ABSTRACT

MAGNETIC RECORDING MEDIUM HAVING A LUBRICANT FILM COATED ON OPTIMUM CONDITIONS AND METHOD OF EVALUATING THE LUBRICANT FILM

A magnetic recording medium is disclosed which has nonmagnetic substrate 21,23 on which a magnetic layer 24, a protection film 25, and a lubricant film 26 are successively stacked. The lubricant film 26 is formed by quantitatively controlling an amount of a lubricant in consideration of a surface coverage ratio of the lubricant film 26 relative to the protection film 25 and an average thickness of the lubricant film 26. Preferably, the surface coverage ratio is selected to be between 0.55 and 0.985 while the average thickness is not smaller than 0.4 times the attenuation length of a photoelectron which is emitted from a predetermined element and which is attenuated in the lubricant film 26. To this end, X-ray photoelectron spectroscopy is used to evaluate the lubricant film 26.

Fig. 1.