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(54) Title: A METHOD OF PROVIDING PREADJUSTED PERSONAL INFORMATION IN SECURITY THROUGH NETWORK
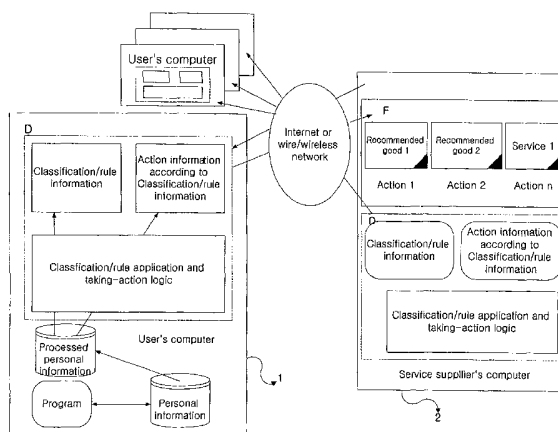
(57) **Abstract:** Disclosed is a method of supplying tailored information services capable of protecting personal information include: the step of a user's registering and storing personal information according to a given data model through a program installed in his or her computer; the steps of a service supplier's generating data including classification/rule information, action information according to the above classification/rule information, and classification/rule application and tacking-action logic, and transmitting the data to the user's computer to decide the classification of the user; the step of the user computer's deciding the classification of the user according to the received data of classification/rule information, action information according to the above classification/rule information, and classification/rule application and tacking-action logic, and asking the service supplier's computer for taking action according to the classification of the user; and the step of the service supplier computer's taking action in response to that request, and transmitting a result obtained from the action to the user's computer.

A METHOD OF PROVIDING PREADJUSTED PERSONAL INFORMATION IN SECURITY THROUGH NETWORK

Technical Field

The present invention relates to a method of supplying tailored information services capable of protecting personal information. More particularly, it relates to a method of supplying tailored information services that can perform differentiated marketing according to the classification of customers without leaking out personal information such as the age, sex, business relations, etc. of each customer.

Background Art

Recently, many enterprises are providing differentiated information services according to the age, sex and taste of each customer by using a customer relationship management (CRM). According to this service supply method, a service supplier has only the limited information such as the personal information that each customer has given or information of business relations, so the service supplier cannot provide differentiated information services to potential customers or common people who do not have business relations with itself. In addition, since the service supplier does not have important personal information of actual customers, particularly, information of each customer's assets that is the most principal point of the purchasing power, the service supplier cannot distinguish potential customers who can let it profit greatly. By way of example, if a customer, John, is saving 1,000USD and 50,000USD in a bank A and a bank B, respectively, the bank A cannot get from the bank B the information that John is saving 50,000USD in the bank B without John's agreement. Therefore, the bank A cannot offer kinds of more proper savings accounts to John who may possibly let the bank A make more profits or provide beneficial interest information to him.

In order to solve this problem, there proposed a method of providing services

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by using personal information of customers attained through a software program such as a personal asset management program or integrated account management program distributed to customers or potential customers. However, according to this conventional service supply method, customers evade storing the personal information

5   in an outside computer system because their personal information may leak out easily, and it is hard for a service supplier to get personal information of customers, potential customers and common people. Besides, it is difficult for the service supplier to distinguish potential customers who let the service supplier make a profit, whereby a new turnover cannot be realized.

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Disclosure of Invention

Accordingly, the present invention concerns a method of supplying tailored information services which can perform differentiated marketing according to the

15   classification of users without leaking out personal information of the users from a computer that a person is using and managing.

The inventive method of supplying tailored information services capable of protecting personal information includes: the step of a user's registering and storing personal information according to a given data model through a program installed in

20   his or her computer; the steps of a service supplier's generating data including classification/rule information, action information according to the above classification/rule information, and classification/rule application and taking-action logic, and transmitting the data to the user's computer to decide the classification of the user; the step of the user computer's deciding the classification of the user

25   according to the received data of classification/rule information, action information according to the above classification/rule information, and classification/rule application and taking-action logic, and asking the service supplier's computer for

taking action according to the classification of the user; and the step of the service supplier computer's taking action in response to that request, and transmitting a result obtained from the action to the user's computer.

According to another preferred embodiment of the present invention, the above personal information includes a person's character and status of assets.

According to still another preferred embodiment of the present invention, the step of asking for taking action in accordance with the classification of the user includes: the sub-step of checking if the personal information of the user stored in the user's computer corresponds to conditions of deciding the classification/rule information; the sub-step of determining a classification identifier according to the corresponding conditions of deciding when the personal information of the user corresponds to the conditions of deciding the classification/rule information, thus deciding the classification of the user; and the sub-step of determining a request for taking action corresponding to the classification identifier according to the information of taking action to transmit the request to the service supplier's computer.

According to still another preferred embodiment of the present invention, the above classification/rule information can be embodied by anyone of a decision table, a decision matrix, a decision tree and a script.

BRIEF DESCRIPTION OF THE DRAWINGS

The above and other objects, features and advantages of the present invention will be apparent from the following detailed description of the preferred embodiments of the invention in conjunction with the accompanying drawings, in which:

FIG. 1 shows a system construction for carrying out the present invention;

FIG. 2 is a flow chart showing a method of supplying tailored information services capable of protecting personal information according to the present invention; and

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FIG. 3 is a flow chart showing in detail the step of asking for taking action according to the classification of a user after deciding the classification of the user.

Best Mode for Carrying Out the Invention

The present invention will now be described in detail in connection with preferred embodiments with reference to the accompanying drawings. For reference, like reference characters designate corresponding parts throughout several views.

FIG. 1 shows a system construction for carrying out the present invention, and FIG. 2 is a flow chart showing a method of supplying tailored information service capable of protecting personal information according to the present invention. FIG. 3 is a flow chart showing in detail the step of asking for taking action according to the classification of a user after deciding the classification of the user.

A user's computer 1 and a service supplier's computer 2 are connected to each other through Internet or wire/wireless network. A program that the service supplier has provided, such as a personal assets management program or an integrated saving account management program, is installed in user's computer 1.

First, a user registers and stores S10 personal information such as his or her character and present status of assets according to a given data model in a program installed in his or her computer 1. A service supplier produces data D including classification/rule information, action information according to the above classification/rule information, and classification/rule application and taking action logic, and stores S20 data D in the service supplier's computer 2.

The following table 1 shows a first preferred embodiment of the classification/rule information, action information according to the above classification/rule information. This classification/rule information includes conditions of decision A that enable deciding the classification of a user according to the personal information, and a proper classification identifier B for each classification. The

classification/rule information can be embodied by general software program logic such as a decision table, a decision matrix, a decision tree, and a script. Conditions of decision A consist of equations each using values of personal information as parameters. If the user's personal information corresponds with some classification's conditions of decision, a predetermined classification identifier B is decided. Once the classification identifier B is decided, corresponding to this identifier B, a request for taking action C is determined in the action information.

【Table 1】

Classification/rule information   Action information

Conditions of decision	Classification identifier (B)		Request for taking action C
Overall assets > = One hundred thousand $ AND Sex = Man	AA1		OpenURL (AA1,htm)
Overall assets< One hundred thousand $ AND Age = Forties	AA2		OpenURL (AA2,htm)
O O O			
Others	ZZZ		SendMessage('Others')

Data D held in the service supplier's computer 2 is transmitted S30 to the user's computer 1 periodically or at a given point of time (e.g. login) through Internet or wire/wireless network. If the user has been already registered as a customer in the service supplier such as a banking facility, his or her personal information, information of business relations, etc. that he or she has already provided to the service supplier when he or she was registered as a customer therein can be also

transmitted. At this point, the classification of the user can be more exactly carried out in his or her computer 1.

After the user's computer 1 decides the classification of the user on the basis of the classification/rule information and action information according to the received data D's classification/rule application and taking-action logic, it requires S40 to take action according to the classification of the user. This step S40 is fully described as follows.

Computer 1 checks S41 if the user's personal information held in computer 1 corresponds to conditions of decision A of the classification/rule information according to the received classification/rule application and taking- action logic. If the user's personal information corresponds to conditions of decision A of the classification/rule information, computer 1 decides classification identifier B according to those corresponding conditions of decision A and decides S42 the classification of the user. After that, computer 1 determines request for taking action C in response to the above classification identifier B, thus transmitting it to the service supplier's computer 2.

Once the service supplier's computer 2 receives request for taking action C according to the classification of the user, an action F is carried out in response to request for taking action C, thus transmitting S50 a result, obtained from the action, to the user's computer 1.

For example, if the user's computer 1 determines the user as a man of forties having assets of more than one hundred thousand dollars, a request for taking action, asking for the information suitable for his character and assets, is transmitted to the service supplier's computer 2. The service supplier's computer 2 takes action in response to the request 2 and transmits information about kinds of insurance and kinds of savings deposits, stock information, tax information, etc. to the user's computer 1. Accordingly, a person's confidential personal information such as personal assets information cannot leak out from a computer that the person is using and managing,

and the service supplier can perform effective marketing according to a person's character and status of assets.

Industrial Applicability

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While the present invention has been described with reference to the particular illustrative embodiments, it is not to be restricted by the embodiments but only by the appended claims. It is to be appreciated that those skilled in the art can change or modify the embodiments without departing from the scope and spirit of the 10 present invention. Particularly, the present invention enables users to be provided with information services according to information about a person's tastes and inclination (e.g. religion, political preference, etc.), information about personality and mental state (e.g. fortune-telling, biorhythm, etc.), another information relating to a person (e.g. academic background, grade, etc.).

15 According to the present invention, since confidential personal information such as information of personal assets, identification numbers, bank account passwords, etc. cannot leak out from a computer that a person is using and managing, a person can use information services with a sense of security. A service supplier can perform effective marketing according to a person's character and status of assets, 20 thus reducing the marketing costs and realizing a new turnover. Moreover, because personal information does not need to be stored in a service supplier's computer, maintenance and repair costs such as barrier system construction costs that may fall on the service supplier can be saved.

WHAT IS CLAIMED IS:

1. A method of supplying tailored information services capable of protecting personal information comprising:

a step of a user's registering and storing personal information according to a given data model through a program installed in his or her computer;

a step of a service supplier's generating data including classification/rule information, action information according to said classification/rule information, and classification/rule application and taking-action logic, and transmitting the data to the user's computer to decide the classification of the user;

a step of the user computer's deciding the classification of the user according to the received data of classification/rule information, action information according to said classification/rule information, and classification/rule application and taking-action logic, and asking the service supplier's computer for taking action according to the classification of the user; and

a step of the service supplier computer's taking action in response thereto, and transmitting a result obtained from the action to the user's computer.

2. A method according to claim 1, wherein said personal information includes a person's character and status of assets.

3. A method according to claim 1, wherein the step of asking for taking action according to the classification of the user includes:

a sub-step of checking if the personal information of the user stored in the user's computer corresponds to conditions of deciding the classification/rule information;

a sub-step of determining a classification identifier according to the corresponding conditions of deciding when the personal information of the user corresponds to the conditions of deciding the classification/rule information, thus

deciding the classification of the user; and

a sub-step of determining a request for taking action corresponding to the classification identifier according to the information of taking action to transmit the request to the service supplier's computer.

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4. A method according to claim 1, wherein said classification/rule information can be embodied by anyone of a decision table, a decision matrix, a decision tree and a script.

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Fig. 1

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                    ┌─────────────────┐
                    │      Start       │
                    └────────┬────────┘
                             │
                             ▼
            ┌─────────────────────────────┐
            │     User stores personal     │   ⤵
            │   information through program │      S10
            └──────────────┬───────────────┘
                           │
                           ▼
            ┌─────────────────────────────┐
            │ Service supplier generates and│
            │      stores data including    │   ⤵
            │ classification/rule application│    S20
            │     and taking-action logic   │
            └──────────────┬───────────────┘
                           │
                           ▼
            ┌─────────────────────────────┐
            │   Transmitting data to user's │   ⤵
            │       computer to decide      │     S30
            │     classification of user    │
            └──────────────┬───────────────┘
                           │
                           ▼
            ┌─────────────────────────────┐
            │     Asking for taking-action  │
            │  according to classification of│  ⤵
            │      user after deciding      │     S40
            │     classification of user    │
            └──────────────┬───────────────┘
                           │
                           ▼
            ┌─────────────────────────────┐
            │     Taking action according to│   ⤵
            │     classification of user    │     S50
            └──────────────┬───────────────┘
                           │
                           ▼
                    ┌─────────────────┐
                    │       End        │
                    └─────────────────┘
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Fig. 2

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S30

Does user's personal information
correspond to condition of deciding
classification/rule information?   S41

YES

Determining classification
identifier to decide
classification of user   S42

Transmitting request for
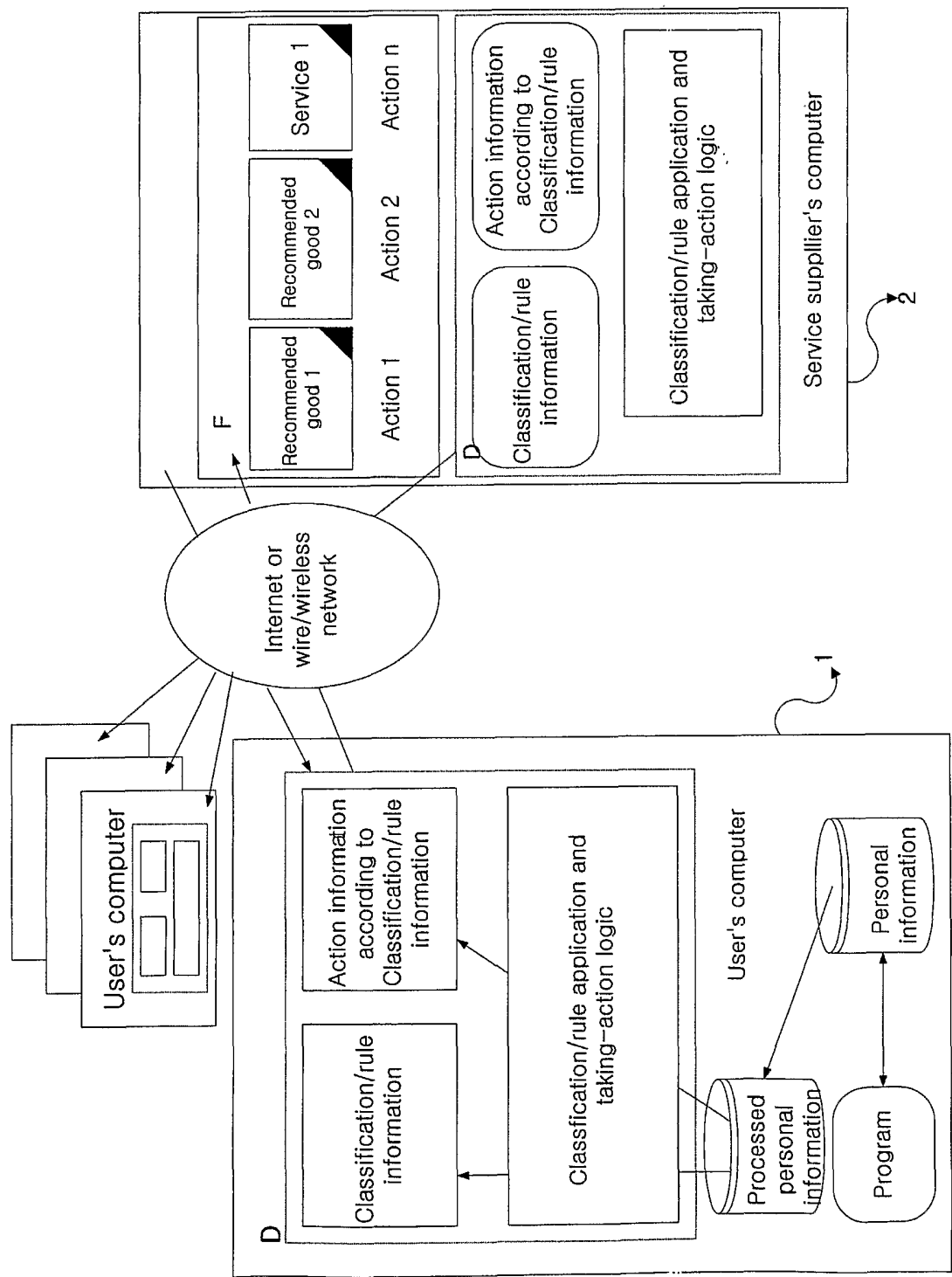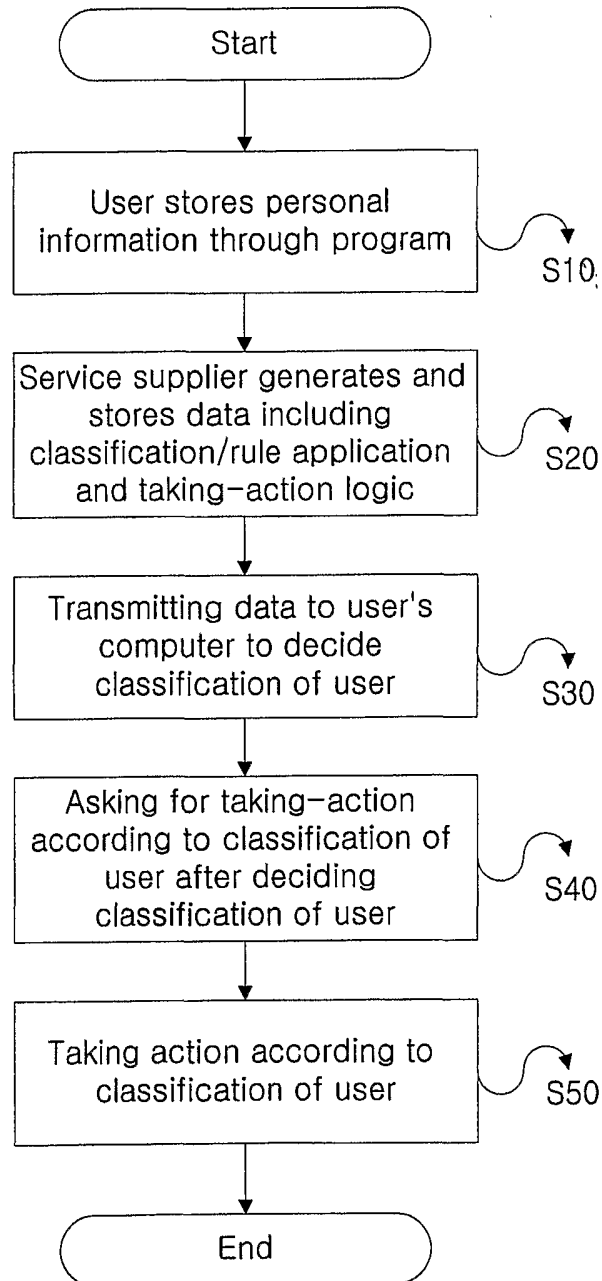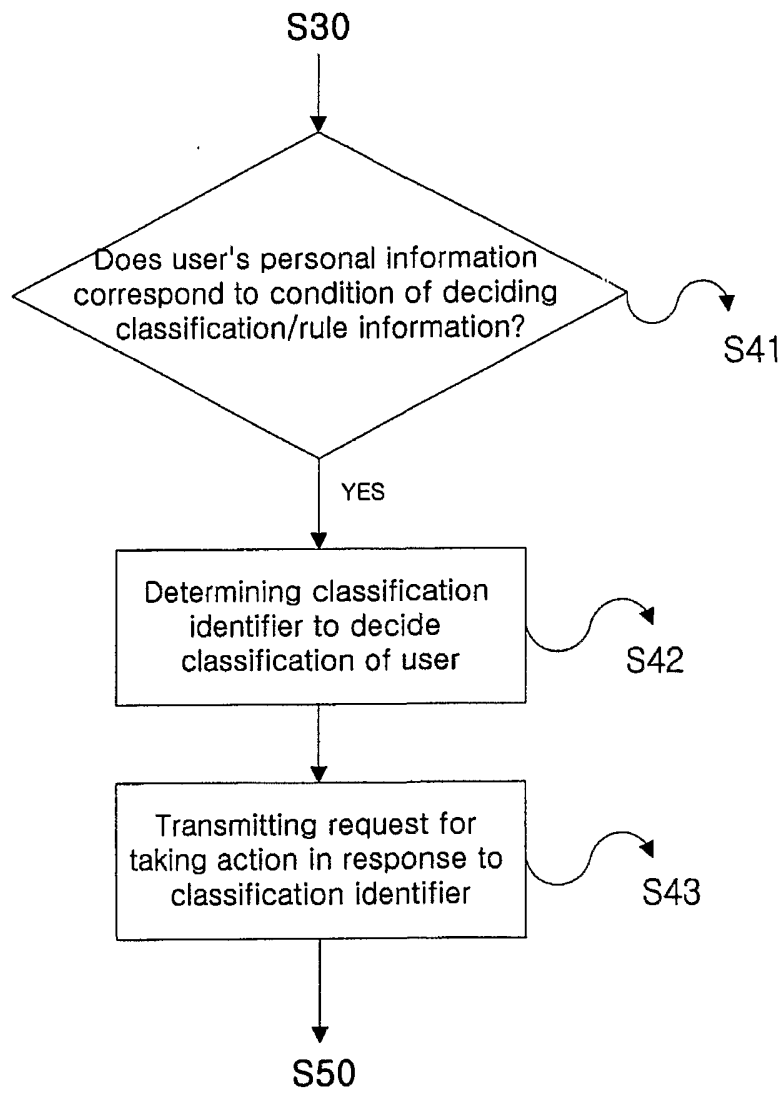taking action in response to
classification identifier   S43

S50

Fig. 3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR02/01262

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)
IPC G06F 17/60

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

Korean Patents and applications for inventions since 1975
Korean Utility models and applications for Utility models since 1975

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR 2000-0072653 A(JOYDOTCOM CORP.) 05 DECEMBER 2000 see the abstract and the claim 1	1 - 4
P , Y	KR 2002-0043404 A(HANA BANK CORP.) 10 JUNE 2002 see the whole document	1 - 4
P , Y	KR 2001-0107282 A(ASSETWAY CORP.) 07 DECEMBER 2001 see the abstract and the claim 1	1 - 4
A	KR 2001-0025715 A(KIM , JINHYUNG) 06 APRIL 2001 see the whole document	1 - 4
A	KR 2000-0064085 A(KIM, YOUNGHO) 06 NOVEMBER 2000 see the whole document	1 - 4
A	KR 2000-0058889 A(KIM, YOUNGHO) 05 OCTOBER 2000 see the abstract	1

☐ 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 relevence
"E" earlier application or patent but published on or after the international filing date
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"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 relevence; 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 relevence; 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	Date of mailing of the international search report
27 SEPTEMBER 2002 (27.09.2002)	27 SEPTEMBER 2002 (27.09.2002)

Name and mailing address of the ISA/KR	Authorized officer
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