ABSTRACT

[Abstract]

[Object] To achieve a high coercive force (Hc) and low-noise characteristics (high S/N ratio) through realization of both segregation of SiO_2 and high perpendicular magnetic anisotropy by providing a two-layer structure having magnetic recording layers with different properties.

[Solution] A magnetic disk for use in perpendicular magnetic recording, having at least an underlayer 5, a first magnetic recording layer 6, and a second magnetic recording layer 7 on a substrate in this order. The first magnetic recording layer 6 and the second magnetic recording layer 7 are each a ferromagnetic layer of a granular structure containing a nonmagnetic substance forming grain boundary portions between crystal grains containing at least Co (cobalt). Given that the content of the nonmagnetic substance in the first magnetic recording layer 6 is A mol% and the content of the nonmagnetic substance in the second magnetic recording layer 7 is B mol%, A>B.

[Selected Figure] Fig. 1