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(54) Title: LIGHT UNIT WITH INTERNAL POWER FAILURE DETECTION

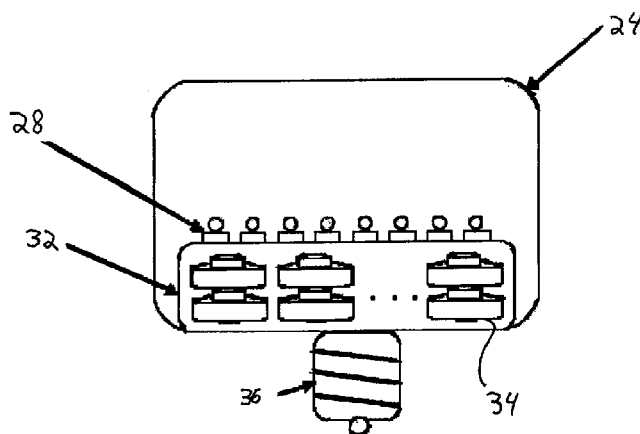


FIG. 1

(57) Abstract: A light unit that includes an internal power supply that may be used in the event of an external power failure to provide power to the light unit. In one aspect, the present disclosure provides a lighting apparatus, comprising (a) a power input configured to receive external power from an external power source; (b) a solid state light element that is interconnected to the power input; (c) a detection circuit interconnected to the power input and that, when power is not provided to the power input, measures input impedance at the power input and determines if there is a lack of external power; and (d) a back-up power source that is interconnected to the solid state light element and the power input and that provides power to the solid state light element when the light element is; not provided with power from the power input.

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**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US 08/59596

<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  IPC(8) - H05B 7/00 (2008.04)                  USPC - 315/86 ,                  According to International Patent Classification (IPC) or to both national classification and IPC</p>																	
<p><b>B. FIELDS SEARCHED</b></p> <p>Minimum documentation searched (classification system followed by classification symbols)                  USPC: 315/ 86,136,161,185R</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched                  USPC: 362/ 20,183,251 ; 315/ 86,136,161,185R ; 361/ 58,115</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)                  PubWEST (USPT, PGPB, EPAB, JPAB); Google patent, USPTO, Google scholar                  Search Terms: power source , power input, external ,back up, detection circuit ,solid state, impedance battery, wireless, modem, memory, microcontroller</p>																	
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Category*</th> <th style="width:70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width:20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X ----- Y</td> <td>US 6,628,083 B2 (Pickering) 30 september 2003 (30.09.2003), entire document, especially (col 2 ln 30-35, 42,49-50, 53-55); (col 3 ln 8-10, 14-15, 50-52); (col 4 ln 5-8) 27-32)</td> <td>1-2, 9 ----- 3-8, 10-12</td> </tr> <tr> <td>Y</td> <td>US 5,924,784 A (Chliwny et al.) 20 July 1999 (20.07.1999), entire document, especially (col 2 ln 52-55); (col 3 ln 10-12); and (col 5 ln 26-30, 52-54)</td> <td>3- 5,10</td> </tr> <tr> <td>Y</td> <td>US 6,583719 B2 (Okada et al.) 24 June 2003 (24.06.2003), entire document, especially Fig 9, (Col 14 ln 10-13, 25-28)</td> <td>6- 8</td> </tr> <tr> <td>Y</td> <td>US 6,573,746 B2 (Kim et al.) 3 June 2003 (03.06.2003), entire document, especially (col 2 ln 49 -55) (col 3 ln 10-15)</td> <td>11- 12</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X ----- Y	US 6,628,083 B2 (Pickering) 30 september 2003 (30.09.2003), entire document, especially (col 2 ln 30-35, 42,49-50, 53-55); (col 3 ln 8-10, 14-15, 50-52); (col 4 ln 5-8) 27-32)	1-2, 9 ----- 3-8, 10-12	Y	US 5,924,784 A (Chliwny et al.) 20 July 1999 (20.07.1999), entire document, especially (col 2 ln 52-55); (col 3 ln 10-12); and (col 5 ln 26-30, 52-54)	3- 5,10	Y	US 6,583719 B2 (Okada et al.) 24 June 2003 (24.06.2003), entire document, especially Fig 9, (Col 14 ln 10-13, 25-28)	6- 8	Y	US 6,573,746 B2 (Kim et al.) 3 June 2003 (03.06.2003), entire document, especially (col 2 ln 49 -55) (col 3 ln 10-15)	11- 12
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<p>Date of the actual completion of the international search 5 September 2008 (05.09.2008)</p>		<p>Date of mailing of the international search report <b>11 SEP 2008</b></p>															
<p>Name and mailing address of the ISA/US                  Mail Stop PCT, Attn: ISA/US, Commissioner for Patents                  P.O. Box 1450, Alexandria, Virginia 22313-1450                  Facsimile No. 571-273-3201</p>		<p>Authorized officer:                  Lee W. Young                  PCT Helpdesk: 571-272-4300                  PCT OSP: 571-272-7774</p>															