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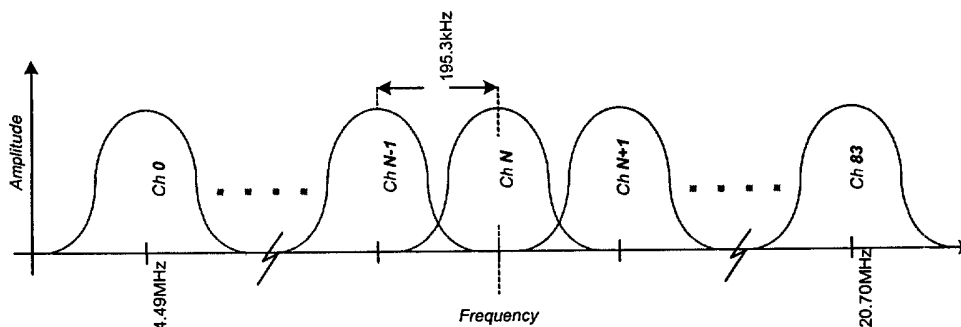
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(54) Title: METHOD AND SYSTEM FOR POWER LINE NETWORK FAULT DETECTION AND QUALITY MONITORING

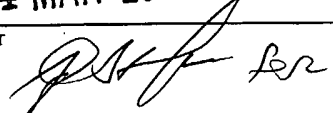


(57) Abstract: Fault detection and power network quality monitoring are performed for a power line network using power line communications ("PLC") signal transceiving and data processing capabilities. Power line signals are continuously received and processed to obtain signal data representative of power line network operating conditions that are expressed in the received power line signals. The harmonic content and noise signature of the signal data are evaluated with reference to known fault signature data and power line network topology properties for detecting and identifying the location of an existing or anticipated fault in the power line network and assessing power transmission quality of the network.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER												
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B. FIELDS SEARCHED												
Minimum documentation searched (classification system followed by classification symbols) U.S. : Please See Continuation Sheet												
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)												
C. DOCUMENTS CONSIDERED TO BE RELEVANT												
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.										
A	US 5,812,557 A (Stewart et al.) 22 September 1998 (22.09.1998), column 3, lines 48-54	1-26										
A	US 5,986,574 A (Colton) 16 November 1999 (16.10.1999), column 2, lines 52-64	1-26										
X	US 6,014,612 A (Larson et al.) 11 June 2000 (11.06.2000), column 15, line 66 through column 16, lines 23	1										
A	US 6,141,634 A (Flint et al) 31 October 2000 (31.10.2000), column 4, lines 28-45	1-26										
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.												
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Continuation of B. FIELDS SEARCHED Item 1:

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