

LAMINATED EXCHANGE COUPLING ADHESION (LECA) MEDIA FOR HEAT ASSISTED MAGNETIC RECORDING

ABSTRACT OF THE DISCLOSURE

An apparatus includes a plurality of bilayer structures positioned adjacent to each other, each of the bilayer structures including a first layer of magnetic material having a first Curie temperature and a second layer of magnetic material positioned adjacent to the first layer, wherein the second layer has a second Curie temperature that is lower than the first Curie temperature, and magnetic grains of the first layer are unstable when the second layer of magnetic material is heated above the second Curie temperature. The recording temperature is reduced due to the smaller switching volume achieved by using vertically decoupled laminations at elevated temperatures.

FIGURE 2