ABSTRACT

PIVOT SUPPORT FOR ACTUATOR ARM

The disclosure relates to a pivot bearing assembly (52) for a disc drive comprising in combination a bearing (52) surrounded on one side by a wishbone-shaped end (60) of the actuator arm (38), and on the other side by a biasing spring metal strip (70) whose ends are tightly attached to the split ends (62, 64) of the wishbone of the actuator arm. When the arm assembly is mounted in the disc drive, the bearing is mounted on its center of rotation, with the spring tensile force biasing the head of the actuator arm against the spindle (42) of the stepper motor (37). The distal end of the actuator arm with a gear sector (56) which meshes with a pinion (42a) on the motor shaft (42) of the stepper motor (37) so that rotation of the motor shaft causes movement of the actuator arm (38) and with it the flexure (36) and transducer (34), across the surface of the disc (30). The bearing (52) comprises a pair of compliant bearings (53, 54) which are pre-loaded inwards by a screw (57) essentially along the lines of force (55, 56) to create a very long effective axis.

(Figures 1B and 4A are to accompany Abstract when published)