

ABSTRACT
FERROMAGNETIC MATERIAL SPUTTERING TARGET

A ferromagnetic material sputtering target which is a sintered compact sputtering target made of a metal having Co as its main component, and nonmetallic inorganic material particles, wherein a plurality of metal phases having different saturated magnetization exist, and the nonmetallic inorganic material particles are dispersed in the respective metal phases. By increasing the pass-through flux of the sputtering target, it is possible to obtain a stable discharge. Moreover, it is also possible to obtain a ferromagnetic material sputtering target capable of obtaining a stable discharge in a magnetron sputtering device and which has a low generation of particles during sputtering. Thus, this invention aims to provide a ferromagnetic material sputtering target for use in the deposition of a magnetic thin film of a magnetic recording medium, and particularly of a magnetic recording layer of a hard disk adopting the perpendicular magnetic recording system.

[Selected Drawing] None