



(51) International Patent Classification:
H05B 37/02 (2006.01)

(21) International Application Number:
PCT/IB2009/050239

(22) International Filing Date:
22 January 2009 (22.01.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
08150632.1 25 January 2008 (25.01.2008) EP

(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KRIJN, Marcellinus, P., C., M.** [NL/NL]; c/o High Tech Campus Building 44, NL-5656 AE Eindhoven (NL). **VAN GORKOM, Ramon, P.** [NL/NL]; c/o High Tech Campus Building 44, NL-5656 AE Eindhoven (NL). **JAK, Martin, J., J.** [NL/NL]; c/o High Tech Campus Building 44, NL-5656 AE Eindhoven (NL).

(74) Agents: **BEKKERS, Joost, J., J.** et al.; High Tech Campus Building 44, NL-5656 AE Eindhoven (NL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

[Continued on next page]

(54) Title: LIGHTING SYSTEM COMPRISING A LIGHT SOURCE, A CONTROLLER AND A LIGHT SENSOR

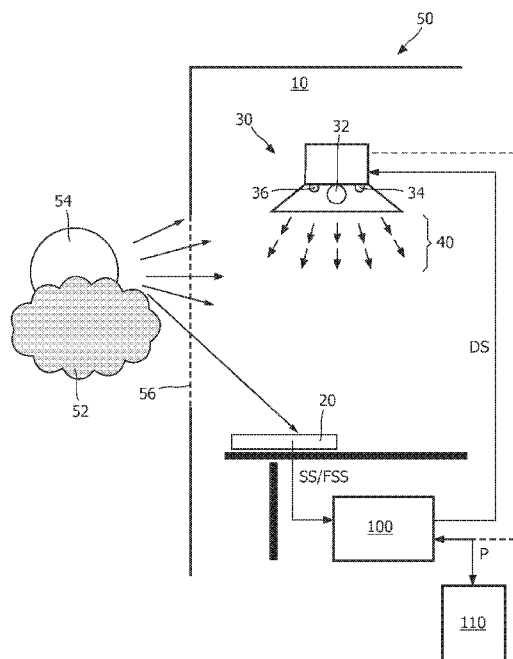


FIG. 1

(57) Abstract: The invention relates to a lighting system (10), a controller (100) for use in the lighting system, a light sensor (20) for use in the lighting system, a method of determining the contribution of the light emitted by the light source (30) to an illumination level and a computer program product. The lighting system comprises a light source for emitting modulated light (40), a light sensor for sensing the illumination level over time to capture the modulation of the modulated light, and a controller being configured for receiving a sense signal (SS) and for receiving a parameter (P) defining the modulated light to determine the contribution of the modulated light to the sensed illumination level. The effect of the measures according to the invention is that due to the known modulation of the modulated light emitted by the light source, the contribution of the light source in the sensed illumination level can be reconstructed relatively accurately.



- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))* — *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

Published:

- *with international search report (Art. 21(3))*

(88) Date of publication of the international search report:

29 October 2009

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2009/050239

A. CLASSIFICATION OF SUBJECT MATTER
INV. H05B37/02

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 practical, 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	EP 1 635 617 A (AGILENT TECHNOLOGIES INC [US] AVAGO TECH ECBU IP SG PTE LTD [SG]) 15 March 2006 (2006-03-15) columns 2-5	1-15
X	DE 44 28 278 C1 (RADINGER CHRISTOPH [DE]) 21 September 1995 (1995-09-21) columns 1,2; figure 1	1-15
X	JP 2004 022646 A (JAPAN RADIO CO LTD) 22 January 2004 (2004-01-22) abstract	1-15
E	WO 2009/046753 A (OSRAM GMBH [DE]; SCHALLMOSER OSKAR [DE]) 16 April 2009 (2009-04-16) pages 9-11; figure 1	1-15

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

28 August 2009

Date of mailing of the international search report

03/09/2009

Name and mailing address of the ISA/

European Patent Office, P.B. 5618 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Morrish, Ian

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2009/050239

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2007/121574 A (TIR SYSTEMS LTD [CA]; ASHDOWN IAN [CA]; LOVELAND DAMIEN [CA]; SPEIER I) 1 November 2007 (2007-11-01) paragraphs [0041], [0042] -----	1-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2009/050239

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1635617	A	15-03-2006	CN 1746948 A 15-03-2006
		JP 2006079099 A 23-03-2006	
		KR 20060051100 A 19-05-2006	
		US 2006054776 A1 16-03-2006	
DE 4428278	C1	21-09-1995	NONE
JP 2004022646	A	22-01-2004	NONE
WO 2009046753	A	16-04-2009	NONE
WO 2007121574	A	01-11-2007	CA 2648723 A1 01-11-2007
		EP 2016807 A1 21-01-2009	
		US 2009189530 A1 30-07-2009	