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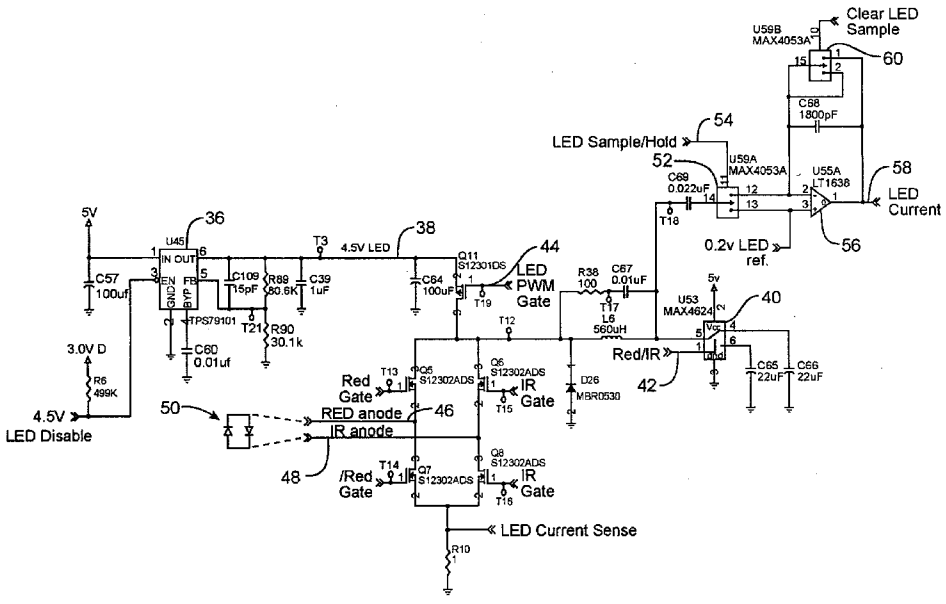
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(54) Title: SWITCH-MODE OXIMETER LED DRIVE WITH A SINGLE INDUCTOR



(57) Abstract: A light emitter drive circuit for an oximeter which utilizes a single inductor (L6) for driving multiple light emitters (50). The inductor is connected to a switching circuit (40) to multiple energy storage circuits, such as capacitors. These are alternately charged up, using the same inductor. Subsequently, the capacitors are alternately discharged for their corresponding light emitters through the same inductor. Also, the magnetic susceptibility of the LED drive circuit is reduced by using magnetic flux canceling in the inductor. In one embodiment, a toroidal inductor is used with geometric symmetry and its magnetic flux. In another embodiment, a dual core closed bobbin shielded inductor is used.

WO 2005/082239 A1

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