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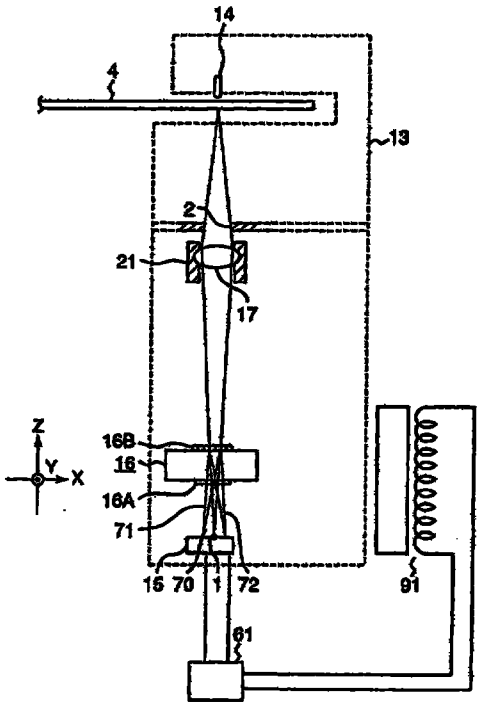
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(57) Abstract

In a magnetic memory drive, a diffraction grating (16) receives a beam emitted by a light source (1) to generate three beams of 0th-order and ±1st-order light beams, and a condensing system (17) converges the beams on a magnetic recording medium (4). The beams reflected from the medium is received by a photodetector (15) which outputs signals corresponding to quantities of the received beams, and a signal processor (61) processes the signals to output a tracking error. The photodetector comprises a plurality of light-receiving sections. When crosstalk from a light-receiving section for the 0th-order beam to light-receiving sections for the ±1st-order beams is ϵ and crosstalk from the light-receiving sections for the ±1st-order beam to the light-receiving section for the 0th-order is ϵ' in the light-receiving sections of the photodetector, quantity of light Q_0 of the 0th-order light beam and quantity of light $Q_{\pm 1}$ of the ±1st-order light beams has a relationship represented by equation (1). Thus, the tracking error is reduced.



$$Q_0 : Q_{\pm 1} = \sqrt{\frac{2\times\epsilon'}{\epsilon}} : 1. \quad (1)$$