ABSTRACT

MONITOR SYSTEM FOR DETERMINING THE AVAILABLE CAPACITY OF A READ BUFFER AND A WRITE BUFFER IN A DISK DRIVE SYSTEM

A data buffer monitor apparatus which monitors the space availability in WRITE buffer and the number of sectors available for transfer in the READ buffer and generates the OK TO TRANSFER signal. The data buffers monitor apparatus includes a READ buffer monitor, a WRITE buffer monitor and a transfer controller. The READ buffer monitor monitors the total number of sectors stored in the READ buffer, the number of sectors in the READ buffer available for transfer to the host and generates a READ OK TO TRANSFER signal if the sectors for a requested READ operation are stored in the READ buffer. The WRITE buffer monitor monitors the total number of sectors in the WRITE buffer and generates a WRITE OK TO TRANSFER signal if the WRITE monitor determines that a requested WRITE operation can be performed. The transfer controller in response to either the READ OK TO TRANSFER signal being generated by the READ buffer monitor if a READ operation has been requested or the WRITE OK TO TRANSFER signal being generated by the WRITE buffer monitor if a WRITE operation has been requested generates a OK TO TRANSFER signal indicating the requested READ or WRITE operation transfer of sectors to and from the disk drive system may be performed by the disk drive.

Figure 1