impact may cause the actuator arm to be dislodged from the ramp pad or from the non-critical area. This may then result in the actuator arm coming into contact with the surface of the magnetic platter, possibly causing disk corruption and loss of data as the read write heads brush abrasively against the magnetic platter. In other words, when a HDD is too weak or floppy, there is a higher risk that the actuator arm may damage the disk when the HDD suffers an impact. Conversely, if the structure of the casing is too rigid, the vibration or shock may be transmitted directly to the HDD components, which is equally undesirable.

In addition, during production of conventional HDD bases, there is a need for meticulous post-machining due to the need to refine the miniature parts that require a more precise outline.

Accordingly, there is a need to provide a HDD base that overcomes, or at least ameliorates, the disadvantages mentioned above. In particular, there is a need to provide a HDD base that is lightweight but at the same time retains or improves mechanical strength. There is also a need to provide a HDD base that is optimized to resist shock and impact whilst being economical to produce and requires minimal or no post-machining at all.

Summary

~~In a first aspect, t~~There is provided a HDD base comprising: at least two anchor formations for anchoring at least two parts of a HDD; and a rigid member configured to retain said anchor formations in a fixed position relative to each other. In a first aspect, there is provided a hard disk drive (HDD) base comprising: a motor hub anchor formation, a ramp pad anchor formation and a pivot emboss anchor formation, said anchor formations being integrally formed on a unitary rigid member and being configured on said unitary rigid member to retain said anchor formations in a fixed position relative to each other. In one embodiment, there are at least three anchor formations on the HDD.

In a further embodiment, the three anchor formations are respectively configured to couple to and anchor the motor hub, ramp pad and pivot emboss of the HDD.

In yet another embodiment, the rigid member may be configured to hold the at least two or more anchor formations in a common plane. Advantageously, the rigid member, is capable of substantially reducing the relative motion of the motor hub, ramp pad and pivot emboss relative to one another. Advantageously, in so doing, the rigid member is capable of keeping critical positions in the HDD (such as the spindle motor, actuator arm pivot and ramp pad) in or about a common plane, thereby securing moving parts in the HDD, e.g. the actuator arm, and prevents damage to the HDD in the event of a physical impact. Also advantageously, the rigid member provides resistance against stress and deformation of the HDD which can be experienced when, for example, the user is resting his arm on the laptop surface, thereby applying stress on the HDD.

~~In a second aspect, t~~There is provided a HDD comprising a base, the base comprising at least two anchor formations for anchoring at least two parts of a HDD; and a rigid member configured to retain said anchor formations in a fixed position relative to each other.

In a second aspect, there is provided a HDD comprising: a chamber having said HDD disposed therein; a HDD base comprising a motor hub anchor formation, a ramp pad anchor formation and a pivot emboss anchor formation, wherein said anchor formations are integrally formed on a unitary rigid member and being configured on said unitary rigid member to retain said anchor formations in a fixed position relative to each other.

In another embodiment of the present disclosure, there is provided a HDD base comprising plastic. In one embodiment, the HDD base may be substantially comprised of plastic. The HDD base may be completely made of plastic.

Advantageously, a HDD base made of plastic is more cost effective to produce compared to HDD bases that are constructed from metals such as aluminum. In one embodiment, for a comparably-sized HDD base, cost savings in excess of 50% can be achieved when the HDD base is

an adjacent edge of the unitary rigid member to an adjacent edge of the HDD base.

21. The HDD as claimed in any one of claims 19 or 20, wherein the connecting arms comprise a conduit for receiving a fastening means for fastening the unitary rigid member to the HDD base.

22. The HDD as claimed in claim 21, wherein the conduit for receiving the fastening means for fastening the unitary rigid member to the HDD base is aligned with a conduit of the HDD base for receiving the fastening means that also fastens a HDD top cover to the HDD base.

23. The HDD as claimed in any one of claims 19 to 22, wherein plural connecting arms extend substantially around the perimeter of the unitary rigid member and respectively extend to the edge of the HDD base.

24. The HDD as claimed in claim 23, wherein six connecting arms extend from the edges of the unitary rigid member to the edges of the HDD base.

25. The HDD as claimed in any one of claims 21 to 24, wherein the conduits on the connecting arms are configured to receive a screw.

26. The HDD according to any one of claims 18 to 25, wherein said unitary rigid member is configured to hold two or more of said anchor formations in a common plane.