

Abstract Of The Disclosure

ENHANCED SPUTTER TARGET ALLOY COMPOSITIONS

A sputter target, where the sputter target is comprised of Co, greater than 0 and as much as 24 atomic percent Cr, greater than 0 and as much as 20 atomic percent Pt, greater than 0 and as much as 20 atomic percent B, and greater than 0 and as much as 10 atomic percent X_1 , where X_1 is an element selected from the group consisting of Ag, Ce, Cu, Dy, Er, Eu, Gd, Ho, In, La, Lu, Mo, Nd, Pr, Sm, Tl, W, and Yb. The sputter target is further comprised of X_2 , wherein X_2 is selected from the group consisting of W, Y, Mn, and Mo. Moreover, the sputter target is further comprised of 0 to 7 atomic percent X_3 , wherein X_3 is an element selected from the group consisting of Ti, V, Zr, Nb, Ru, Rh, Pd, Hf, Ta, and Ir. The thin film sputtered by the sputter target has a coercivity value between 1000 Oersted and 4000 Oersted.