

OPTICAL PICKUP, TILT DETECTION APPARATUS, TILT DETECTION
METHOD AND OPTICAL DISK APPARATUS

ABSTRACT OF THE DISCLOSURE

A tilt detection apparatus capable of detecting the tilt of the optical disk, provided with a laser for outputting a laser beam, a diffraction grating for diffracting the laser beam from said laser to generate a 0th order diffraction beam and +-first order diffraction beams which have the phase distribution equal to the phase distribution due to the wave front aberration generated on an optical disk when the optical disk is tilted, an objective lens for collecting said diffraction beams and exposing the beams to the optical disk, a photodetector for generating signals corresponding to said +-first order diffraction beams reflected at said optical disk, a signal generation circuit for generating the push-pull signals based on the generated signals, and a tilt detection circuit for detecting the tilt of the optical disk based on the push-pull signals.

Figure 10