

Fe-Co-Based Alloy Target And Method For Producing The Same

ABSTRACT

Provided is an Fe-Co-based alloy target, which consists of iron, cobalt, and first and second additives. The first additive is rhenium, ruthenium, or their combination, and the second additive is selected from the group consisting of tantalum, niobium, molybdenum, tungsten, chromium, boron, and any combination thereof. Based on a total amount of the Fe-Co-based alloy target, a total amount of the first additive ranges from 2 atomic percent (at%) to 7 at%, and a total amount of the first and second additives ranges from 27 at% to 35 at%. With said composition, the number of maximum inscribed circles with a diameter more than 3 micrometers in the white phase is less than or equal to 5, such that the flatnesses of the Fe-Co-based soft underlayer sputtered from the Fe-Co-based alloy target and the seed layer covering the Fe-Co-based soft underlayer are improved.

Fig. 3