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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

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(54) Title: METHODS AND APPARATUS FOR END-OF-LIFE ESTIMATION OF SOLID STATE LIGHTING FIXTURES

(57) Abstract: The present disclosure is directed to methods and apparatus for estimating end-of-life for solid state lighting. By tracking actual operating parameters, such as the temperature (330) and current (320) supplied to a lighting fixture (100) over time and comparing it with estimated life time prediction data (370) stored in a look-up table (360), a precise prediction of the lifetime status of the lighting fixture may be obtained.

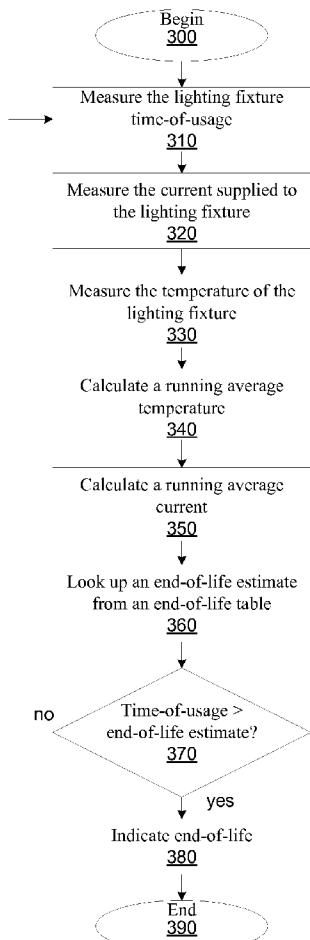
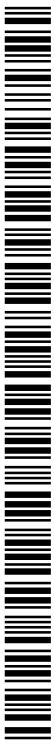


FIG. 3





AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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ADD.
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 practicable, 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	US 2006/028155 A1 (YOUNG GARRETT [US]) 9 February 2006 (2006-02-09) the whole document	1-30
X	WO 02/15145 A2 (POWER SIGNAL TECHNOLOGIES INC [US]) 21 February 2002 (2002-02-21) page 19, line 8 - page 20, line 22; figures 19-22	1-30
A	US 2009/254287 A1 (OHGOH TSUYOSHI [JP]) 8 October 2009 (2009-10-08) the whole document	1-30
A	WO 2009/156590 A1 (VALOPAA OY [FI]; VILMI TOIVO [FI]) 30 December 2009 (2009-12-30) the whole document	1-30
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Date of the actual completion of the international search 12 July 2012	Date of mailing of the international search report 07/11/2012
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Hunckler, José
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International application No
PCT/IB2012/052236

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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