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(71) Applicant: VALENCE SEMICONDUCTOR, INC. [US/US]; 41 Discovery, Irvine, CA 92618 (US).

(72) Inventors: CHINI, Ahmad; 138 Mount Charles Crescent, Vaughan, Ontario L6A 2J9 (CA). OMIDI, Javad; 35 Trailwood Drive, #2411, Mississauga, Ontario L4Z 3L6 (CA). ALAVI, Hossein; 25 Trailwood Drive, #2408, Mississauga, Ontario L4Z 3K9 (CA).

(74) Agents: SCHAAL, William, W. et al.; Blakely, Sokoloff, Taylor & Zafman, 12400 Wilshire Boulevard, 7th Floor, Los Angeles, CA 90025-1026 (US).

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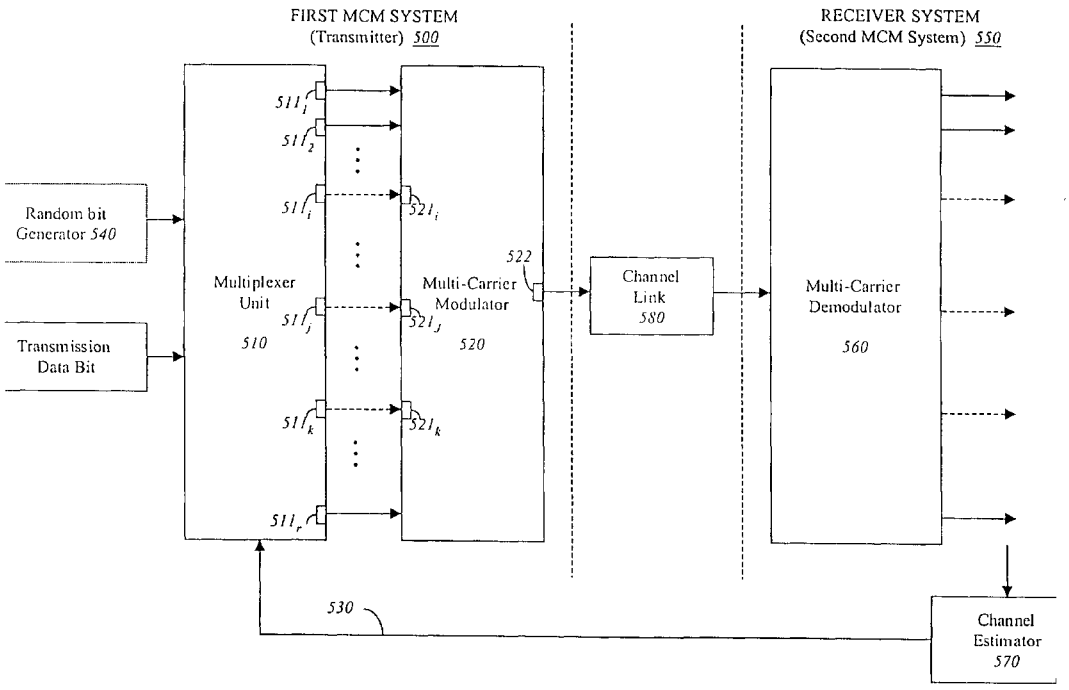
(54) Title: CONTROL OF POWER SPECTRAL DENSITY BY MODULATION OF SUBCARRIERS WHICH DO NOT CARRY DATA



(57) Abstract: A method is described for mitigating power spectral density irregularities in a multi-carrier modulation environment. The method involves identifying at least one carrier of a plurality of carriers that is in a non-data bearing state. Thereafter, that carrier is modulated with random data.

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INTERNATIONAL SEARCH REPORT

Ir onal Application No
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L27/26

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)
IPC 7 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, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JONES D L: "Peak power reduction in OFDM and DMT via active channel modification" SIGNALS, SYSTEMS, AND COMPUTERS, 1999. CONFERENCE RECORD OF THE THIRTY-THIRD ASILOMAR CONFERENCE ON OCT. 24-27, 1999, PISCATAWAY, NJ, USA,IEEE, US, 24 October 1999 (1999-10-24), pages 1076-1079, XP010373802 ISBN: 0-7803-5700-0 abstract page 1076, column 2, paragraph 2	1,7,19, 20
Y		2-4,6
A		5,8-18, 21-27
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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
13 January 2003	17/01/2003

Name and mailing address of the ISA	Authorized officer
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	Reilly, D

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/18621

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

A method is described for mitigating power spectral density irregularities in a multi-carrier modulation environment. The method involves identifying at least one carrier of a plurality of carriers that is in a non-data bearing state. Thereafter, that carrier is modulated with random data.