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**United States Patent** [19]  
**Rosen**

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- [54] **SYSTEM AND METHOD FOR UPDATING SECURITY INFORMATION IN A TIME-BASED ELECTRONIC MONETARY SYSTEM**
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- [\*] Notice: This patent is subject to a terminal disclaimer.
- [21] Appl. No.: **08/371,201**
- [22] Filed: **Jan. 11, 1995**

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**Related U.S. Application Data**

- [62] Division of application No. 07/794,112, Nov. 15, 1991, Pat. No. 5,453,601.
- [51] Int. Cl.<sup>6</sup> ..... **G06K 7/10; G06F 17/60**
- [52] U.S. Cl. .... **235/379; 380/24**
- [58] Field of Search ..... **380/24; 235/379**

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[57] **ABSTRACT**

An improved monetary system using electronic media to exchange economic value securely and reliably. The invention provides a complete monetary system having electronic money that is interchangeable with conventional paper money comprising (1) issuing banks or financial institutions that are coupled to a money generator device for generating and issuing to subscribing customers electronic money including electronic currency backed by demand deposits, or electronic credit authorizations; (2) correspondent banks that accept and distribute the electronic money; (3) a plurality of transaction devices that are used by subscribers for storing electronic money, for performing money transactions with the on-line systems of the participating banks or for exchanging electronic money with other like transaction devices; (4) teller devices, associated with the issuing and correspondent banks, for process handling and interfacing the transaction devices to the issuing and correspondent banks, and for interfacing between the issuing and correspondent banks themselves; (5) a security arrangement for maintaining the integrity of the system; and (6) reconciliation and clearing processes to monitor and balance the monetary system.

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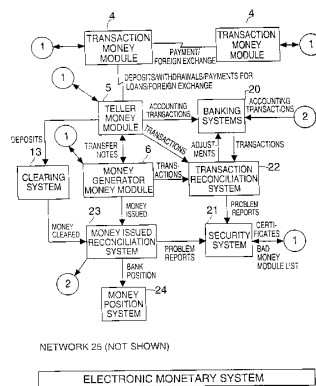
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**14 Claims, 69 Drawing Sheets**





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FIG. 1

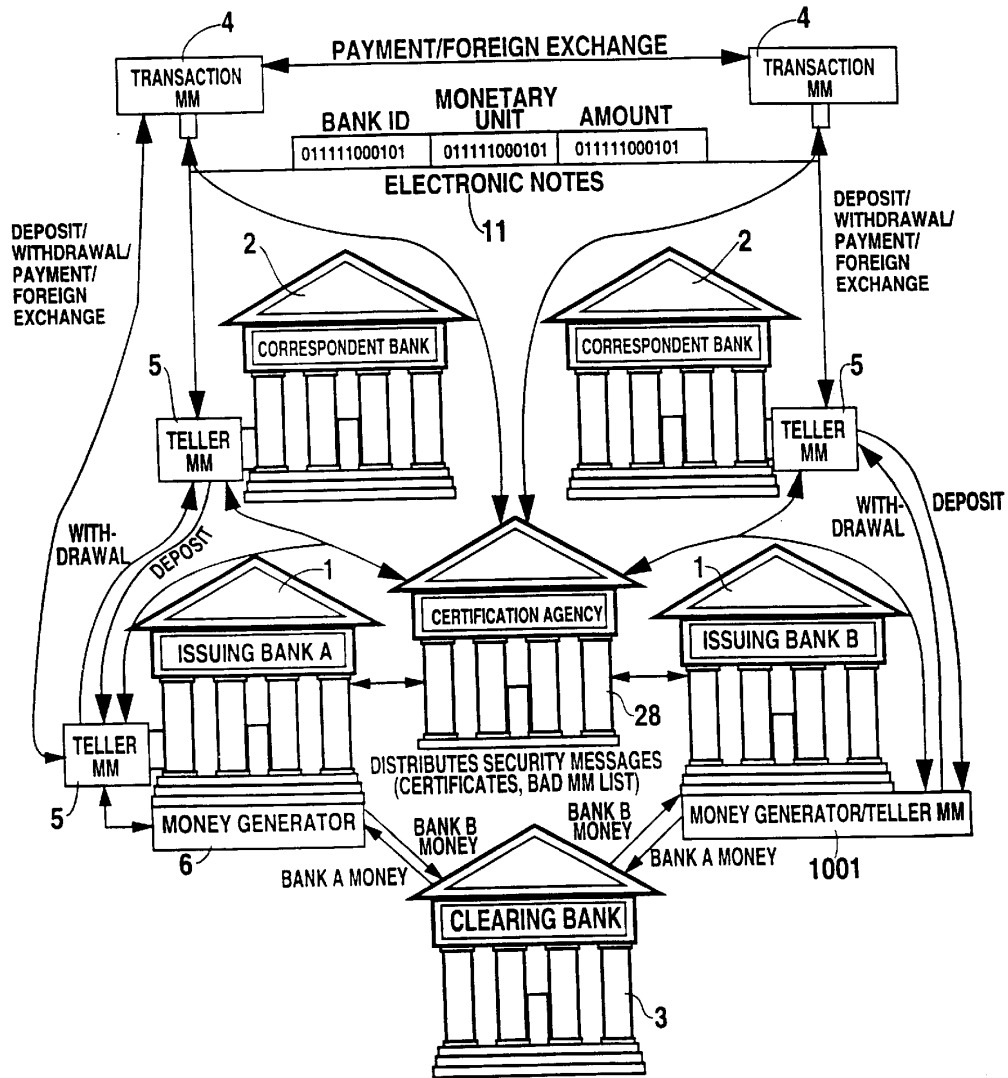
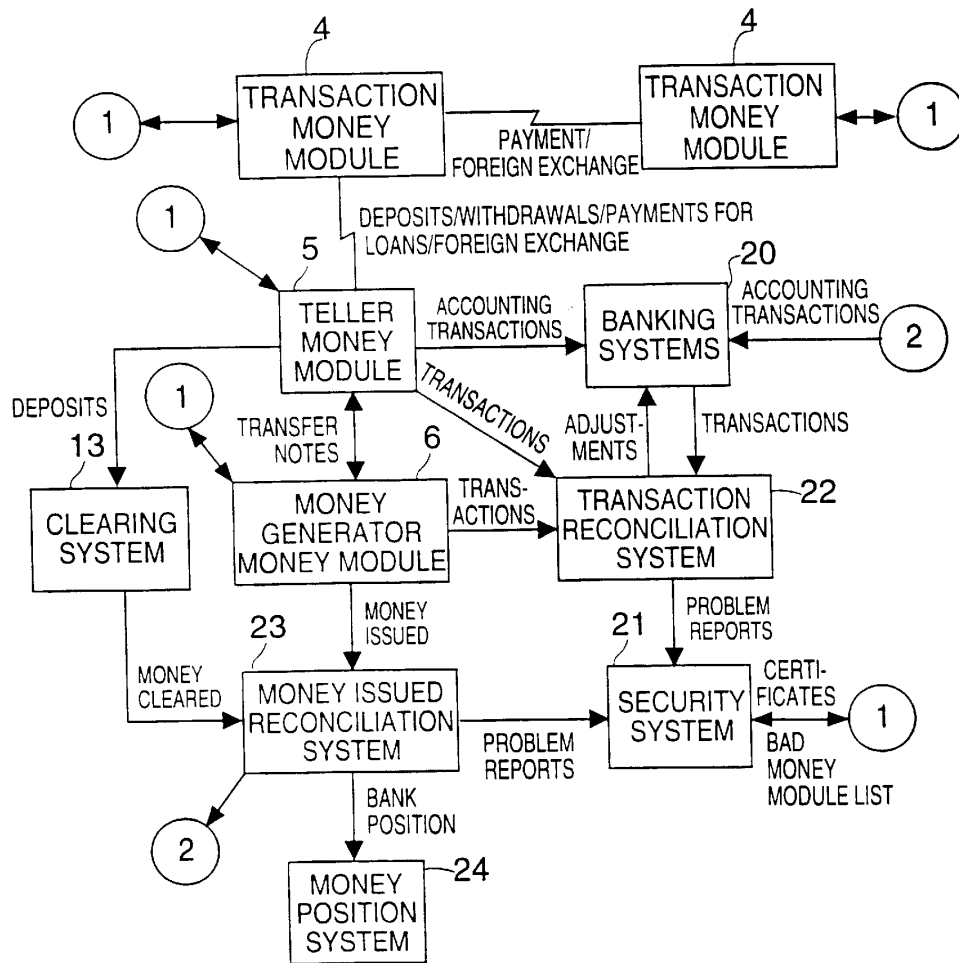


FIG. 2



NETWORK 25 (NOT SHOWN)

ELECTRONIC MONETARY SYSTEM

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