ABSTRACT

The substantial data recording area on the recording medium is expanded by reducing the gap area to compensate the delay time of data conversion while data recording and reproducing in data storage and retrieval device. Namely, the purpose is the improvement of the efficiency of formatting.

Based on servo sector signal 10, data sector generator circuit 16 generates write data sector signal 19, which indicates the timing of data recording in data recording area, and transmits the data to delay circuit 17 and selector 18 which has 2 input port and 1 output port. Delay circuit 17 outputs read data sector signal which is a delayed signal of write data sector signal with certain period. These 2 signals are inputted to selector 18. Selector 18 outputs write data sector signal 19 when write mode signal 21 is active, and outputs read data sector signal 20 as data sector signal 15 when write mode signal is inactive.