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CLAIMS

1. An apparatus for controlling the reading and writing of a data stream to and from the data fields of a sector-servo fixed-block-architecture disk drive having some servo sectors located within data fields and splitting their associated data fields into at least two portions, the apparatus comprising:

means for storing a value representing the location of a servo sector within a data field;

a counter for counting the number of data clock cycles in the data stream;

means coupled to the counter and the servo sector location value storing means for comparing the count value with the stored servo sector location value;

means responsive to the comparing means for interrupting the data stream; and

means for updating the storing means with a value representing the location of the next servo sector.

2. The apparatus according to claim 1 further comprising an encoder/decoder for encoding and decoding data in the data stream, and wherein the interrupting means includes means for freezing the encoder/decoder.

3. The apparatus according to claim 1 further comprising means for clocking the data in the data stream, and wherein the interrupting means is coupled to the clocking means.

4. The apparatus according to claim 1 further comprising a disk data controller for controlling the data stream and a data clock generator coupled to the disk data controller for generating data clock cycles during write mode of the disk drive, and wherein the interrupting means is coupled to the disk data controller.

5. An apparatus for controlling the reading and writing of data to and from the data fields of a sector-servo fixed-block-architecture disk drive, the disk drive having a data disk with some servo sectors located within the data fields and splitting their associated data fields into at least two portions of unequal length, the apparatus comprising:

means for clocking write data to and read data from the data fields;

means for storing a first value representing the location of a servo sector within a data field;

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a counter for counting data clock cycles;

a comparator coupled to the counter and the servo sector location-value storing means for generating a signal when the value in the counter matches the stored servo sector location value;

means coupled to the clocking means and responsive to the comparator signal for interrupting the reading or writing of data for a fixed time period; and

means for updating the storing means with a second value, different from the first value, representing the location of the next servo sector within its associated data field.

6. The apparatus according to claim 5 wherein the disk drive is a banded recording disk drive with each band having a unique number of data fields, wherein the storing means includes means for storing the location of servo sectors for each of the bands, and wherein the updating means includes means for updating the storing means with second values representing the location of the next servo sector in each of the bands.

7. The apparatus according to claim 5 further comprising an encoder/decoder for encoding and decoding data in the data stream, and wherein the interrupting means includes means for freezing the encoder/decoder.

8. An apparatus for controlling the reading and writing of a data stream to and from the data fields in a sector-servo fixed-block-architecture disk drive, the disk drive having an encoder/decoder for encoding and decoding data in the data stream, a voltage-controlled oscillator for clocking data in the data stream during read mode, and a data disk with some servo sectors located within the data fields and splitting their associated data fields into at least two portions, the apparatus comprising:

a data clock generator for clocking data in the data stream during write mode;

a disk data controller for controlling the data stream to and from the encoder/decoder, the disk data controller being coupled to the data clock generator and having means for receipt of a clocking signal from the voltage-controlled oscillator;

means for storing a first value representing the location of a servo sector within a data field;

a counter coupled to the data clock generator and having means for receipt of a clocking signal from the voltage-controlled oscillator for counting data clock cycles during read and write modes;

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a comparator coupled to the counter and the servo sector location value storing means for generating a signal when the value in the counter matches the stored servo sector location value;

data timing and control circuitry coupled to the disk data controller and the comparator for interrupting the data stream for a fixed time period in response to the comparator signal, whereby data in the data stream is not read from or written to the data fields during said time period; and

means for updating the storing means with a second value representing the location of the next servo sector within its associated data field.

9. The apparatus according to claim 8 wherein the disk drive is a banded recording disk drive with each band having a unique number of data fields, wherein the storing means includes means for storing the location of servo sectors for each of the bands, and wherein the updating means includes means for updating the storing means with second values representing the location of the next servo sectors in each of the bands.