mirror, and an imaging unit disposed on the path of light split by the beam splitter. A controller actuates the strobe light irradiation unit and the imaging unit according to the timing of the pulse laser beam emitted to the workpiece, and detects the width of a laser-processed groove immediately after emission of the pulse laser beam on the basis of an image signal from the imaging unit.

(Figure 2)