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(54) Title: APPARATUS AND METHOD OF ENERGY EFFICIENT ILLUMINATION

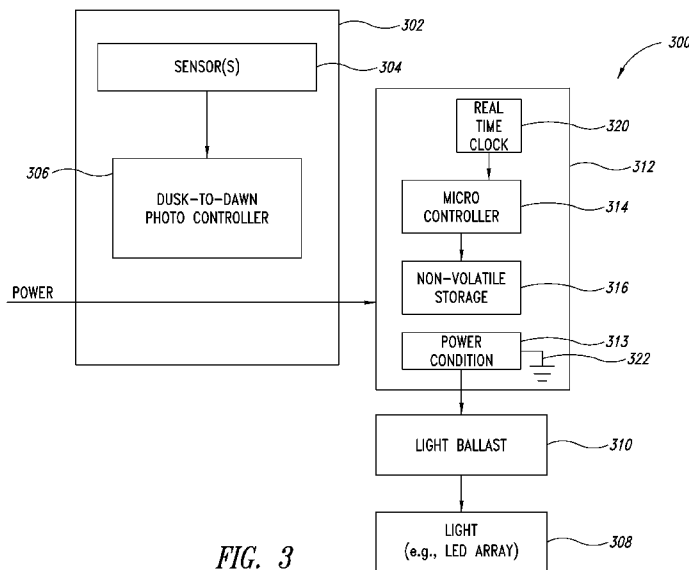
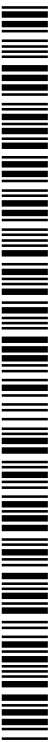


FIG. 3

(57) Abstract: An illumination system reduces a level of light output, and hence power consumption, at a time after turning ON a light source, and increases the level of light output at a time prior to turning OFF the light source. A control subsystem can determine when to increase the level of light based on a predicted time when the light source will be turned OFF. The control subsystem may determine an average or median length of time that the light source has been turned on for a number of recent daily cycles. A control subsystem may be an integral part of a luminaire or may be a retrofit.



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**A. CLASSIFICATION OF SUBJECT MATTER****H05B 37/02(2006.01)i**

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**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

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Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) &amp; Keywords: illumination , sensor , daily cycles, on/off

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5589741 A (TERMAN, MICHAEL et al.) 31 December 1996 See abstract; column 14, lines 25-62; claims 1,3,6 and figure 6.	1-26
A	JP 2004-349065 A (MATSUSHITA ELECTRIC WORKS LTD.) 09 December 2004 See abstract; paragraphs [0031]-[0038]; claim 1 and figure 2.	1-26
A	US 5343121 A (TERMAN, MICHAEL et al.) 30 August 1994 See abstract; column 7, lines 4-42; claims 1,12,14 and figures 4,10.	1-26
A	US 7339471 B1 (CHAN, PETER et al.) 04 March 2008 See column 4, lines 37-67, column 5, lines 1-29; claim 7 and figures 3-5.	1-26

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

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"E" earlier application or patent but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

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"&amp;" document member of the same patent family

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5589741 A	31.12.1996	None	
JP 2004-349065 A	09.12.2004	None	
US 5343121 A	30.08.1994	None	
US 7339471 B1	04.03.2008	None	