

MAGNETIC RECORDING MEDIUM INCLUDING A MAGNETIC ZERO LAYER

ABSTRACT

A stack including a crystallographic orientation interlayer, a magnetic zero layer disposed on the interlayer, and a magnetic recording layer disposed on the magnetic zero layer is disclosed. The magnetic zero layer is non-magnetic or has a saturation magnetic flux density (B_s) less than about 100 emu/cc. The magnetic zero layer and the magnetic layer include grains surrounded by a non-magnetic segregant. The magnetic zero layer provides a coherent interface between the interlayer and the magnetic layer with a lattice mismatch less than about 4%.

Figure 3