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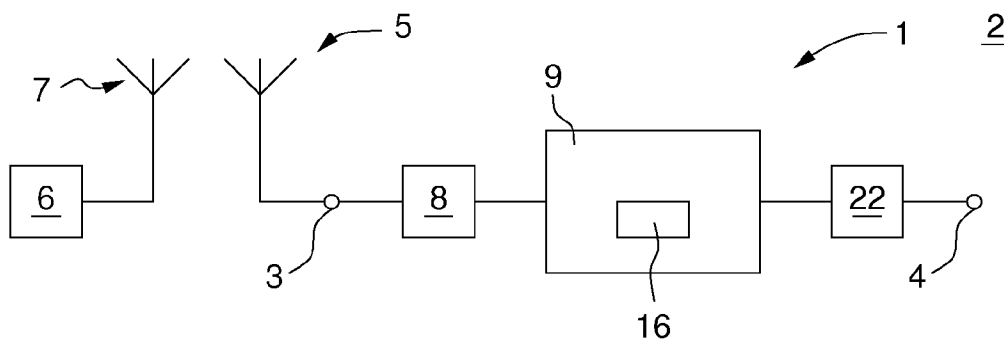


Fig. 1

(57) Abstract: A receiver apparatus (1) for receiving a signal over a fading channel comprises a frequency domain interpolation unit (16) with a filter unit (10), a power comparison unit (20), and a processing unit (21). The filter unit (10) comprises a first filter element (11), which is a reference filter, and a second filter element (12). The first filter element (11) is arranged as large-band filter. The power comparison unit (20) compares the power of the signal filtered with said second filter element (12) with the power of the signal filtered with said first filter element (11). The processing unit (21) determines an appropriate filter length for a third filter element (13) of the filter unit (10) on the basis of this comparison. Thereby, a trade-off is made between an additional power received due to a long echo and an additional Gaussian noise power. The signal filtered with the third filter element (13) is sent to a signal processing unit (22) for further signal processing and then output at said output (4) of the receiver apparatus (1).



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INTERNATIONAL SEARCH REPORT

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

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 301 003 A (TOKYO SHIBAURA ELECTRIC CO [JP]) 9 April 2003 (2003-04-09) abstract paragraphs [0008] - [0019] paragraphs [0025] - [0032] paragraphs [0039] - [0060] paragraphs [0062] - [0081] figures 1-7,9,12,14,15	1-10
A	US 7 085 315 B1 (KELTON JAMES R [US]) 1 August 2006 (2006-08-01) abstract column 2, lines 11-27 column 2, line 65 - column 4, line 66 column 5, line 20 - column 7, line 67 column 8, line 58 - column 9, line 21 figures 1,2,10 ----- -/-	1-10

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

☒ See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PEI-YUN TSAI ET AL: "Frequency-domain interpolation-based channel estimation in pilot-aided OFDM systems" IEEE 59TH VEHICULAR TECHNOLOGY CONFERENCE - VTC 2004 MILAN, ITALY 17-19 MAY 2004, vol. 1, 17 May 2004 (2004-05-17), - 19 May 2004 (2004-05-19) pages 420-424Vol.1, XP010764832 NJ, USA ISBN: 978-0-7803-8255-8 abstract Sections I-V -----	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

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