METHOD AND APPARATUS FOR ENCODING DIGITAL SERVO INFORMATION IN A SERVO BURST

ABSTRACT

A method and apparatus for writing binary servo data into the servo bursts contained on the storage medium (104) of a storage device (102). The binary servo information may include track identifying information such as a track number, cylinder number, head number, sector number, index and/or SID. A burst includes T time slots, each slot comprising one cycle of the servo burst frequency, and the servo data to be written comprises X bits of binary data. Each one-bit of the servo data is represented as a slot containing a transition, and each zero-bit is represented as an empty or null slot. In this manner, the present invention provides a highly bit-efficient scheme for representing digital servo data.

A high quality PES signal is assured by writing the binary servo information in such a manner as to guarantee a threshold number of transitions as required for accurate peak-hold detection.

Fig. 1