

ABSTRACT**MAGNETIC ALLOY SPUTTERING TARGET AND RECORDING
LAYER FOR MAGNETIC RECORDING MEDIA**

A magnetic alloy sputtering target comprises a magnetic phase and an amorphous phase comprising a first oxide being selected from the group consisting of: MgB_4O_7 , $\text{Mg}_2\text{B}_2\text{O}_5$, $\text{Mg}_3\text{B}_2\text{O}_6$, $\text{Al}_{18}\text{B}_4\text{O}_{33}$, $\text{Al}_4\text{B}_2\text{O}_9$, and any combination thereof. A recording layer for magnetic recording media is made from the magnetic alloy sputtering target. Since the amorphous phase is capable of well impeding the magnetic exchange coupling effect between grains of the magnetic phase, the magnetocrystalline anisotropy, coercivity, and signal to noise ratio of magnetic recording media are highly improved and the demands of high-density magnetic recording media are met.

Fig. 1