

[0040] The instant mobile card issuing server **110** functions to issue and transmit an instant mobile card to the mobile terminal **170** of a user through the wireless network.

[0041] “The issue of the instant mobile card” used in the present invention represents a procedure of actually generating and transmitting an instant mobile card number.

[0042] All instant mobile cards issued according to the present invention are recorded and managed by the instant mobile card issuing server **110**, and the recorded information can be permanently or temporarily preserved depending on the selection of an operator.

[0043] Further, the instant mobile card issuing server **110** uses a phone number of the mobile terminal **170** as a main authentication key value, and functions to perform various authenticating operations required for wireless services.

[0044] When receiving an instant mobile card from the mobile terminal **170** through the card reader terminal **150** in short-range communication manner, or when receiving payment information corresponding to the instant mobile card issued to the mobile terminal **170** from a payment system (not shown), the card issuing company main server **120** functions to transmit a corresponding instant mobile card number to the instant mobile card issuing server **110**.

[0045] Further, the card issuing company main server **120** functions to receive approval from the card issuing company payment processing server **130** and transmit the approval to the card reader terminal **150** or the payment system. **FIG. 2** is a flowchart of an instant mobile card issuing method using a wireless network according to an embodiment of the present invention.

[0046] For the utilization of the present invention, a user must apply to a card issuing company for the use of an instant mobile card in advance in a wired or wireless manner.

[0047] As shown in **FIG. 2**, in the instant mobile card issuing method of the present invention, a request for the issue of an instant mobile card is received from the mobile terminal **170** of the user through the wireless network at step **S201**.

[0048] Thereafter, the entry of a secret number is guided at step **S203**, and a unique phone number of the mobile terminal **170** is obtained at the same time that a response to the guidance is received at step **S205**. It is determined whether both the entered secret number and the obtained phone number of the mobile terminal **170** are identical with a secret number and a phone number of the mobile terminal, respectively, which have been previously stored at step **S207**.

[0049] If it is determined that the entered secret number and the obtained phone number are identical with the previously stored secret number and phone number, respectively, an instant mobile card number is transmitted to the mobile terminal **170** at step **S209**. At this time, a validity period of the instant mobile card number may be transmitted together with the instant mobile card number.

[0050] Thereafter, it is determined whether the transmission of the instant mobile card number results in success at step **S211**. If the transmission fails, a cause of the transmission failure is transmitted to the mobile terminal **170** at step **S213**.

[0051] The instant mobile card issuing method of the present invention may provide a function of allowing the user to confirm the use of the instant mobile card number by transmitting a short message to the user mobile terminal **170** in the case where a payment is processed using the instant mobile card number.

[0052] Information transmitted/received between the instant mobile card issuing server **110** and the mobile terminal **170** is encrypted in an End-to-End (E2E) manner. That is, the present invention further provides encryption performed between the user mobile terminal **170** and the instant mobile card issuing server **110** besides encryption basically provided from the wireless network, thus securely protecting user information.

[0053] However, the instant mobile card issuing method of the present invention does not require the installation of an additional program by the user so as to realize the protection and encryption of the user information.

[0054] Further, the instant mobile card issuing method of the present invention enables the user to easily change a desired card to be used through the wired/wireless network.

[0055] The instant mobile card issued according to the present invention can be used in on/off-line affiliated stores in the same manner as that of an existing card, and the instant mobile card number is mapped to the existing card number, so that approval/payment procedures are executed with respect to the existing card.

[0056] Hereinafter, a method of processing a payment with a previously issued instant mobile card using short-range communication in an affiliated store is described.

[0057] **FIG. 3** is a flowchart of the instant mobile card payment processing method using short-range communication according to an embodiment of the present invention.

[0058] The user may receive the instant mobile card number and transmit the information of the corresponding instant mobile card to the card reader terminal **150** using the short-range communication between the mobile terminal **170** and the short-range communication receiver **160**.

[0059] The short-range communication may be infrared communication or Bluetooth communication.

[0060] As shown in **FIG. 3**, in the instant mobile card payment processing method of the present invention, when receiving an instant mobile card number and payment information from the card reader terminal **150** at step **S301**, the card issuing company main server **120** transmits the instant mobile card number to the instant mobile card issuing server **110** at step **S303**.

[0061] The instant mobile card issuing server **110** requests the card issuing company payment processing server **130** to process a payment using an existing card number mapped to the instant mobile card number at step **S305**.

[0062] The card issuing company payment processing server **130** processes the payment at step **S307**, and transmits approval to the card reader terminal **150** at step **S309**.

[0063] The instant mobile card payment processing method of the present invention may provide a function of allowing the user to confirm the use of the instant mobile card by transmitting a short message to the user mobile