METHOD AND APPARATUS FOR RUN-TIME TEMPERATURE COMPENSATION OF GIANT MAGNETORESISTIVE HEAD BIAS CURRENT

ABSTRACT OF THE DISCLOSURE

A process of run-time temperature compensating bias current to a magnetoresistive read head in which a plurality of temperature ranges are defined with associated bias current values. A hysteresis range of temperatures is defined for each boundary between temperature ranges. A bias current value is selected based on the temperature range of the sensed temperature. The process is repeated. If the sensed temperature is in a different temperature range from that previously identified and the measured temperature is not in a hysteresis range at the boundary with the temperature range previously identified, the selected bias current value is based on the presently identified temperature range. If the sensed temperature is in a hysteresis range at the boundary with the temperature range previously.

Fig. 2