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[Continued on next page]

(54) Title: CONTROL UNIT FOR A LED ASSEMBLY AND LIGHTING SYSTEM

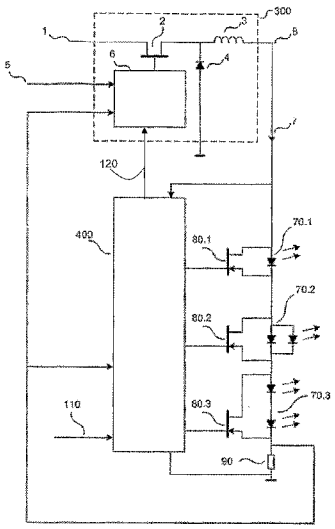


Figure 2

(57) Abstract: A control unit for an LED assembly comprising a first and second LED unit, said LED units being serial connected is described. The LED assembly, in use, is powered by a switched mode power supply. The control unit being arranged to receive an input signal representing a desired output characteristic of the LED assembly, determine a first and second duty cycle for respective LED units associated with a nominal current of the switched mode power supply, for providing the desired output characteristic, determine the largest of the first and second duty cycles for respective LED units, determine a reduced current based on at least the largest of the duty cycles, adjust the first and second duty cycle for respective LED units based on the reduced current, - provide an output signal for the LED assembly and the switched mode power supply based on the adjusted first and second duty cycles and the reduced current for obtaining the desired characteristic.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. H05B33/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	WO 2009/029553 A2 (CIRRUS LOGIC INC [US]) 5 March 2009 (2009-03-05) paragraphs [0024] - [0027]; figure 2	1-6
X	WO 2006/107199 A2 (HILLOCK LTD [NL]; PAMM LTD [NL]; VAN GEFFEN THEODORA LOUISE FRA [NL];) 12 October 2006 (2006-10-12)	7-11, 13-15
Y	abstract; figures 2,4a,4b,5,6	12
Y	US 2007/188425 A1 (SACCOMANNO ROBERT [US]) 16 August 2007 (2007-08-16) abstract	12

☐ Further documents are listed in the continuation of Box C.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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WO 2006107199 A2	12-10-2006	CA 2601731 A1	12-10-2006
		EP 1880583 A2	23-01-2008
		JP 2008535279 T	28-08-2008
		US 2008191642 A1	14-08-2008
US 2007188425 A1	16-08-2007	NONE	