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(71) Applicant (for all designated States except US): **MOTOROLA, INC.** [US/US]; 1303 East Algonquin Road, Schaumburg, Illinois 60196 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PARK, Young-Seo** [KR/US]; 9365 N.W. 54th Street, Sunrise, Florida 33351 (US). **DODLATYVENKATA, Lavanya** [IN/US]; 10461 N.W. 12th Place, Plantation, Florida 33322 (US).

(74) Agents: **DOUTRE, Barbara, R.** et al.; 8000 West Sunrise Boulevard, Room 1610, Plantation, Florida 33322 (US).

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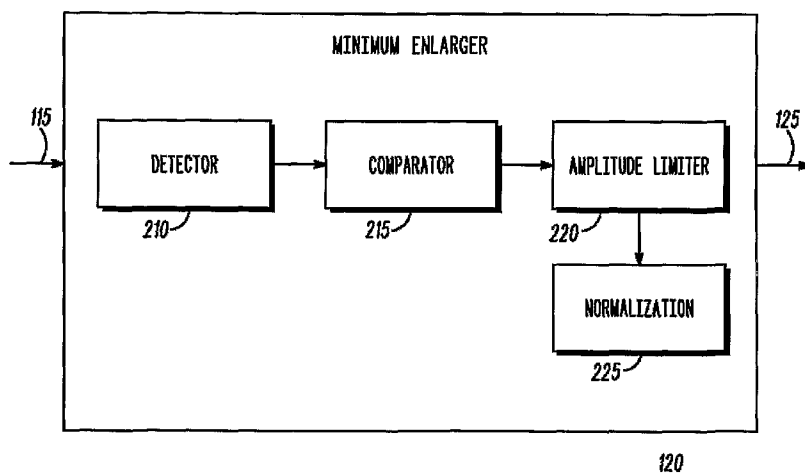
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR ENLARGING AMPLITUDE MINIMA IN A LINEAR MODULATION SIGNAL



(57) Abstract: A system and a method to enlarge the minimum signal of a linear modulation signal (115) including multi-carrier modulation, such as Scalable advanced Modulation or Orthogonal Frequency Division Multiplexing, are disclosed. A minimum enlarger (120) exploits a simple amplitude limiter (220) so as not to interfere with an existing peak suppression scheme. The amplitude limiter (220) enlarges local minimum amplitude values to a predetermined minimum amplitude threshold if the local minimum amplitude values are less than the predetermined minimum amplitude threshold. While the amplitude limiter (220) adjusts the local minimum amplitude values in the linear modulation signal (115), the phase of the linear modulation signal (115) is maintained. The conditioned linear modulation signal (125) increases the efficiency of a linear power amplifier (130). The spectral change of the linear modulation signal due to the disclosed scheme is negligible because the adjusted signal power is negligible.



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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/20438

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04L 27/26 (2006.01)

USPC - 375/300

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(8) H04L 027/026 (2006.01) -

USPC - 375/295, 297, 300, 301, 302; 455/091, 134, 102, 104, 108, 109, 110, 113, 114, 123, 127; 332/156, 157, 159, 162, 167

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, IP.com, DialogPro, IEEEEXPLORE

## 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 5,469,127 (HULICK et al) 21 November 1995 (21.11.1995), entire document	10 ----- 1-9
Y	US 2004/0252775 A1 (PARK) 16 December 2004 (16.12.2004), entire document	5, 7-9
Y	US 6,351,500 B2 (KUMAR) 26 February 2002 (26.02.2002), entire document	1-9
A	US 5,483,373 (BULOW et al) 09 January 1996 (09.01.1996), entire document	1-10
A	US 4,486,898 (YOKOYA) 04 December 1984 (04.12.1984), entire document	1-10

☐ Further documents are listed in the continuation of Box C.

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Authorized officer:

Blaine R. Copenheaver

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