

CLAIMS

1. A sputtering target material consisting of in at. %: 10 to 50% of B; and the balance of at least one of Co and Fe, and unavoidable impurities, wherein a hydrogen content of the sputtering target material is 10 ppm or less, wherein the sputtering target material is a solidified molded product by using a powder, and wherein, in a particle size distribution of the powder, a cumulative volume of particles having a particle diameter of 5 μm or less is 10% or less, and a cumulative volume of particles having a particle diameter of 30 μm or less is 18% or more and 40% or less.
2. A method of producing a sputtering target material, comprising: providing a powder, and sintering the powder, wherein the sputtering target material consists of in at. %: 10 to 50% of B; and the balance of at least one of Co and Fe, and unavoidable impurities, wherein a hydrogen content of the sputtering target material is 10 ppm or less, and wherein, in a particle size distribution of the powder, a cumulative volume of particles having a particle diameter of 5 μm or less is 10% or less, and a cumulative volume of particles having a particle diameter of 30 μm or less is 18% or more and 40% or less.
3. The sputtering target material according to claim 1, wherein the sputtering target material has a bending strength of 200 MPa or more, and wherein the bending strength is measured by a three-point bending test conducted by using a specimen having a longitudinal length of 4 mm, a width of 25 mm, and a thickness of 3 mm.
4. The method according to claim 2,

wherein the sputtering target material has a bending strength of 200 MPa or more, and

wherein the bending strength is measured by a three-point bending test conducted by using a specimen having a longitudinal length of 4 mm, a width of 25 mm, and a thickness of 3 mm.