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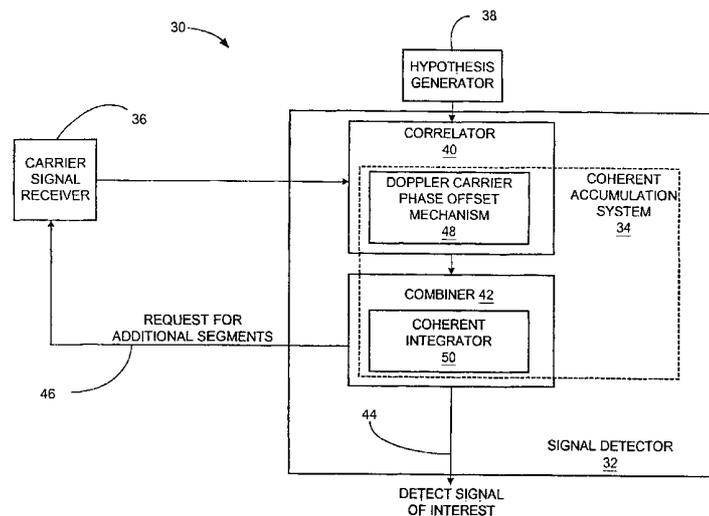
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- (71) Applicant: CONEXANT SYSTEMS, INC. [US/US]; 4311 Jamboree Road, Newport Beach, CA 92660-3095 (US). For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SIGNAL DETECTOR AND METHOD EMPLOYING A COHERENT ACCUMULATION SYSTEM TO CORRELATE NON-UNIFORM AND DISJOINT SAMPLE SEGMENTS



(57) Abstract: A signal detector employs a coherent accumulation system that coherently combines the correlation results derived from segments of samples of a received signal. The segments may have non-uniform lengths and may have been obtained over different and non-overlapping time periods. The segments are obtained during sampling windows of arbitrary length and at arbitrary times, and the results of processing the segments are successively combined in a coherent manner (separate magnitude and phase accumulation) until a threshold signal-to-noise ratio (SNR) has been achieved. Coherent integration is enabled by introducing a carrier phase offset as well as a code phase offset, so that different segments are aligned in carrier phase as well as code phase. Although not limited to this application, in one implementation example, the signal detector is used in connection with and as part of a global positioning system (GPS) receiver.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G01S1/04 G01S5/14 H04B1/707

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 G01S H04B

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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 00 14568 A (QUALCOMM INC) 16 March 2000 (2000-03-16) abstract; figure 12 page 14, line 14 -page 15, line 29 ---	1,3,4,6, 7,11 5,8,10, 15,18, 20,27, 31,39-55
Y	US 6 044 105 A (GRONEMEYER STEVEN A) 28 March 2000 (2000-03-28) cited in the application abstract --- -/--	5,15,27

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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