

ABSTRACT

Fe-Pt-BASED FERROMAGNETIC MATERIAL SPUTTERING TARGET

An Fe-Pt-based ferromagnetic material sputtering target comprising a metal and a metal oxide, wherein the metal has a composition in which Pt is contained in an amount of 5 mol% or more and 60 mol% or less and the remainder is Fe. An object of the present invention is to provide a ferromagnetic material sputtering target, which enables to form a magnetic recording layer composed of a magnetic phase such as an Fe-Pt alloy, and a non-magnetic phase to isolate the magnetic phase, and in which a metal oxide is used as one of the materials for the non-magnetic phase. Provided is a ferromagnetic material sputtering target wherein an inadvertent release of the metal oxide during sputtering and particle generation due to abnormal electrical discharge starting at a void inherently included in the target are suppressed, the adherence between the metal oxide and the matrix alloy is enhanced, and its density is increased.