

ABSTRACT OF DISCLOSURE

ALLOY AND SPUTTERING TARGET MATERIAL FOR SOFT-MAGNETIC FILM
LAYER IN PERPENDICULAR MAGNETIC RECORDING MEDIUM, AND METHOD
FOR PRODUCING THE SAME

There are provided a sputtering target material for a soft-magnetic film layer with a high saturation magnetic flux density and high amorphous properties and a method for producing the sputtering target material. The target material is made of an alloy comprising one or more of Zr, Hf, Nb, Ta and B in an amount satisfying $5 \text{ at\%} \leq (\text{Zr} + \text{Hf} + \text{Nb} + \text{Ta}) + \text{B}/2 \leq 10 \text{ at\%}$ and having 7 at% or less of B; 0 to 5 at% in total of Al and Cr; and the balance being Co and Fe in an amount satisfying $0.20 \leq \text{Fe}/(\text{Fe} + \text{Co}) \leq 0.65$ (at% ratio) with unavoidable impurities.