

Title (en)  
LED LIGHTING SYSTEM AND DEVICE

Title (de)  
LED-BELEUCHTUNGSSYSTEM UND -VORRICHTUNG

Title (fr)  
SYSTÈME ET DISPOSITIF D'ÉCLAIRAGE À DEL

Publication  
**EP 3443812 A4 20191127 (EN)**

Application  
**EP 16898854 A 20160808**

Priority

- US 201662323352 P 20160415
- US 201662337860 P 20160517
- US 201662338510 P 20160519
- US 201615230481 A 20160807
- US 2016045939 W 20160808

Abstract (en)  
[origin: WO2017180176A1] A device, system, process, and method of manufacturing provides use of at least two LED lighting sources to provide auxiliary component modules. Embodiments can be used in a variety of industries, including city street lamps, indoor lighting systems, lighting systems in automobiles, train lighting systems, tunnel lighting systems, building lighting systems, networked lighting systems, and other systems that could benefit from flexibility and ease in changing circuit components for time-based, usage-based, or fault-based detected situations.

IPC 8 full level  
**H05B 44/00** (2022.01); **G05B 19/42** (2006.01); **H05B 37/02** (2006.01); **H05B 37/04** (2006.01)

CPC (source: EA EP ES KR RO US)  
**G05B 19/42** (2013.01 - EA KR); **H02M 1/12** (2013.01 - RO); **H05B 45/30** (2020.01 - EA EP ES US); **H05B 45/37** (2020.01 - EA EP ES US); **H05B 47/17** (2020.01 - EA EP ES US); **H05B 47/175** (2020.01 - EA EP US); **H05B 47/29** (2020.01 - EP US); **H02M 7/44** (2013.01 - RO); **H05B 45/375** (2020.01 - EA EP ES US); **H05B 45/385** (2020.01 - EA EP ES US); **Y02B 20/40** (2013.01 - EP)

Citation (search report)

- [Y] US 2010301752 A1 20101202 - BAKRE SHASHANK [US], et al
- [IY] US 2014265845 A1 20140918 - WILLIAMS NICOLAS [GB]
- [A] US 2009146932 A1 20090611 - OSAKA SYOHEI [JP]
- [A] US 2011025215 A1 20110203 - HULETT JEFFERY NEIL [US]
- See references of WO 2017180176A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2017180176 A1 20171019**; AU 2016402386 A1 20181129; BR 112018071063 A2 20190507; CA 3020898 A1 20171019; CL 2018002941 A1 20190405; CN 109315038 A 20190205; CO 2018012266 A2 20181122; DO P2018000228 A 20191015; EA 038615 B1 20210923; EA 201892106 A1 20190329; EP 3443812 A1 20190220; EP 3443812 A4 20191127; ES 2714009 A2 20190524; ES 2714009 B2 20200513; ES 2714009 R1 20190911; KR 20190009293 A 20190128; MA 43624 A1 20190329; MA 43624 B1 20190731; MD 20180100 A2 20190630; MX 2018012633 A 20190701; PE 20190166 A1 20190201; PH 12018550189 A1 20190515; RO 133069 A2 20190130; RO 133069 A3 20190430; RO 133069 B1 20220128; TN 2018000347 A1 20200615; ZA 201807496 B 20190828

DOCDB simple family (application)  
**US 2016045939 W 20160808**; AU 2016402386 A 20160808; BR 112018071063 A 20160808; CA 3020898 A 20160808; CL 2018002941 A 20181015; CN 201680086857 A 20160808; CO 2018012266 A 20181114; DO 2018000228 A 20181015; EA 201892106 A 20160808; EP 16898854 A 20160808; ES 201890063 A 20160808; KR 20187033102 A 20160808; MA 43624 A 20160808; MD 20180100 A 20160808; MX 2018012633 A 20160808; PE 2018001991 A 20160808; PH 12018550189 A 20181115; RO 201800276 A 20160808; TN 2018000347 A 20160808; ZA 201807496 A 20181108