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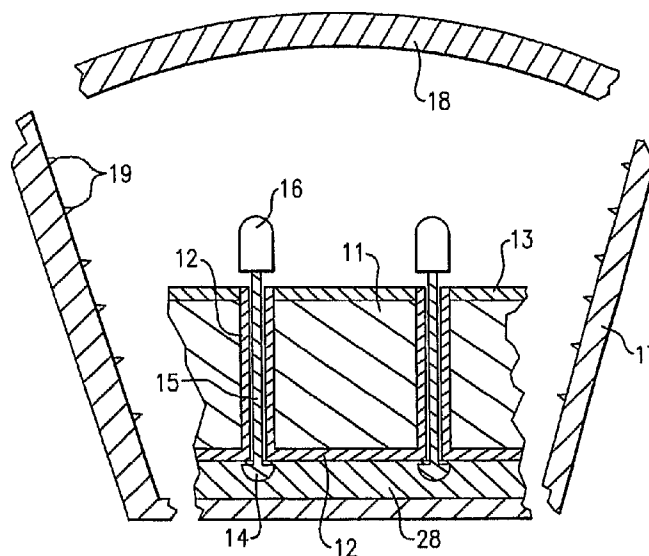
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(54) Title: LIGHTING DEVICE AND LIGHTING METHOD



(57) Abstract: A lighting device comprising first and second groups of solid state light emitters, which emit light having peak wavelength in ranges of from 430 nm to 480 nm and from 600 nm to 630 nm, respectively, and a first group of lumiphors which emit light having dominant wavelength in the range of from 555 nm to 585 nm. In some embodiments, if current is supplied to a power line, a combination of (1) light exiting the lighting device which was emitted by the first group of emitters, and (2) light exiting the lighting device which was emitted by the first group of lumiphors would, in an absence of any additional light, produce a sub-mixture of light having x, y color coordinates within an area on a 1931 CIE Chromaticity Diagram defined by points having coordinates (0.32, 0.40), (0.36, 0.48), (0.43, 0.45), (0.42, 0.42), (0.36, 0.38). Also provided is a method of lighting.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H05B 33/14 (2008.04)

USPC - 257/89

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(8) - F21K 2/00; H05B 33/00; H05B 33/04; H05B 33/08; H05B 33/12; H05B 33/14; H05B 35/00 (2008.04)

USPC - 362/231,240; 313/502,505; 257/89,98,100,E33.061

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)

USPTO EAST System (US, USPG-PUB, EPO, DERWENT), PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,577,073 B2 (SHIMIZU et al) 10 June 2003 (10.06.2003) entire document	1-2,4-12,14-15,17-26, 29-33,36-40,43-47,50-63, 66-75,78-81,84-88,91-98, 107-129,138-152, 161-168,177-184, 193-200,209-231, 240-252,261-268, 277-284,293-316, 322-329,332,334-335, 338-348,351-358 --- 3,13,16,27-28,34-35, 41-42,48-49,64-65,76-77, 82-83,89-90,99-106, 130-137,153-160, 169-176,185-192, 201-208,232-239, 253-260,269-276, 285-292,317-321, 330-331,333,336-337, 349-350

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"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

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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 2004/0105264 A1 (SPERO) 03 June 2004 (03.06.2004) entire document	3, 13, 16, 27-28, 34-35, 41-42, 48-49, 64-65, 76-77, 82-83, 89-90, 99-106, 130-137, 153-160, 169-176, 185-192, 201-208, 232-239, 253-260, 269-276, 285-292, 320-321, 330-331, 333, 336-337, and 349-350
Y	US 6,441,558 B1 (MUTHU et al) 27 August 2002 (27.08.2002) figure 1, column 4, lines 1-15	317-319
Y	US 4,710,699 A (MIYAMOTO) 01 December 1987 (01.12.1987) column 4, lines 22-67	319
A	US 2005/0030744 A1 (DUCHARME et al) 10 February 2005 (10.02.2005) entire document	1-358