

HARD DISK FILE DESIGN FOR IMPROVED HEAD MERGE PROCESS IN TUB CASTING

ABSTRACT

A head disk assembly file (11) has a tub-type basecasting (15) with side walls, a floor and a pack of hard disks (21). The file also comprises an actuator (31) having a set of head gimbal assemblies (33) with magnetic heads (34). The actuator (31) is secured to the file and is rotatable from a pre-merge position outside of the disks to an inner diameter position near the centers of the disks. A head merge tool (13) comprising a merge comb (41) with fingers interfaces with the file at a home position. In the home position, the merge comb (41) is surrounded by but free of contact with the side walls (17, 19), the floor (15) and the head gimbal assemblies (33). The floor has a recess (51) located beneath the merge comb (41). The recess (51) extends from one side wall (19) to the inner diameter of the disks (21) and provides a clearance for a lowermost finger (43) of the merge comb (41).

Fig. 1