

Title (en)  
LED DIMMING CONTROLLER

Title (de)  
LED DIMMERSTEUERUNG

Title (fr)  
GRADATEUR POUR DEL

Publication  
**EP 1502483 A1 20050202 (EN)**

Application  
**EP 03736588 A 20030509**

Priority  
• US 0314883 W 20030509  
• US 37907902 P 20020509  
• US 39162702 P 20020626

Abstract (en)  
[origin: WO03096761A1] Methods and apparatus for providing power to devices via an A.C. power source, and for facilitating the use of LED-based light sources on A.C. power circuits that provide signals other than standard line voltages. In one example, LED-based light sources may be coupled to A.C. power circuits that are controlled by conventional dimmers (i.e., "A.C. dimmer circuits"). Hence, LED-based light sources may be conveniently substituted for other light sources (e.g., incandescent lights) in lighting environments employing conventional A.C. dimming devices and/or other control signals present on the A.C. power circuit. In yet other aspects, one or more parameters relating to the light generated by LED-based light sources (e.g., intensity, color, color temperature, temporal characteristics, etc.) may be conveniently controlled via operation of a conventional A.C. dimmer and/or other signals present on the A.C. power circuit.

IPC 1-7  
**H05B 41/00**

IPC 8 full level  
**H05B 37/02** (2006.01); **H01L 33/00** (2010.01); **H05B 44/00** (2022.01); **F21K 99/00** (2010.01)

CPC (source: EP US)  
**H05B 45/20** (2020.01 - EP US); **H05B 45/3577** (2020.01 - EP US); **H05B 45/37** (2020.01 - EP US); **H05B 45/3725** (2020.01 - EP US); **F21K 9/232** (2016.08 - EP US); **F21Y 2113/13** (2016.08 - EP); **F21Y 2115/10** (2016.08 - EP US); **H05B 45/325** (2020.01 - EP US)

Citation (third parties)  
Third party :  
• US 5661645 A 19970826 - HOCHSTEIN PETER A [US]  
• WO 0145470 A1 20010621 - TAKION CO LTD [JP], et al  
• US 6577072 B2 20030610 - SAITO YUTAKA [JP], et al  
• JP H06242733 A 19940902 - HAKUYO DENKYU KK, et al  
• EP 0876085 A2 19981104 - INCERTI & SIMONINI DI INCERTI [IT]  
• AGILENT TECHNOLOGIES: "AGILENT AN 1273. REGULATORY STANDARDS FOR COMPLIANCE TESTING TO THE IEC 1000-3-2(EN 61000-3-2) AND IEC 1000-3-3 (EN 61000-3-3)", 2000, pages 1-20,55 - 56, XP055180349, Retrieved from the Internet <URL:TTP://LITERATURE.CDN.KEYSIGHT.COM/LITWEB/PDF/5964-1917E.PDF>

Cited by  
CN101808453A; US9775212B2; US11297705B2; US10342086B2; US10973094B2; US10206378B2; US10506801B2; US10091857B2; US10485072B2; US9695995B2; US11284491B2; US8643308B2; US9615432B2; US11953167B2; US8933642B2; US11528792B2; US9232590B2; US10237956B2; US10537012B2; US9807842B2; US10176689B2; US10713915B2; US10966295B2; US10036549B2; US10314125B2; US10571115B2; US11073275B2; US11638336B2; US11678420B2; US9832837B2; US10136486B2; US9441795B2; US9635727B2; US10182480B2; US10560992B2; US10617099B2; US10932339B2; US11333308B2; US9066403B2; US10161568B2; US10690296B2; US10772172B2; US11028972B2; US11428370B2; US8373363B2; US9253844B2; US9867243B2; US10260686B2; US11317495B2; US11729884B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 03096761 A1 20031120**; AT E416597 T1 20081215; AU 2003237827 A1 20031111; DE 60325042 D1 20090115; DK 1502483 T3 20090323; EP 1502483 A1 20050202; EP 1502483 B1 20081203; ES 2320644 T3 20090527; JP 2005524960 A 20050818; JP 4347794 B2 20091021; PT 1502483 E 20090310

DOCDB simple family (application)  
**US 0314883 W 20030509**; AT 03736588 T 20030509; AU 2003237827 A 20030509; DE 60325042 T 20030509; DK 03736588 T 20030509; EP 03736588 A 20030509; ES 03736588 T 20030509; JP 2004504577 A 20030509; PT 03736588 T 20030509