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(54) Title: GROUP III NITRIDE BASED QUANTUM WELL LIGHT EMITTING DEVICE STRUCTURES WITH AN INDIUM CONTAINING CAPPING STRUCTURE

(57) Abstract: Group III nitride based light emitting devices and methods of fabricating Group III nitride based light emitting devices are provided. The emitting devices include an n-type Group III nitride layer, a Group III nitride based active region on the n-type Group III nitride layer and comprising at least one quantum well structure, a Group III nitride layer including indium on the active region, a p-type Group III nitride layer including aluminum on the Group III nitride layer including indium, a first contact on the n-type Group III nitride layer and a second contact on the p-type Group III nitride layer. The Group III nitride layer including indium may also include aluminum.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
H01L33/00

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 practical, search terms used)
EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/006418 A1 (EMERSON DAVID TODD ET AL) 9 January 2003 (2003-01-09) page 4, paragraph 46 - page 5, paragraph 60; claims 1-3,23-26,79-105; figures 1,2 -----	1-46
X	US 6 153 894 A (UDAGAWA ET AL) 28 November 2000 (2000-11-28) column 7, line 21 - column 15, line 39; claims 1-4; example 1 -----	1-46
X	EP 1 189 289 A (NICHIA CORPORATION) 20 March 2002 (2002-03-20) paragraph '0004! - paragraph '0016!; examples 1,9-13 -----	1-46

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 8 February 2006	Date of mailing of the international search report 15/02/2006
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INTERNATIONAL SEARCH REPORT

information on patent family members

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