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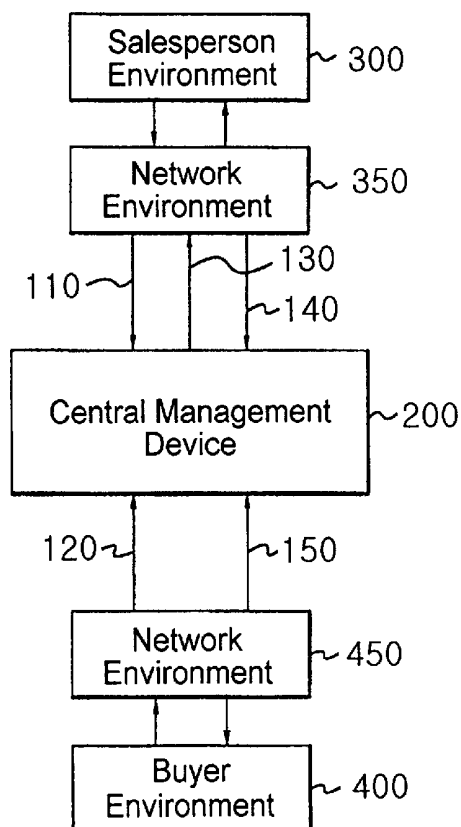
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(54) Title: ONLINE EXCHANGE METHOD USING EXCHANGE MATTER AND PAYMENT INSURANCE AND MANAGEMENT SYSTEM THEREOF



(57) Abstract: The present invention relates to on-line or Internet exchange trade systems and methods for properties or services. The present invention comprises, an exchange system that has an exchange medium for smoothly exchanging properties and services by compensating the difference in the values on-line including the Internet, a mediation system for mediating the trade of said properties and services, an authentication and search system for authenticating the take-over, quality and payment of the products when said properties and services are being traded through the mediation system on said on-line.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

**ONLINE EXCHANGE METHOD USING EXCHANGE MATTER AND
PAYMENT INSURANCE AND MANAGEMENT SYSTEM THEREOF**

BACKGROUND OF THE INVENTION

The present invention relates to on-line or Internet exchange trade systems and methods for properties or services. More particularly, the invention relates to a system and method capable of purchasing properties and services by converting the properties and services into an exchange medium using a trade mediation service and exchange medium being operated on-line or on the Internet, and also capable of authenticating the act of trade.

SUMMARY OF THE INVENTION

The object of the present invention is to resolve the problem concerning the difference in values between the properties and services. Another object of the invention is to provide a method and apparatus for converting the properties and service into an exchange medium and again purchasing the required

properties and services using the converted exchange medium resulting a rapid progress in the exchange trade.

Still another object of the present invention is resolving the buyer's concern on the product hand-over and quality as well as the salesperson's concern of receiving the purchase money using the method and apparatus for a paying guarantee against purchase money and trade completion confirmation hence promoting an wide spread of the exchange trade.

Further objective of the present invention is to provide a method and apparatus for an exchange trade management system using a exchange medium and paying guarantee for promoting an effective and reliable exchange in the issue management and operation of the exchange medium, paying guarantee for purchase money, and trade completion confirmation. Consequently, the present invention is effective for improving the usage of various forms of resources owned by individuals and companies, as well as in new customer creation, new market development, advertisement effectiveness, sales increase, provision of competitive edge, cash flow, purchase cost reduction,

interest cost reduction, profit increase and various others.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a configuration of the total system for the implementation of an on-line trade according to the present invention.

FIG. 2 is a brief diagram of the central management device 200 which is an essential part of the present invention.

FIG. 3 a brief diagram of the salesperson environment 300 which is an essential part of the present invention.

FIG. 4 a brief diagram of the buyer environment 400 which is an essential part of the present invention.

FIG. 5 is a flow chart which shows the up-loading process of the sales information of salesperson to a Web page according to the methods of the present invention.

FIG. 6 is a flow chart which shows the relaying process of the purchase order of a buyer to a salesperson according to the methods of the present

invention.

FIG. 7 is a flow chart which shows the contract completion process by receiving sales intention from the salesperson according to the methods of the present invention.

FIG. 8 is a flow chart which shows the process for trade completion confirmation and paying the price according to the methods of the present invention.

FIG. 9 a flow chart which shows the process for purchase order cancellation and the corresponding price paying process according to the methods of the present invention.

FIG. 10 is a brief configuration diagram for the implementation of direct trade according to the present invention.

FIG. 11 is a brief configuration diagram of the central management device in the system shown in FIG. 10.

FIG. 12 is a brief configuration diagram of the salesperson environment in the system shown in FIG. 10.

FIG. 13 is a brief configuration diagram of the buyer environment in the system shown in FIG. 10.

FIG. 14 a flow chart which shows the process for uploading the sales information of the salesperson to a web page for direct trade on the spot according to the methods of the present invention.

FIG. 15 a flow chart which shows the process for issuing a BM paying guarantee statement according to the methods of the present invention.

FIG. 16 is an example of the BM paying guarantee statement according to the present invention.

FIG. 17 a flow chart which shows the trade completion and money paying process according to the methods of the present invention.

FIG. 18 a flow chart which shows an issue cancellation of BM paying guarantee statement and corresponding money paying process according to the methods of the present invention.

DETAILED DESCRIPTION OF THE EMBODIMENTS

Recently, the e-commerce on the Internet is becoming more active. The conventional Internet trades were in general in the form of exchanging the buyer's money with the tangible products from salesperson through

e-commerce sites on the Internet. Also, even if the methods of exchanging properties and services on the Internet exist, the methods of mutually exchange based on the price agreed upon through a discussion either on-line or off-line are well known. This kind of exchange trade for satisfying both parties needs based on mutual exchange of properties and services can provide opportunities and profits for individuals and businesses such as reducing the purchase cost and the use of cash.

However, the conventional barter exchanges usually take a long time and sometimes the trade itself is not possible since the products have to be matched for both parties needs for an exchange and there is no basis for determining the values for each other's products.

Hence, in order to compensate the value difference between the properties and services being exchanged and allow the exchange to happen smoothly, there is need for a new exchange medium based on other resources (properties or services) than the existing money (cash, credit card, e-money) which are essentially based on cash.

Moreover, a mediation system is necessary for attracting a wider participation of exchange traders through the advertisement of the properties and services to be exchanged. In order to promote the exchange trade, the methods for resolving the buyer's concerns on product take-over and quality as well as the salesperson's concerns on receiving the money.

The present invention is designed to overcome the above problems of the conventional methods on mutual exchanges of the properties and services. The object of the invention is to provide a method for on-line exchange trade method by having an exchange medium, trade authentication system and trade mediation system that can purchase the necessary properties and services on-line or on the Internet using an exchange medium and paying guarantee and also to provide an operation and management method and apparatus for the management system.

In order to achieve the stated objectives, the present invention comprises, an exchange system that has an exchange medium for smoothly exchanging properties and services by compensating the difference in the values on-line including the

Internet, a mediation system for mediating the trade of said properties and services, an authentication and search system for authenticating the take-over, quality and payment of the products when said properties and services are being traded through the mediation system on said on-line. Also the present invention comprises the step of converting said properties and services into said exchange medium through the sales, purchasing required properties and services through said exchange medium, authenticating these trade activities by said authentication and search systems in order for the trader to be able to search the trade activities.

Hereinafter, preferred embodiments of the present invention will be described in detail with reference to the accompanying drawings.

FIG. 1 is a configuration of the total system for the implementation of an on-line trade according to the present invention.

As shown in FIG. 1, the system according to the present invention comprises, a central management device 200 located in an operation server for trading the properties and services of the present invention,

a salesperson environment 300 that further comprises a communication means such as a computer for connecting on-line to said central management device 200, a network environment 300 such as the Internet for connecting to the central management device 200 from said salesperson environment 300, a buyer environment 400 that further comprises a communication means such as a computer for connecting on-line to said central management device 200, a network environment 450 such as the Internet for connecting to the central management device 200 from said buyer environment 300.

Alternatively, the network environment 350, 450 can be a dedicated Internet line, mobile terminal device or public telephone network.

The salesperson according to the present invention registers a sales information 110 of the properties and services required to be exchanged to the central management device 200, informs the willingness for sales with Barter Money (BM) which is an exchange medium, using the salesperson environment 300 and network environment 350.

Likewise, the buyer also registers the properties

and services required to be exchanged to the central management device 200 and after searching for other people's sales information 110 by connecting to the central management device 200, inputs a purchase order 120 using the buyer environment 400 and network environment 350.

The central management device 200 provides a paying guarantee information for the purchase order 120 and either allows the salesperson to confirm the purchase order registered in the central management device 200 or allows the salesperson to recognize the purchase order by transmitting the inputted purchase order 120 to the salesperson environment 300.

The salesperson who confirms the purchase order with a paying guarantee from the central management device 200 transmits a sales intention to the central management device 200 in order to reach the buyer and the buyer completes the trade by paying his/her own BM, which is an exchange medium, for the properties and services of the salesperson.

The exchange system in the central management device 200 converts the properties and services into the BM through the sales, and allows to purchase the

necessary properties and services using the converted BM and promotes the exchange trade between the salesperson and buyer by providing a paying guarantee and a function for searching paying guarantee for the BM used as purchase money.

FIG. 2 is a brief diagram of the central management device 200 which is an essential part of the present invention.

As shown in FIG. 2, the central management device 200 comprises a CPU 205, an operating system (OS) 210, a RAM 215, a ROM 220, a network environment and storage device 250.

The central management device 200 can be configured as a personal computer system or work-station which has a sufficient memory and high performance capability. The storage device 250 further comprises a CD-ROM, flash-memory or hard disk. Also, the storage device 250 further comprises a membership information database 260, a membership account database 265, a paying guarantee account database 270, a sales information database 275, a purchase information database 280 and a purchase order database 285 which are used for the execution of

exchange trade for the present invention.

As a specific example of the above system, a commercial database software such as Oracle is used for the creation and management of various databases.

The membership information database 260 maintains and manages the information concerning the members using the categories including member ID, password, membership number, membership category, company name (or name), business registration number (or citizen identification number), address, e-mail address, telephone number, present status, registration date and expiry date. These information are obtained at the time of the first registration.

The membership account database 265 maintains and manages the information concerning the membership accounts using the categories including membership number, credit/debit distinction, credit/debit date, credit/debit details, and credit/debit amount. The membership account is created at the time of first registration and the details of every exchange trade is recorded and managed in the membership account database 265.

The paying guarantee account database 270 maintains

and manages the information concerning the deposited BM using the categories including authorization number, buyer membership number, deposit date, salesperson membership number, deposit amount, deposit details and progress status.

The sales information database 275 maintains and manages the information concerning the properties and services to be sold using the categories including membership number, registration number, large classification, medium classification, small classification, product name, product specification, number, sales unit, sales period, price, price condition and other conditions.

The purchase information database 280 maintains and manages the information concerning the purchase using the categories including membership number, registration number, large classification, medium classification, small classification, product name, product specification, number, sales unit, sales period, price, price condition and other conditions. These information, when the registration concerning the properties and services to be purchased are not made, are obtained by inputting the information

concerning the properties and services to be purchased.

The purchase order database 285 maintains and manages the information concerning the purchase order using the categories including authorization number, buyer membership number, product name product specification, number, sales unit, sales period, price, price condition and other conditions.

FIG. 3 a brief diagram of the salesperson environment 300 which is an essential part of the present invention.

As shown in FIG. 3, the salesperson environment 300 comprises a CPU 310, an OS 315, a RAM 320, a input device 340, a storage device 335, a monitor 345 and a network environment.

FIG. 4 a brief diagram of the buyer environment 400 which is an essential part of the present invention.

As shown in FIG. 4, the buyer environment 400 comprises a CPU 410, an OS 415, a RAM 420, a input device 440, a storage device 435, a monitor 445 and a network environment.

The network environment 350, 450 as shown in FIG. 3 and FIG. 4 can take the form of a dedicated Internet

line or a modem and the input device 340, 440 can be a keyboard or mouse.

Moreover, The devices in FIG. 3 and FIG. 4 can communicate with the central management device 200 in both ways and they can communicate by selectively using ARS or other voice communication means. Fax or document can also be used as a proper communication means.

The following is a more detailed explanation of the trading process of the properties and services using the system according to the present invention which comprises the central management device 200, salesperson environment 300 and buyer environment 400. The communication between the buyer and salesperson for the on-line trade is performed through a network such as the Internet while the central management device 200 playing a role similar to a web server. The salesperson logs on to the central management device 200, creates a sales information 110 and logs out. The sales information 110 is up-loaded to the Web pages and exposed to a potential buyer. The buyer logs on to the central management device 200, creates a purchase order 120 and logs out. The central

management device 200 checks whether or not the buyer has a paying capability against the purchase order 120 and afterwards transmits a purchase order with a paying guarantee to the corresponding salesperson. When the sales person inputs a sales intention 140 against the purchase order 130 with a paying guarantee, the central management device 200 informs the buyer that the contract is successfully established. When the buyer inputs a trade completion 150 after a normal take-over of the product, the central management device 200 transmits a deposited BM to the salesperson for the paying guarantee and completes the trade.

FIG. 5 is a flow chart which shows the up-loading process of the sales information of salesperson to a Web page according to the methods of the present invention.

The up-loading process comprises the steps of: connecting and logging on S500 to a central management device 200 by a salesperson through a network environment 350 of a salesperson environment 300; selecting S510 a classification by the salesperson according to the products and services to

be sold; inputting S520 a sales information 110 of the properties and services to be sold to said central management device 200 by the sales person; receiving S530 the inputted sales information 110 by the salesperson in said central management device 200; storing S540 in a sales information database 275 of said central management device 200; and registering S550 said stored sales information to a web page of the central management device 200.

The salesperson can be an individual, businessman or government. Also, the sales information 110 comprises membership number, registration number, large classification, medium classification, small classification, product name, product specification, number, sales unit, sales period, price, price condition and other conditions. Among these categories, the membership number, registration number, large classification, medium classification, small classification, product name, product specification, number and sales unit are obtained during the log-on and classification selection process of the salesperson and the registration date is obtain from the system at the time of sales

information registration. The price category is used for indicating the present cash price of the product. The price condition category is used for indicating on which percentage of BM and cash will be used for sale. Other conditions are used for indicating the other conditions concerning the trade such as free guarantee period and delivery cost.

Specific examples are as follows. The case for a product with a cash trade price 100,000 won is sold for 50,000 cash and remainder as BM and inclusive of delivery cost can be represented as;

- Price: 100,000 won
- Price Condition: Cash 50,000 won, BM 50,000 won
(or BM 50%)
- Other Conditions: Inclusive of delivery cost

Also, the case for a product with a cash trade price 100,000 won is sold for BM alone and not inclusive of delivery cost can be represented as;

- Price: 100,000 won
- Price Condition: BM 100,000 won (or BM 100%)
- Other Conditions: delivery cost not included

FIG. 6 is a flow chart which shows the relaying process of the purchase order of a buyer to a salesperson according to the methods of the present invention.

The relaying process of the present invention comprises the steps of: connecting and logging on S600 to a central management device 200 by a buyer through a network environment 450 of a buyer environment 300; selecting S610 the product to be purchased amongst the registered sales information 110 on a web site by the buyer; making a purchase order 120 by the buyer on the web site of the central management device 200; receiving S630 the inputted purchase order by the buyer in said central management device 200; determining whether or not the buyer is capable of paying up by checking a membership account database 265 of the buyer in said central management device 200; returning S650 to said purchase product selection step S610 if the buyer has no capability of paying up for the purchase order amount requested by the buyer after checking the account of the buyer and informing an insufficient

balance status; assigning S655 a trade authorization number to the buyer if the buyer has a capability of paying up for the purchase order amount requested by the buyer after checking the account of the buyer; transferring S660 BM of the amount requested by paying guarantee from the buyer account to a paying guarantee account database 270 in the central management device 200; adding S670 a paying guarantee number to said purchase order in the central management device 200; storing S680 said purchase order with a paying guarantee in a purchase order database 285; and transmitting S690 said purchase order to said salesperson environment in the central management device 200.

The purchase order comprises buyer membership number, product name, product specification, number, purchase unit, price, price condition, other condition, salesperson membership number, progress status (authorization, contract, contract completion, etc.), authorization date, contract date and trade completion date. Among these categories, the buyer membership number, product name, product specification, number, purchase unit, price, price

condition and other condition are obtained during the log-on and product selection process of the buyer. Also, the number category is used for indicating the number of purchase by the buyer. The categories for the progress status, authorization date, contract date and trade completion date are used for indicating the present progress of the purchase order by the buyer such as authorization (paying guarantee completion step), contract (sales intention receiving step), trade completion and sales cancellation and the information is obtained through the central management device 200.

FIG. 7 is a flow chart which shows the contract completion process by receiving sales intention from the salesperson according to the methods of the present invention.

The contract completion process according to the present invention comprises the steps of: connecting and logging on S700 to a central management device 200 by a salesperson through a network environment 350 of a salesperson environment 300; selecting S710 the transmitted purchase order with a paying guarantee by the sales person; searching S720 the

details of said selected purchase order with a paying guarantee; selecting S730 a sales cancellation intention or sales intention by the salesperson; inputting S740 the reason for sales cancellation in case of a sales cancellation; receiving said inputted reason for sales cancellation in the central management device 200; returning S755 the deposited BM for paying guarantee in the paying guarantee account to the buyer account in the central management device 200; transmitting S760 the reason for sales cancellation to the buyer in the central management device 200; adding S770 a contract completion information to purchase order with a paying guarantee in the central management device 200 in case the sales intention is inputted in said step S730; storing S780 the purchase order with the added contract completion to the purchase database; and transmitting S790 the completion of contract to the corresponding buyer. The buyer can be an individual, businessman or government.

FIG. 8 is a flow chart which shows the process for trade completion confirmation and paying the price according to the methods of the present invention.

The process for trade completion confirmation and paying the price according to the present invention comprises the steps of: connecting and logging on S800 to a central management device 200 by a buyer through a network environment of a buyer environment 300; selecting S810 the purchase order which completed the contract by the buyer, inputting S820 the completion of the trade; receiving S830 the trade completion of the buyer in the central management device 200; adding S840 the trade completion information to said purchase order; storing S850 in said purchase order database; and paying S860 the price by transferring the deposited BM for paying guarantee from a paying guarantee account database to the salesperson account.

FIG. 9 a flow chart which shows the process for purchase order cancellation and the corresponding price paying process according to the methods of the present invention.

The process for purchase order cancellation and the corresponding price paying process according to the present invention comprises the steps of: connecting and logging on S800 to a central management device

200 by a buyer through a network environment of a buyer environment 300; searching S910 the requested purchase order by the buyer; selecting S920 said requested purchase order; inputting S930 the cancellation of said purchasing order; receiving S940 the cancellation of said purchasing order in the central management device 200; determining S950 whether or not a sales intention is received against the cancellation requested purchase order in the central management device 200; transferring S960, a previously agreed amount (contract money) from the deposited amount in a paying guarantee account for paying guarantee, to the salesperson account if the purchase order is canceled after the sales intention was received; transferring S965, the remaining amount other than the previously agreed amount (contract money) from the deposited amount in a paying guarantee account for paying guarantee, to the buyer account in the central management device 200; deleting S970 the cancellation requested purchase order in the purchase order database; transferring S985 the deposited amount in the paying guarantee account for paying guarantee to the buyer account if

the purchase order was canceled before the sales intention was received in said S950 step; and deleting S985 the cancellation requested purchase order in the purchase order database.

FIG. 10 is a brief configuration diagram for the implementation of direct trade according to the present invention.

FIG. 11 is a brief configuration diagram of the central management device in the system shown in FIG. 10.

FIG. 12 is a brief configuration diagram of the salesperson environment in the system shown in FIG. 10.

FIG. 13 is a brief configuration diagram of the buyer environment in the system shown in FIG. 10.

The system configurations shown in FIG. 10 to FIG. 13 are used for the system such as in FIG. 1 to FIG. 4. Accordingly, the detailed explanation concerning the system configurations in FIG. 10 to FIG. 13 will be omitted here. However, the central management device 200 for the implementation of direct trade according to the present invention as shown in FIG. 11 includes a BM issue database 285.

The BM issue database 285 maintains and manages the information concerning the BM paying guarantee statement issue using the categories including issue number, authorization number, buyer membership number, product name, product specification, number, sales unit, price, price condition, other conditions, salesperson membership number, progress status (authorization, trade completion, cancellation), authorization date, trade completion date, and cancellation date. These information are obtained by inputting the request for a BM paying guarantee statement issue by the buyer.

According to the present invention as shown in FIG. 10, the salesperson who wants to exchange can upload the sales information to a web page using the above configurations in order to inform the potential buyers. The buyers can pay directly in the trading place using the issued BM paying guarantee statement by requesting an issue of the BM paying guarantee statement. The contract is established by offering a paying guarantee against the issued BM. At the completion of a trade, the price is paid by an account transfer.

The trading method using the system in FIG. 10 will be explained in more details. The communication between the salesperson and buyer for a direct trade at the spot according to the present invention is accomplished through the network while the central management device in FIG 10 playing a role similar to a web server.

In the registration process for the sales information to a web page for the direct trade at the spot according to the present invention, the salesperson logs on to the central management device and creates the sales information and logs out.

The sales information 110 is exposed to the potential buyers through the up loading to a web page. When the buyer logs on to the central management device 200 and requests a BM paying guarantee issue 125, the central management device checks whether or not the buyer has the capability to pay the price against the BM paying guarantee issue 125 and transmits a BM paying guarantee statement 135 and authorization number 136 to the corresponding buyer. The buyer outputs the transmitted BM paying guarantee statement 135 in the form of a document and fills in

the authorization number on the spot and submits it as purchase money.

When the salesperson requests a paying guarantee details search 145 against the BM paying guarantee statement 135 with a authorization number 136, the central management device 200 transmits a search result 155 to the salesperson. When the salesperson, who has confirmed the details of BM paying guarantee, inputs a trade completion 160, the central management device 200 transmits the deposited BM for paying guarantee to the salesperson and completes the trade.

FIG. 14 a flow chart which shows the process for up-loading the sales information of the salesperson to a web page for direct trade on the spot according to the methods of the present invention. The process in FIG. 14 is identical to the registration of the sales information as shown in FIG 5.

The process for up-loading the sales information of the salesperson to a web page for direct trade on the spot comprises the steps of: connecting and logging on S1400 to a central management device 200 by a salesperson through a network environment 350 of a salesperson environment 300; selecting S1410 a

classification by the salesperson according to the products and services to be sold; inputting S1420 a sales information 110 of the properties and services to be sold to said central management device 200 by the sales person; receiving S1430 the inputted sales information 110 by the salesperson in said central management device 200; storing S1440 in a sales information database 275 of said central management device 200; and registering S1450 said stored sales information to a web page of the central management device 200.

The salesperson can be an individual, businessman or government. Also, the sales information 110 comprises membership number, registration number, large classification, medium classification, small classification, product name, product specification, number, sales unit, sales period, price, price condition and other conditions. Among these categories, the membership number, registration number, large classification, medium classification, small classification, product name, product specification, number and sales unit are obtained during the log-on and classification selection

process of the salesperson and the registration date is obtain from the system at the time of sales information registration. The price category is used for indicating the present cash price of the product. The price condition category is used for indicating on which percentage of BM and cash will be used for sale. Other conditions are used for indicating the other conditions concerning the trade such as free guarantee period and delivery cost.

Specific examples are as follows. The case for a product with a cash trade price 100,000 won is sold for 50,000 cash and remainder as BM and inclusive of delivery cost can be represented as;

- Price: 100,000 won
- Price Condition: Cash 50,000 won, BM 50,000 won
(or BM 50%)
- Other Conditions: Inclusive of delivery cost

Also, the case for a product with a cash trade price 100,000 won is sold for BM alone and not inclusive of delivery cost can be represented as;

- Price: 100,000 won

-- Price Condition: BM 100,000 won (or BM 100%)

--Other Conditions: delivery cost not included

FIG. 15 a flow chart which shows the process for issuing a BM paying guarantee statement according to the methods of the present invention. The process for issuing a BM paying guarantee statement according the present invention comprises the steps of: connecting and logging on S1500 to a central management device 200 by a buyer through a network environment 350 of a buyer environment 300; selecting S1510 the product to be purchased amongst the registered sales information 110 by the buyer; receiving S1530 the BM paying guarantee statement request of the buyer in the central management device; requesting S1520 a BM paying guarantee statement to the central management device 200; determining the paying capability by searching an membership account database in the central management device; returning S1550 to said purchase product selection step if the buyer has no capability of paying up for the issue requested BM amount by the buyer after checking the account of the buyer and informing an insufficient balance status;

assigning S1555 an issue number for BM paying guarantee statement and a trade authorization number in the central management device if the buyer has a capability of paying up for the purchase order amount requested by the buyer after checking the account of the buyer; depositing S1560 a BM amount requested for paying guarantee from the buyer account to a trade management database; adding S1570 the authorization number to said BM paying guarantee statement in the central management device 200; storing S1580 said BM paying guarantee statement with a paying guarantee in a BM issue database; outputting said BM paying guarantee statement to the buyer; and submitting said BM paying guarantee statement by the buyer as purchase money at the trading spot. Here, the buyer can be an individual, businessman or government.

The necessary information for requesting a BM paying guarantee statement comprises buyer membership number, product name, product specification, number, purchase unit, price, price condition, other conditions and salesperson membership number. Among these categories, the buyer membership number, product name, product specification, number, purchase unit, price, price

condition, other conditions and salesperson membership are obtained during the log-on and product selection process of the buyer. Also, the number category is obtained at the time of inputting the purchase number of the buyer.

FIG. 16 is an example of the BM paying guarantee statement according to the present invention.

As shown in FIG. 16, the numeral 1610 on the drawing represents the BM paying guarantee statement issue number, 1620 represents the issued BM amount, 135 represents the authorization number, 1640 represents the BM paying guarantee statement issue date, 1650 represents the salesperson name, 1660 represents the buyer name and 1670 represents the buyer membership number.

The BM paying guarantee statement issue number 1610 and authorization number 135 are used by the salesperson for searching issue details.

Also, the buyer signature section 1680 is for obtaining the issuer's signature when the BM paying guarantee statement is used for the purchase money

Also, the purchase date 1690 is for filling in the date on which the BM paying guarantee statement is

paid as purchase money.

Also, 1695 displays a telephone number for providing a BM paying guarantee details search on the cable when the salesperson is unable to connect on-line due to some reasons such as computer network problem.

Also, 1696 is used for introducing the usage process for the BM paying guarantee statement.

FIG. 17 a flow chart which shows the trade completion and money paying process according to the methods of the present invention.

The trade completion and money paying process according to the present invention comprises the steps of: connecting and logging on S1700 to a central management device 200 by a salesperson through a network environment 350 of a salesperson environment 300; requesting S1710 a detail search of the received BM paying guarantee statement by the salesperson using the authorization number; receiving S1720 the detail search of the BM paying guarantee statement in the central management device; outputting S1730 the result of the detail search of the received BM paying guarantee statement using the authorization number in the central management

device; comparing S1740 the detail of the BM paying guarantee statement received as purchase money with the searched detail by the salesperson; informing S1745 that trade is not possible assuming that no contract is established if the two details do not match; inputting S1750 a trade completion confirmation if the two details match in said detail comparing step; receiving S1760 a trade completion input from the salesperson in the central management device; adding S1770 the trade completion information to the corresponding BM paying guarantee statement stored in the BM issue database in the central management device; transferring S1780 the deposited BM for said paying guarantee from the trade management account database to the salesperson account; and completing S1790 the trade after the money transfer.

FIG. 18 a flow chart which shows an issue cancellation of BM paying guarantee statement and corresponding money paying process according to the methods of the present invention.

The issue cancellation of BM paying guarantee statement and corresponding money paying process

comprises the steps of: connecting and logging on S1800 to a central management device 200 by a buyer through a network environment 350 of a buyer environment 300; searching S1810 an issue requested BM paying guarantee statement by the buyer; selecting S1820 an issue cancelled BM paying guarantee statement by the buyer; inputting S1830 the issue cancellation by the buyer; receiving S1840 the issue cancellation input from the buyer in the central management device; determining S1850 whether it is before receiving a trade completion confirmation from the buyer in the central management device; returning S1855 to the search step of the issue requested BM paying guarantee statement by the buyer and informing the issue cancellation is not possible if it is after the reception of the trade completion confirmation; transferring S1860 the deposited BM in the paying guarantee account for paying guarantee if it is before the reception of the trade completion confirmation; and deleting S1800 the corresponding BM paying guarantee statement in the BM issue database.

So far, a detailed explanation through examples of the invention is given. It should be understood,

however, that the detailed description and specific examples are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

WHAT IS CLAIMED IS:

1. An on-line exchange trade management system using an exchange medium and paying guarantee, comprising:
 - a central management device having an exchange mediation means;
 - a salesperson terminal having a communication means for providing properties and services to be sold to said central management device through a network environment;
 - a buyer terminal having a communication means for purchasing properties and services by connecting to said central management device through a network environment; andwherein when said salesperson terminal offers properties and services to said central management device, said buyer terminal connects to said central management device to purchase request said properties and services and at the time of trade establishment the paying is carried out with the exchange medium owned by the buyer.

2. The system as claimed in Claim 1, wherein said central management device comprising a storage apparatus for storing membership information database, membership account database, paying guarantee account database, sales information database, purchase information database and purchase order database.
3. The system as claimed in Claim 2, wherein said membership information database comprising the information such as member ID, password, membership number, membership category, company name (or name), business registration number (or citizen identification number), address, e-mail address, telephone number, present status, registration date and expiry date and said information are obtained at the time of the first registration to said exchange medium means.
4. The system as claimed in Claim 2, wherein said membership account database comprising the information such as membership number, credit/debit distinction, credit/debit date, credit/debit

details, and credit/debit amount and said information are created at the time of first registration to said exchange medium means and the details of every exchange trade are recorded and managed in said membership account database.

5. The system as claimed in Claim 2, wherein said paying guarantee account database comprising the information such as authorization number, buyer membership number, deposit date, salesperson membership number, deposit amount, deposit details and progress status and the information concerning the deposited exchange medium for paying guarantee is maintained and managed using said information.
6. The system as claimed in Claim 2, wherein said sales information database comprising the information such as membership number, registration number, large classification, medium classification, small classification, product name, product specification, number, sales unit, sales period, price, price condition and other conditions and the information concerning the properties and services

to be sold is maintained and managed using said information.

7. The system as claimed in Claim 2, wherein said purchase information database comprising the information such as membership number, registration number, large classification, medium classification, small classification, product name, product specification, number, sales unit, sales period, price, price condition and other conditions and the information concerning the purchase is maintained and managed using said information.

8. The system as claimed in Claim 2, wherein said purchase order database comprising the information such as authorization number, buyer membership number, product name product specification, number, sales unit, sales period, price, price condition and other conditions and the information concerning the purchase order is maintained and managed using said information.

9. The system as claimed in Claim 1, wherein said

central management device further comprising a network communication means to connect said salesperson terminal and buyer terminal.

10. The system as claimed in Claim 9, wherein said network communication means further comprising a dedicated Internet line or a Modem.

11. The system as claimed in Claim 1, wherein said central management device further comprising input apparatus such as a keyboard, mouse, scanner or digital camera.

12. The system as claimed in Claim 1, wherein said central management device further comprising a web site which can be connect to said salesperson terminal and buyer terminal.

13. The system as claimed in Claim 1, wherein said exchange medium is a medium which represents the exchange values of the properties and service in terms of money, e-money or points.

14. The system as claimed in Claim 1, wherein said exchange mediation means further comprising a network communication means, web site, storage device and said web site operation program.

15. The system as claimed in Claim 1, wherein the network environment for said salesperson terminal, and buyer terminal further comprising a dedicated Internet line or a Modem that can connect to said central management device.

16. The system as claimed in Claim 1, wherein said central management device adds a paying guarantee information to the inputted purchase request from said buyer terminal and transmits to said salesperson terminal.

17. An on-line exchange trade method for trading properties and services having a central management device with a exchange mediation means and a salesperson terminal and buyer terminal that connects to said central management device through a network, comprising the steps of;

registering the properties and service to be sold to said central management device by the salesperson through the salesperson terminal; requesting for purchase by connecting to the exchange mediation means of said central management device using said buyer terminal; pay guaranteeing for said purchase request by said central management device; and paying by said buyer using his/her own exchange medium after purchasing the properties or services registered to the exchange mediation means.

18. The on-line exchange trade method as claimed in Claim 17, wherein said registering step further comprising the steps of:

connecting and logging on to the central management device by the salesperson through the network environment of the salesperson environment 300;

selecting a classification by the salesperson according to the products and services to be sold;

inputting a sales information of the properties and services to be sold to said central management device by the sales person;

receiving the inputted sales information by the salesperson in said central management device;

storing in a sales information database of said central management device; and

registering said stored sales information to a web page of the central management device.

19. The on-line exchange trade method as claimed in Claim 18, wherein said sales information further comprising the information categories such as membership number, registration number, large classification, medium classification, small classification, product name, product specification, number, sales unit, sales period, price, price condition and other conditions.

20. The on-line exchange trade method as claimed in Claim 19, wherein said membership number, large classification, medium classification, small classification, product name, product specification, price, sales unit are obtained at the time of the salesperson's log-on and classification selection stage and said price category price is used for

indicating the present cash price of the product and said price condition category is used for indicating on which percentage of BM and cash will be used for sale said other conditions are used for indicating the other conditions concerning the trade such as free guarantee period and delivery cost.

21. The on-line exchange trade method as claimed in Claim 17, wherein said pay guaranteeing step further comprising the steps of:

connecting and logging on to the central management device by the buyer through a network environment of the buyer environment;

selecting the product to be purchased amongst the registered sales information on a web site by the buyer;

making a purchase order by the buyer on the web site of the central management device;

receiving the inputted purchase order by the buyer in said central management device;

determining whether or not the buyer is capable of paying up by checking a membership account database

of the buyer in said central management device;

returning to said purchase product selection step if the buyer has no capability of paying up for the purchase order amount requested by the buyer after checking the account of the buyer and informing an insufficient balance status;

assigning a trade authorization number to the buyer if the buyer has a capability of paying up for the purchase order amount requested by the buyer after checking the account of the buyer;

transferring BM of the amount requested by paying guarantee from the buyer account to a paying guarantee account database in the central management device;

adding a paying guarantee number to said purchase order in the central management device;

storing said purchase order with a paying guarantee in a purchase order database; and

transmitting said purchase order to said salesperson environment in the central management device.

22. The on-line exchange trade method as claimed in Claim 21, wherein said purchase order comprising

the information such as buyer membership number, product name, product specification, number, purchase unit, price, price condition, other condition, salesperson membership number, progress status (authorization, contract, contract completion, etc.), authorization date, contract date and trade completion date.

23. The on-line exchange trade method as claimed in Claim 22, wherein said buyer membership number, product name, product specification, number, purchase unit, price, price condition and other condition are obtained during the log-on and product selection process of the buyer, and said number category is used for indicating the number of purchase by the buyer, and said progress status, authorization date, contract date and trade completion date are used for indicating the present progress of the purchase order by the buyer such as authorization (paying guarantee completion step), contract (sales intention receiving step), trade completion and sales cancellation, and are obtained through the central management device.

24. The on-line exchange trade method as claimed in Claim 17, wherein said paying step further comprising the steps of:

connecting and logging on to the central management device by the buyer through a network environment of a buyer environment;

selecting the purchase order which completed the contract by the buyer, inputting the completion of the trade;

receiving the trade completion of the buyer in the central management device;

adding the trade completion information to said purchase order;

storing in said purchase order database; and

paying the price by transferring the deposited exchange medium for paying guarantee from a paying guarantee account database to the salesperson account.

25. The on-line exchange trade method as claimed in Claim 17, further including a step of canceling the purchase requested purchase order by the buyer.

26. The on-line exchange trade method as claimed in

Claim 25, wherein said canceling step further comprising the steps of:

connecting and logging on to the central management device by a buyer through the network environment of the buyer environment;

searching the requested purchase order by the buyer;

selecting said requested purchase order;

inputting the cancellation of said purchasing order;

receiving the cancellation of said purchasing order in the central management device;

determining whether or not a sales intention is received against the cancellation requested purchase order in the central management device;

transferring, a previously agreed amount (contract money) from the deposited amount in a paying guarantee account for paying guarantee, to the salesperson account if the purchase order is canceled after the sales intention was received;

transferring, the remaining amount other than the previously agreed amount (contract money) from the deposited amount in a paying guarantee account for paying guarantee, to the buyer account in the central management device;

deleting the cancellation requested purchase order in the purchase order database;

transferring the deposited amount in the paying guarantee account for paying guarantee to the buyer account if the purchase order was canceled before the sales intention was received in said determining step; and

deleting the cancellation requested purchase order in the purchase order database.

27. An on-line exchange trade method using an exchange medium and paying guarantee having, a central management device with a exchange mediation means which converts web sites, properties and services to an exchange medium with a specific value, and a communication means with a salesperson terminal and buyer terminal in order to connect to the central management device, comprising the steps of:

creating sales information by the salesperson by connecting to the central management device through the salesperson terminal in order to register properties and services to be sold;

uploading said sales information to the web site;

requesting an issue of exchange medium paying guarantee statement by the buyer to the central management device;

transmitting the exchange medium paying guarantee statement and authorization number to the buyer after checking whether or not the buyer has the capability to pay the price against the exchange medium paying guarantee issue in the central management device;

outputting the transmitted exchange medium paying guarantee statement in the form of a document ;

filling in the authorization number on the spot by the buyer and submitting said exchange medium paying guarantee statement as purchase money; and

completing the contract after searching said submitted exchange medium paying guarantee statement from the central management device by the salesperson.

28. The on-line exchange trade method as claimed in claim 27, wherein said requesting an issue of exchange medium paying guarantee statement step further comprising the steps of:

connecting and logging on to the central management device by the buyer through a network environment of

the buyer environment;

selecting the product to be purchased amongst the registered sales information by the buyer;

receiving the exchange medium paying guarantee statement request of the buyer in the central management device;

requesting a exchange medium paying guarantee statement to the central management device;

determining the paying capability by searching an membership account database in the central management device;

returning to said purchase product selection step if the buyer has no capability of paying up for the issue requested exchange medium amount by the buyer after checking the account of the buyer and informing an insufficient balance status;

assigning an issue number for exchange medium paying guarantee statement and a trade authorization number in the central management device if the buyer has a capability of paying up for the purchase order amount requested by the buyer after checking the account of the buyer;

depositing a exchange medium amount requested for

paying guarantee from the buyer account to a trade management database;
adding the authorization number to said exchange medium paying guarantee statement in the central management device;
storing said exchange medium paying guarantee statement with a paying guarantee in a exchange medium issue database;
outputting said exchange medium paying guarantee statement to the buyer; and
submitting said exchange medium paying guarantee statement by the buyer as purchase money at the trading spot.

29. The on-line exchange trade method as claimed in claim 27, wherein said transmitting step further comprising the steps of: connecting and logging on to a central management device by a salesperson through a network environment of a salesperson environment;
requesting a detail search of the received exchange medium paying guarantee statement by the salesperson using the authorization number;
receiving the detail search of the exchange medium

paying guarantee statement in the central management device;

transmitting the result of the detail search of the received exchange medium paying guarantee statement using the authorization number in the central management device.

30. The on-line exchange trade method as claimed in claim 27, wherein said completing the contract step further comprising the steps of:

comparing the detail of the exchange medium paying guarantee statement received as purchase money with the searched detail by the salesperson;

informing that trade is not possible assuming that no contract is established if the two details do not match;

inputting a trade completion confirmation if the two details match in said detail comparing step;

receiving a trade completion input from the salesperson in the central management device;

adding the trade completion information to the corresponding exchange medium paying guarantee statement stored in the exchange medium issue

database in the central management device;

transferring the deposited exchange medium for said paying guarantee from the trade management account database to the salesperson account; and

completing the trade after the money transfer.

31. The on-line exchange trade method as claimed in Claim 27, further including a step of canceling the purchase requested purchase order by the buyer.

32. The on-line exchange trade method as claimed in Claim 31, wherein said canceling step further comprising the steps of:

connecting and logging on to the central management device by the buyer through the network environment of the buyer environment;

searching an issue requested exchange medium paying guarantee statement by the buyer;

selecting an issue cancelled exchange medium paying guarantee statement by the buyer; inputting the issue cancellation by the buyer;

receiving the issue cancellation input from the buyer in the central management device;

determining whether it is before receiving a trade completion confirmation from the buyer in the central management device;

returning to the search step of the issue requested paying guarantee statement by the buyer and informing the issue cancellation is not possible if it is after the reception of the trade completion confirmation;

transferring the deposited exchange medium in the paying guarantee account for paying guarantee if it is before the reception of the trade completion confirmation; and

deleting the corresponding exchange medium paying guarantee statement in the exchange medium issue database.

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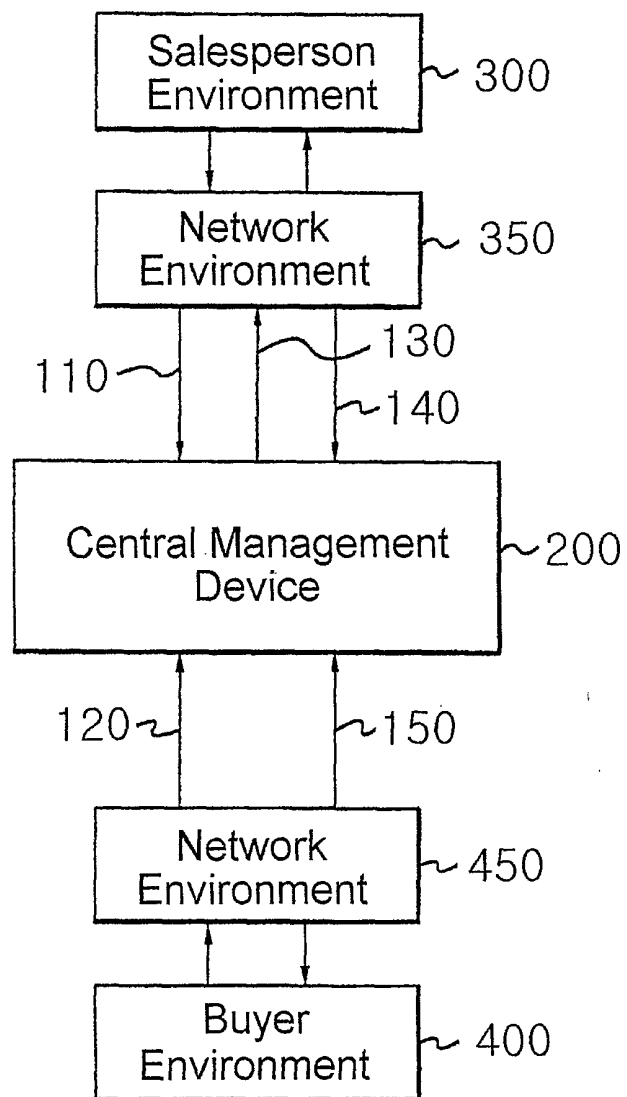


FIG. 1

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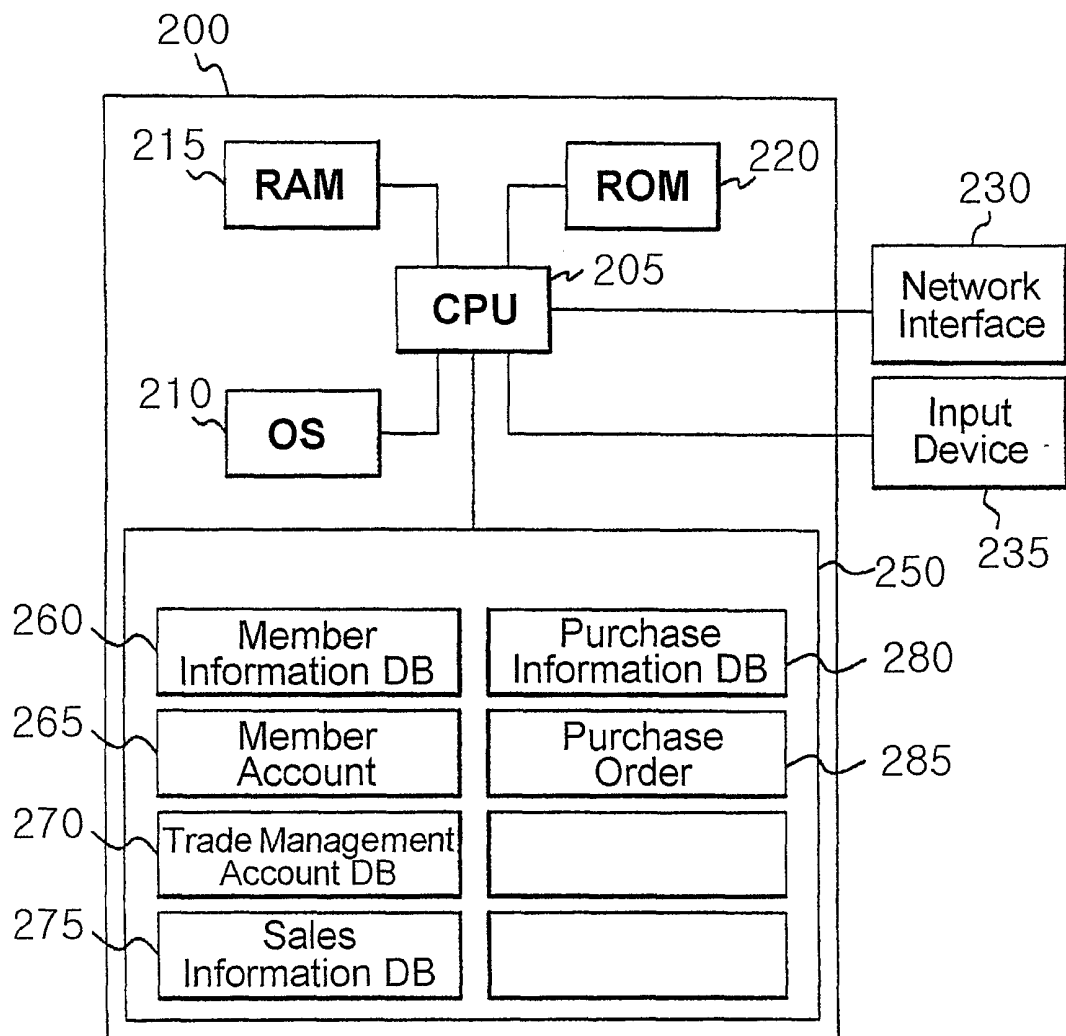


FIG. 2

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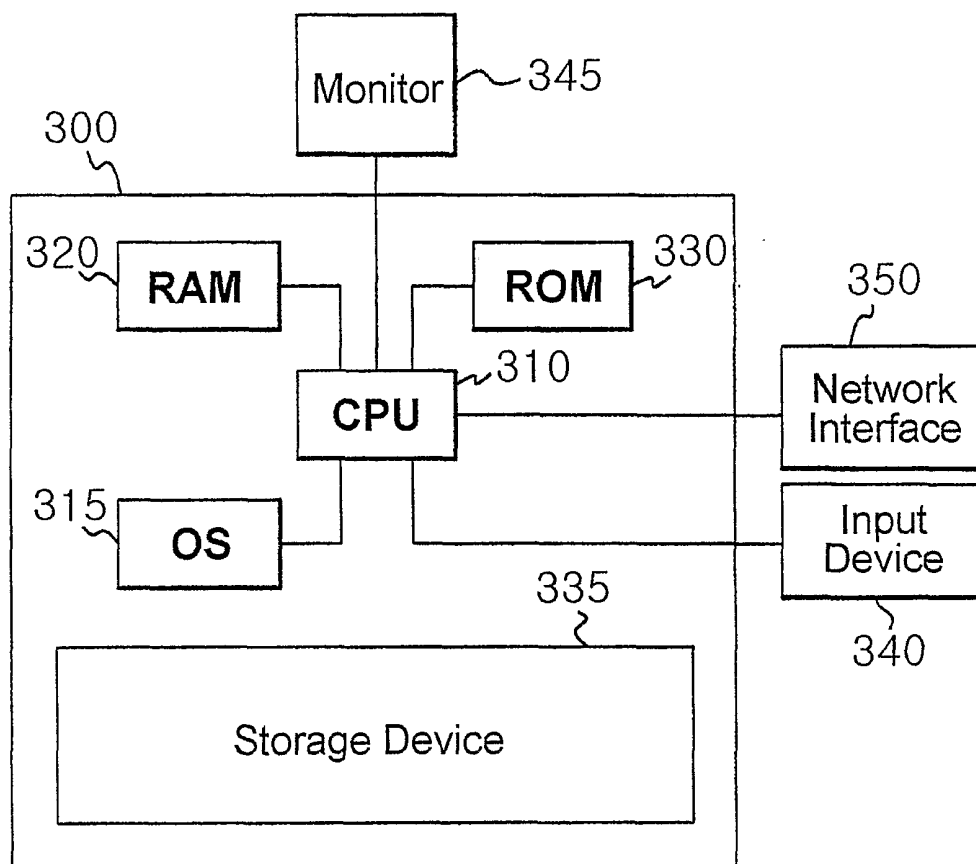


FIG. 3

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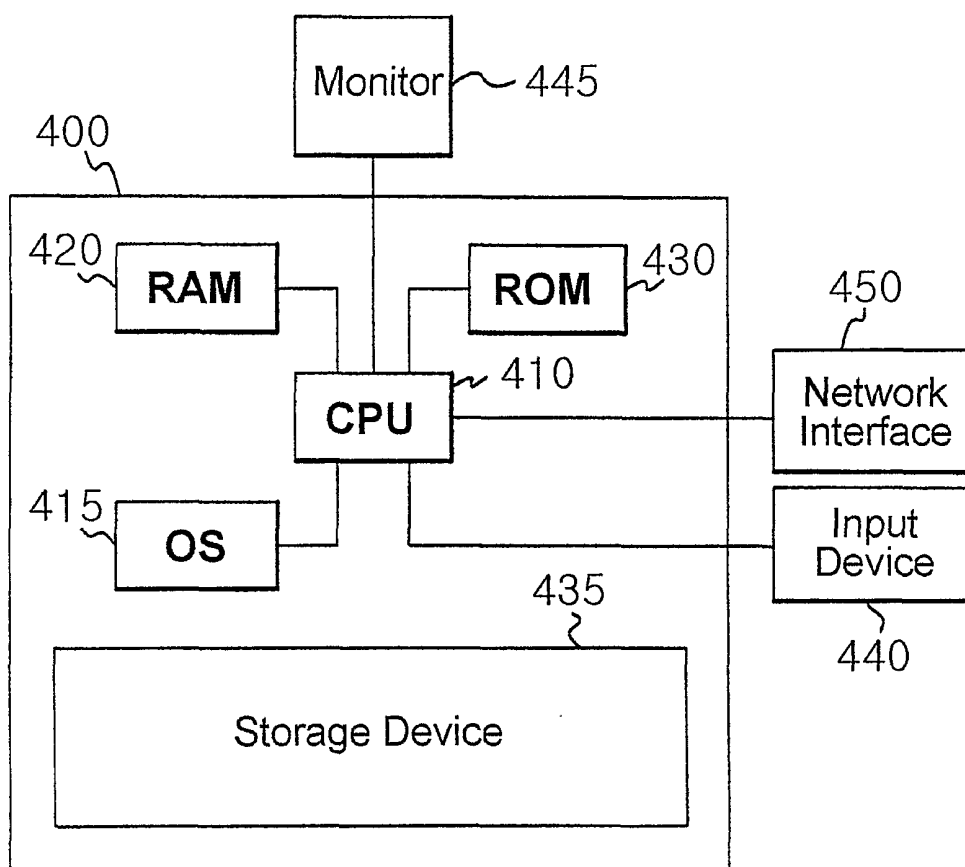


FIG. 4

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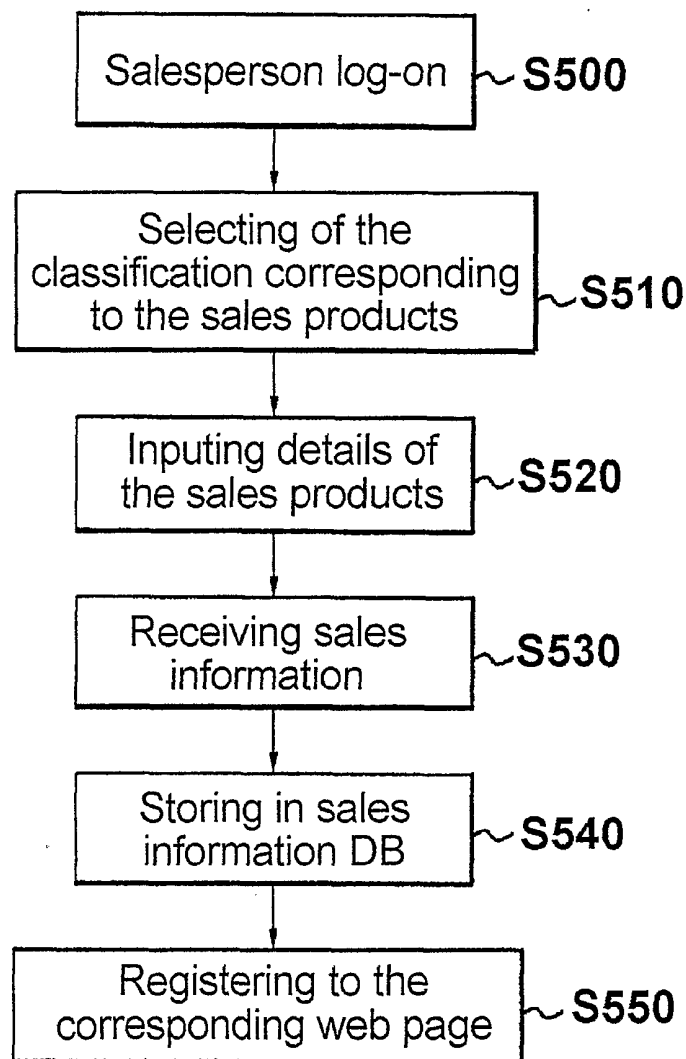


FIG. 5

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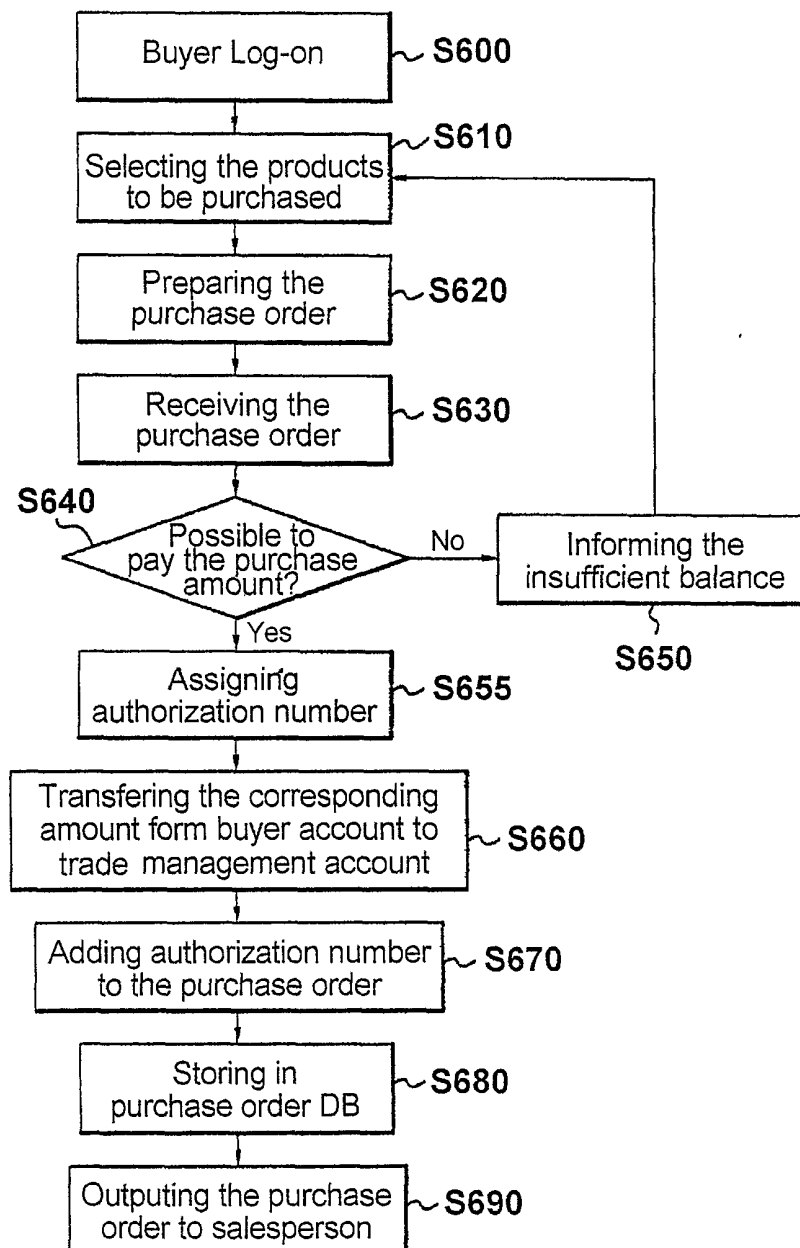


FIG. 6

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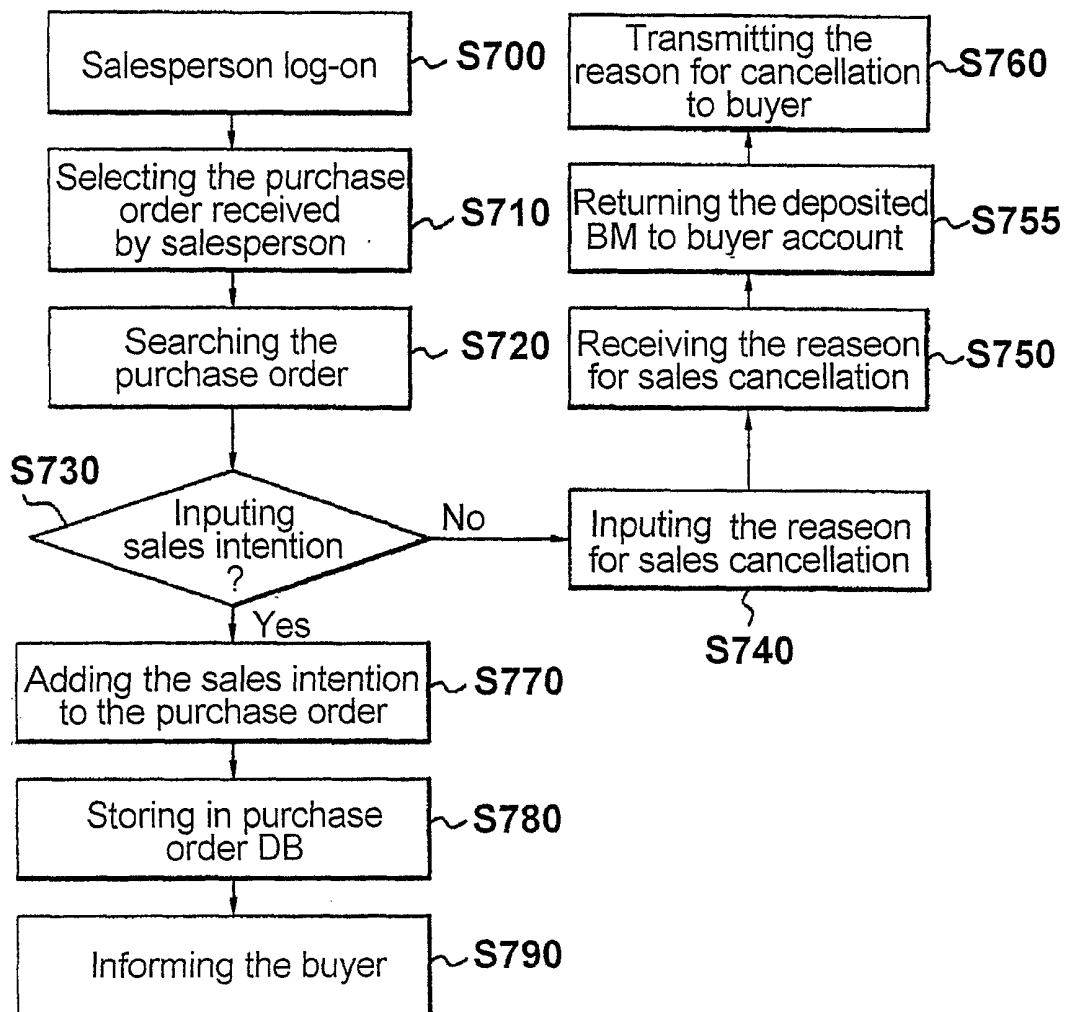


FIG. 7

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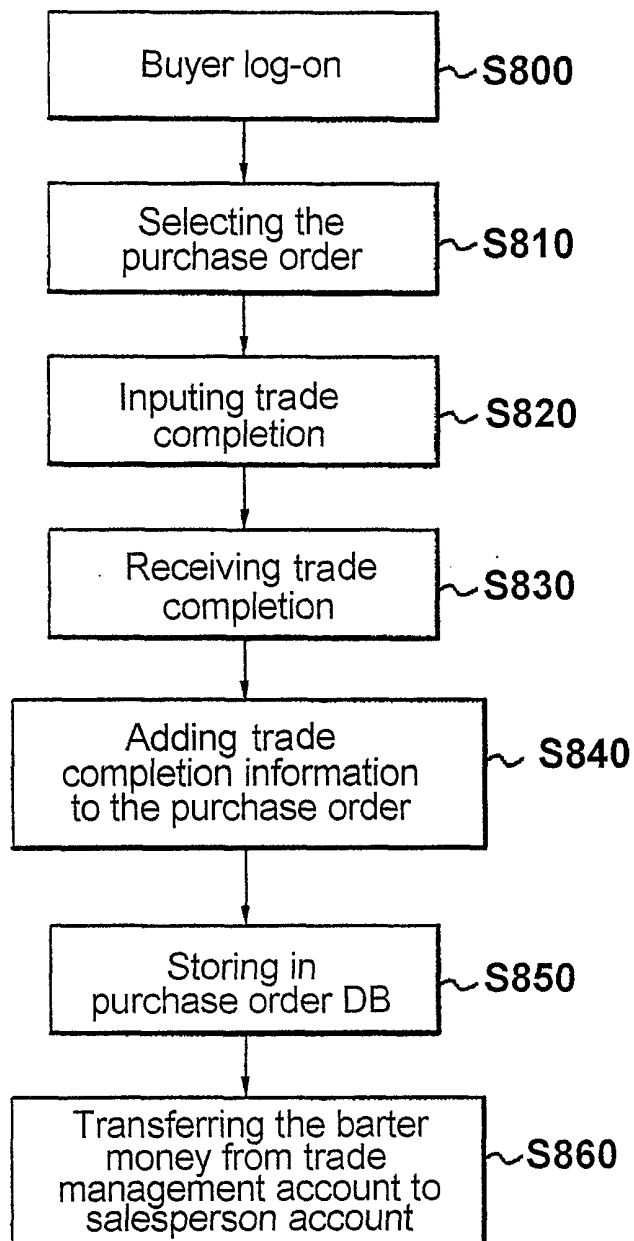


FIG. 8

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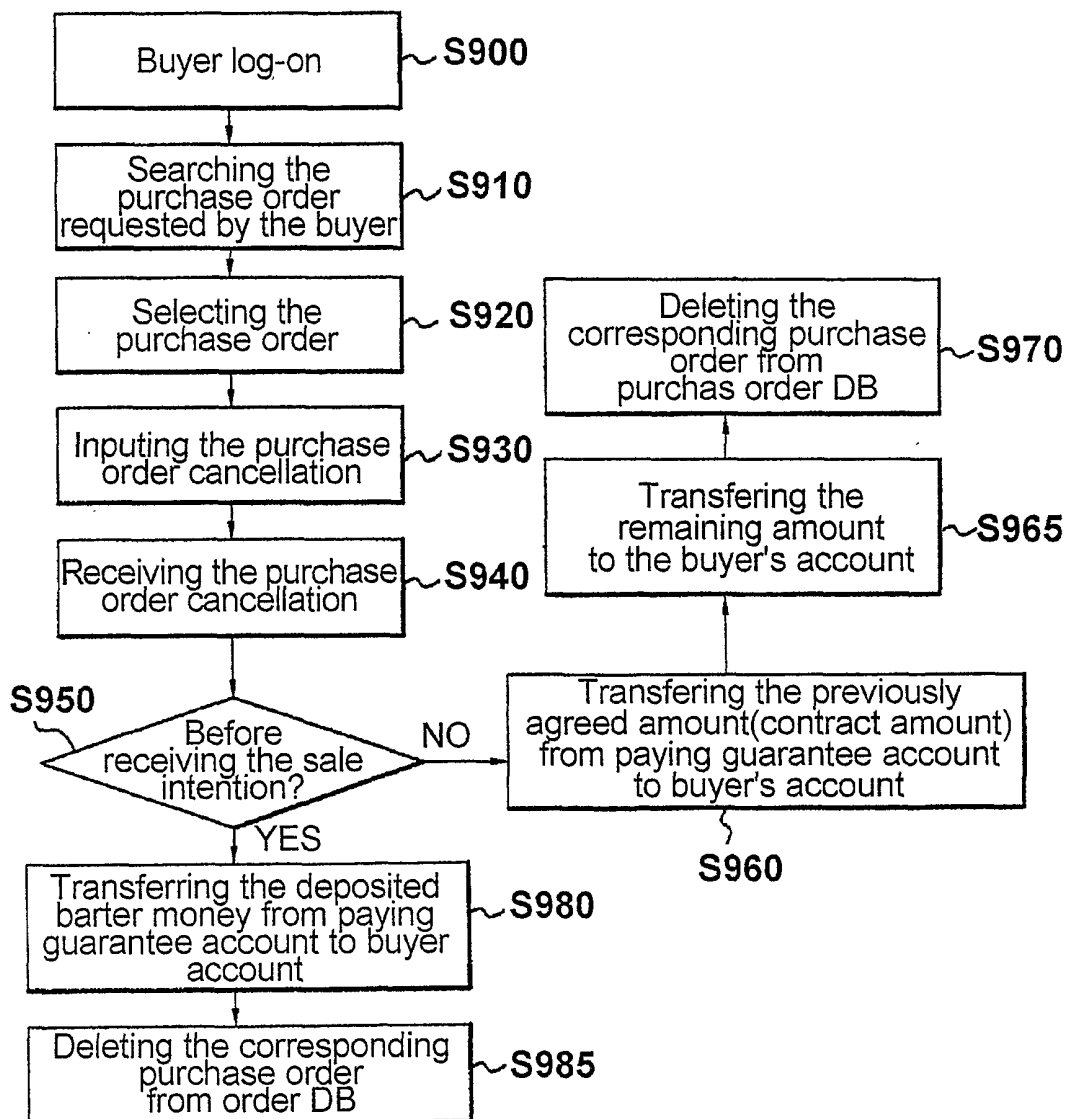


FIG. 9

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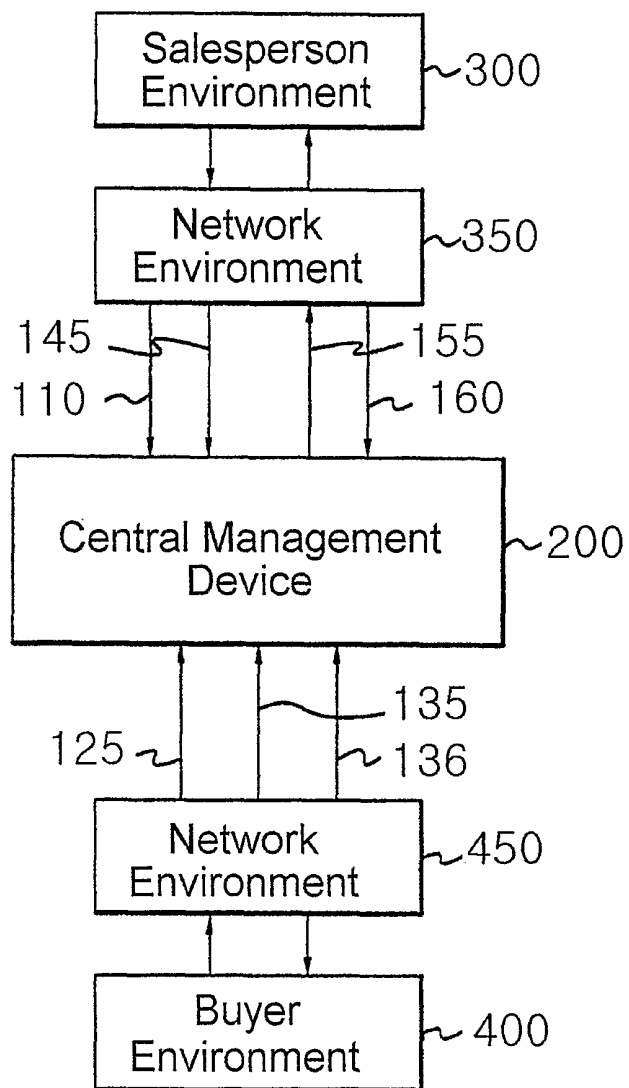


FIG. 10

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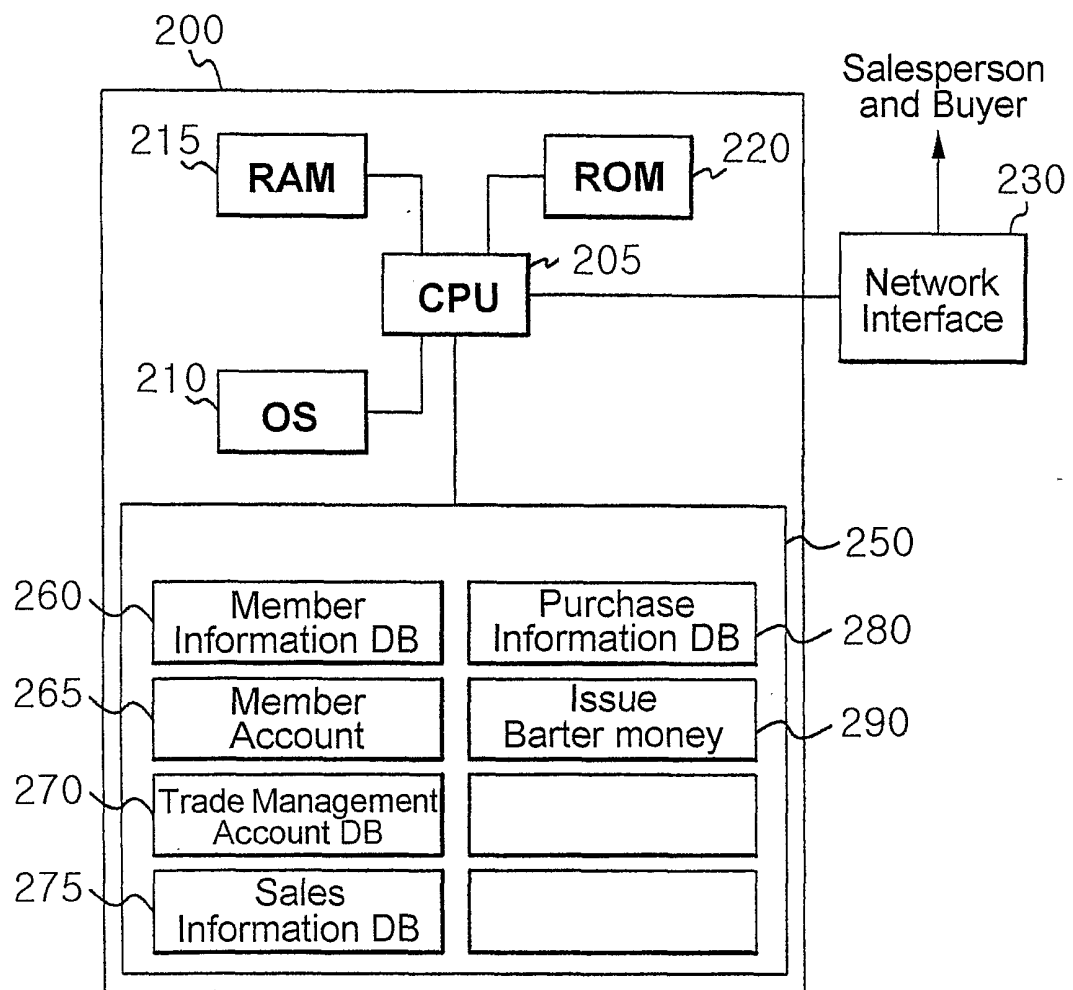


FIG. 11

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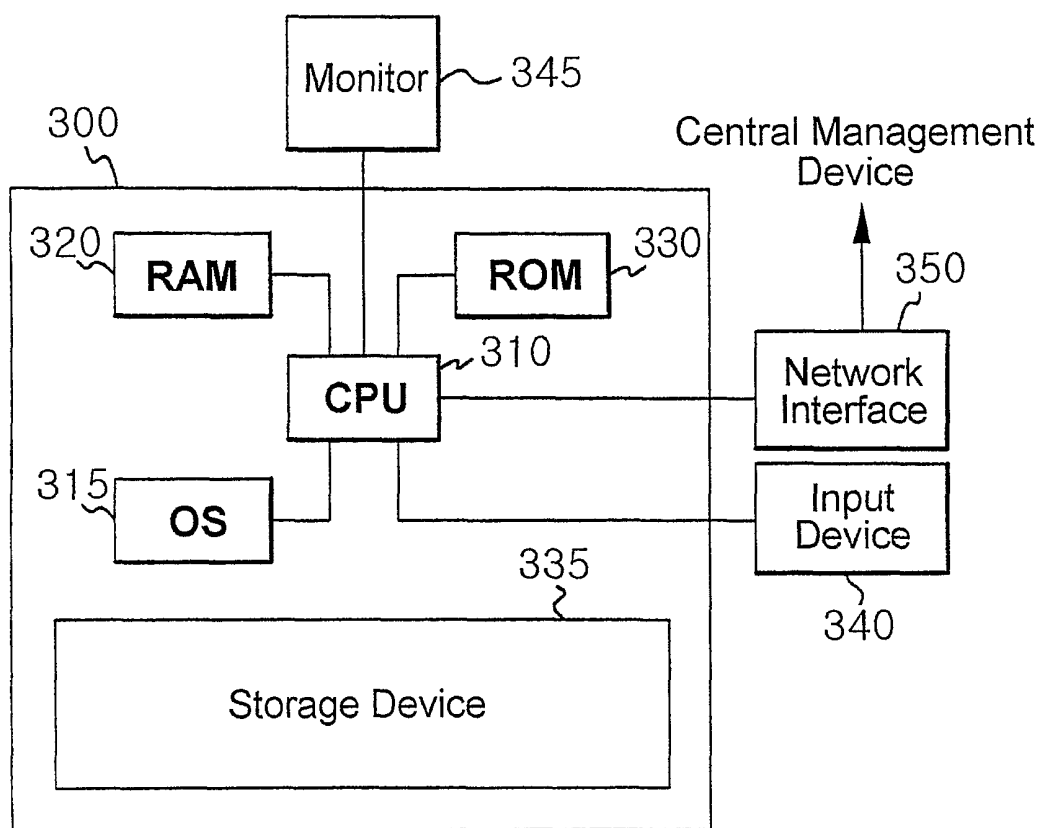


FIG. 12

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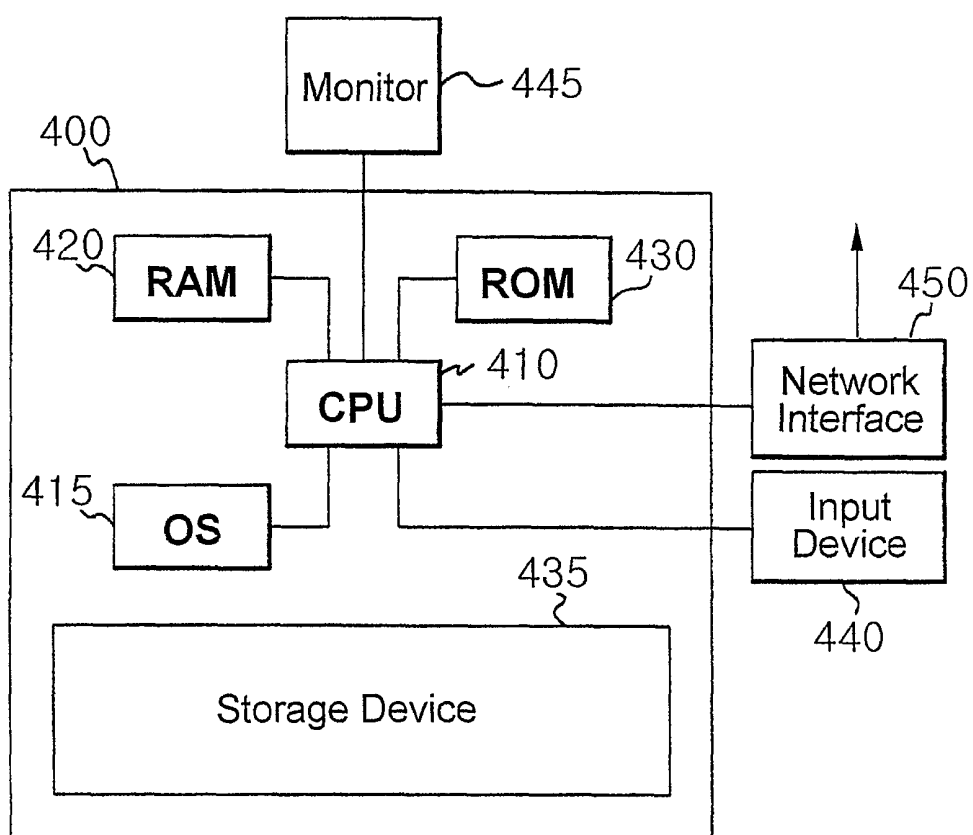


FIG. 13

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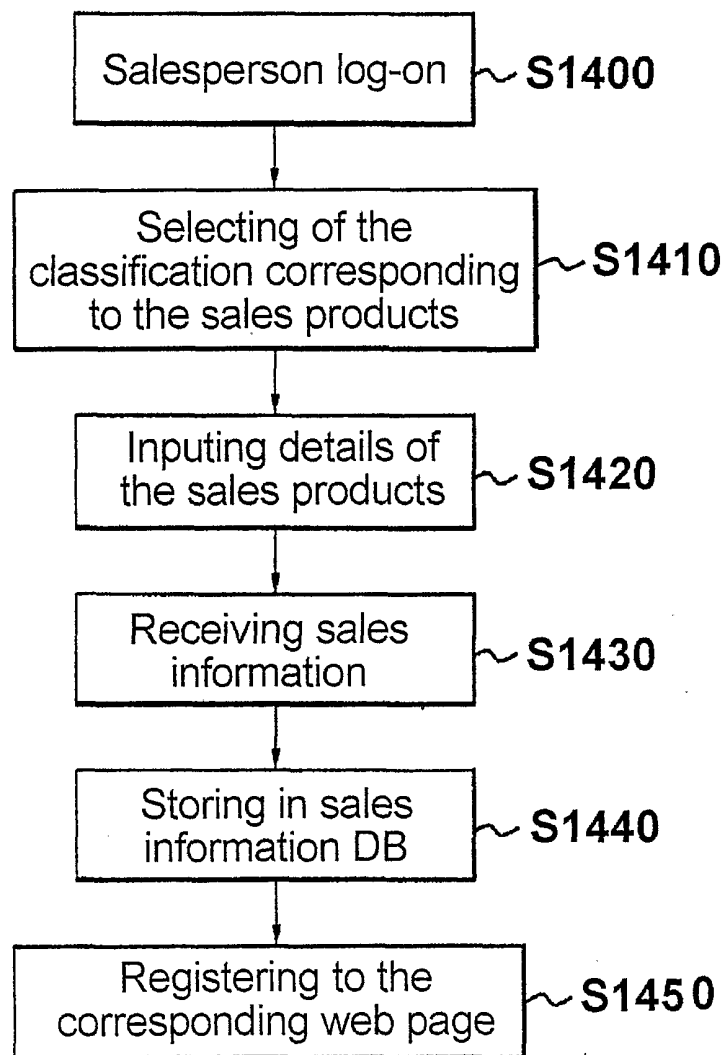


FIG. 14

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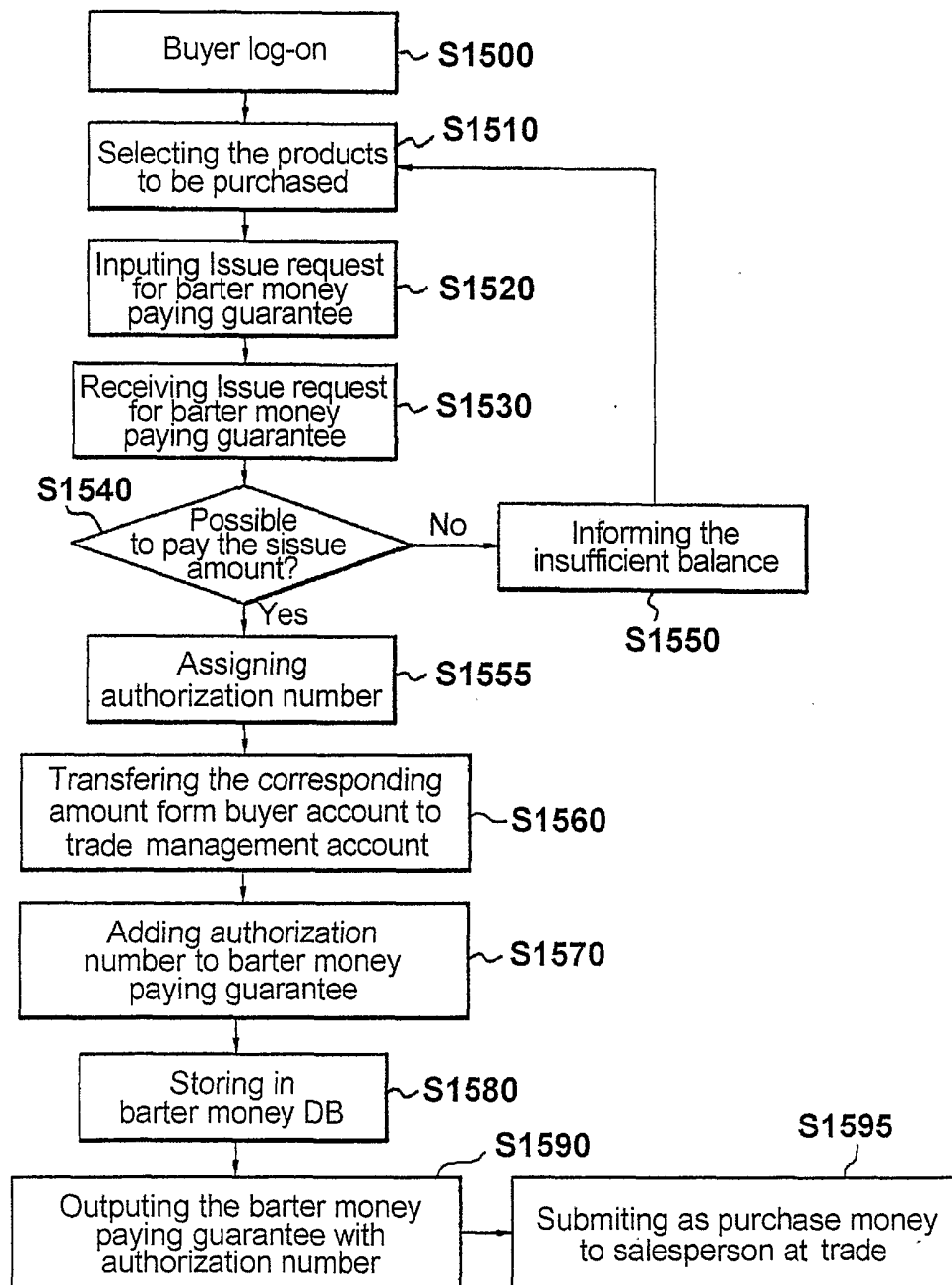


FIG. 15

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Issue date : yyyy-mm-dd 1640

BM paying guarantee certificate

1620 BM(Barter money) : ₩500,000

1610

Issue number	3458-6789	Authorization number	13254-5862
Sales-person	Segae.CO.,LTD.		
Buyer	Hong,gil do	Membership no.	1234-3456
	Signature	Purchase date	2000.4.22

135
1650
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1680 Issue detail search : TEL) 02-555-8768

User's guide

1. This certificate shows the details of which covered by Baternet Inc.'s paying guarantee.

2. User method for buyers

(1) Submit this certificate with your personal identification after filling in the authorization number

(2) Put your signature down at the buyer's signature section after the products or services have been instructed.

3. User method for salespersons

(1) Procedure for receiving the sales money.
Reception Buyer Confirmation Issue Detail Searching Trade Completion Confirmation Buyer's Signature

(2) Make sure to check the buyer's identification and search the issue details.

(3) The certificate without buyer's signature or not genuine can not be used as a trade guarantee.

4. When the trade completion confirmation procedure is completed, the issue money is credited to salesperson's account.

5. For the BM paying guarantee certificates whose trade completion confirmation procedure are not completed, would be cancelled.

6. The use of this certificate is only limited for the members of Baternet Inc., and this certificate can not be transferred, sold and offered as a security to other person.

Baternet Inc. TEL : 02-546-4746

1696

FIG. 16

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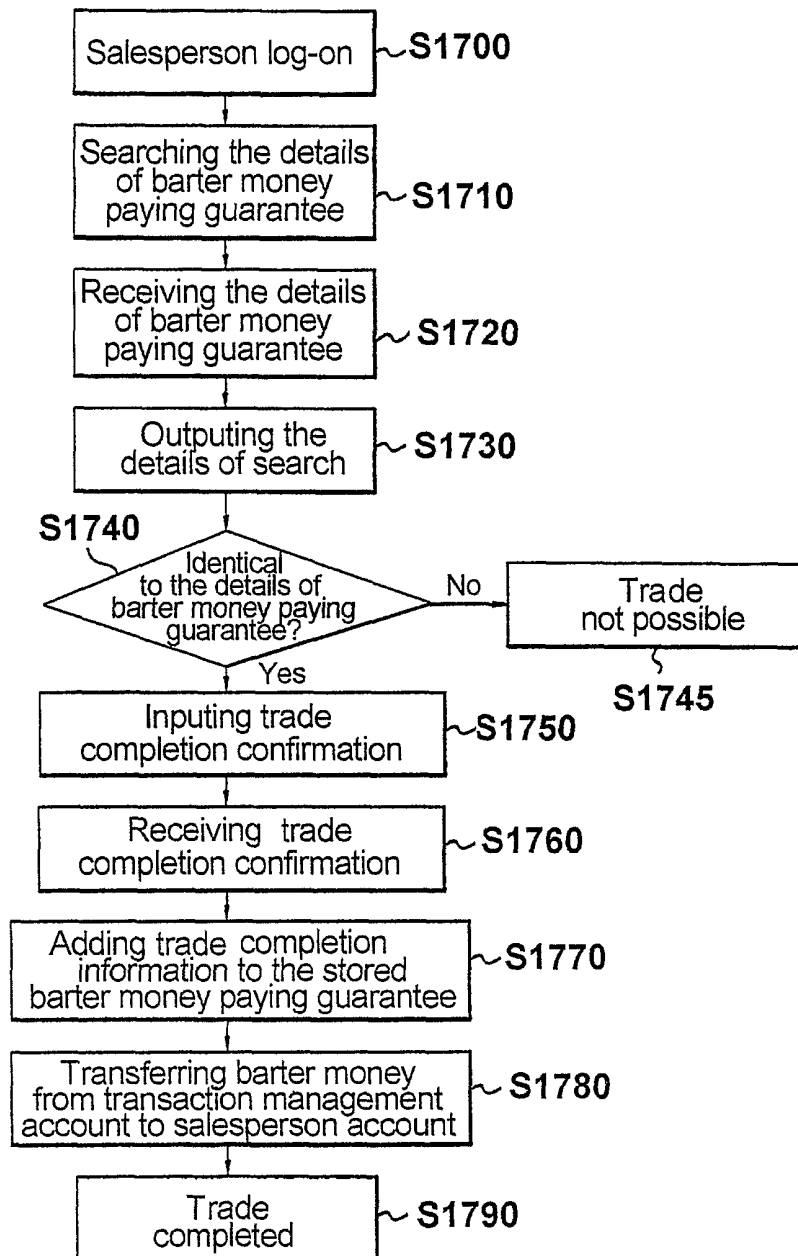


FIG. 17

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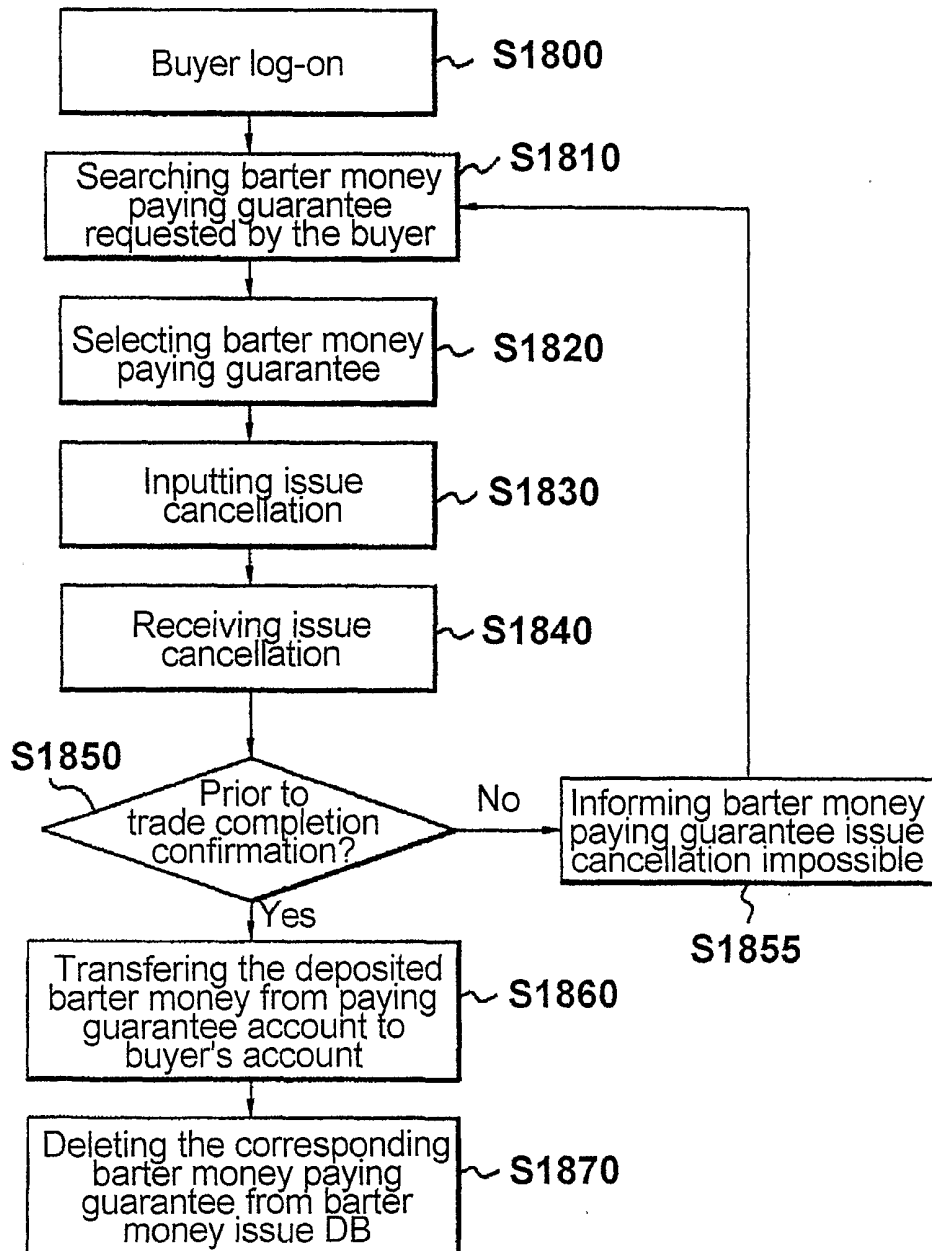


FIG. 18

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR01/00696

A. CLASSIFICATION OF SUBJECT MATTER**IPC7 G06F 17/60**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G06F 17/00, 17/60

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PAJ, KIPONET

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 1999-0084123 A 6 DECEMBER 1999 see Claim	1-32
A	US 06041303 A 21 MARCH 2000 see Abstract	1-32
A	US 06023702 A (International Business Machines Corporation) 8 FEBRUARY 2000 see Abstract	1-32
A	US 06044363 A 26 MARCH 2000 see Abstract	1-32

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

22 AUGUST 2001 (22.08.2001)

Date of mailing of the international search report

23 AUGUST 2001 (23.08.2001)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, Dunsan-dong, Seo-gu, Daejeon
Metropolitan City 302-701, Republic of Korea

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Telephone No. 82-42-481-5993

