

DATA STORAGE DEVICE AND A METHOD OF CONTROLLING WRITE OF USER
DATA THEREOF

[Title of Document] Abstract

[Object]

To prevent offtrack write that will be caused due to a head vibration.

[Solving Means]

A hard disk drive (HDD) according to an embodiment of the present invention judges approval/disapproval of write of user data to a magnetic disk by using a read signal for user data in addition to servo data in write processing. Thus, a head vibration which cannot be precisely detected based on servo data is detected to prevent off-track write. More specifically, the HDD acquires a read back signal amplitude of a read element 121 with respect to a user data sector 212 within adjacent servo data 211 during a write access phase, and detects a vibration from a maximum value MAX and a minimum value MIN of the read back signal amplitude to judge data write approval/disapproval.

[Selected Drawing] Fig. 3