

LAMINATED THIN FILM DISK FOR LONGITUDINAL RECORDING

ABSTRACT

A thin film disk with laminated magnetic layers, for use in a disk drive, is described which exhibits a single switching behavior resulting in a smooth hysteresis loop. This is achieved by depositing a seed layer prior to depositing the Cr or Cr alloy underlayer. The seed layer material is selected to promote a [112] PO in the underlayer and subsequently a [1010] PO in the two or more laminated magnetic layers. The [1010] PO aids in maintaining minimal Hc variations between the magnetic layers. The seed layer (12) can be a B2 type structure material such as NiAl or FeAl or any other material which results in the [112] PO in the underlayer. The underlayer (13) is preferably Cr or a Cr alloy; the magnetic layers are preferably CoPtCr, CoPtCrTa or CoPtCrB. The spacer layer (15) between the magnetic layers may be made from the same material as the underlayer.

Fig. 1