# 1.2 Hypothetical Claim Set B (Financing service)

# **Brief Description**

## **Background of the Invention**

With the rapid spread of on-line shopping supported by Internet technology, recently the number of individual customers who order and purchase merchandise on overseas shopping sites is rapidly increasing. The number of people going abroad has also been increasing in recent years. The amount of money they spend while shopping overseas has increased as a matter of course. Individually, they typically settle transactions or spend more in foreign currencies. Currently, most transactions on overseas on-line shopping sites are settled by credit card. When customers go shopping overseas, such transactions are also typically settled by credit card.

Because of recent instability in exchange rates, individual consumers who do on-line shopping are keen to enjoy more stable exchange rates. Recently, exchange rates have been at the mercy of speculators. Therefore, in dealing with foreign currencies, exchange rate stability has become much more important. The method of conducting stable transactions free from fluctuation risk includes closing a contract, namely, a forward exchange contract to buy currency at a fixed price. A person who closes such a contract will be permitted to buy a certain amount of foreign currency at a fixed price on a specified date in the future.

However, currently, forward exchange contracts are permitted only when closing a forward exchange contract involving a large amount of currency (for instance, a contract to pay the amount of one million euro currency three months later as payment of the cost of importing the merchandise). Forward exchange contracts are therefore available only to international business corporations and organizations or currency dealers who try to minimize the risk of exchange rate fluctuations. Most individual customers, therefore, are unlikely to use this system.

To overcome such inconvenience, the present invention provides a method for customers to enjoy stability in financial transactions regardless of exchange rate fluctuations, wherein the credit card issuing company will invite individual credit card owners (customers) to apply for forward exchange contracts, and close a forward exchange contract in a certain amount on behalf of the individual customers.

## **Detailed Description of Preferred Embodiments**

The fig.1 shows the principle of a system for settling transactions using a credit card in an embodiment of the present invention, incorporating the service of forward exchange contracts therein. Block 1 is a Web-server of a credit card issuing company, whereon advertising inviting customers to apply for a forward exchange contract can be electronically posted and an application for the forward exchange contract is received. Block 2 is a forward exchange contract processing system of the credit card issuing company. Block 3 is forward exchange contract processing system of an exchange bank/broker, whereon the credit card issuing company can buy foreign currencies from the exchange bank or broker. Block 4 is a terminal of a credit card owner, which is a personal computer with a browser installed for communication on the Internet. Block 5 is a business system of the credit card issuing company for performing daily business operations such as credit inquiries, payment permission, clearing and so forth. Block 6 is a shop (including a virtual shop) or cyber mall which is a member of the credit card issuing company. Block 7 is a Web-server for a virtual shop or a cyber mall on the Internet. Block 8 is a business system for real (conventional) member shops of the credit card issuing company. The business system, regardless of location (virtual or real), has capabilities of making inquiries to the business system of the credit card issuing company (Block 5), inquiring about payment permission, and sending data corresponding with sales slips and the like. Block 9 is a credit inquiry and settlement system, which the correspondent bank of the credit card issuing company and the credit card owners is provided with.

The fig.2 shows the flow that the credit card issuing company invites exchange contract from the credit card owner. The credit card issuing company A will post advertisements (for inviting consumers to apply for a forward exchange contract) in its own shop, other shops such as those of member shops, affiliated banks, travel agents or on its own Web server. Additionally, the company A will send electronic mail to owners of credit cards that were issued by the company A, inviting them to apply for forward exchange contracts equivalent to a number of units (e.g. 50,000 Yen per unit) as specified (e.g., 2,000 units) at a specified exchange rate (e.g., 100 yen to the dollar) on a specified date (e.g., January 10, 2000). The application invitation program may be successfully implemented if done selectively to promising users of forward exchange contracts, to those who are scheduled to join packaged tours overseas or to go abroad on business and will depart prior to the specified date on the application invitation program in the advertisement; it may also expand its business by concentrating its efforts on the sales campaign seasons, for instance, during the Christmas season by offering luxury gifts to consumers. In response to such special advertisements, a credit card owner can access the Web server of the company A by manipulating a browser on the terminal, and reach the application form page (display) for forward exchange contracts. Because the transactions are protected by security mechanisms such as SSL from likely accesses by unauthorized users, the credit card owner can safely enter on

the screen his or her name, credit card number, validity date and number of units (e.g., credit card owner X:6 units, credit card owner Y:10 units) equivalent to the amount of forward exchange contract to be applied for. On the other hand, upon receipt of the information supplied by the credit card owner, the Web server of the company A will access its own business server and determine if the application can be accepted, by comparing and verifying information about the validity of the credit card concerned and credit limit as well as by checking whether the maximum acceptable number of units has been reached. If the application cannot be accepted, the Web server will send to the user's terminal a notice to the effect that the application is rejected and forcibly log the applicant out of the application form page. If the application is acceptable, the Web server will access the applicant's data in the business server, add information to the effect that amount of forward exchange contract (e.g., credit card owner X:6 units, credit card owner Y:10 units) on the date of January 10, 2000 have been duly ordered, and then send to the user a notice to the effect that the application is complete. If the initially targeted number of units has been reached (or when the deadline for application has passed), the forward exchange contract processing system of the company A will communicate with the forward exchange contract processing system of the exchange bank/broker and so forth for closing the total of the forward exchange (100 million yen in this case) on the specified date.

Fig.3 shows the flow diagram when credit card owner X buys 6 units(3000 dollars) of forward exchange contract, and credit card owner Y buys 10 units(5000 dollars). Upon completion of the application for the forward exchange contract, the credit card owner X will establish a connection with the Web server of virtual shop or cyber mall on the Internet, which is a member shop of the company A, which can handle transactions in dollars. Now, the owner X can choose which merchandise to purchase by referring to merchandise information supplied by the shop or mall and successively place merchandise into a shopping basket. Finally, after checking the descriptions of merchandise to be purchased and the prices, the owner X sends a command that takes the owner X to a page (display) for entering information about the credit card, personal information, shipping destination of merchandise and so forth. Upon receipt of the command, the server of the member shop sends out the page (display) for entering the name of the credit card owner, his or her credit card number, address, phone number and so forth. The page will be received on the terminal. The server of the member shop will establish a connection with the business system of the company A and ask the company whether it will permit payment for the purchase concerned, on the basis of information about the name of the credit card owner, credit card number thereof and the amount of the purchase concerned. The Web server of the credit card company will determine if the payment can be permitted, and send the result to the member shop. If the payment is permitted, the server of the member shop will send information to the effect that the purchasing procedure is complete, and, if not, a notice to the effect that the transaction cannot be permitted, to the terminal of the credit card owner.

Another credit card owner Y who applied for a forward exchange contract, will

purchase merchandise in an overseas shop, which is also a member shop of the company A which can settle transactions in dollars. The member shop will inquire about the credit status. If the payment is permitted, the member shop will have the owner Y sign the sales slip and issue a receipt to the user for completing the purchasing procedure.

The settlement system of the member shop will run the sales amounts totaling subsystem at a reasonable frequency (e.g., once per day) for totaling the sales amounts for the purpose of charging transaction amounts against the company A, and send a notice of charges of sales amounts, to the settlement system of the company A. The business system of the company A will store the notices as received, and perform the process of totaling all the charges once per month, and after paying the charges via its correspondent bank, send a notice to the effect that payment against charges is complete.

Additionally, the business system of the company A will total data on charges as settled in dollars, and extract data on charges regarding credit card owners (or payers) who applied for forward exchange contracts.

Now, in the event that the settlement amount has reached the amount of the forward exchange contract applied for, such amount will be computed at the exchange rate on a specified date. In the event that an amount exceeding the amount of forward exchange contract applied for is to be settled, the amount which is up to the amount of the forward exchange contract applied for is computed for settlement at the exchange rate on a specified date and the excess will be computed for settlement as converted into yen value at the exchange rate at the closing date used as the basis of charges and the settlement amount will be charged against the credit card owner. For example, when credit card owner X purchased 4,000 dollars, whose amount exceeds the amount of the forward exchange contract (6inits: 3,000 dollars), the excess (1,000 dollars) is converted into yen value at the exchange rate at the closing date.

To provide services for gold card owners, in practice, one more processes could be added, which will have all credit card users bear and pay a uniform share by increasing the membership fee; if the settlement amount does not reach the amount of the forward exchange contract, the process will have the user bear and pay a special charge together with the original charge taking into account the balances (forward exchange contract settlement amount; and current exchange rate - the rate of the forward exchange contract) (provided that, if there is any currency exchange profit, the special charge may be reduced to zero); or alternatively the process will have a member shop bear and pay the currency exchange loss.

Once it is closed, a normal forward exchange contract cannot be canceled. Therefore, in the event that the currency of the user's country suddenly rises, the user would not enjoy a currency exchange profit which otherwise would have been obtained. Therefore, optionally, a user who in the past had transactions exceeding a certain level with the company A is permitted to have a transaction without closing any forward exchange contract if the user declares that he or she will not close any forward exchange contract at the time of the merchandise transaction. Before the user conducts a merchandise transaction with a virtual shop or cyber mall on the Internet, a certain period (e.g., a couple of weeks in the past) of data on exchange rate fluctuations can be extracted from the exchange database by running an applet for graphically indicating the data so that the user can judge whether to close a forward exchange contract prior to purchasing the merchandise.

## <u>Claims</u>

#### 1.

A method for approving the settlement of charges with a forward exchange contract by an individual consumer, the method being characterized in that it comprises:

issuing an invitation by a credit card issuing company A to a user of a credit card issued by company A to apply for a forward exchange contract of a currency D on a specified date, wherein the user is scheduled to make settlement of a small amount in a foreign currency;

application by the user for a forward exchange contract with company A for the purchase of a specified amount of currency D by submission of the user's name and credit card number to company A, said user becoming a participant in an application invitation program run by company A if the application is accepted;

performance by company A of a forward exchange contract for the purchase of currency D on a specified date for an amount at least equal to the forward exchange contracts of all participants in the application invitation program;

performing by a participant in the application invitation program of a transaction with a member shop in the program which can settle the transaction in the currency D;

submission by member shops of charges associated with the participant transactions to company A after a check of the participant status with company A has been completed;

totaling by company A, as closed on a specified date, of charges submitted by the member shops and determining the amount of the total charges in currency D; and

totaling the required settlements of the participant in currency D;

where the settlement amount is smaller than the amount of the forward exchange contract that was applied for by the participant approving the settlement amount at the exchange rate on a specified date, and in the event that it is greater than the amount of the forward contract applied for approving the settlement amount up to the amount of the forward exchange contract applied for at the exchange rate on a specified date, and computing the excess at the exchange rate at the closing day used as the basis for charges. 2.

A method for processing data on computer system to implement a forward exchange contract by an individual consumer, wherein the data processing for the forward exchange contract is characterized in that it comprising of the steps of:

issuing an invitation by a web server of a credit card issuing company A to a user of a credit card issued by company A to apply for a forward exchange contract of a currency D on a specified date, wherein the user is scheduled to make settlement of a small amount in a foreign currency;

application by the user terminal for a forward exchange contract with company A for the purchase of a specified amount of currency D by submission of the user's name and credit card number to company A, said user becoming a participant in an application invitation program run by company A if the application is accepted;

performance by a forward exchange contract system of company A of a forward exchange contract for the purchase of currency D on a specified date for an amount at least equal to the forward exchange contracts of all participants in the application invitation program;

performing of a transaction with a participant in the application invitation program by a system of a member shop in the program which can settle the transaction in the currency D;

submission by a system of member shops of charges associated with the participant transactions to company A after a check of the participant status with company A has been completed;

totaling by the business system of company A, as closed on a specified date, of charges submitted by the systems of the member shops and payment of the charges by the business system of company A to the systems of the member shops in currency D; and

totaling by the business system of company A settlements of the participant in currency D;

where the settlement amount is smaller than the amount of the forward exchange contract that was applied for by the participant charging the settlement amount at the exchange rate on a specified date, and in the event that it is greater than the amount of the forward contract applied for computing the settlement amount up to the amount of the forward exchange contract applied for at the exchange rate on a specified date, and computing the excess at the exchange rate at the closing day used as the basis for charges. 3.

The method of claim 2 for processing data on computer system to implement the forward exchange contract by an individual consumer, the method being characterized in that it further comprises:

the providing of the invitation includes posting an advertisement on the web server of company A to invite users who own credit cards that were issued by the company A and who are scheduled to make a small amount of settlement in a foreign currency, to apply for a forward exchange contract and receiving the name and credit card number as well as the number of currency units entered from the user terminal in an application form on the display screen on their user terminal that appears when the users click on the advertisement page on the browser;

the application by the user terminal include inviting the applicant to close a forward exchange contract and accepting the application for the currency exchange contract if the credit card is valid and if the number of currency units is found to be within the credit limit of the credit card and;

upon acceptance of the application for the forward exchange contract closing the forward exchange contract in the currency D through negotiation between the forward exchange contract processing system of the company A and the forward exchange contract processing system of an exchange broker;

wherein the step for totaling charges on the settlement system of the company A includes totaling data on charges submitted via a charging system of the member shops as closed on a specified date after the participant in the application invitation program has performed the transaction with the member shops which can settle the transaction in the currency D, and after paying the charges in the currency D totaling transaction settlements by credit card in the currency D regarding the participant in the application invitation program.

#### 4.

The method of Claim 3 for processing data on a computer system to implement the closing of a forward exchange contract by an individual consumer, the method being characterized in that the validation step of the credit card comprising of:

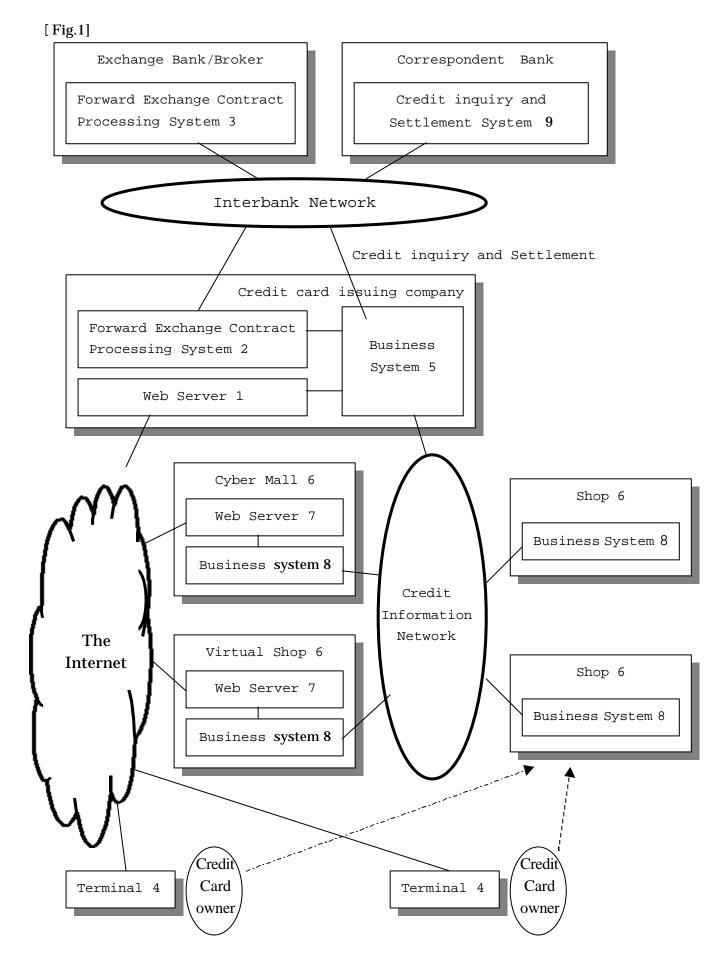
Checking if the applicant is a gold card owner, and rejecting the applicant is not a gold card owner.

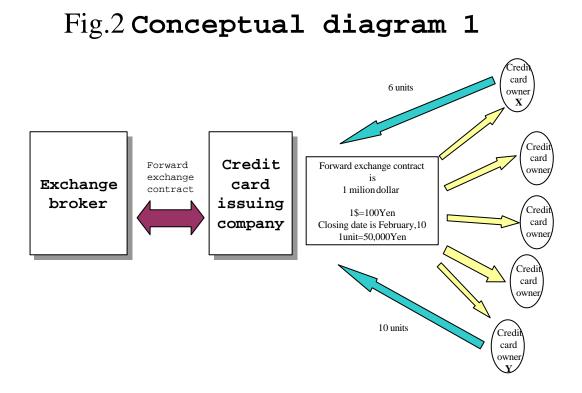
#### 5.

The method of Claim 3 for processing data on a computer system to implement the closing of a forward exchange contract by an individual consumer, the method further comprising the processing of settling the transaction at the exchange rate on the closing day being used as the basis of charges in the event that a credit card owner with the transaction record of more than a specified value has declared that he or she will not close any forward exchange contract against a certain transaction.

#### 6.

The method of Claim 3 for processing data on a computer system to implement the closing of a forward exchange contract by an individual consumer, the method further comprising the process, wherein in the event that, when a merchandise transaction application is sent using the terminal of a credit card owner with a transaction record of greater than a specified value, to the on-line member shop on the Internet of the company A, data on the exchange rate fluctuations for a certain period in the past can be extracted, by an exchange rate forecast system in the on-line shop, from the database and then an applet for graphically indicating the exchange rate fluctuations will be sent to the browser on the terminal of the credit card owner, whereas if the credit card owner should send, using the terminal, a notice to the effect that he or she will not close any forward exchange contract for a certain transaction, the transaction can then be settled at the exchange rate on the designated date.





#### Fig.3 Conceptual diagram 2 U.S.A. Japan U.S.A. currency in the total of 4,000 dollars purchased on January 15 and February 1 On-line Credit card shop owner Charging Х yia bank Payment in For settlement, the excess Credit dollars at the closing date of amount over the limit (e.g., card 1,000 dollars) will be February 10 issuing charged at the rate of the closing date. company Charging via bank Payment in Department dollars Payment in store dollars at the closing date of in the U.S.A. February 10 The amount within the limit will be 1 charged at the conversion rate as per the forward exchange contract. Credit U.S. currency in the total of 5,000 card dollars purchased on January 23 owne

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#### 11

# Trilateral Project B3b-Mutual Understanding in Search and Examination

### <u>Questionnaire (Group 1)</u>

#### Hypothetical Claim Set B (Financing service)

- (1) Is the subject matter appropriate for patent protection? Please include the analysis to support this determination.
- (2) Scope of the claim as interpreted by the Office what does the claim cover/include?
- (3) Assuming that there exist following known prior art, please determine whether the claimed invention lacks novelty or non-obviousness / inventive step. Please include the analysis to support this determination.

List of hypothetical prior art:

- (a) Claim "<u>1</u>" of this hypothetical case.
- (b) The gold card owners are given some extra benefits that standard card (basic card) owners can not use. (It is assumed that to cancel forward exchange contracts selectively is **not** known as the prior art.)
- (4) Assuming that there exist following known prior art, please determine whether the claimed invention lacks novelty or non-obviousness / inventive step. Please include the analysis to support this determination.

List of hypothetical prior art:

- (c) Claim "<u>3</u>" of this hypothetical case.
- (d) The gold card owners are given some extra benefits that standard card (basic card) owners can not use. (It is assumed that to cancel forward exchange contracts selectively is **not** known as the prior art.)