OPTICAL DEVICE

ABSTRACT OF THE DISCLOSURE

An optical device comprises a light-emitting portion (4), a converging means (3), and a light-receiving portion (5), wherein light (L_F) emitted from the light-emitting portion (4) is converged and irradiated by the converging means (3) on an irradiated portion (2) and returned light (L_R) reflected from the irradiated portion (2) also is converged by the converging means (3), the light-receiving portion (5) is disposed near a confocal position of returned light (L_R) from the irradiated portion (2) of the converging means (2), light (L_F) emitted from the light-emitting portion (4) is passed through a light path of the same axis and received by the light-receiving portion (5) before and after it is reflected on the irradiated portion (2), and the light-receiving portion (5) detects a signal based on a push-pull method. In the optical device such as an optical pickup, the number of optical components can be reduced, and alignment required to adjust optical components of the optical device for proper interrelationship can be simplified. Thus, the optical device can be simplified and miniaturized. Also, a tracking servo signal can be stably detected by utilizing push-pull method.

Figure 6