

ABSTRACT

LASER PROCESSING APPARATUS

A focusing unit of a laser processing apparatus includes: a focusing lens that focuses a laser beam oscillated from a laser beam oscillating unit; and a spherical aberration extending lens that extends the spherical aberration of the focusing lens. A pulsed laser beam is applied from the focusing unit to a workpiece held on a chuck table, to form shield tunnels each composed of a fine hole and an amorphous region shielding the fine hole, the shield tunnels extending from an upper surface toward a lower surface of the workpiece.

(Figure 2)