SEED LAYER STRUCTURE FOR SPIN VALVE SENSOR

ABSTRACT

A bilayer seed layer structure (302, 614) is employed between a first read gap layer (216, 618) and a spin valve sensor (300, 600) for increasing the magnetoresistive coefficient (dr/R). In a bottom spin valve sensor (300) the bilayer seed layer structure (302) is located between the first read gap layer (216) and a pinning layer (214) and in a top spin valve sensor (600) the bilayer seed layer structure (614) is located between the first read gap layer (618) and the free layer (606). The pinning layer (214, 610) preferably iridium manganese (IrMn). The bilayer seed layer structure (302,614) includes a first seed layer (304, 616) which is a metallic oxide and a second seed layer (306,618) that is a nonmagnetic metal. A preferred embodiment is a first seed layer of nickel manganese oxide (NiMnO) and a second seed layer of copper (Cu).

FIG 13

This Sheet Has Been Replaced

