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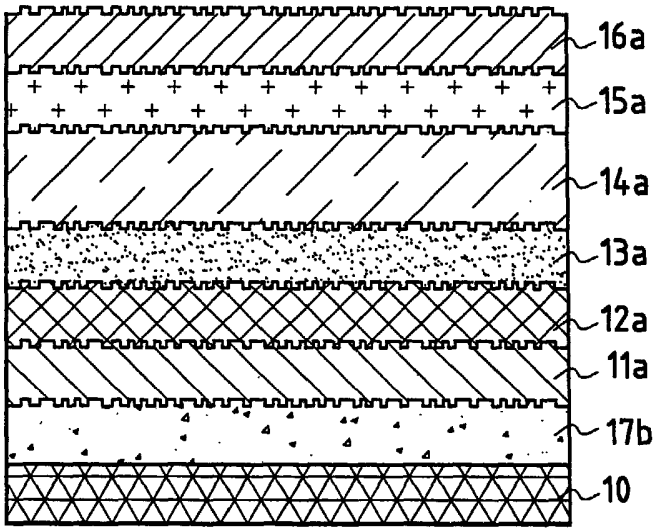
(54) Title: LIGHT EMITTING DIODE, SUPPORT & METHOD OF MANUFACTURE



(57) Abstract: A light emitting diode of the stacked-layer structure type, incorporating at least one layer made of an inorganic material between the layer forming the substrate (10) and a layer forming the light emitting layer (14), is provided, in which a periodic structure at the wavelength range emitted by the light emitting layer is printed. Also described is a method for generating a microstructure periodic with a wavelength range of the emitting layer of a light emitting diode. The method includes: depositing an inorganic material layer by a sol-gel process between the substrate and a light emitting layer, and printing the periodic structure onto the outer surface of this layer by soft lithography, as well as using this process for manufacturing a light emitting diode.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/27547

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01L 27/25, 31/12, 33/00

US CL : 257/79

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. : 257/79

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)

PLUS, EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y, E	US 2004/0156982 A1 (MARUYAMA et al) 12 August 2004 (12.08.2004), paragraphs 23-30.	1-22
Y, P	US 6,512,249 B2 (KOYAMA et al) 28 January 2003 (28.01.2003), column 3 lines 40-47.	1-22
Y, P	US 6,512,250 B1 (KOYAMA et al) 28 January 2003, column 5 lines 10-55.	1-22

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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