MULTILAYERED PINNED LAYER STRUCTURE FOR IMPROVED COUPLING FIELD AND GMR FOR SPIN VALVE SENSORS

ABSTRACT

A multifilm structure is provided for a pinned layer structure (404) of a spin valve sensor (400) for increasing the magnetoresistive coefficient (dr/R) of the sensor and /or decreasing a ferromagnetic coupling field (H_F) between the pinned layer structure (404) and the free layer (206) of the sensor. The multifilm structure for the pinned layer in one or both AP layers of an AP pinned layer structure (404) or a single pinned layer structure includes a nickel iron (NiFe) middle layer (406) which is located between a cobalt (Co) first film (408) and a cobalt (Co) second film (410).

Fig.14