

**8.** A backlighting system as claimed in claim 1, wherein said electronic componentry includes a plurality of control means, each of which control the distribution of power to more than one light source, each control means receiving feedback of the electrical power consumption of its selected number of light sources and adjusting the power supplied to the selected number of light sources accordingly.

**9.** A backlighting system as claimed in claim 8, wherein the electronic componentry includes inverters, each control means controls more than one inverter and each inverter powers more than one light source.

**10.** A backlighting system as claimed in claim 8, further comprising a cooling means and wherein said control means also receives feedback on a temperature within the display apparatus and adjusts the amount of cooling provided to at least said selected number of light sources by said cooling means accordingly.

**11.** A backlighting system as claimed in claim 1, wherein the display apparatus is a multi-layer display.

**12.** A power distribution system for at least one light source within a display apparatus wherein a control means controls the distribution of power to the at least one light source by carrying out the steps of,

- i) detecting the electrical power consumed by the at least one light source,
- ii) determining whether the electrical power consumed by the at least one light source is within predetermined limits,
- iii) regulating the electrical power supplied to the at least one light source based upon the detected power consumption to maintain or return the power consumed by the at least one light source between said predetermined limits and
- iv) repeating steps (i) to (iv).

**13.** A power distribution system as claimed in claim 12, wherein the step of regulating the electrical power supplied to the at least one light source comprises providing the light source with a first light source brightness controlling power signal and a second light source current controlling power signal.

**14.** A power distribution system as claimed in claim 12 or claim 13, wherein said display apparatus includes a plurality of control means, each of which are connected to an associated inverter to control the power distributed to more than one fluorescent light source, wherein a capacitor associated with each fluorescent light source and its associated inverter.

**15.** A power distribution system as claimed in claim 12, wherein the power consumed by the at least one light source is determined by sensing the current through the at least one light source.

**16.** A power distribution system as claimed in claim 12, wherein said display apparatus also includes a temperature sensor which provides said control means with an indication of the temperature in the vicinity of the at least one light source and the control means also carries out the steps of:

- iiia) determining whether the temperature of the at least one light source is within predetermined limits, and
- iiia) adjusting the power supplied to the at least one light source based upon the temperature indication to maintain or return the temperature of the at least one light source between said predetermined limits.

**17.** A power distribution system as claimed in claim 14, wherein, the display apparatus also includes cooling means adapted to provide variable cooling to the at least one light source, wherein the control means also carries out the step of:

- iiib) controlling the electrical power supplied to the cooling means based upon the temperature indication to maintain or return the temperature of the at least one light source between said predetermined limits.

**18.** A power distribution system as claimed in claim 17, wherein the respective steps of regulating and adjusting the electrical power supplied to the at least one light source and the step of controlling the power supplied to the cooling means occur by pulse width modulating the current or voltage supplied to the at least one light source or the cooling means respectively.

**19.** A power distribution system as claimed in claim 18, wherein the pulse width modulation frequency employed in the step of regulating the power supplied to the at least one light source is greater than the pulse width modulation frequency employed in the step of adjusting the power supplied to the at least one light source.

**20.** A power distribution system as claimed in claim 18, wherein the pulse width modulation frequency employed in the step of regulating the power supplied to the at least one light source is sufficiently high that the current supplied to the at least one light source, after being filtered by the inverter, is at a substantially constant analogue or DC level.

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