The invention relates to the semiconductor technique and may be used for detection of magnetic and electromagnetic fields in the modern electronic and optoelectronic systems.

The photoelectromagnetic sensor includes an active semiconductor layer of the type $n^{\circ}(p^{\circ})$ deposited onto a semiinsulating semiconductor substrate, onto the active layer being deposited supply ohmic contacts and ohmic contacts for Hall voltage recording. Onto the active layer $n^{\circ}(p^{\circ})$ there is locally deposited a semiconductor layer p+(n+), onto which there is formed an ohmic contact, with the possibility of illuminating the layer p+(n+).

Claims: 1 Fig.: 1