

HIGH MOMENT IRON NITRIDE BASED MAGNETIC HEAD LAYERS RESISTANT TO HARD AXIS ANNEALING

ABSTRACT

A method employs an RF magnetron sputtering system under specific process conditions for making shield and pole piece ferromagnetic layers(51, 52, P1, P2) of a read write magnetic head (40) wherein the magnetic anisotropy H_K of the ferromagnetic layers (51, 52, P1, P2) is substantially maintained without easy axes switching when annealed along their hard axes in the presence of a magnetic field (hard axis annealing).

FIG 8