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United States Patent [19] Schwendeman

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[45] Date of Patent: **Mar. 7, 1995**

- [54] **RELIABLE MESSAGE DELIVERY SYSTEM**
- [75] Inventor: **Robert J. Schwendeman**, Pompano Beach, Fla.
- [73] Assignee: **Motorola, Inc.**, Schaumburg, Ill.
- [21] Appl. No.: **963,370**
- [22] Filed: **Oct. 19, 1992**

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Primary Examiner—Curtis Kuntz
Assistant Examiner—G. J. Oehling
Attorney, Agent, or Firm—Kelly A. Gardner; John H. Moore

Related U.S. Application Data

- [63] Continuation-in-part of Ser. No. 954,106, Sep. 30, 1992, Pat. No. 5,315,635.
- [51] Int. Cl.⁶ **H04M 11/00**
- [52] U.S. Cl. **379/57; 379/58; 340/825.44**
- [58] Field of Search 379/56, 57, 58, 93, 379/97, 98, 99; 340/825.44, 311.1, 825.07, 825.15, 825.17; 370/94.1; 358/437, 439, 441

[57] ABSTRACT

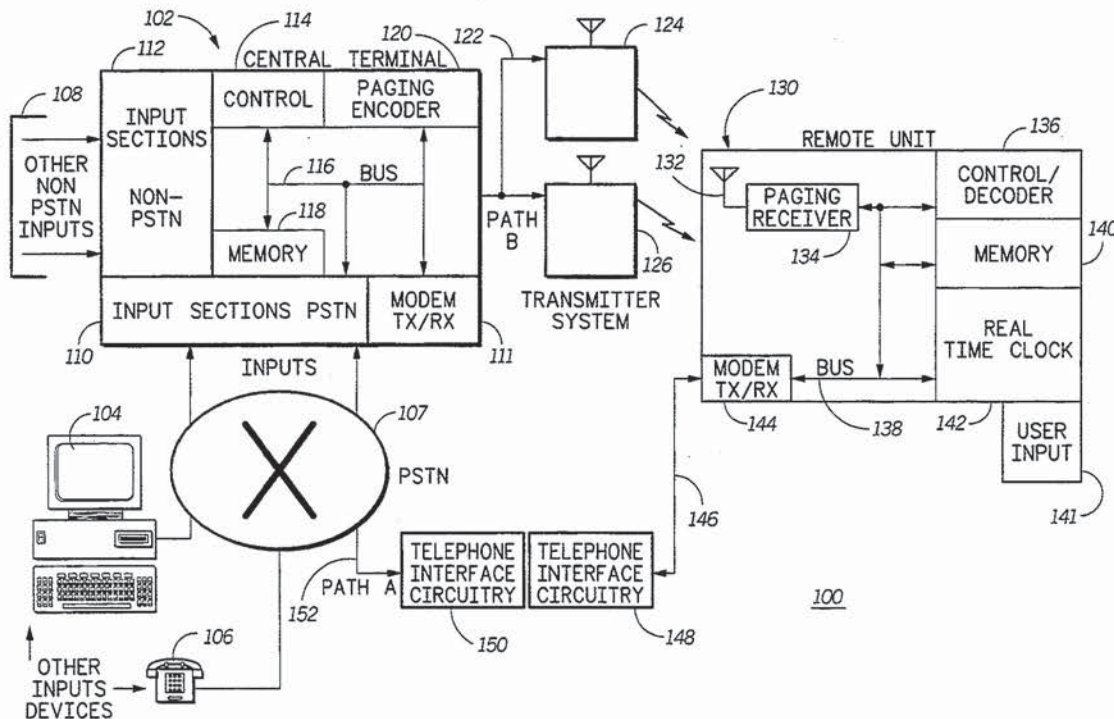
A method and apparatus for reliably delivering messages (200) from a central terminal (102) to a communication receiver (130) in a communication system (100), such as an electronic mail system. The central terminal (102) transmits messages (1300) to the communication receiver (130) and the communication receiver (130) receives transmitted messages (1300) over a first communication medium (122). The communication receiver (130) reconciles messages that it failed to receive over the first communication medium (122) with the central terminal (102) over a second communication medium (152). The reconciliation process between the communication receiver (130) and the central terminal (102) utilizes cyclic redundancy codes (CRCs) transmitted with the messages (1300) to identify the messages (1300) being reconciled.

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12 Claims, 11 Drawing Sheets



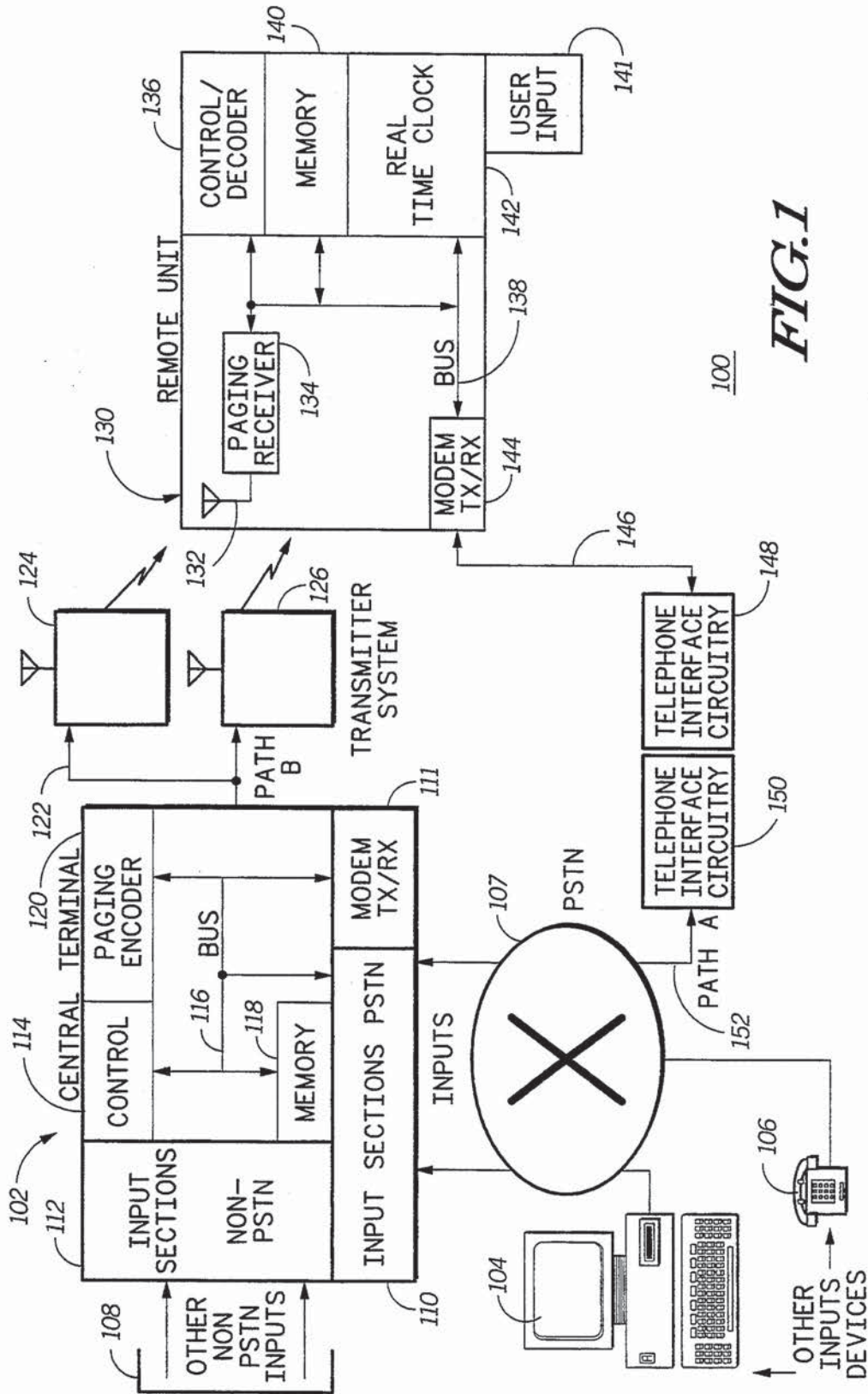


FIG. 1

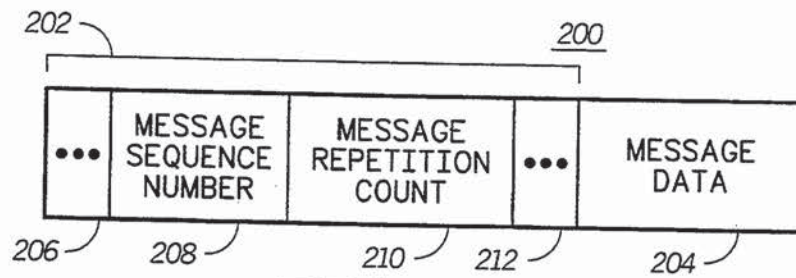


FIG. 2

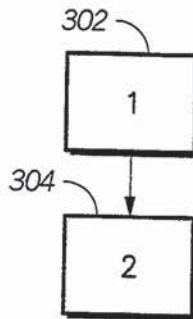
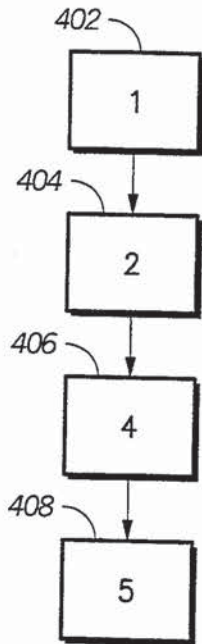


FIG. 3

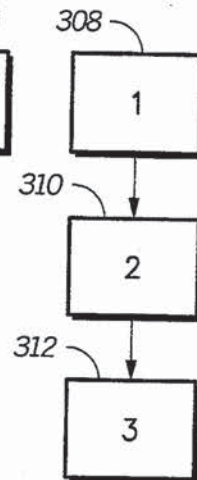
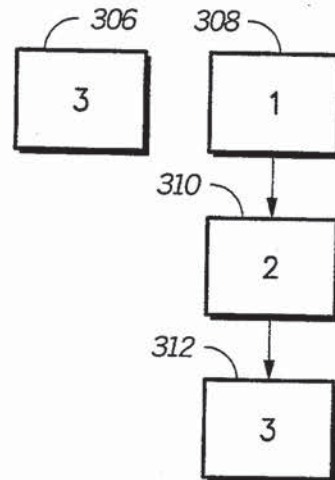
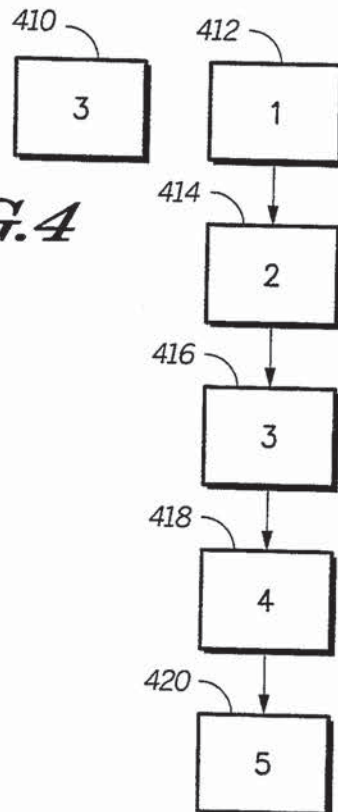


FIG. 4



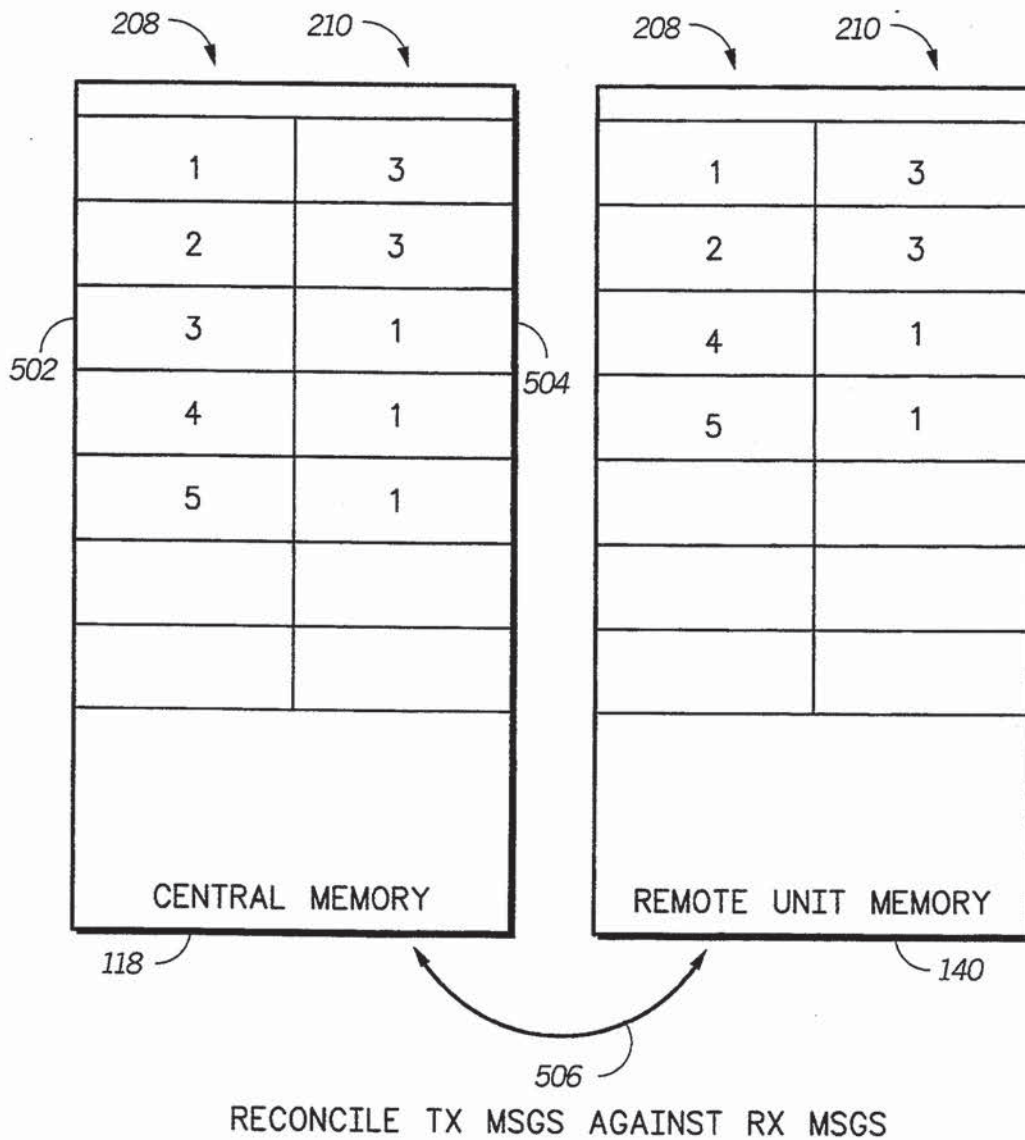


FIG. 5

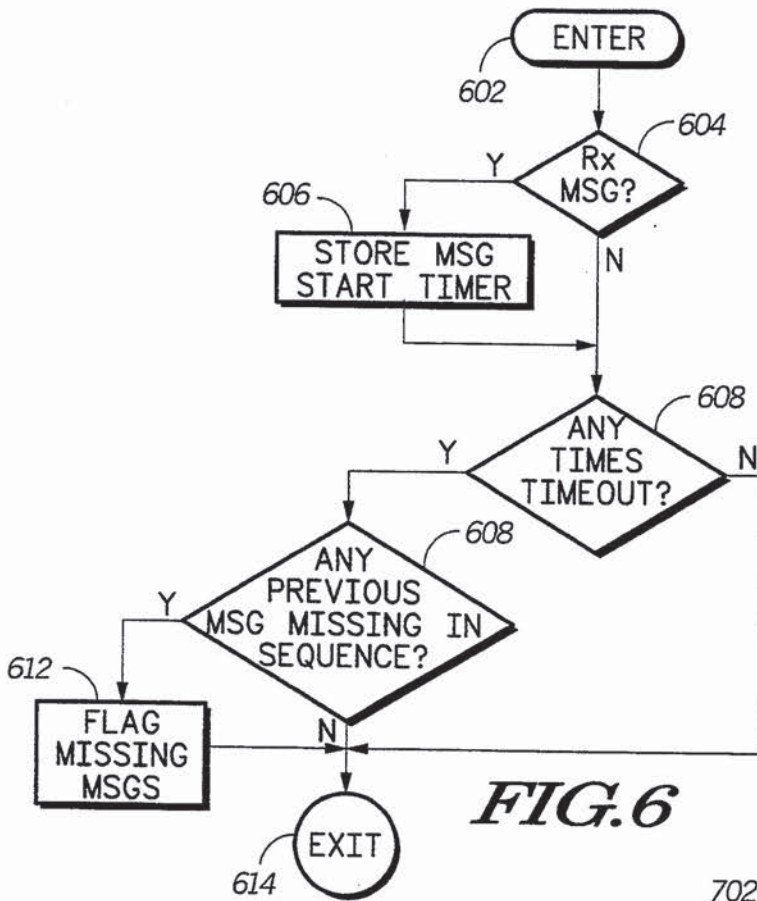


FIG. 6

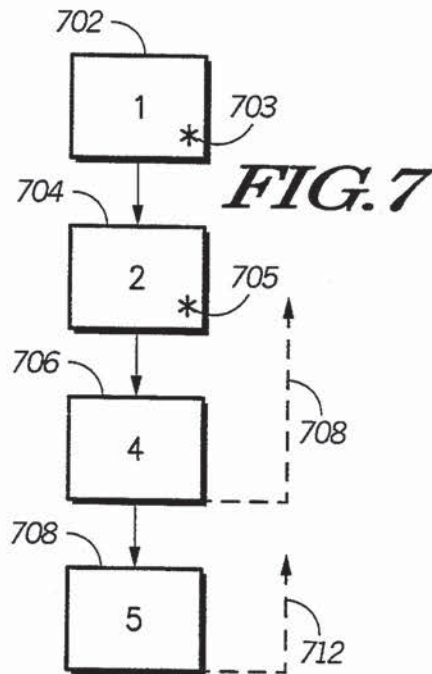


FIG. 7

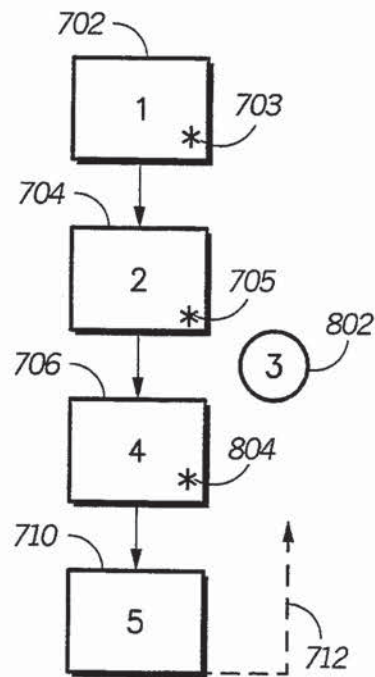


FIG. 8

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