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(71) Applicant (for all designated States except US): **LIGHT-
ING SCIENCE GROUP CORPORATION** [US/US];
Suite 1555, 2100 McKinney Avenue, Dallas, Texas 75201
(US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MAXIK, Fredric S.**
[US/US]; 11640 NW 23rd Street, Plantation, Florida 33323
(US).

(74) Agents: **SMITH, T. Murray** et al.; Haynes and Boone,
LLP, 901 Main Street, Suite 3100, Dallas, Texas 75202
(US).

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Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

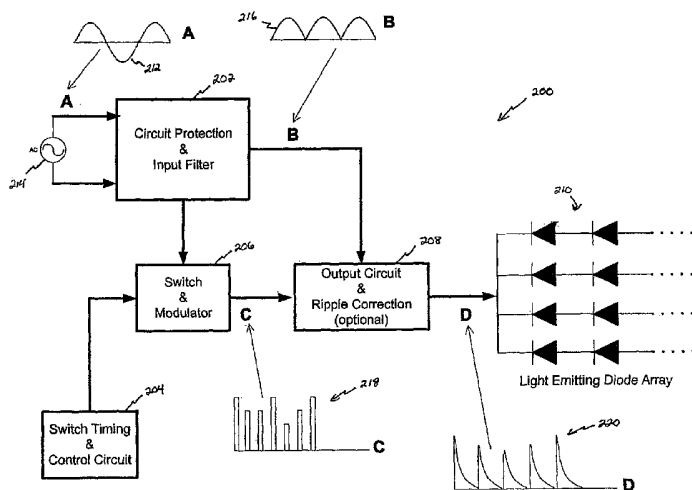
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For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: ELECTRONIC LIGHT GENERATING ELEMENT LIGHT BULB



(57) Abstract: The present system for driving an electronic light generating element, includes: (i) input terminals, (ii) an input rectifier, (iii) a switch control circuit coupled to the input circuit and operable to generate a switching signal having pulses, and (iv) a switching element coupled to the input circuit and the switch control circuit. The switching element is operable to generate an output signal formed as a series of bursts having peak amplitudes above a maximum forward current rating for a duty cycle less than a maximum operating duty cycle over which an electronic light generating element may be catastrophically damaged in response to the signal independent of negative current attributes and switching being applied to the switching element. The output signal is applied to the electronic light generating element to produce light.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2005/013354

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H05B33/08

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)

IPC 7 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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 175 528 A (CHOI ET AL) 29 December 1992 (1992-12-29)	1-7, 11-17, 20,21, 28,29
X	column 6, line 30 - column 7, line 13; figures	23,24
A		30-41
Y	US 5 313 187 A (CHOI ET AL) 17 May 1994 (1994-05-17)	1-7, 11-17, 20,21, 28,29
X	abstract; figures	23,24
A		30-41
	----- -/-	

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

☒ Patent family members are listed in 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

4 October 2005

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26. 10. 2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Maicas, J

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2005/013354

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2001/024112 A1 (JACOBS RONNY ANDREAS ANTONIUS MARIA ET AL) 27 September 2001 (2001-09-27)	1,2,4, 11-13,20
A	paragraph '0025!; figures -----	30-41
A	US 4 423 473 A (KIRKLEY ET AL) 27 December 1983 (1983-12-27) abstract -----	1,11,20
Y	FR 2 586 844 A (SOFRELA SA) 6 March 1987 (1987-03-06) figures -----	4-6, 13-15, 28,29
Y	WO 2004/003869 A (MONZO, JOSE) 8 January 2004 (2004-01-08) figures -----	4-6, 13-15, 28,29
A	EP 0 441 965 A (MITSUBISHI RAYON CO., LTD; SONY CORPORATION) 21 August 1991 (1991-08-21) figure 4E -----	31,37

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2005/013354

Box 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 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 fee, this Authority did not invite payment of any additional fee.
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.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ 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: 1-22

Device, Circuit and Method for driving an electronic light comprising:
an input circuit,
a switch control circuit,
a switching element,
the electronic light being driven with a series of bursts having a peak amplitude over the maximum rating of the electronic light.

2. claims: 23-29

Light source comprising:
a power circuit which applies a forward voltage to a LED, being the forward current of the LED above of the maximum forward current rating of the LED.

3. claims: 30-41

Apparatus and Method comprising:
an electronic light,
a circuit producing an electric signal for driving said electronic light,
the electric signal including a pulse train which has a plurality of pulses of two amplitudes,
at least some the the pulses having a peak current above the maximum current rating of the electronic light,
the maximum current rating of the electronic light being surpassed less than ten per cent of the time.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2005/013354

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