ABSTRACT

APPARATUS FOR COMBINING LINEAR AND ROTATIONAL MOTION OF AN AZIMUTH READ/WRITE HEAD

A mechanism and method for providing rotational and linear movement to an azimuth tape recording head is disclosed. The mechanism includes a toothed gear upon which the read/write head is mounted. Two identical threaded shafts, each extending from identical stepper motors are mounted on a base, along a same vertical plane as the toothed gear. Rotational axes of the threaded shafts are arranged in a parallel relation such that each is méshably engaged to the toothed gear on opposing sides. Rotational movement of the head is achieved by synchronously rotating the threaded shafts, at the same speed, in opposite directions. Linear movement, or lifting/lowering, of the head is achieved by synchronously rotating one threaded shaft in one direction and the other threaded shaft in the opposite direction.

FIGURE 4