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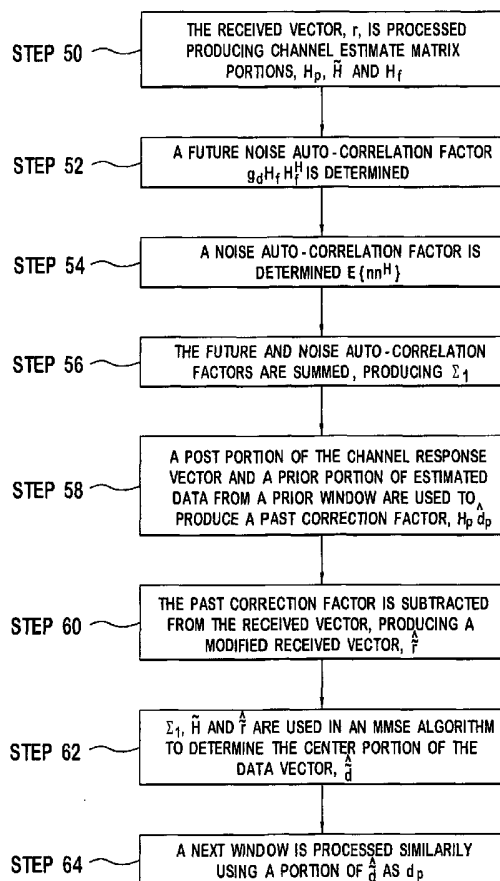
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[Continued on next page]

(54) Title: REDUCED COMPLEXITY SLIDING WINDOW BASED EQUALIZER



(57) Abstract: A sliding window based data estimation is performed. An error is introduced in the data estimation to the communication modeling the relationship between the transmitted and received signals. To compensate for an error in the estimated data, the data that was estimated in a previous sliding window step (58) or terms that would otherwise be truncated as noise are used. These techniques (50, 52, 54, 56, 58, 60, 62 and 64) allow for data to be truncated prior to further processing reducing the data of the window.

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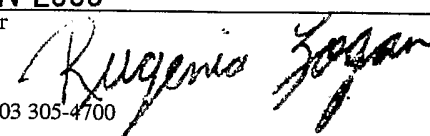
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/06162

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H04B 1/69 US CL : 375/130 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) U.S. : 375/130, 147, 150, 229, 231; 455/561 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) Please See Continuation Sheet		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,219,561 B1 (RALEIGH) 17 April 2001, all	1-32
A	US 5,805,638 A (LIEW) 08 September 1998, all	1-32
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
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19 November 2004 (19.11.2004)	12 JAN 2005	
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INTERNATIONAL SEARCH REPORT

Continuation of B. FIELDS SEARCHED Item 3:

East

search terms: sliding window, equalizer, MMSE, matrix, channel estimate