A DISK DRIVE

ABSTRACT

A data storage disk drive is provided with a spindle 42 which supports a plurality of disks 110 for rotation about a common axis, and a rotary actuator 20 which supports magnetic transducers for movement in unison across respective disk surfaces. The disk drive includes a disk drive enclosure having die-cast generated predetermined zero draft registration surfaces 30-40 for mounting the spindle motor shaft 42 and the actuator bearing shaft 44 and possibly magnet assemblies 46, 48. The enclosure includes a base casting 14 and a cover casting 16, each casting including structure (figs. 7-9) for locating and retaining electrical connectors used for connecting to a planar electronics card (90) located outside the drive enclosure. The disk drive includes an effective and easily manufacturable electrical path from a flax circuit to an actuator comb (figs. 11-13). The disk drive also includes a tubular, at least partly electrostatic, chemical breather filter (56) arranged with integral housing and diffusion channels (58) formed in the cover casting (figs. 14-24).

Fig. 1