MAGNETIC RECORDING MEDIUM AND METHOD OF MANUFACTURING THE SAME

ABSTRACT

In a magnetic recording medium having an underlying film of a body-centered-cubic (bcc) CrV-based alloy and a magnetic film of a hexagonal close-packed (hcp) CoPtCr-based alloy deposited on the underlying film, a difference between a crystal lattice plane distance $d_{(002)}$ of (002) planes in the hcp alloy of the magnetic film and another crystal lattice plane distance $d_{(110)}$ of (110) planes in the bcc alloy of the nonmagnetic film is given by subtracting $d_{(110)}$ from $d_{(002)}$ and falls within a range between 0.002 and 0.032 angstrom. Preferably, the difference $d_{(002)}-d_{(110)}$ is present between 0.014 and 0.030 angstrom. Only a single pair of the underlying film and the magnetic film may be included in the magnetic recording medium or plural pairs of the underlying film and the magnetic film may be included in the magnetic recording medium.

Fig. 1.

This Sheet Has Been Replaced

