

PERPENDICULAR MAGNETIC RECORDING MEDIUM AND
METHOD OF MANUFACTURING THE SAME

ABSTRACT OF THE DISCLOSURE:

A perpendicular magnetic recording medium comprises a magnetic recording layer that records a signal, an underlayer formed of Ru or Ru compound below the magnetic recording layer, a non-magnetic layer formed of a non-magnetic material below the underlayer to control crystal orientation of the underlayer, a soft magnetic layer provided below the nonmagnetic layer, and a substrate on which the magnetic recording layer, the underlayer, the non-magnetic layer, and the soft magnetic layer are formed. The non-magnetic layer comprises a first non-magnetic layer formed above the soft magnetic layer and a second non-magnetic layer formed above the first non-magnetic layer. The first non-magnetic layer is formed of amorphous Ni compound while the second non-magnetic layer is formed of crystalline Ni or crystalline Ni compound.

Figure 1