ABSTRACT

COUNTER BALANCED ROTARY AIRLOCK ACTUATOR LATCH ASSEMBLY FOR DISK DRIVE

An airlock latch assembly for restraining a disk drive actuator when the disk is not spinning and the disk drive is subjected to a rotational shock force is disclosed. The latch assembly includes a latch member meshably engaged with a counter inertia member by gear teeth provided on each member. The latch member and the counter inertia member are each characterized by a moment of inertia, the ratio of which is determined by the gear ratio of the respective gear teeth. The latch assembly also restrains the actuator in its proper position when the disk drive is subject to linear shock forces.

FIGURE 3