THIS SHEET HAS BEEN REPLACED

Abstract

DISK DRIVE

A rotary actuator disk drive uses substantially identical dual-element inductive write/magnetoresistive read transducers for both the top and bottom disk surfaces. There is no requirement that the read elements be mechanically offset from the write elements, as is typically the case in rotary actuator disk drives due to the head-to-track skew caused by the inherent nonlinear path of the heads across the data tracks. The transducers are supported on the trailing ends of the head carriers in such a manner that the geometric centers of the read and write elements are aligned without any mechanical offset. The sense current for the magnetoresistive elements is provided with opposite polarity to the elements on the top and bottom disk surfaces to shift the magnetic centers of the top and bottom read elements in opposite directions relative to their geometric centers. The amount and direction of the magnetic shift is such that the read elements are effectively offset from their respective write elements so that the skew caused by the rotary actuator has minimal effect on alignment of the read and write elements with the data tracks.

This Sheet Has Been Replaced

