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(54) Title: METHODS FOR PRODUCING LIGHT EMITTING DEVICE

(57) Abstract: A method includes disposing a planarization layer on a surface of a layer of semiconductor material and disposing a lithography layer on a surface of the planarization layer. The method also includes performing nanolithography to remove at least a portion of the planarization layer, at least a portion of the lithography layer and at least a portion of the layer of semiconductor material, thereby forming a dielectric function in the surface of the layer of semiconductor material that varies spatially according to a predefined pattern.

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**INTERNATIONAL SEARCH REPORT**

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PCT/US04/10877

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : H01L 21/00  
 US CL : 216/41,47-50; 257/14,79-103; 430/272.1,314-317; 438/22,28-32,34,35,39,42,725,736,760,761-763,780,781

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)

U.S. : 216/41,47-50; 257/14,79-103; 430/272.1,314-317; 438/22,28-32,34,35,39,42,725,736,760,761-763,780,781

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, E --- Y, E	US 6,778,746 B2 (CHARLTON et al) 17 August 2004 (17.08.2004), Figs. 23(b-f), column 6, line 5, columns 9-12, column 24, lines 34-67 and column 31, lines 46-50.	1, 7-9, 25, 52-54, 58, 61-65 and 76 ----- 30-34, 42, 43, 55-57, 59, 60, 89-91 and 106
Y, E	US 2004/0110856 A1 (YOUNG et al) 10 June 2004 (10.06.2004) paragraphs 17-20.	2-6, 10-12, 15, 16, 40, 41 and 45
Y, P	US 2003/0141507 A1 (KRAMES et al) 31 July 2003, see paragraph 2 and Company Literature, Abrading Methods, Inc.	26-29 and 85-88
Y	US 5,834,331 A (RAZEGHI) 10 November 1998 (10.11.1998), see col. 1, lines 15-32.	36-39, 48-51 and 94-100
Y, E	US 2004/0144985 (ZHANG et al) 29 July 2004 (29.07.2004), Fig. 2F and paragraphs 3 and 31.	35
Y	US 5,126,231 A (LEVY) 30 June 1992 (30.06.1992), see Figs. 9-13; column 1, lines 9-15; column 4, lines 13-15 and 40-44	44, 46, 47, 66 and 67

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"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
"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
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"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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INTERNATIONAL SEARCH REPORT

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**Continuation of Item 4 of the first sheet:**

The title is gramatically incorrect. The new title should read: Methods For Producing Light Emitting Device.