

METHOD AND APPARATUS FOR RESTORING
A THERMAL RESPONSE SIGNAL OF A MAGNETORESISTIVE HEAD

Abstract

A method and apparatus for reading an information signal or a readback signal from a magnetic storage medium (24) using a magnetoresistive (MR) element (72), modifying the signal such that a thermal component of the signal representing a thermal response of the MR element is degraded, and altering the modified signal (60) to produce a restored thermal signal (80) substantially representative of the thermal component of the signal read from the MR element to an arm electronics (AE) module (74) having a highpass filtering behavior. The AE module passes content of the information signal other than the thermal component content, thereby degrading the thermal component of the information signal. An inverse filter (156) included in the signal separation/restoration module (76) receives the highpass filtered signal from the AE module and produces the restored thermal signal.

Figure 1

This Sheet Has Been Replaced

