ABSTRACT

AN ACTUATOR ASSEMBLY WITH ORTHOGONAL FORCE GENERATION

An actuator assembly for positioning read/write heads above a data storage media comprises a pivotally mounted carriage arm assembly with a voice coil and a magnetic device having a plurality of poles for generating a magnetic field. The voice coil is positioned with its effective portions crossing through the magnetic field to generate at least one pair of driving forces in a direction substantially orthogonal to a seeking direction of the read/write heads. The carriage arm driven by said pair of forces has substantially no reacting force generated onto the pivot so that the servo bandwith of the head positioning assembly can be improved and achieves a high degree of head positioning accuracy.

(Figure 4)