This Sheet Has Been Replaced



ABSTRACT

LIMIT STOP AND MAGNETIC LATCH IN A DISC STORAGE SYSTEM

A limit stop 170, 172 is provided in a disc storage system having a rotary actuator 106 mounted for travel about an axis 118 adjacent to a rotating disc 100, and having an arm 114 supporting a transducer 112 over the surface of said disc and a motor element support 122 extending opposite to said arm from said rotary support axis. A limit stop to limit the extent of movement of the motor element support is mounted on the base 108 of the housing 110. The limit stop comprises a fixed portion 204 mounted to the housing base, and extended portion 200 mounted to define the limit of travel of the motor element support, said extended portion being connected to the fixed portion by a thin connecting portion 202 which flexes under impact by the motor element. The fixed mounting portion, thin connecting portion, and extended portion form essentially a U-shaped element having a defined gap 210 across the base of the "U". The gap defining the amount of flexibility in the limit stop. The flexibility being adapted to allow for absorption of the energy of the moving actuator arm, while causing the arm to rest against the surface of the limit stop with the transducer resting on the surface of the disc. The extended portion may also include a magnetic latch 260.

Figure 1.