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(54) Title: METHOD AND APPARATUS FOR DETECTION IN DIGITAL MAGNETIC RECORDING

(57) Abstract

A detector (200) in an informational handling system and a method of detection is provided. An input circuit (250, 252) is used to receive an input signal (202). A second circuit determines boundaries (A, B, E') based on the input signal (202). However, at least two of the boundaries (A, B) specified by the second circuit are monotonically related to each other. The detector (200) can be implemented in a magnetic disc drive (110). A read circuit (155) is operably coupled to the disc (112) to read data stored on the disc (112). The read circuit (155) includes an input circuit (250, 252), a boundary calculation circuit, and a logic circuit (283) operably coupled to one another. The input circuit (290, 252) serves to receive the data and provide an input to the boundary calculation circuit. The boundary calculation circuit calculates several boundaries (A, B, E') based on the input (202). At least two of the boundaries (A, B) are monotonically related. The boundary circuit provides an output to the logic circuit (283) which provides a binary decision.

