



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
06.11.2013 Bulletin 2013/45

(51) Int Cl.:
H05B 33/08 (2006.01)

(43) Date of publication A2:
31.10.2012 Bulletin 2012/44

(21) Application number: **12165662.3**

(22) Date of filing: **26.04.2012**

(84) Designated Contracting States:
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
Designated Extension States:
BA ME

(72) Inventors:
• **Tai, Shih-Neng**
Zhongli City, Taoyuan County 320 (TW)
• **Chung, Chia-Tin**
Toufen Township, Miaoli County 351 (TW)

(30) Priority: **29.04.2011 TW 100115247**

(74) Representative: **Viering, Jentschura & Partner**
Kennedydamm 55 / Roßstrasse
40476 Düsseldorf (DE)

(71) Applicant: **Paragon Semiconductor Lighting Technology Co., Ltd.**
Gueishan Township 33383 (TW)

(54) **Illuminating apparatus and method thereof**

(57) An illuminating apparatus (1) adapted to receive an input power which is a pulse DC includes a lighting unit (13), a detecting unit (11) and a controlling unit (15). The lighting unit (13) includes a plurality of lighting sets (131) and a switching unit. The switching unit (133) may be used to cause the lighting sets (131) interconnected in a serial fashion and /or in a parallel manner. The de-

tecting unit (11) detects a state of the input power. The controlling unit (15) couples the detecting unit (11) and the lighting unit (13), and controls the switching unit (133) according to the detecting unit (11) detecting the state of the input power. As such, the turn-on voltages of the lighting unit (13) may adjust at different stages of the input power.

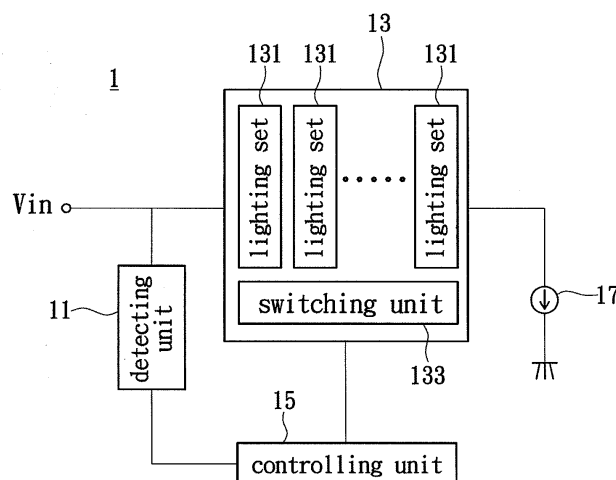


FIG. 2



EUROPEAN SEARCH REPORT

Application Number
EP 12 16 5662

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2010/013172 A1 (KONINKL PHILIPS ELECTRONICS NV [NL]; PHILIPS INTELLECTUAL PROPERTY [DE] 4 February 2010 (2010-02-04)	1,3-9, 11-13,15	INV. H05B33/08
Y	* the whole document *	2,10,14	

X	WO 2010/141684 A1 (EXCLARA INC [US]; SHTEYNBERG ANATOLY [US]; ZHOU DONGSHENG [US]; RODRIG) 9 December 2010 (2010-12-09)	1,3-9, 11-13,15	
Y	* page 27, line 15 - page 35, line 18; figures 1, 6 *	2,10,14	

X	EP 2 288 234 A1 (ADVANCED CONNECTEK INC [TW]) 23 February 2011 (2011-02-23)	1,6,12	
	* page 2, paragraph 12 - page 3, paragraph 37; figures 2-7 *		

			TECHNICAL FIELDS SEARCHED (IPC)
			H05B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 2 October 2013	Examiner Burchielli, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

1
EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 12 16 5662

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

02-10-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2010013172 A1	04-02-2010	CN 102113410 A	29-06-2011
		EP 2319275 A1	11-05-2011
		JP 2011529634 A	08-12-2011
		US 2011127922 A1	02-06-2011
		WO 2010013172 A1	04-02-2010

WO 2010141684 A1	09-12-2010	CN 102498449 A	13-06-2012
		EP 2438494 A1	11-04-2012
		JP 2012529124 A	15-11-2012
		KR 20130010455 A	28-01-2013
		US 2010308738 A1	09-12-2010
		WO 2010141684 A1	09-12-2010

EP 2288234 A1	23-02-2011	AU 2010201909 A1	17-02-2011
		EP 2288234 A1	23-02-2011
		JP 2011035368 A	17-02-2011
		KR 20110013167 A	09-02-2011
		TW 201105172 A	01-02-2011
		US 2011025216 A1	03-02-2011
