【Name of Document】 ABSTRACT

【Title of the Invention】 DISK DRIVE DEVICE AND CLEARANCE CONTROL METHOD THEREFOR

【Abstract】

【Problem】 To more precisely control the clearance between a head and disk for the pressure without using a barometric sensor.

【Solving Means】 In an embodiment of the present invention, an HDD determines a clearance from variations in operational parameters, and further determines a variation in pressure by deducting the clearance variation caused by a variation in temperature from the clearance. When the HDD controls the clearance in accordance with the pressure change, the HDD checks for head-disk contact. The accuracy and reliability in pressure measurement (clearance measurement) using operational parameters are not high. Therefore, confirming the pressure measurement by the presence or absence of head-disk contact eliminates head-disk contact in the following read/write operation to attain a securer margin for the clearance.

【Selected Drawing】 FIG. 4