

A Twin Head Design for Micro-Actuator Position Sensing in a Hard Disk Drive

ABSTRACT OF THE DISCLOSURE

An improved HDD actuator architecture which overcomes limitations within the prior art to enable HDD systems to operate with increased TPI disks. The present invention allows precision control of a micro-actuator read/write head 16a, 16b by measuring the position directly with the read/write heads rather than relying on a position sensor. According to an embodiment of the present invention, the position of the micro-actuator head 16a, 16b with respect to the conventional actuator assembly 12 is determined by comparing the position of the micro-actuator head 16a with the position of a second head 16b affixed to the conventional actuator 12 using disk servo patterns.

FIGURE 2