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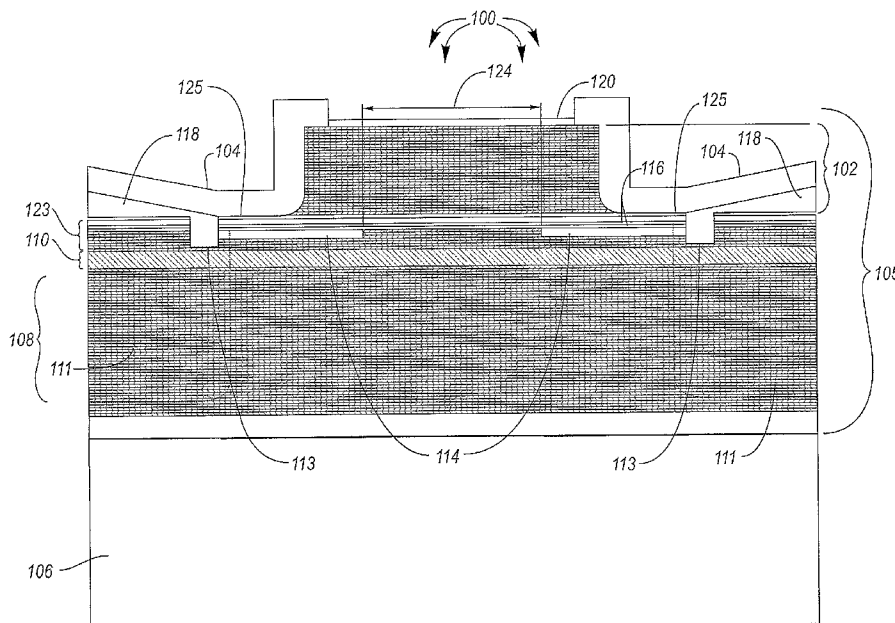
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
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(54) Title: ELECTRO-ABSORPTION MODULATOR INTEGRATED WITH A VERTICAL CAVITY SURFACE EMITTING LASER



(57) Abstract: An electro-absorption modulator integrated with a vertical cavity surface emitting laser (VCSEL). An electro-absorption modulator (EAM) is integrated or grown on a VCSEL. The electro-absorption modulator may be separated from the VCSEL by a semi-insulating or nonconducting layer. Contacts on the EAM can bias the EAM such that 0 light emitted by the VCSEL is selectively absorbed. Thus, the VCSEL can emit a constant wave light that is modulated by the integrated EAM.

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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 practicable, search terms used) MicroPatent (USG USA EPA EPB WO JP DEG DEA DET DEU GBA FRA): (iron or ferr*5 or (fe near ".seq.")) with dop*5; (blue with shift*5) same (bandedge*1 or band*1edge*1 or (band*1 with edge*1)); us20020097768, IP.com, DialogPro		
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 2002/0097768 A1 (THORNTON) 25 July 2002 (25.07.2002) entire document	1-2, 6-12 and 17-18 ----- 3-5, 13-16 and 19-22
Y	US 5,499,259 A (MAKITA) 12 March 1996 (12.03.1996) entire document	3-5, 13-16, 19 -22
Y	US 2005/0040415 A1 (KISH, JR. et al) 24 February 2005 (24.02.2005) entire document	16 and 20
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