

ABSTRACT

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

5 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
10 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
15 the lubricant film 26.

Fig. 1.