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- (71) Applicant: **KONINKLIJKE PHILIPS N.V.** [NL/NL];
High Tech Campus 5, NL-5656 AE Eindhoven (NL).
- (72) Inventors: **WANG, Jianfeng**; c/o High Tech Campus,
Building 44, NL-5656AE Eindhoven (NL). **CAVAL-**
CANTI, Dave, Alberto, Tavares; c/o High Tech Campus,
Building 44, NL-5656AE Eindhoven (NL).
- (74) Agents: **VAN EEUWIJK, Alexander** et al.; Philips IP&S
- NL, High Tech Campus 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, BN, 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, PA, 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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[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR OPERATING A LIGHTING NETWORK ACCORDING TO ENERGY DEMAND AND ENERGY SUPPLY

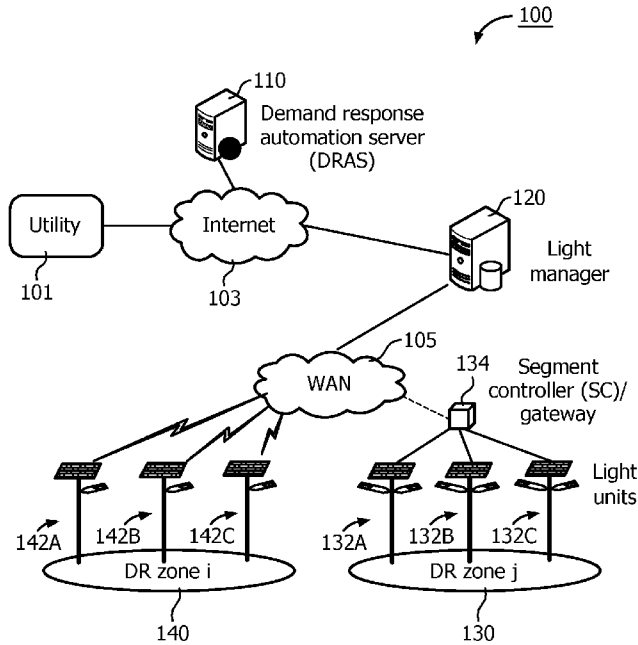


FIG. 1

(57) Abstract: Methods and apparatus related to operation of a plurality of lighting units of a lighting network according to energy demand and/or energy supply.

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *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))*

(88) Date of publication of the international search report:
28 November 2013

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

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2013/051917

A. CLASSIFICATION OF SUBJECT MATTER
INV. H02J3/14 H05B37/02
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)
H02J 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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/002792 A1 (HOFFKNECHT MARC O [CA]) 1 January 2004 (2004-01-01) pages 4, 5; figure 1 -----	1-10
A	US 7 062 361 B1 (LANE MARK E [US]) 13 June 2006 (2006-06-13) columns 6, 7; figure 1 -----	1-10
A	US 2010/295475 A1 (CHEMEL BRIAN J [US] ET AL) 25 November 2010 (2010-11-25) paragraph [0233] - paragraph [0264] -----	1-10

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	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 23 July 2013	Date of mailing of the international search report 08/10/2013
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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 Morrish, Ian
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2013/051917

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2004002792	A1	01-01-2004	AU 2003245148 A1	19-01-2004
			CA 2490269 A1	08-01-2004
			EP 1530888 A2	18-05-2005
			US 2004002792 A1	01-01-2004
			US 2007061050 A1	15-03-2007
			WO 2004004423 A2	08-01-2004

US 7062361	B1	13-06-2006	NONE	

US 2010295475	A1	25-11-2010	NONE	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2013/051917

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see annex

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10

Adjusting lighting based on electricity prices

2. claims: 11-17

Dimming based on security levels
