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WO 01/31357 A1

(54) Title: SPIN-VALVE SENSOR

(57) Abstract: A magnetoresistive sensor including an oxide layer, a pinned layer, a non-magnetic spacer layer, a free magnetic layer, and a pinning layer. This sensor includes the pinning layer adjacent to the free magnetic layer. The free magnetic layer adjacent to the non-magnetic spacer layer. The non-magnetic spacer layer adjacent to the pinned layer. And the pinned layer adjacent to the oxide layer. A method of manufacturing the magnetoresistive sensor including forming a layered structure. The layered structure includes an oxide layer, a pinned layer, a non-magnetic spacer layer, a free magnetic layer, and a pinning layer. The pinning layer is adjacent to the free layer. The free layer is adjacent to the spacer layer. The spacer layer is adjacent to the pinned layer. And the pinned layer is adjacent to the oxide layer.