

PERPENDICULAR MAGNETIC RECORDING MEDIUM AND
METHOD OF MANUFACTURING THE SAME

Abstract of the Disclosure

A perpendicular magnetic recording medium 100 has, over a substrate,
5 at least a magnetic recording layer 122 with a granular structure in which
nonmagnetic grain boundaries are formed between magnetic grains
continuously grown into a columnar shape. The magnetic grains of the
magnetic recording layer 122 contain Co, Cr, and Pt. The magnetic recording
layer 122 contains at least one oxide selected from a group A including SiO_2 ,
10 TiO_2 , and Cr_2O_3 , at least one oxide selected from a group B consisting of oxides
each having a larger Gibbs free energy ΔG than the group A, and a reducing
agent adapted to reduce the oxides of the group B.

FIGURE 1