CLAIMS

[Claim 1] (Amended) A sintered compact sputtering target having an Fe-Pt alloy and one or more nonmagnetic materials as its main components, wherein the sintered compact sputtering target contains at least C (carbon) as the nonmagnetic material and additionally contains one or both of W and Cr as trace additive elements other than the main components in an amount of 50 massppm to 5000 massppm, and a standard free energy ΔG° for the formation of a carbide of each trace additive element is -5000 [cal/mol] or less per 1 mol of carbon in the carbide.

[Claim 2] (Deleted)

[Claim 32] (Amended) The sintered compact sputtering target according to claim 1, wherein the sintered compact sputtering target additionally contains, as the nonmagnetic materials, one or more materials selected from an oxide, a nitride, and a carbide in addition to the C (carbon).

[Claim 43] (Amended) The sintered compact sputtering target according to claim 1 or claim 32, wherein the sintered compact sputtering target additionally contains, as metal components, one or more elements selected from Ag, Au, Co, Cu, Ga, Ge, Ir, Ni, Pd, Re, Rh, Ru, Sn, and Zn in addition to the main components and the trace additive elements.

[Claim 54] (Amended) A method of producing a sintered compact sputtering target having an Fe-Pt alloy and one or more nonmagnetic materials as its main components, wherein, as raw material powders, an Fe powder, a Pt powder, a C powder (graphite powder) and one or both of W and Cr as trace additive element powders in an amount of 50 massppm to 5000 massppm in which a standard free energy of formation ΔG°, in a case of forming a carbide, per 1 mol of carbon is -5000 [cal/mol] or less are prepared, these powders are mixed and pulverized in an Ar atmosphere, the mixed and pulverized powder is filled in a carbon mold, and hot pressed using a hot press device under the following conditions; specifically, a vacuum atmosphere, a rate of temperature increase of 200 to 600°C/hour, holding temperature of 800 to 1400°C, and holding time of 0 to 4 hours, and a pressure of 20 to 50 MPa is applied from the start of temperature increase to the end of holding, to produce a sintered compact.

[Claim 6] (Deleted)

[Claim ~~7~~5] (Amended) The method of producing a sintered compact sputtering target according to claim ~~5~~4, wherein sintering is performed to the raw materials, in which one or more materials selected from an oxide, a nitride, and a carbide are additionally contained as raw material powders of nonmagnetic materials in addition to the C (carbon).

[Claim ~~8~~6] ~~(Amended)~~ The method of producing a sintered compact sputtering target according to claim ~~5~~ 4 or claim ~~7~~5, wherein sintering is performed to the raw materials, in which one or more elements selected from Ag, Au, Co, Cu, Ga, Ge, Ir, Ni, Pd, Re, Rh, Ru, Sn, and Zn are additionally contained as raw materials of metal components.