

METHOD AND APPARATUS FOR LASER MARKING ON FINISHED GLASS DISK MEDIA

Abstract

There is disclosed a laser marking apparatus that is able to form dome-shaped marks on a finished glass disk that are visible to naked eyes. The laser marking apparatus comprises a CO₂ laser beam generator, a pulse calibration, a beam modifying and energy stabilizing system, an attenuator, a galvanometer, and a material handling unit. There is also disclosed a laser marking method that comprises calibrating the laser beam generated by the laser beam generator by pulse calibration, passing the calibrated laser beam from the laser generator through the attenuator and the beam modifying and energy stabilizing system, wherein the laser power can be selected, the laser mode can be improved, and the fluctuation of laser power from laser generator and optic path can be minimized, and directing the modified laser beam into the galvanometer, wherein the modified laser beam is directed by an x-y scanner and focused by F-Theta lens to the surface of a workpiece held by the materials handling unit.

FIG.1



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