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Dowling et al.

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(54) **VIRTUAL CONNECTION OF A REMOTE UNIT TO A SERVER**

(76) Inventors: **Eric Morgan Dowling**, 1132 W. Lookout Dr., Richardson, TX (US) 75080; **Mark Nicholas Anastasi**, 405 Copperas Trail, Highland Village, TX (US) 75077

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(51) **Int. Cl.⁷** **H04J 3/00**

(52) **U.S. Cl.** **370/469; 370/329**

(58) **Field of Search** **370/329, 389, 370/468, 469; 709/203, 206, 227**

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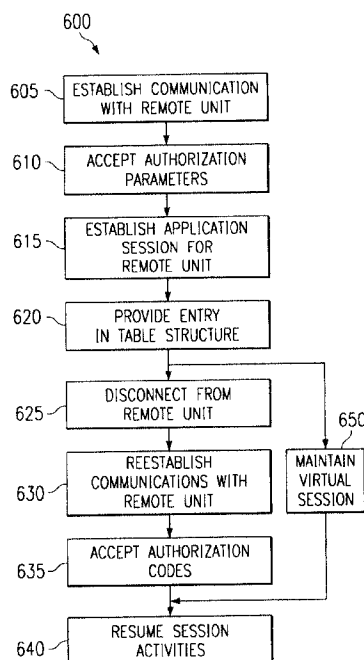
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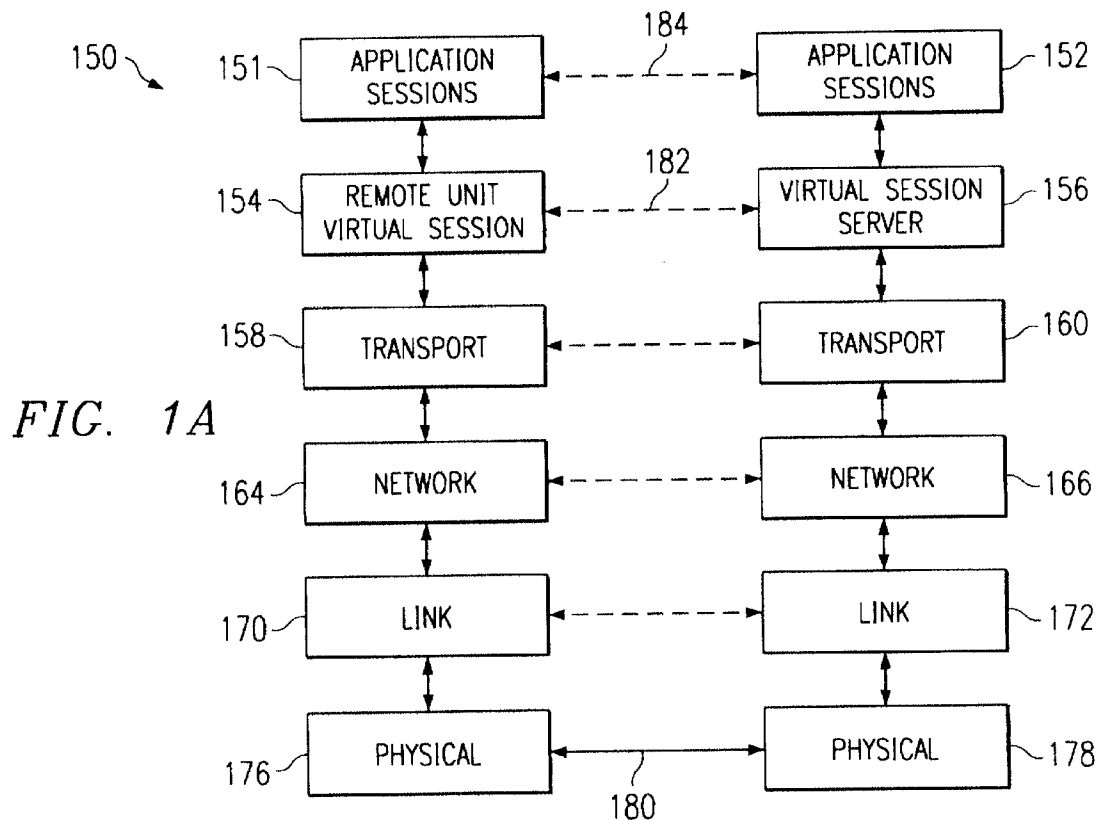
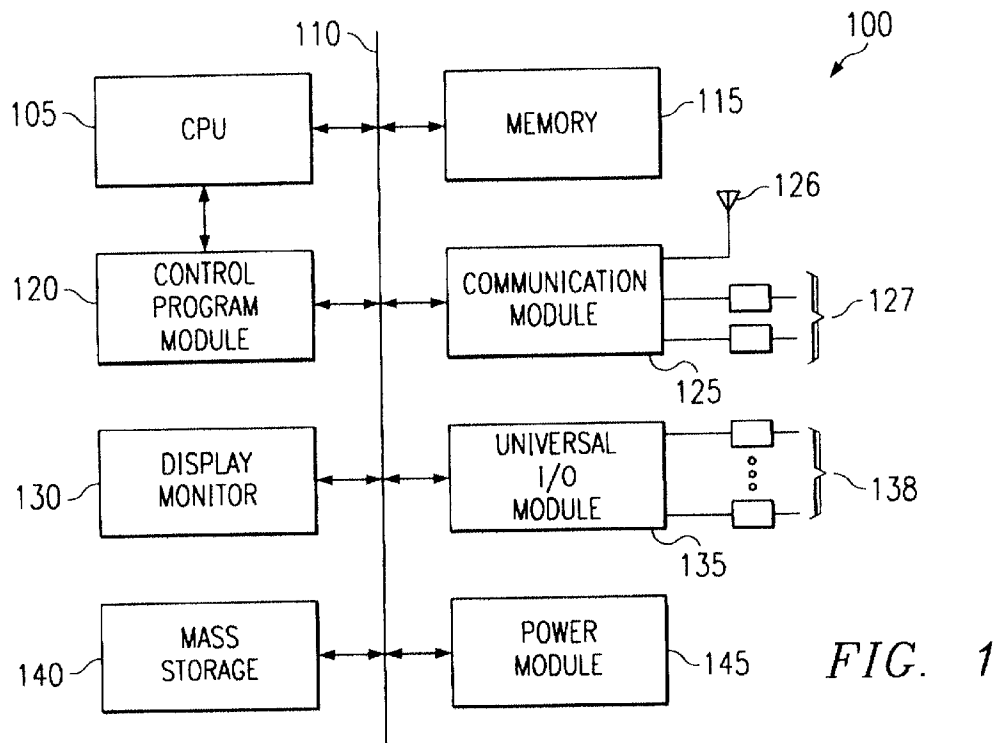
(74) *Attorney, Agent, or Firm*—Eric M. Dowling

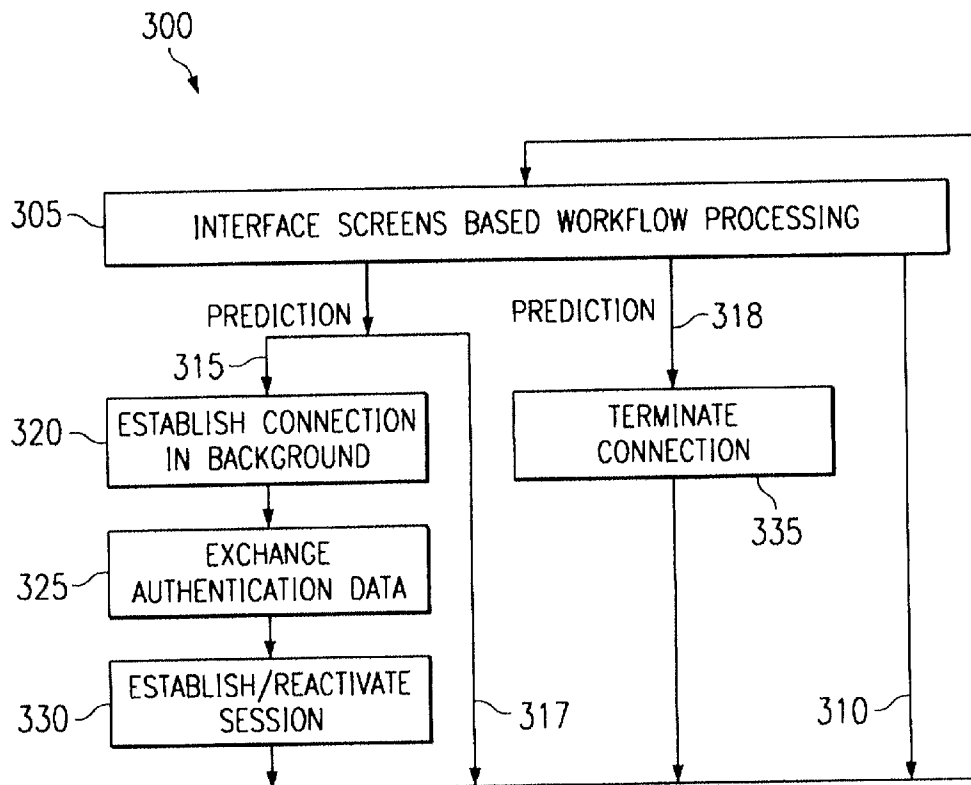
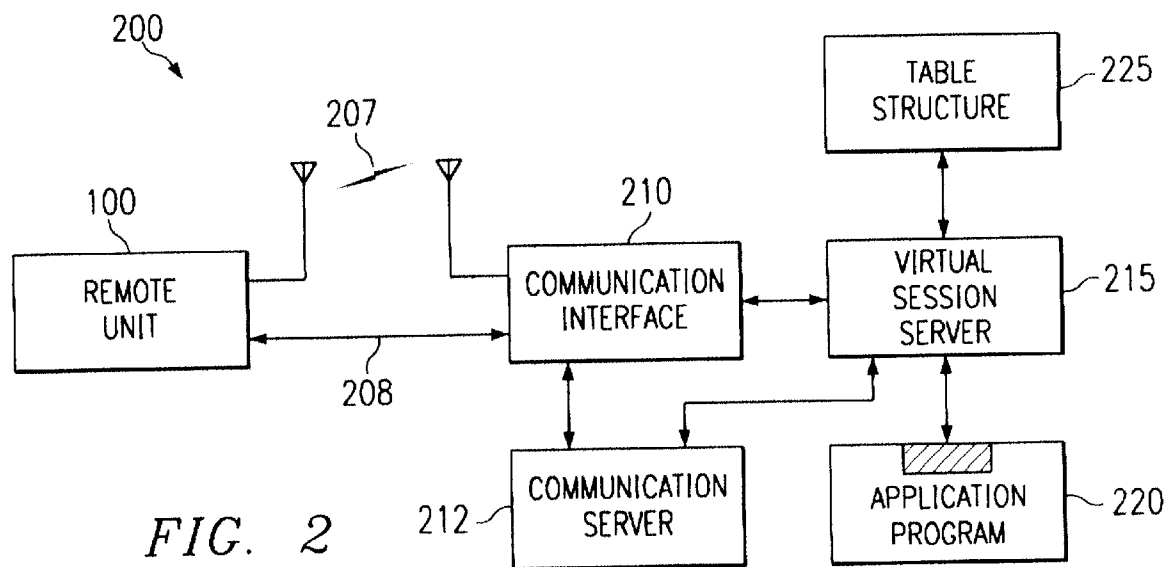
(57) **ABSTRACT**

A method is provided for reconnecting a telephone modem with a reduced delay by reducing a time associated with retraining. A wireline communication connection is initialized by a telephone modem to train a set of parameters. The parameters are stored in a memory structure. The connection is used for communication, and is then terminated. At a later time, the connection is reestablished by accessing the parameters from memory and using them to reconnect the modem with a reduced set-up delay. Another method involves coupling to a first physical layer and establishing a session with a server, and then decoupling from the first physical layer while maintaining the session. Later, the session is resumed using a second physical layer. At least one of the physical layers involves a local interface unit that includes a landline connection to a WAN.

75 Claims, 4 Drawing Sheets







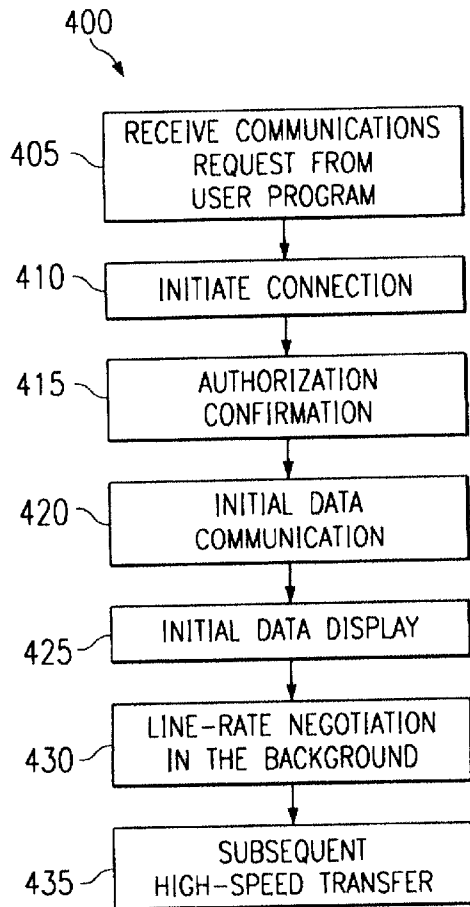


FIG. 4

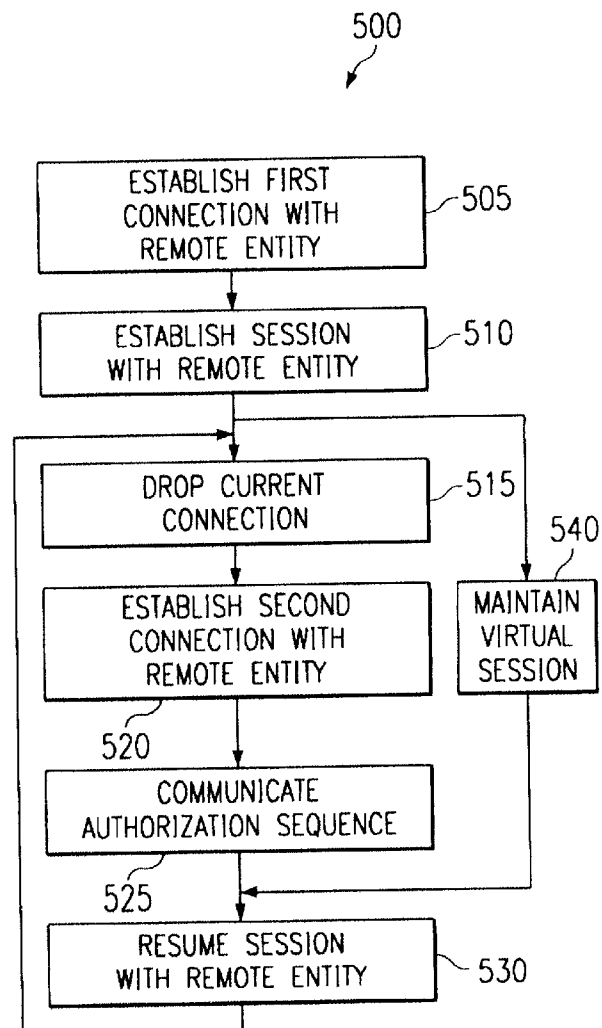


FIG. 5

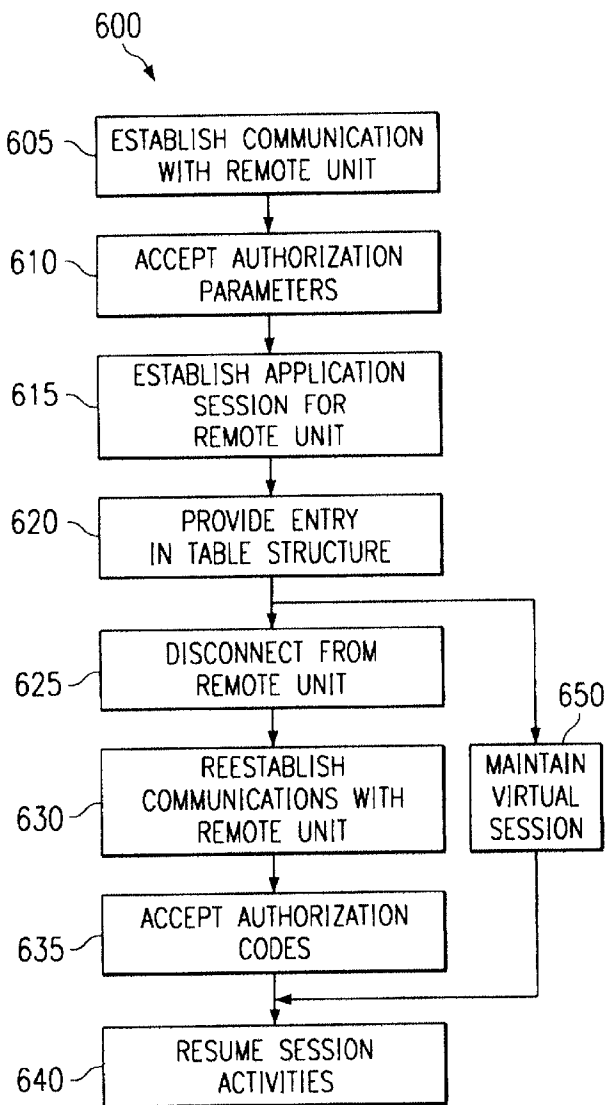


FIG. 6

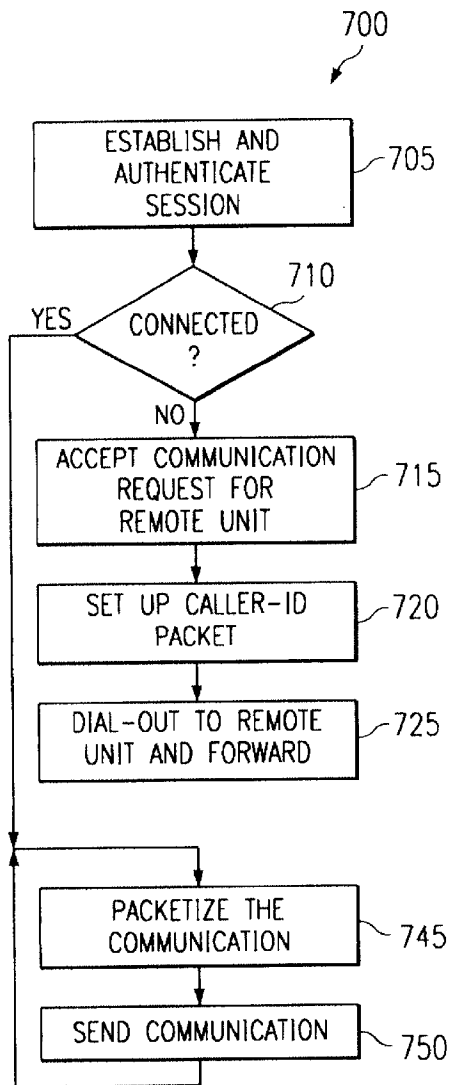


FIG. 7

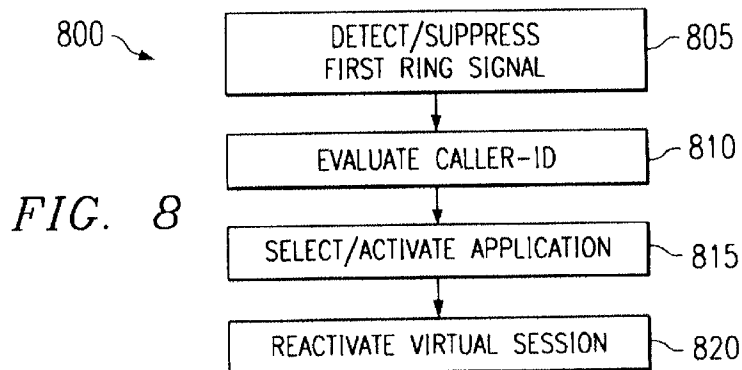


FIG. 8



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