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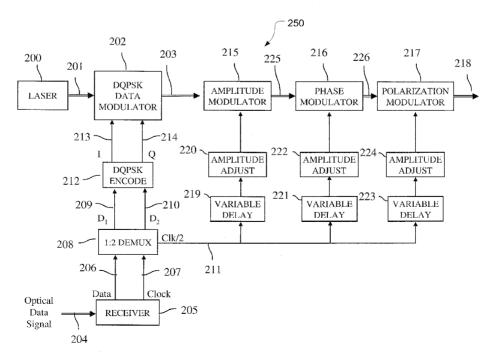
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(57) Abstract: An apparatus system and method, wherein a multi-level data modulation format (fig 2), such as DQPSK, is combined with symbol rate synchronous amplitude (215, fig. 2), phase (216, fig.2) and/or polarization modulation (217, fig.2).



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Minimum documentation searched (classification system followed by classification symbols) U.S.: 398/183, 184, 185, 186, 187, 188, 189, 198					
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) EAST					
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 6,876,818 B1 (Bai et al.) 5 April 2005, col. 4, lines 52-55, col. 8, lines 15-16, 48-51, col. 9, lines 2-7, and fig. 9			1-2, 4-5, 9, 11, 13-14, 16-17, 21, 23, 25-27	
•				3, 6-8, 10, 12, 15, 18- 20, 22, 24	
Y	US 6,650,846 B1 (Ito) 18 November 2003, col. 6, lines 15-18, and 1, 2, 3, 4, fig. 3			3, 15	
Y	US 2004/0028418 A1 (Kaplan et al.) 12 February 2004, page 3, paragraph 0046 and 260, 261, 263, fig. 10			6-7, 18-19	
Y	US 2003/0081277 A1 (Corbeil et al.) 1 May 2003, pages 2-3, paragraph 0029, and 52, FEC Encoder, fig. 6			8, 20	
Х	US 5,946,119 (Bergano et al.) 31 August 1999, 201, 202, 203, 204, 207, 207, 209, 216, 205, 206, 210, 213, fig. 3			1-7, 9-19, 21-27	
Further documents are listed in the continuation of Box C. See patent family annex.					
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