

ABSTRACT

The present invention relates to a method for accurately detecting and controlling
5 a position of an optical head and an optical disk, and pertains to the technical field of
optical holographic storage. According to the present invention, by utilizing the narrow
shift selectivity of a spherical reference beam shift multiplexing technology, a control
area that includes an x-direction position control unit and a y-direction position control
unit and that is separated from a data area is formed in a storage medium. Like the data
10 area, holograms of special patterns are recorded in the control area, when the data is
read, information in the control area is read first, and the position of the optical head
relative to the hologram in the data area can be detected in the x direction and the y
direction respectively according to the information read by the hologram in the control
area, so that reference light is controlled to the correct position shown by the address.

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[Fig. 3]