

ABSTRACT

An object of the present invention is to provide a magnetic recording medium having a thick magnetic recording layer of excellent magnetic characteristics. The magnetic recording medium of the present invention includes a non-magnetic substrate and a magnetic recording layer, wherein the magnetic recording layer includes a plurality of first magnetic recording layers located at odd-numbered positions from the non-magnetic substrate, and one or more second magnetic recording layers located at even-numbered positions from the non-magnetic substrate, the first magnetic recording layers each having a granular structure that has first magnetic crystal grains with an ordered alloy and a first non-magnetic portion surrounding the first magnetic crystal grains and formed of a material having carbon as the main component, and the second magnetic recording layer having a granular structure that has second magnetic crystal grains with an ordered alloy and a second non-magnetic portion surrounding the second magnetic crystal grains and formed of a material different from that of the first non-magnetic portion.

Fig. 3

MAGNETIC ANISOTROPY CONSTANT K_u ($\times 10^6$ J/m³)

TOTAL THICKNESS OF MAGNETIC RECORDING LAYERS (nm)

EXAMPLE 1

COMPARATIVE EXAMPLE 1

COMPARATIVE EXAMPLE 2

COMPARATIVE EXAMPLE 3