MAGNETIC DISK AND METHOD OF MANUFACTURING SAME

Abstract

Disclosed is a method of manufacturing magnetic disks, comprising a magnetic layer, a protective layer, and a lubricating layer on a substrate. In the process, a lubricant *alpha* comprising a compound denoted by chemical formula

$HO\text{-}CH_2\text{-}CH(OH)\text{-}CH_2\text{-}O\text{-}CH_2\text{-}CF_2(\text{-}O\text{-}C_2F_4)p\text{-}(O\text{-}CF2)q\text{-}O\text{-}CF_2\text{-}CH_2\text{-}O\text{-}CH_2\text{-}CH(OH)\text{-}CH_2\text{-}OH$

wherein p and q are natural number,

and a compound denoted by chemical formula

$HO\text{-}CH_2\text{-}CF_2(\text{-}O\text{-}C_2F_4)m\text{-}(O\text{-}CF2)n\text{-}O\text{-}CF_2\text{-}CH_2\text{-}OH$

wherein m and n are natural number,

is fractionated by molecular weight to prepare a lubricant *a* having a weight average molecular weight (Mw) of from 3,000 to 7,000 and a molecular weight dispersion of less than or equal to 1.2;

a lubricant *beta* comprising a compound denoted by the chemical formula

$HO\text{-}CH_2\text{-}CF_2(\text{-}O\text{-}C_2F_4)m\text{-}(O\text{-}CF2)n\text{-}O\text{-}CF_2\text{-}CH_2\text{-}OH$

wherein m and n are natural number,

is fractionated by molecular weight to prepare a lubricant *b* having a weight average molecular weight (Mw) of from 2,000 to 5,000 and a molecular weight dispersion of less than or equal to 1.2;

a lubricant *c* comprising a mixture of lubricants *a* and *b* is prepared; and

a film of lubricant *c* is formed on a protective layer provided on a substrate to form a lubricating layer. A magnetic disk comprising a magnetic layer, a protective layer, and a lubricating layer on a substrate, in which the lubricating layer has been formed on the protective layer is also enclosed.

(Fig. 1)