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IN-SITU ENVELOPE DETECTION SYSTEM FOR MAGNETIC RECORDING

ABSTRACT

Embodiments of systems, methods and article of manufacture provide for readback signal detection and analysis. One embodiment provides an in-situ system (300) to detect envelope traces of a readback signal. Using the envelope data, the presence of undesirable activity and/or storage medium (310) surface conditions may be determined. For example, head modulation may be determined. Upon detection of a modulation event in a sector or a track, the comprised data may be recovered using a signal processing system (340). Another embodiment provides for detection of a thermal signal component in a surface condition. Information indicating a defect may then be used to avoid storage areas having the defects.

FIG. 3



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