

MAGNETO-RESISTANCE EFFECT ELEMENT AND MAGNETIC HEAD

Abstract of the Disclosure

A magneto-resistance effect element comprising a spin valve film including a first magnetic layer, a second magnetic layer and a non-magnetic layer interposed between the first magnetic layer and the second magnetic layer. Among the first and the second magnetic layers, in at least one of the magnetic layers, close-packed faces of crystal grains which constitute the magnetic layer are isotropically dispersed. Such a magnetic layer, by setting a film thickness of an under layer having an identical crystal structure with the magnetic layer at 2.0nm or less and by dispersing isotropically close-packed faces of crystal grains constituting the under layer, can be obtained with reproducibility. According to a magneto-resistance effect element comprising such a spin valve film, while maintaining a large MR change rate, for example, magnetostriction constant can satisfy such a low magnetostriction as 1×10^{-6} or less. Further, excellent soft magnetic property can be provided.

Figure 2