FERROMAGNETIC TUNNEL JUNCTION, MAGNETORESISTIVE ELEMENT AND MAGNETIC HEAD

ABSTRACT

This invention is directed to a ferromagnetic tunnel junction, an MR element and a magnetic head. A ferromagnetic tunnel junction is constituted by sequentially laminating a first ferromagnetic film (211), an insulating film (210) and a second ferromagnetic film (212). These are laminated on an appropriate insulating substrate (4). The present invention is characterized in that the barrier potential of the insulating film (210) is set within a range of 0.5 to 3eV. A ferromagnetic tunnel junction with which a high MR ratio can be achieved with good reproduction characteristics is provided.

FIG. 1