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HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
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SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
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(54) Title: SYSTEM AND METHOD FOR REPURPOSING 120VAC WIRING ARCHITECTURE TO RETROFITABLE LOW VOLTAGE DC POWER 2-WIRE LED DIMMING

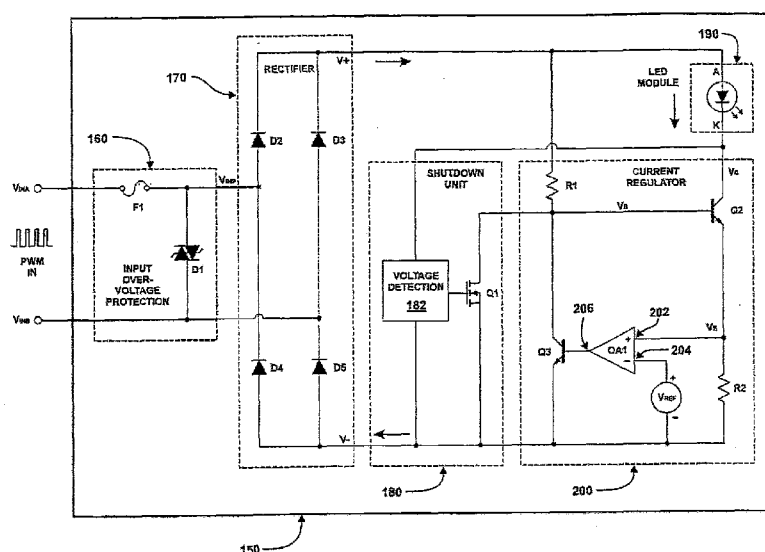


FIGURE 2

(57) Abstract: A 2-Wire LED dimming system and method re-purposes existing 120V AC architecture and hardware to carry low voltage PWM gradient DC power to the LED lamps provides a consistent gradation over a 0-100% dimming range. An LED Driver is electrically connected to an AC power source and connect to at least one LED lamp. The AC power source is electrically connected to an AC to DC converter where the AC power is converted to filtered and regulated DC power for the control unit and the power switch. The power switch is electrically connected to the AC to DC converter DC power output. The control unit is electrically connected to the power switch which is turned ON or OFF according to the pulse width modulation PWM signal from the control unit in order to connect or disconnect the DC power from the AC to DC converter.



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A. CLASSIFICATION OF SUBJECT MATTER

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CPC - H05B 33/02, 33/08, 33/0806, 33/0824, 33/10, 33/0845

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)

See Search History document

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

See Search History document

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 9,706,613 B2 (EMERAY, LLC) 11 July 2017; the entire document	1-6
A	US 8,368,322 B2 (YU, Z et al.) 5 February 2013; the entire document	1-6
A	US 2012/0212151 A1 (CHU, Y) 23 August 2012; the entire document	1-6

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

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