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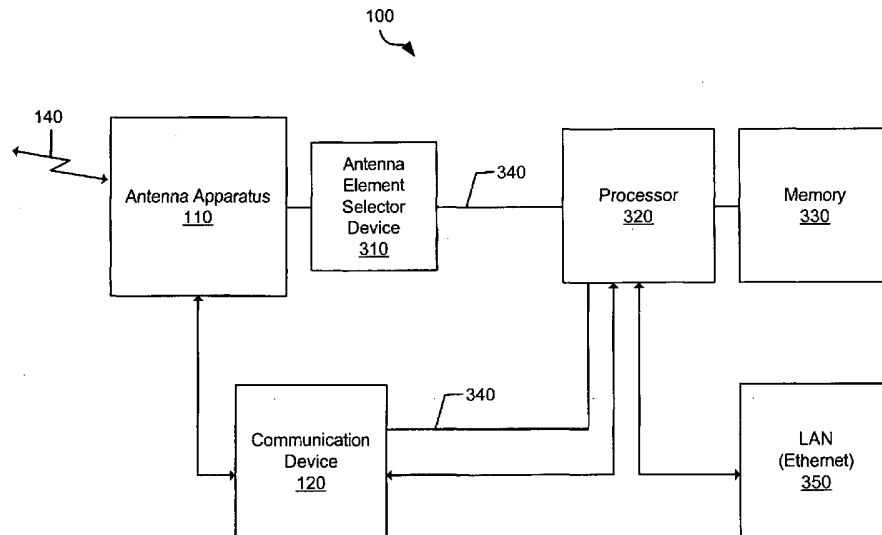
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(54) Title: SYSTEM AND METHOD FOR TRANSMISSION PARAMETER CONTROL FOR AN ANTENNA APPARATUS WITH SELECTABLE ELEMENTS



(57) Abstract: A system and method for improved data transmission on a wireless link to a remote receiving node includes a communication device for converting packets to RF at a physical data rate, an antenna apparatus having a plurality of antenna configurations for transmitting the RF, and a processor for selecting the antenna configuration and the physical data rate based on whether the remote receiving node indicated reception of the data transmission. The processor may determine a table of success ratios for each antenna configuration and may rank each antenna configuration by the success ratio. The processor may transmit with an unused antenna configuration to probe the unused antenna configuration and update the table of success ratios. Similarly, the processor may maintain a table of effective user data rates, rank each physical data rate by the effective user data rate and probe unused physical data rates to update the table.

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IPC(7): H04Q 007/00

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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IPC(7): H04Q 007/20, 00, 24; H04B 007/00, 001/38, H04M 001/00

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)

MicroPatent; IP.Com; DialogPro

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,445,688 B1 (GARCES et al) 3 September 2002 (03.09.2002) column 1 lines 35-67, column 2 lines 2, 3, 34-53, column 5 line 41 - column 6 line 47, column 7 line 62 - column 8 line 55, Table 1, figure 3, claims 9, 13, 16	1-25
Y	US 2004/0017310 A1 (RUNKLE et al) 29 January 2004 (29.01.2004) paragraphs 6, 24, 25, 29, 34-37, claims 1, 5, 6, 16, figures 3, 6	1-25
Y	WO 03/079484 A2 (GRAY) 25 September 2003 (25.09.2003) pages 2, 12-13	20-24
A	US 6,356,243 B1 (SCHNEIDER et al) 12 March 2002 (12.03.2002) see entire document	20-24
A	EP 0 534 612 A2 (KANG et al) 31 March 1993 (31.03.1993) see entire document	20-24
A	US 6,266,528 B1 (FARZANEH) 24 July 2001 (24.07.2001) see entire document	1-25

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