

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2015/097539

A. CLASSIFICATION OF SUBJECT MATTER

H01L 33/10 (2010.01) i; H01L 33/00 (2010.01) i

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)

H01L

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)

CNTXT, VEN: light emitting diode, refractive index, dielectric layer, insulation layer, light extraction rate, light emitting efficiency, led, refractive, index, lower, smaller, insulating, layer, extraction, emission

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
PX	CN 104638078 A (TIANJIN SAN'AN OPTOELECTRONICS CO., LTD.), 20 May 2015 (20.05.2015), the whole document	1-13
X	CN 104300055 A (EPSTAR CORPORATION), 21 January 2015 (21.01.2015), description, paragraphs 0034-0040, and figure 2B	1-4, 8-12
X	CN 104134723 A (ENRAYTEK OPTOELECTRONICS CO., LTD.), 05 November 2014 (05.11.2014), description, paragraphs 0049-0058, and figures 4-12	13
A	US 2011018024 A1 (FUKSHIMA et al.), 27 January 2011 (27.01.2011), the whole document	1-13
A	JP 2012114130 A (PANASONIC CORPORATION), 14 June 2012 (14.06.2012), the whole document	1-13

Further documents are listed in the continuation of Box C.

See patent family annex.

<p>* Special categories of cited documents:</p> <p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“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)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“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</p> <p>“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</p> <p>“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</p> <p>“&” document member of the same patent family</p>
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Date of the actual completion of the international search
10 March 2016 (10.03.2016)

Date of mailing of the international search report
18 March 2016 (18.03.2016)

Name and mailing address of the ISA/CN:
State Intellectual Property Office of the P. R. China
No. 6, Xitucheng Road, Jimenqiao
Haidian District, Beijing 100088, China
Facsimile No.: (86-10) 62019451

Authorized officer
WANG, Yibing
Telephone No.: (86-10) **62411584**

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2015/097539

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 104638078 A	20 May 2015	None	
CN 104300055 A	21 January 2015	None	
CN 104134723 A	05 November 2014	None	
US 2011018024 A1	27 January 2011	EP 2259345 A1	08 December 2010
		EP 2259345 A4	17 July 2013
		US 8525204 B2	03 September 2013
		WO 2009119640 A1	01 October 2009
		KR 20100126793 A	02 December 2010
		KR 101240011 B1	06 March 2013
		JP 2009260316 A	05 November 2009
JP 2012114130 A	14 June 2012	JP 2013038450 A	21 February 2013
		JP 5659728 B2	28 January 2015