

PERPENDICULAR MAGNETIC RECORDING MEDIUM

Abstract of the Disclosure

In a perpendicular magnetic recording medium having, over a substrate, a magnetic recording layer, an underlayer made of Ru or a Ru compound and
5 provided below the magnetic recording layer, a pre-underlayer made of a nonmagnetic crystalline material, and a soft magnetic layer provided below the pre-underlayer, when the difference between the highest point and the lowest point of unevenness of the interface between the soft magnetic layer and the pre-underlayer, derived by a cross-sectional TEM image, is given as an
10 interface roughness (nm) and the distance between the soft magnetic layer and the magnetic recording layer, excluding the soft magnetic layer and the magnetic recording layer, is given as a SUL-MAG distance (nm), interface roughness (nm) $\leq$ 0.4(nm) and interface roughness $\times$ SUL-MAG distance (nm) $\leq$ 12(nm) are satisfied.

FIGURE 1