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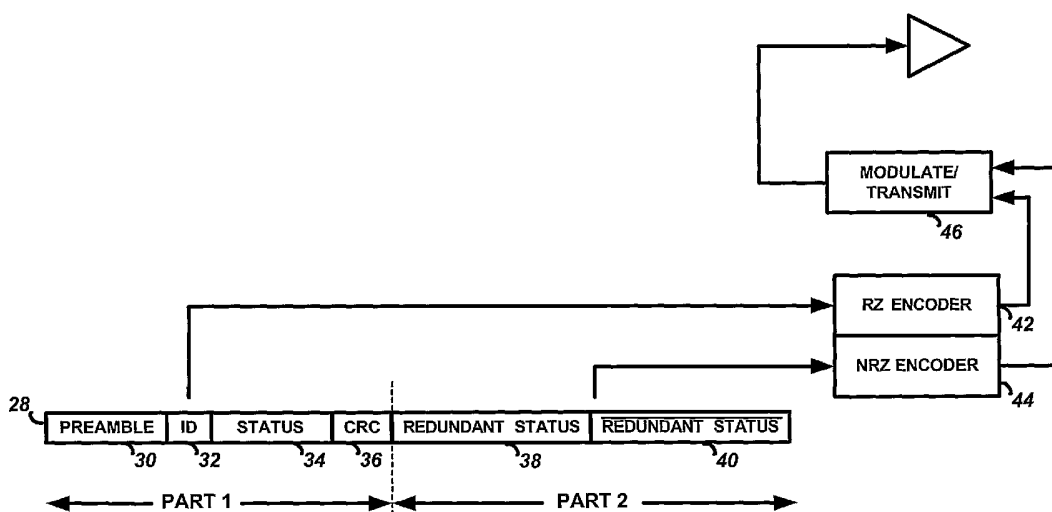
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(54) Title: HYBRID ENCODING OF DATA TRANSMISSIONS IN A SECURITY SYSTEM



(57) Abstract: A security system in which wireless transmitting security devices use a hybrid or dual encoding methodology, wherein a first part of a data message is encoded in a return-to-zero (RZ) format and a second part of the data message is encoded in a non-return-to-zero (NRZ) format, thereby increasing error detection and correction. In a first aspect of the invention, status information is included in the first part of the message and redundant status information is included in the second part of the message. In a second aspect of the invention, message sequence information is included in the second part of the message to avoid processing of stale or out-of-sequence messages.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **H04L 9/00**(2006.01);**G06F 15/16**(2006.01),**15/173**(2006.01);**H04L 1/00**(2006.01);**H04H 1/00**(2006.01)

 USPC: 713/170,181,160;709/206,224;370/241,312
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 713/170,181,160; 709/206,224; 370/241,312

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.
Y	US 2005/0111446 A1 (Greaves et al) 25 Nov. 2003 Fig. 2, 3, 7, 9, paragraph 0030,0032,0036,0051,0056,0065, 0078.	1-52
Y	US 7,043,210 B2 (Zhu et al) 4 June 2002 Fig. 6, 7, col. 4 lines 58-60, col. 5 lines 64-67, col. 6 lines 1-8.	1-52
Y	US 6,038,607 (Hamilton et al) 21 March 1995, col. 1 lines 25-61	9-16, 25-32
Y	US 6,895,023 B2 (Fice et al.) 11 Dec. 2000 col. 7 lines 47-49	2-7, 34-39,44-49.

Further documents are listed in the continuation of Box C. See patent family annex.

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