

ABSTRACT:

"Magnetoresistance device, and magnetic head comprising such a device"

A magnetoresistance device comprising a stacked structure, said stacked structure comprising a non-conducting substrate having a surface on which a multilayer structure is provided, the surface being furnished with a plurality of grooves which are substantially mutually parallel, each groove comprising a first face and a second face, all first faces being substantially planar and mutually parallel, the constituent layers of the multilayer structure being provided in a stack upon each said first face in such a manner as to be parallel thereto, the thickness of the stacks being such that each stack makes physical contact with each immediately neighbouring stack, the magnetoresistance effect of the multilayer structure being measurable by applying an electrical voltage gradient across the plane of the substrate in an in-plane direction substantially perpendicular to the grooves, thereby inducing a measurable flow of electrical current through the multilayer structure across the grooved surface of the substrate, the current thus flowing from one stack to the next in such a manner that, except in the vicinity of the region of electrical contact between immediately adjacent stacks, its direction is substantially perpendicular to the constituent layers of each stack.

Fig. 3

This Sheet Has Been Replaced

