



# United States Patent [19]

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**Shaffer et al.**

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[54] **SYSTEM FOR PROVIDING ENHANCED SECURITY FOR TRANSACTIONS TRANSMITTED THROUGH A DISTRIBUTED NETWORK**

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[21] Appl. No.: **09/052,812**

[22] Filed: **Mar. 31, 1998**

[51] **Int. Cl.**<sup>7</sup> ..... **H04J 3/24; H04L 9/00**

[52] **U.S. Cl.** ..... **713/201; 370/94.1**

[58] **Field of Search** ..... **713/201, 200; 370/235**

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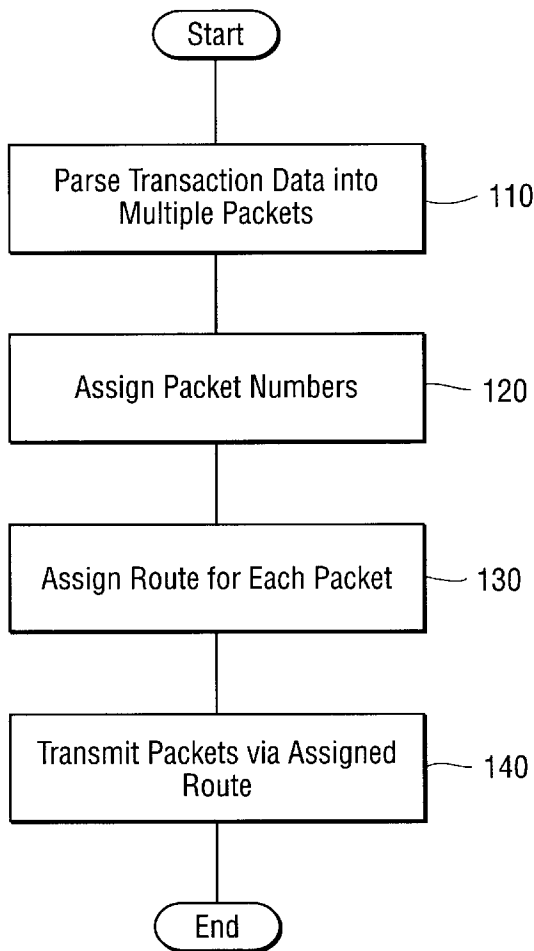
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*Primary Examiner*—Ly V. Hua

### [57] **ABSTRACT**

Transactions sent from a source node to a destination node interconnected by a distributed network are protected from interception by a third party by passing the transaction data into several packets which are renumbered as a pseudo-random sequence and sent along different routes from the source node to the destination node.

**10 Claims, 6 Drawing Sheets**



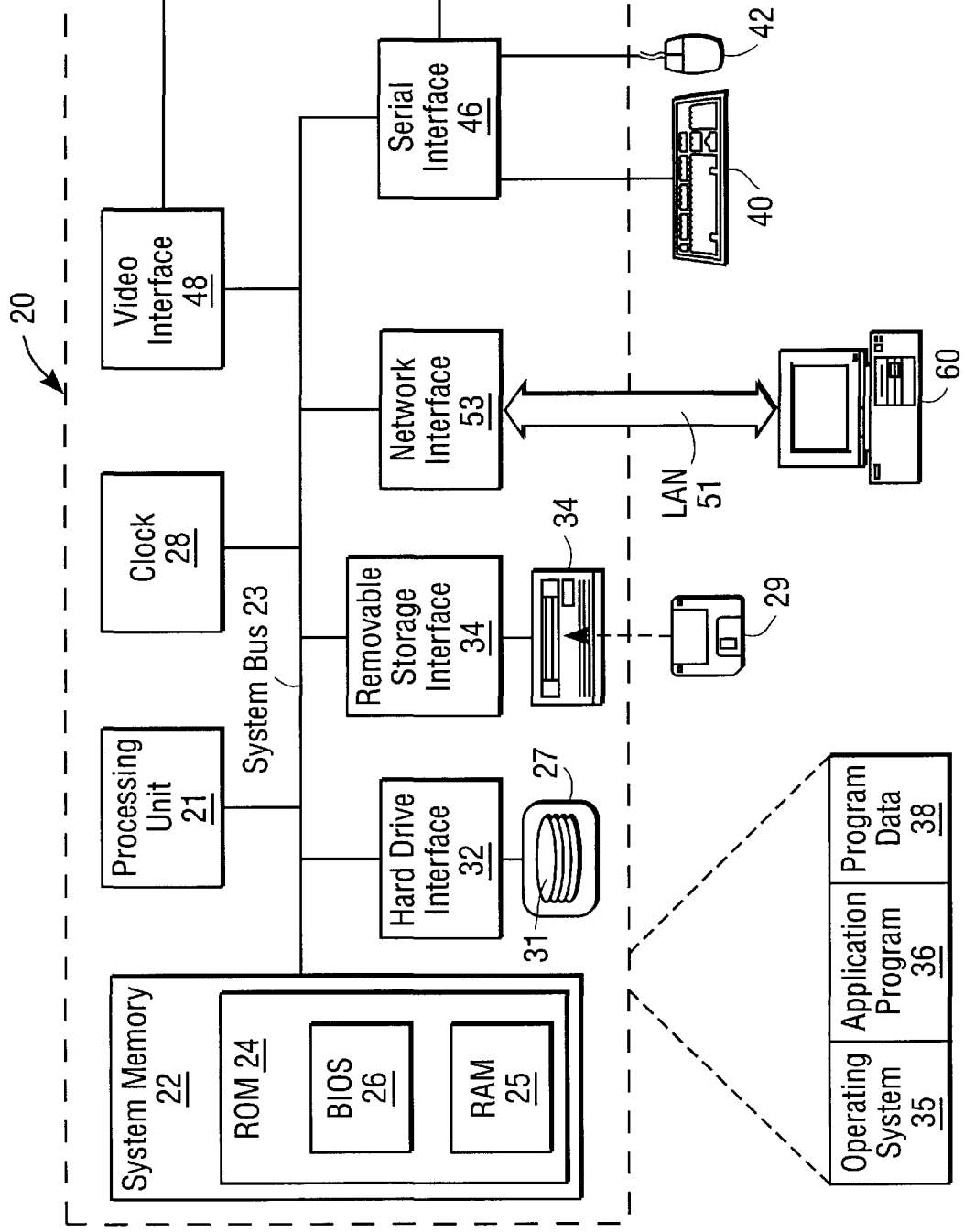


FIG. 1A

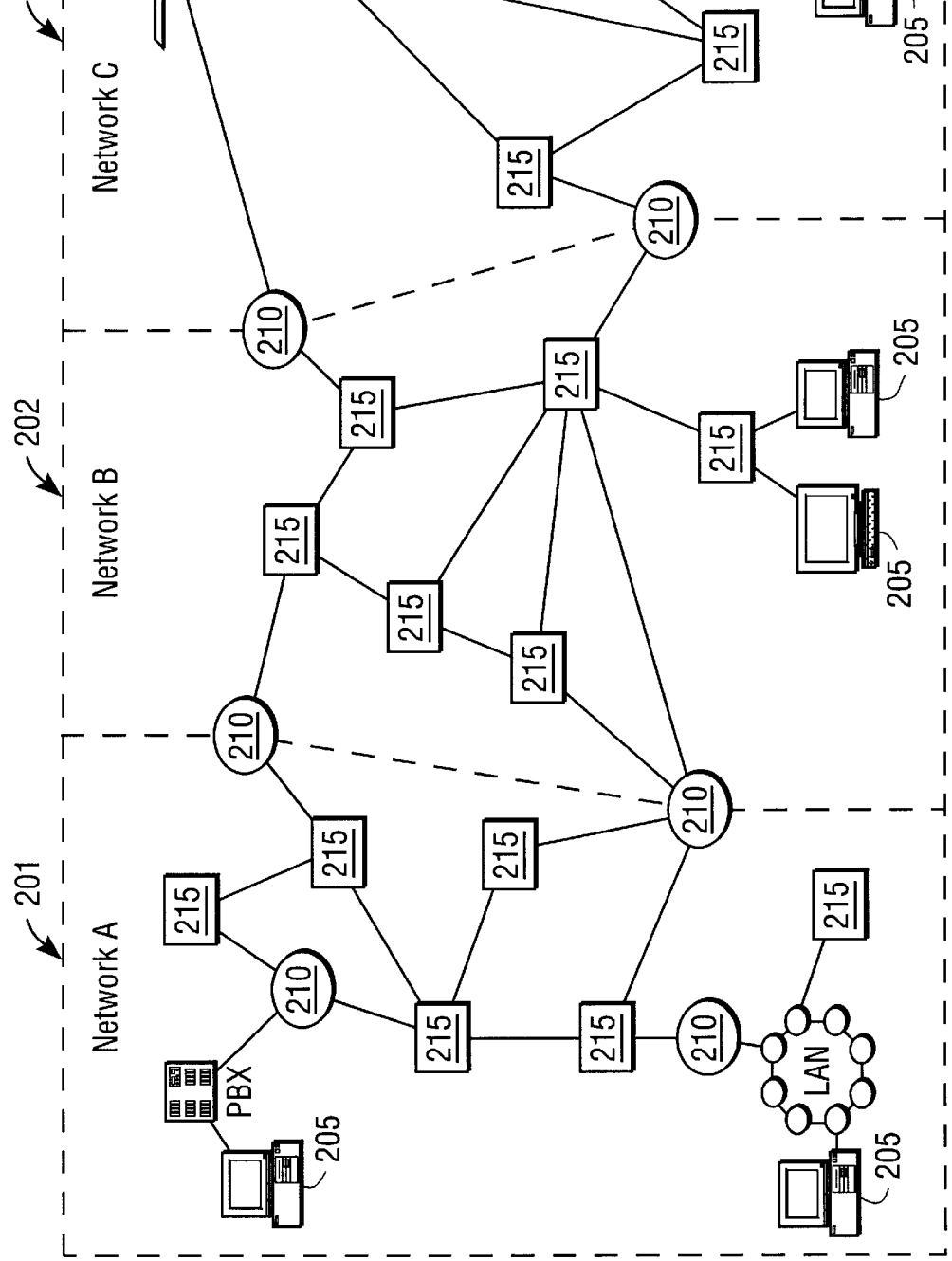


FIG. 1B

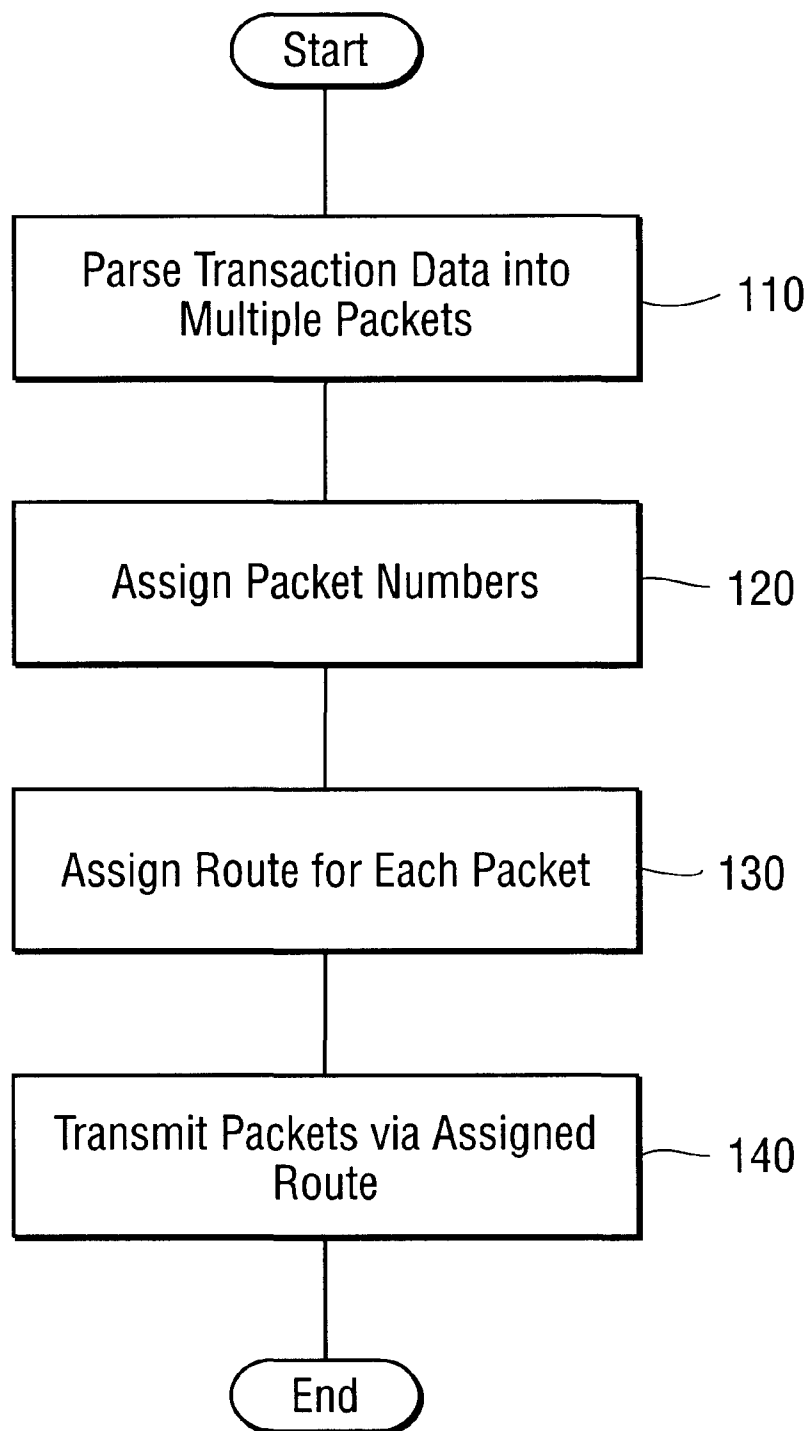
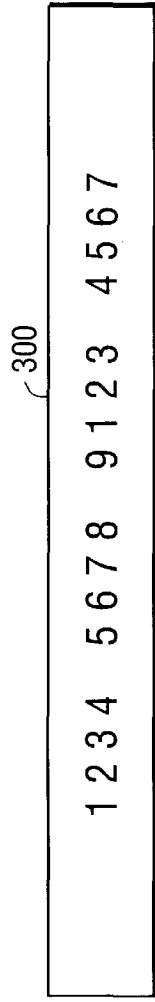
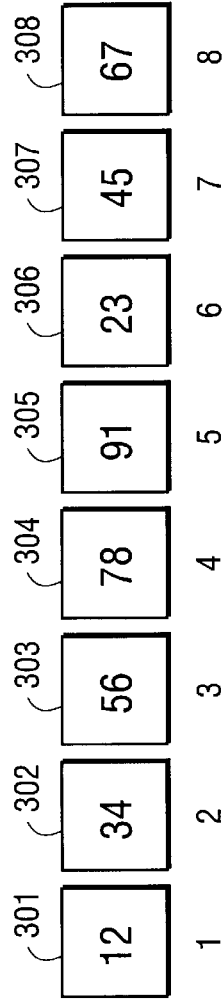


FIG. 2

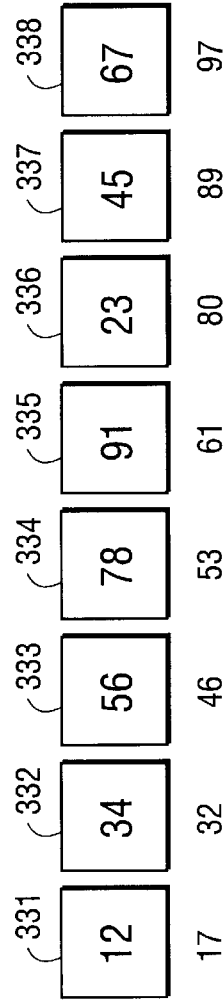
Transaction Data



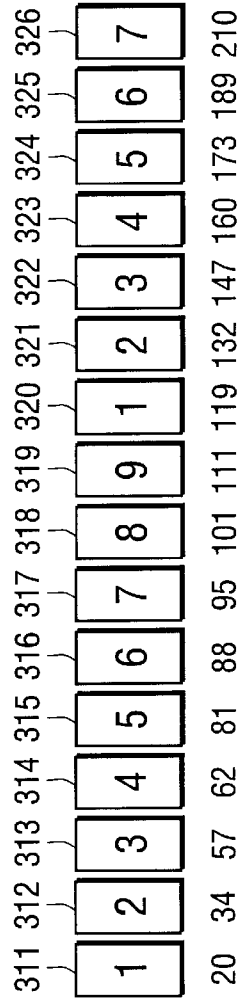
Packet Number



Packet Number



Packet Number



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