

MAGNETIC HEAD COATED WITH LOW SURFACE ENERGY MATERIAL

Abstract

In the present invention, at least parts of surfaces of write element (32) or read element (34) of the surface of the magnetic head (24) are coated with low surface energy materials. Therefore, these coated surfaces do not easily attract water due to their humidity resistance, wetting resistance and hydrophobicity, resulting in improvement of corrosion resistance of these coated surfaces. As particular evaluation, surface energy values of water and low surface energy materials are determined. Then, as low surface energy materials FCOC (fluorocarbon compounds), and especially materials containing perfluoroalkylpolyoxyethyleneethanol are selected. Particular surface energy values of selected materials are also determined. Further, in forming thin films of low surface energy materials on magnetic heads, their preferable thickness is selected to be 5 – 100 Å, 10 – 20 Å being more preferable.

Fig 2