CLAIMS

1. A CoFeB-based alloy sputtering target material comprising in at.%: 10 to 50% of B; and the balance of at least one of Co and Fe, and unavoidable impurities,

wherein the intensity ratio [I [$(CoFe)_3B$]/I [$(CoFe)_2B$]] of the X-ray diffraction intensity [I [$(CoFe)_3B$]] of $(CoFe)_3B$ (121) to the X-ray diffraction intensity [I [$(CoFe)_2B$]] of $(CoFe)_2B$ (200) is 1.50 or less.

2. A CoFeB-based alloy sputtering target material comprising in at.%: 10 to 50% of B; and the balance of at least one of Co and Fe, and unavoidable impurities,

wherein the intensity ratio [I (Co_3B)/I (Co_2B)] of the X-ray diffraction intensity [I (Co_3B)] of Co_3B (121) to the X-ray diffraction intensity [I (Co_2B)] of Co_2B (200) is 1.50 or less.

3. A CoFeB-based alloy sputtering target material comprising in at.%: 10 to 50% of B; and the balance of at least one of Co and Fe, and unavoidable impurities,

wherein the intensity ratio [I (Fe_3B)/I (Fe_2B)] of the X-ray diffraction intensity [I (Fe_3B)] of Fe_3B (121) to the X-ray diffraction intensity [I (Fe_2B)] of Fe_2B (200) is 1.50 or less.

4. The CoFeB-based alloy sputtering target material according to any one of claims 1 to 3, wherein the amount of the unavoidable impurities is up to 1000 ppm.

5. The CoFeB-based alloy sputtering target material according to any one of claims 1 to 3, wherein the sputtering target material is a sintered body of an atomized powder, and wherein the particle size distribution of the atomized powder, the amount of particles having a particle diameter of 5 μm or less is 10% or less, and the amount of particles having a particle diameter of 30 μm or less is 40% or less.