

ABSTRACT

OPTICAL-DISC RECORDING AND REPRODUCING APPARATUS

An optical disc recording and reproducing apparatus realizes stable tracking control for correcting the displacement of an objective lens caused by gravity depending on the positional attitude of the apparatus. The optical disc recording and reproducing apparatus comprises an optical pickup having an objective lens for irradiating an optical disc with light beams, a light receiving section for receiving an optical spot from the optical disc, and a tracking actuator for moving the objective lens in a radial direction of the optical disc, the apparatus performing a tracking operation by driving the tracking actuator based on a tracking error signal obtained from an output signal from the light receiving section, wherein said optical disc recording and reproducing apparatus further comprises an optical-spot offset controlling unit adapted, before the tracking operation, for detecting relative displacement of the optical spot on the light receiving section by operating calculation of the output signal from the light receiving section, and driving and positioning the tracking actuator, thereby maintaining the relative displacement at a fixed value.

Figure 1.