

ABSTRACT

Provided are an FePt-based sputtering target which alone
can form an FePt-based alloy-containing thin film usable as a
magnetic recording medium without using a plurality of targets,
5 and a process for producing the same.

The FePt-based sputtering target has a structure in which
an FePt-based alloy phase, a C phase containing unavoidable
impurities, and a metal oxide phase containing unavoidable
impurities are mutually dispersed, the FePt-based alloy phase
10 containing Pt in an amount of 40 at% or more and 60 at% or
less with the balance being Fe and unavoidable impurities,
wherein C is contained in an amount of more than 0 vol% and 20
vol% or less based on the total amount of the target, the
metal oxide is contained in an amount of 10 vol% or more and
15 less than 40 vol% based on the total amount of the target, and
the total content of C and the metal oxide is 20 vol% or more
and 40 vol% or less based on the total amount of the target.