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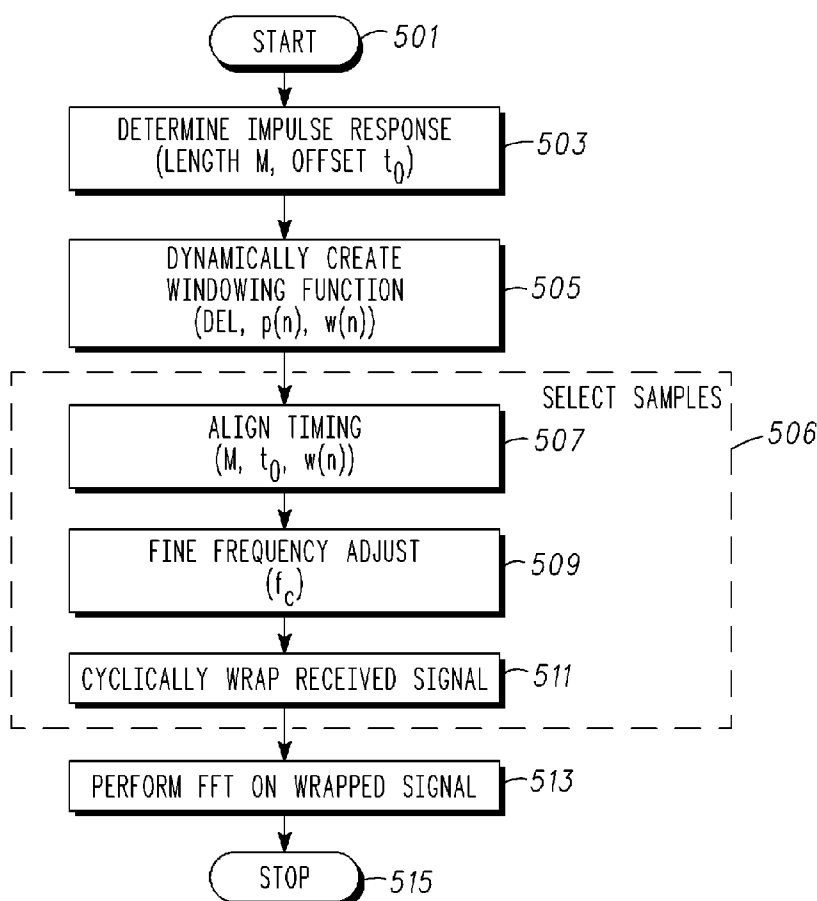
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(54) Title: SYNCHRONIZATION FOR OFDM SIGNALS



(57) Abstract: A method of acquiring, at a receiver (101), fine timing synchronization for an Orthogonal Frequency Division Multiplexing (OFDM) signal as transported over a channel, includes determining an impulse response of the channel (503); dynamically creating a window function corresponding to the impulse response (505); and selecting a multiplicity of samples of the OFDM signal in accordance with the window function, where the multiplicity of samples are time aligned with an OFDM demodulator (506). A corresponding synchronizer (400) includes a correlator (401) for cross correlating a received preamble with a known preamble to provide an impulse response corresponding to the channel; a window generator (404) configured to dynamically create a window function corresponding to the impulse response; and a selector (412) configured to select a multiplicity of samples of the OFDM signal in accordance with the window function, where the multiplicity of samples are time aligned with a Fast Fourier Transform window associated with an OFDM demodulator.



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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)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Please See Continuation Sheet

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US Pub. No: US 2007/0110174 A1(Glazko et al)17 May 2007(17.05.2004) fig 3, 10-12 and paragraph 11-21, 29-33	1-22
Y	US Pub.No US 2005/0105647 A1(Willhelmsson et al) 19 May 2005(19.05.2005), paragraph 5-14.	1, 6-10,11-21
A	US Pub.No: US 2007/0019538 A1(Long et al) 25 January 2007(25.01.2004), Figure 4 and Paragraphs 5-14.	1-22



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