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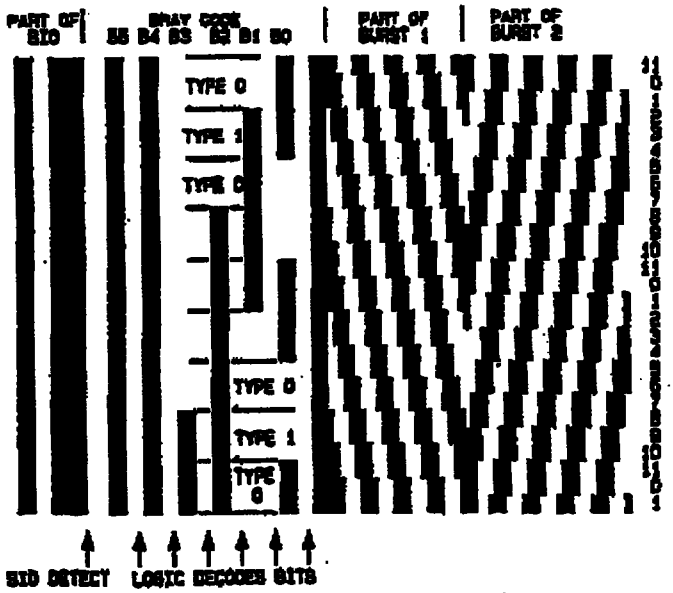
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(54) Method and apparatus for servo positioning in a direct access storage device

ABSTRACT

(57) A phase modulated servo method and apparatus provides acceptable position linearity for servo positioning with a narrow transducer head in a disk file. The disk file includes at least one disk mounted for rotation about an axis and the disk has at least one disk surface for storing data and has a transducer mounted for movement across the disk surface for writing to and for reading data and servo patterns from the disk surface. The transducer includes a read element and a write element. The read element has a width less than the write element and the read element width is greater than 1/3 of a data cylinder and less than 1/2 of a data cylinder. A servo pattern is written on the data disk surface having a track pitch of less than 1/2 of a data cylinder and the servo pattern repeats in a selected binary number of data cylinders.

FIG. 4



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