ABSTRACT

HEAD SUSPENSION ASSEMBLY WITH PIEZOELECTRIC BEAM MICRO ACTUATOR

A micro actuator driven load beam mechanism for use in a head suspension assembly is disclosed. The mechanism includes a load beam including a proximal end portion and a distal end portion, a hinge portion connecting the proximal and distal end portions of the load beam for permitting relative movement therebetween, and a piezoelectric beam connecting the proximal and distal end portions, the piezoelectric beam being selectively energizable to effect relative movement between the proximal and distal end portions. The load beam includes a pocket for holding at least one end of the piezoelectric beam. The piezoelectric beam and the pocket may be inclined relative to a hinge plane to control the load beam twist and minimize the altitude variations of the beam tip.

(Figure 2)