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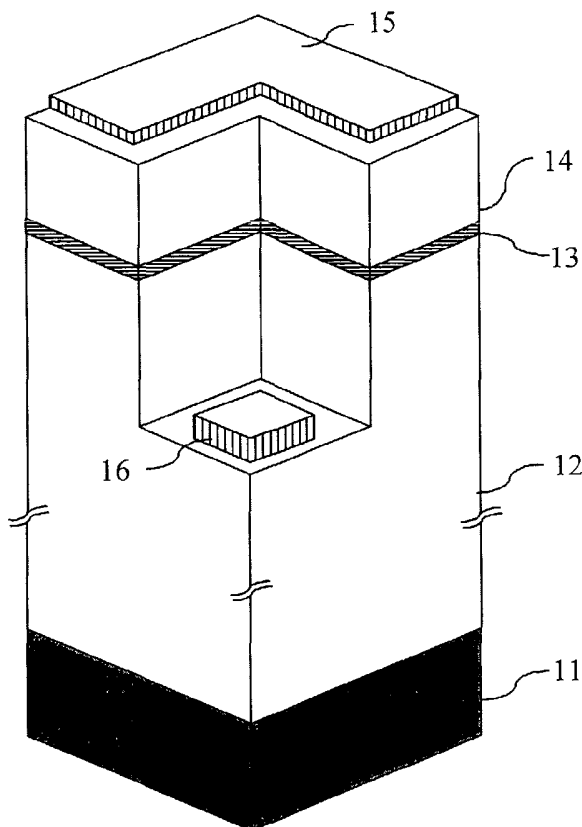
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(54) Title: A LIGHT EMITTING DIODE



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(57) Abstract: A green LED (1) has a substrate (11), a GaN heavily n-doped bottom confining layer (12), an active region (13), an upper GaN confinement layer (14), and a semi-transparent ohmic contact layer (15). The active region (13) has less than or equal to three highly compressively strained quantum wells. The widths of the quantum wells is less than 3 nm. The active region arrangement provides a short free carrier life-time and hence an increase in the modulation bandwidth of the LED.

WO 2004/015784 A3



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ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
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INTERNATIONAL SEARCH REPORT

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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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

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Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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* & * document member of the same patent family

Date of the actual completion of the international search 26 May 2004	Date of mailing of the international search report 03/06/2004
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer van der Linden, J.E.
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