pair of controlled solid-state rectifier devices each of which consists of a plurality of alternately p- and n-type regions and having means for controlling the conductivity of the device connected to an intermediate region thereof, said pair of devices having their opposite terminal regions connected together, means for connecting said pair of devices in series with a source of energizing current and at least one lamp to be controlled, magnetic amplifier means for developing voltages of variable amplitude with respect to the amplitude of said source voltage, means for controlling the amplitude of voltages developed by said amplifier means, and means for applying said developed currents to the conductivity controlling means of said rectifier devices, whereby the conductivity of said devices may be varied and, hence, the amount of power delivered to the lamps may be controlled.

2. A control circuit for selectively and variably controlling variable intensity electric lights energized with alternating current, which control circuit comprises a pair of controlled solid-state rectifier devices each of which consists of a plurality of alternately p- and n-type regions and having means for controlling the conductivity of the device connected to an intermediate region thereof, said pair of devices having their opposite terminal regions connected together, means for connecting said pair of devices in series with a source of energizing current and at least one lamp to be controlled, magnetic amplifier means for developing voltages of variable amplitude with respect to the amplitude of said source voltage, said magnetic amplifier means comprising bias and control windings and a pair of output windings, means for applying currents of predetermined magnitude to said bias windings, means for applying currents of variable magnitude to said control windings, and circuit means for impressing on the conductivity controlling means of said rectifier devices the variable voltages developed in said output windings, whereby the conductivity of said rectifier devices is controlled in accordance with the amplitude of current applied to said control winding and, hence, the amount of power delivered to said lamps is controlled.

3. A control circuit for selectively and variably controlling variable intensity electric lights energized with alternating current, which circuit comprises a pair of solid-state rectifier devices each of which consists of a plurality of alternately p- and n-type regions and an electrode connected to an intermediate region thereof for controlling the conductivity of the device, and the terminal regions of each device being of opposite type, said pair of devices having the terminal regions of one connected to the opposite type terminal regions of the other, and circuit means for connecting said pair of devices in series with a source of alternating current and at least one variable intensity lamp, said devices having the characteristic of being normally non-conductive when the voltage of alternating polarity of the source is applied across said terminal regions and of becoming conductive of source current when source voltage of given instantaneous amplitude and polarity is applied to the terminal regions and control voltage of certain polarity and amplitude in relation to the instantaneous amplitude and polarity of the source voltage is impressed on the control electrode of the device, which control circuit further comprises magnetic amplifier means for developing voltages of variable amplitude with respect to the amplitude of said source voltage, said magnetic amplifier means comprising bias and control windings and a pair of output windings, means for applying currents of predetermined magnitude to said bias windings, means for applying currents of variable magnitude to said control windings, and circuit means for impressing on the control electrode of said rectifier devices the variable voltages developed in said output windings, whereby the conductivity of said rectifier devices is controlled in accordance with the amplitude of current applied to said control winding and, hence, the amount of power delivered to said lamps is controlled.

4. A control circuit according to claim 3 and which further comprises means for rectifying the currents applied to said bias and control windings, and rectifier means in said circuit means for rectifying the voltages applied to the control electrodes of said devices.

5. A control circuit according to claim 3 in which the circuit means for impressing voltages on the control electrode of each device comprises resistive means and rectifying means connected in series with the output winding associated with the device, and connections for impressing between said control electrode and a terminal region of the device the voltage across said resistive means.

6. A control circuit according to claim 5 and which further comprises capacitative means connected in shunt to said rectifying means in said circuit means.

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