

CoFeNi-BASED ALLOY AND SPUTTERING TARGET MATERIAL FOR
SOFT MAGNETIC FILM LAYER IN PERPENDICULAR MAGNETIC
RECORDING MEDIUM

ABSTRACT

There is provided a CoFeNi-based soft magnetic alloy for a perpendicular magnetic recording medium excellent in
5 saturation magnetic flux density, amorphous properties,
corrosion resistance and hardness. The CoFeNi-based alloy
comprises, in at%, Co+Fe+Ni in an amount of 70 to 92%,
provided that Ni content may be 0; Ta in an amount of 1 to 8%;
and B in an amount of more than 7% and not more than 20%.
10 The composition of the CoFeNi-based alloy (at%) satisfies the
ratios of Co/(Co+Fe+Ni) in the range of 0.1 to 0.9;
Fe/(Co+Fe+Ni) in the range of 0.1 to 0.65; Ni/(Co+Fe+Ni) in
the range of 0 to 0.35; and B/Ta in the range of 1 to 8.

(No Drawings)