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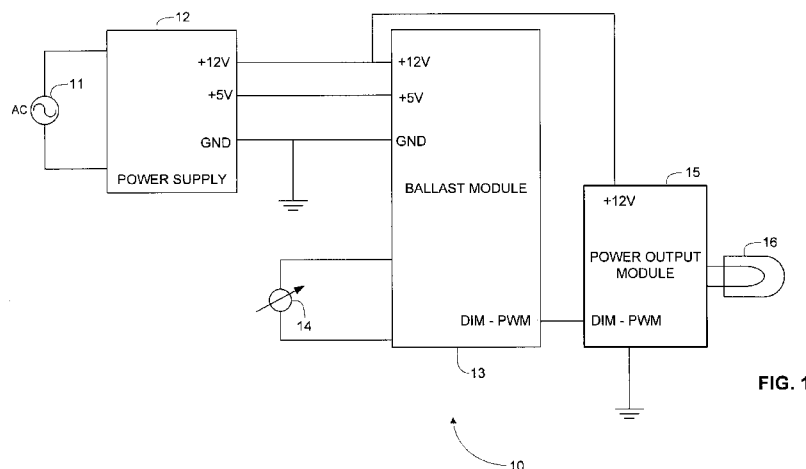
— before the expiration of the time limit for amending the
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amendments (Rule 48.2(h))(88) Date of publication of the international search report:
13 August 2009(54) Title: CONTROLLER AND METHOD FOR CONTROLLING AN INTENSITY OF A LIGHT EMITTING DIODE (LED)
USING A CONVENTIONAL AC DIMMER

FIG. 1

(57) Abstract: The present invention relates to providing a flicker-free method and a control circuit for use in conjunction with a conventional AC dimmer coupled to a mains AC supply to continuously control an intensity of a Light Emitting Diode (LED) over substantially a full range of the dimmer, the control circuit comprising: a controllable source of DC voltage that is configured for coupling to at least one LED and that is powered independently of an output of the AC dimmer thereby isolating the LED voltage from the output of the AC dimmer; and a controller coupled to the source of DC voltage, the controller being powered independently of the output of the AC dimmer and being responsive to a firing angle of the AC dimmer for varying a level of the DC voltage as a function of said firing angle.

INTERNATIONAL SEARCH REPORT

International application No

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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	EP 1 608 206 A (ST MICROELECTRONICS SRL [IT]) 21 December 2005 (2005-12-21)	1,8
A	columns 1-4; figure 1	2-7,9-14
A	----- "HV9931 Unity Power Factor LED Lamp Driver, Initial release" SUPERTEXT INC. HV 9931 - INITIAL RELEASE, SUPERTEX INC, SUNNYVALE, CA, USA, no. HV9931, 1 January 2005 (2005-01-01), pages 1-8, XP002486609 pages 5,6 -----	1-14

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

☒ See patent family annex.

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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
EP 1608206	A	21-12-2005	US	2006022916 A1		02-02-2006