

magnetic strip, and initiates a phone call to a transaction card service provider. The remote transaction service provider receives the transaction card information and transaction amount as entered by the merchant at step 302 and proceeds to retrieve account information related to the transaction card at step 306. Account information includes a database containing device identification information for at least one communication device provided by the account holder. The transaction card service provider obtains the device information and queries the device to determine the location of the device, step 310. The service provider also verifies the location of the merchant in step 308. The location of the merchant may be obtained from the vendor ID submitted with the transaction request or in the alternative, the account owner may specify a substitute vendor location as described in more detail below. Steps 308 and 310 can be performed in any order. With the location information in hand, the remote transaction service provider, then determines at step 312 whether the location of the communication device matches the location of the merchant. If the locations do not match, then the transaction is denied, step 314. If the locations do match, then the transaction is authorized, step 316.

[0045] As with current systems, the account service provider may query database 108 to determine if the transaction amount has not exceeded the predetermined account holder limit. If the transaction amount exceeds the predetermined account holder spending limit, the transaction is denied.

[0046] The method of communication between the service provider and the account holder communication device may be by mobile telephone, two-way pager, or other personal communications device.

[0047] FIG. 4 is a block diagram of an exemplary communication device ID database 400 illustrated in FIG. 1 as database 106. Database 400 includes device IDs for multiple devices including the account holder's mobile phone 402, pager 404, and home phone 410. If account holders gives their transaction card to their child, for example, they may change the device ID to their child's mobile phone number. In addition, the account holder has the option of turning the device ID feature off such that the transaction will be approved regardless of the location of a given communication device.

[0048] While the invention has been particularly shown and described with reference to a preferred embodiment, it will be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the invention.

We claim:

1. Method for authorizing transactions against an account comprising:

- receiving a transaction comprising a request for authorization to charge an amount against the account;
- retrieving a communication device ID for a device associated with the account;
- determining the location of the communication device;
- determining the location of the transaction;
- comparing the location of the transaction with the location of the device; and
- processing the request.

2. The method of claim 1 further comprising denying the request when the location of the transaction is different from the location of the device.

3. The method of claim 1 further comprising authorizing the request when the location of the transaction is the same as the location of the device.

4. The method of claim 1 wherein the request for authorization is received at a merchant location.

5. The method of claim 1 further comprising validating the account.

6. The method of claim 1 further comprising determining whether the transaction is within a predefined credit limit.

7. The method of claim 1 further comprising substituting the location of the transaction with a predefined location.

8. System for authorizing transactions against an account comprising:

an input device adapted to receive a transaction comprising a request for authorization to charge an amount against the account;

a means for retrieving a communication device ID for a communication device associated with the account, wherein the input device is coupled for data communications with the retrieving means;

means for determining the location of the communication device;

means for determining the location of the transaction;

means for comparing the location of the transaction with the location of the device; and

a means for processing the request.

9. The system of claim 8 further comprising a means for denying the request when the location of the transaction is different from the location of the device.

10. The system of claim 8 further comprising a means for authorizing the request when the location of the transaction is the same as the location of the device.

11. The system of claim 8 wherein the input device is located at a merchant location.

12. The system of claim 8 further comprising a means for validating the account.

13. The system of claim 8 further comprising a means for determining whether the transaction is within a predefined credit limit.

14. A computer program product for authorizing transactions against an account comprising:

a recording medium;

means, recorded on the recording medium, for receiving a transaction comprising a request for authorization to charge an amount against the account;

means, recorded on the recording medium, for retrieving a communication device ID for a device associated with the account;

means, recorded on the recording medium, for determining the location of the communication device;

means, recorded on the recording medium, for determining the location of the transaction;