

FePt-C-BASED SPUTTERING TARGET

ABSTRACT

Through the present invention, a thin film containing an
5 FePt-based alloy and carbon, the thin film being capable of being
used as a magnetic recording medium, is enabled to be formed using
one target, and amount of particles is enabled to be reduced.

An FePt-C-based sputtering target containing Fe, Pt, and C,
wherein the FePt-C-based sputtering target has a structure in which
10 a C phase substantially being C is dispersed in an FePt-based alloy
phase containing 33 mol% or more and 60 mol% or less of Pt with
the balance substantially being Fe, an average value of the size
indices a of the C phase is 4.0 μm or more and 9.0 μm or less, and
an average value of the nonspherical indices b of the C phase is
15 3.0 or more.

[Figure 6]