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(54) Title: APPARATUS FOR MEASURING MINORITY CARRIER LIFETIME AND METHOD FOR USING THE SAME

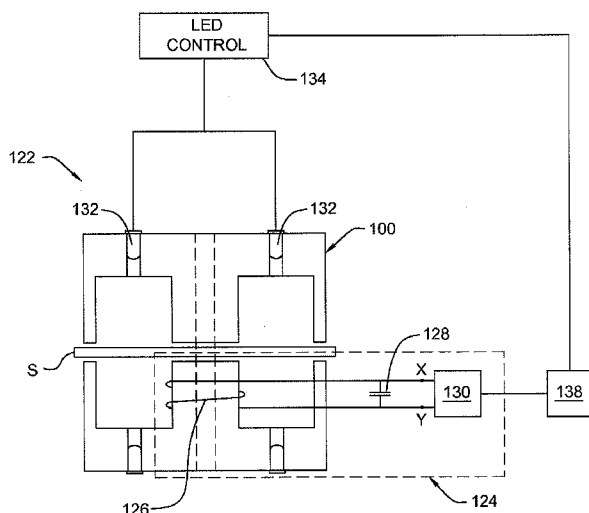


FIG. 2

(57) Abstract: An apparatus for measuring minority carrier lifetime is provided. The apparatus includes a resonant circuit having an inductor and a capacitor and configured to resonate at a measurement frequency. The apparatus also includes a ferromagnetic core having a first portion and a second portion. The first portion defines a gap and can be configured to direct therealong a magnetic field established by the inductor, such that lateral spreading of the magnetic field outside of the first portion is inhibited, and to direct the magnetic field generally uniformly across the gap. The second portion can be configured to direct the magnetic field therealong and, in conjunction with the first portion, into a closed loop. A radiation source can be configured to irradiate an area proximal to the gap defined by the first portion of the ferromagnetic core.



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