

ROBUST DETECTION OF A DATA MODULATED INTO A TIMING BASED SERVO

ABSTRACT

There is disclosed a method for detecting data modulated into a timing based servo pattern prerecorded on a media, comprising shifts of pairs of non-parallel transition stripes arranged in a frame of two bursts. Timing intervals between sequential transition stripes are detected(111). Interval comparison logic compares (114) selected timing intervals and indicates (115) whether the compared intervals represent a "0", or a "1". First and second counters (106, 107) respectively increment (116, 117) the number of the compared intervals representing a "0" and a "1" in each frame. Bit comparison logic compares (120) for each frame, the incremented numbers to a predetermined criteria and, upon one of the numbers meeting the criteria, identifies the corresponding "0" or "1" as the bit value for the frame. Sequence logic calculates the next word and determines whether the detected word is in the linear sequence as a validity check, and provides the calculated word as the output. Thus, the correct position word is provided.

FIG 6