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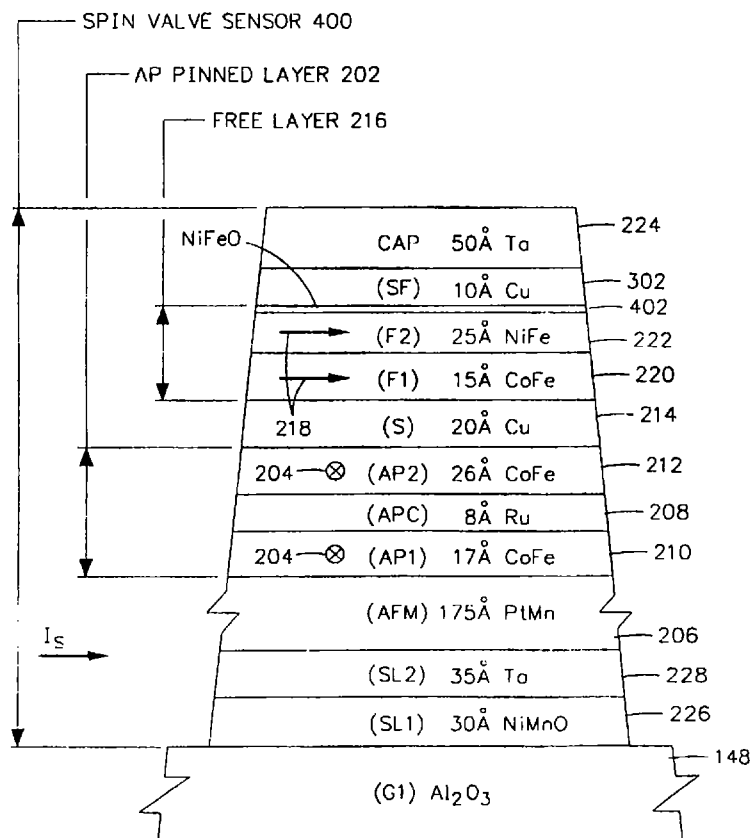
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(54) Title: ENHANCED FREE LAYER FOR A SPIN VALVE SENSOR IN A MAGNETIC READ HEAD



(57) Abstract: A spin valve sensor (400) is provided with a negative ferromagnetic coupling field -HFC for properly biasing a free layer and a spin filter (302) layer is employed between the free layer (222) and a capping layer for increasing the magnetoresistive coefficient dr/R of the spin valve sensor. A top portion (402) of the free layer is oxidized for improving the negative ferromagnetic coupling field HFC when the spin filter layer is employed for increasing the magnetoresistive coefficient dr/R .



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