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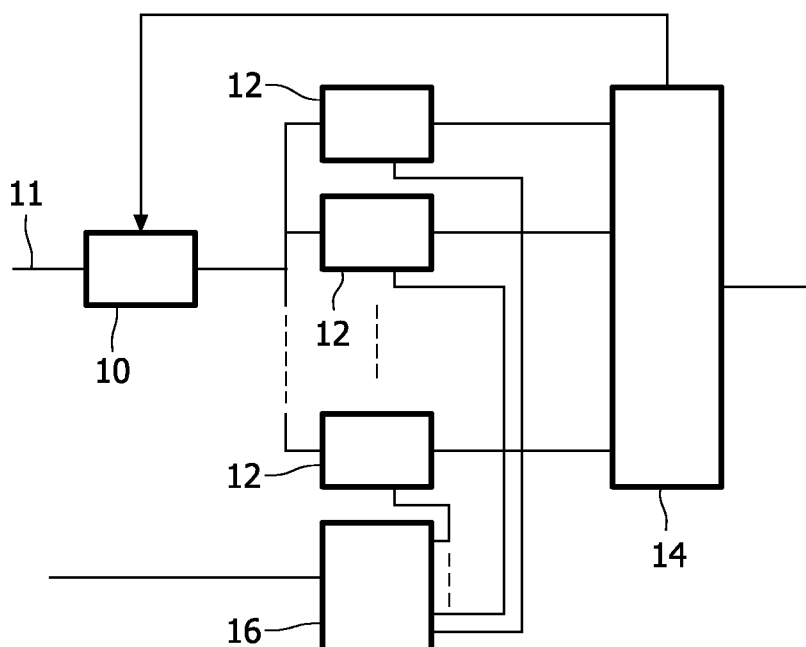
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(54) Title: DATA COMMUNICATION CIRCUIT WITH EQUALIZATION CONTROL



(57) Abstract: An adaptive equalizer comprises an adjustable equalizer circuit (10) that allows to enhance the frequency dependence of contents of the transmitted signals which suffer from losses in the connected transmission channel. A blind equalization tuning procedure is proposed that operates without knowledge about the characteristic of transmission channel. Phase positions of transitions in the equalized signal are detected by a transition phase detector (44). A digital post-processing circuit (14) evaluates a measure for spread of the detected phase positions of transitions accumulated over a plurality of the symbol periods. The digital post processing circuit controls the adjustable equalizer, setting the adjustable equalizer to a setting wherein the detected spread is minimized.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

INV. H04L25/03

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)

H04L

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JAMES EVERITT ET AL: "A CMOS Transceiver for 10-Mb/s and 100-Mb/s Ethernet" IEEE JOURNAL OF SOLID-STATE CIRCUITS, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 33, no. 12, December 1998 (1998-12), XP011060881 ISSN: 0018-9200 the whole document	1,5,6, 13,15,17
A	EP 1 453 238 A (COREOPTICS INC [US]) 1 September 2004 (2004-09-01) page 1, paragraph 3 - paragraph 10 page 2, paragraph 15 - paragraph 19 page 4, paragraph 33 - paragraph 39 page 5, paragraph 41 - paragraph 43 page 6, paragraph 45 - paragraph 49 figures 1a,1b,2 ----- -/--	1-4, 7-14,16



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INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 731 697 B1 (BOCCUZZI JOSEPH [US] ET AL) 4 May 2004 (2004-05-04) column 4, line 40 - line 63 column 5, line 17 - line 40 figure 9 -----	1-4, 7-14,16

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