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(54) Title: COMPUTER SYSTEM AND METHODS FOR TRADING INFORMATION IN A NETWORKED ENVIRONMENT

(57) Abstract

The embodiments relate to methods and system which enable users, communicating with a computer over a network, to determine answers to questions. A question is entered by a user, using a facility accessible to the network, and provided to the computer. The question specifies points reflective of the worth of an answer. The question is then electronically posted to the other users. The computer receives answers to the question from some of the users and enables the user originating the question to select one or more answers. The system electronically credits at least some of the points specified in the question to one or more users who provided the selected answers.

COMPUTER SYSTEM AND METHODS FOR TRADING
INFORMATION IN A NETWORKED ENVIRONMENT

FIELD OF THE INVENTION

5   This invention relates to information and knowledge
retrieval and exchange in a computer network environment.

BACKGROUND OF THE INVENTION

The emergence of the World Wide Web ("WWW") and the
Internet as a public medium of communication has led to an
10 explosion of electronically available information. To help
Internet users identify and retrieve relevant information, a
number of full text search engines, such as Yahoo, Altavista,
Lycos, have been implemented on the WWW. However, their poor
precision and the large numbers of irrelevant documents they
15 typically identify often frustrate users. Furthermore,
search engines only search for stored data and do not provide
access to the vast intellectual resources of the network
users. Also, such conventional search engines merely search
for information, but do not provide answers to specific
20 questions of the users.

Accordingly, there is a need for technology that goes
beyond the capabilities of search engines that execute full
text keyword searches. Although many users of the WWW have
sufficient knowledge and expertise to provide precise and
25 useful information in response to a query, conventional
search systems and other conventional ways of obtaining
information (e.g., discussion forums) can not effectively
utilize the expertise of Internet users. Thus, there is a
need to develop a system that facilitates answering questions
30 posed by computer network users (e.g., Internet users) by
utilizing the collective experience and knowledge of the
network participants. This desired technology should

overcome the limitations of search engines and provide a way of connecting users to other users who are more knowledgeable in the subject of the query. Furthermore, it is desirable to motivate such knowledgeable individuals to answer questions

5 by offering a financial incentive. In other words, it is desirable to enable network users to transact knowledge for a fee.

Although Internet-based forums where questions can be raised and answered exist, there are severe limitations to

10 the existing technology. News groups can be active areas of discussion and debate, but there are no payments to users who provide information. Although services that support information exchange for a fee are known they have not been effective in using collective intelligence of on-line users

15 to determine answers to questions posed by other users. Such known services failed to create a marketplace of information and knowledge utilizing intellectual resources of the on-line community of users. Thus, there is a need for an effective on-line information marketplace supporting exchange of

20 information (as well as know-how and software) for a material reward.

SUMMARY OF THE INVENTION

The preferred embodiment is a computer system and method implementing a service for trading information and knowledge

25 among distributed users interconnected by the Internet or another communications network. The preferred service provides an incentive, remuneration and evaluation scheme for people to engage in and benefit from information and knowledge exchange using computer networks.

30

In the preferred embodiment, questions (also referred to as queries) are posed by users of the service communicating

with the computer system providing the service preferably using the Internet. The questions include user-assigned values expressed in the currency of points. Based on the subject of a question and other information the question is

5 electronically sent to potential respondents who have registered on the system. The question is also matched against a database of previous questions and answers to ascertain if the answer has already been supplied in response to another question.

10
The respondents are preferably ordinary users of the system who may have expertise in various fields. After the respondents answer the question, the user subjectively rates the answers within a predetermined time after receiving the answers. The service then credits at least some of the

15 points associated with the question to the people who provided the best answers. The point distribution mechanism is such that collusion attempts among the users are discouraged. During the question-answer interaction, the preferred service maintains anonymity of the participating

20 users unless one or both parties agree to reveal their identity.

Based on the history of prior responses and other information, the users receive a quality rating in their areas of expertise. High quality ratings may entitle a user
25 (who is an expert in a given field) to more opportunities that promise greater rewards, for example, because questions having high point value may be limited only to the respondents with high ratings. The ratings also help the person who posed the question to determine which of the

30 received answers is likely to be the correct one. Because a respondent with a higher rating is most likely more

knowledgeable in the field, his/her answer has a greater
probability of being the correct one.

For example, in a user session in accordance with the
5 service implemented by the preferred embodiment, a user first
enters a question into the system and specifies how much
he/she is willing to spend for the answer. The user may also
specify the time frame of an expected response, a quality
rating of permitted respondents and keywords that identify
the topic area to which the question pertains.
10

First, the system searches the database of questions and
answers to determine if the answer already exists. If the
answer is not found or the user is not satisfied with it, the
question is then posted so that it can be reviewed by the
15 other users who meet the requirements set forth in the
question. One or more respondents may then answer the
question at their discretion.

The originator of the question receives a list of
20 answers (as the answers are provided to the system) and the
ratings of the users who provided the answers. The person
who posed the question then selects the most useful answer or
several such answers. Most of the points associated with the
question are then transferred to the user who provided the
best answer. (If several good answers have been selected, a
25
large portion of the points is divided among the people who
provided the answers according to the indicated relative
quality of the answers). Additionally, the rating of each
person whose answer has been chosen is increased. As an
incentive for the originator of the question to identify the
30 best answer(s), a certain portion of the points associated
with the question is returned to his/her account. Another

portion of the points is transferred to the service
administrator as payment for the service.

5   The question and one or more best answers are then
stored in a question-answer database. This database stores
an archive of questions and selected answers. Preferably,
all the users of the service can review the archived
questions and answers for a fee. The database of stored
questions and answers is searched automatically whenever a
question is entered, giving priority to existing information.
10

The users of the service are preferably anonymous to
each other and can communicate with each other without
compromising anonymity. A user, however, may disclose
his/her identity to another user at his/her discretion. In
15 general, open communication among the users is encouraged.

The preferred system provides an auction mechanism for
converting money into the points employed as the currency of
the preferred service. The points can be exchanged for
20 products, services, and discounts on products. The preferred
service also provides a mechanism for compensating a user for
viewing electronic mail, advertisements (or other promotional
materials) by crediting points to the account of the user.

25   In the preferred system, user rating increases when
his/her responses are frequently selected as correct ones and
decreases with a low frequency of chosen responses. The
rating may also be effected by other factors such as user's
performance on a test. Higher ratings enhance remuneration
opportunities, reputation and access to specialized
30 promotions. Preferably, questions having higher point values
are directed to people whose rating are not lower then a
given threshold. Since higher point values could generate a

large volume of responses, a rating restriction helps
maintain a higher quality of responses for these questions.

The preferred embodiment provides a sufficiently high
level of assurance that a question will be answered due to
the framework of points and ratings. Points allow subjective
valuation and remuneration that motivate respondents to take
time to provide information, and ratings provide feedback
about the qualifications of respondents. It should be noted
that the illustrative preferred embodiment briefly discussed
above can be modified for a particular implementation as
understood by a person skilled in the art, for example, so as
to enhance user participation and to improve the quality of
responses (i.e., answers).

The preferred embodiment enables a flow of information
from those who have information to those who require it. The
invention is not limited to the preferred Internet
implementation but provides a general framework of a
computerized service where questions can be posed and
answered for an economic reward by users communicating over
networks. It can be used for recognizing and rewarding
individual contributions to a knowledge base within an
organization so as to enhance internal knowledge management.
In addition, it can be used to implement and provide economic
incentives for help desk services. It can also be used for
providing consulting and software development services by
distributed experts over the Internet or another network.
Among other applications this invention can also be employed
for an improved search engine service. Furthermore, it can
be used by companies to enhance product promotions by
providing points in exchange for user attention. Various
other aspects and applications of these system and methods

can be used to improve and develop many computerized services
as understood by persons skilled in the art.

5   The following example illustrates one instance of how
one may employ the preferred embodiment to obtain desired
information. In this specific example, a programmer learning
a new computer language needs to know how to round a decimal
value in that language. He realizes that it will take some
research, and given that no one in his company knows the
language, he decides to search the Internet for an answer.
10 Unsatisfied with the results of this search and available
documentation, he decides to enter a request into the system
of the preferred embodiment. He then chooses the topic area
related to the language of interest, estimates his cost and
decides to enter a point worth slightly less than his cost.
15 Users of the preferred service visiting that topic area, look
at his query and, because many of them are familiar with the
language and rounding a decimal value is not an overly
complicated task, the programmer who originated the question
begins to receive responses. The third response suffices for
20 his tasks and works well in his test, so he decides to choose
that response. After he makes the choice, the question is no
longer available to be answered, the question points are
split according to the distribution scheme, as discussed
above, and the rating of the third respondent is increased.

25
BRIEF DESCRIPTION OF THE DRAWINGS
     The invention will be better understood when taken in
conjunction with the following detailed description and
accompanying drawings, in which:

30   Fig. 1 illustrates the options that can be selected from
the web page of the service of the preferred embodiment.

Fig. 2 is a flowchart of user login software.

Fig. 3 is a flowchart of software for creating a new user profile or modifying the existing profile.

5

Fig. 4 is a flowchart of a sub-system for providing promotions to a user and rewarding the user with points.

Fig. 5 is a flowchart of a sub-system that supports buying and selling points.

10

Fig. 6 is a flowchart of a sub-system that supports redeeming points for products and services.

Fig. 7 is a flowchart of software that supports

15 processing questions received from users.

Fig. 7A is a flowchart of software implementing an example of a rule for increasing a question value.

20   Fig. 8 is a flowchart of software supporting choosing and rating answers.

Fig. 9 is a flowchart of software supporting providing an answer to one of the posted questions.

25

Fig. 10 is a flowchart of software supporting testing users to increase ratings.

Fig. 11 is a flowchart of software supporting proposals for larger projects.

30

Fig. 12 illustrates various functions employed as part of the service of the preferred embodiment.

Fig. 13 is a flowchart for the distribution of points.

Fig. 14 illustrates how the system adjusts user's rating.

5

Fig. 15 illustrates searching the database of questions and answers.

Figs. 16 A-H illustrate examples of screen displays, including electronic forms, that can be employed by the preferred embodiment.

10

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

In the preferred embodiment the service software is primarily resident at the computer system of the service. 15 The computer system of the service may comprise one or more computers communicating with the users of the service over a computer network. Preferably, the network is the Internet and the communication is as known in the art for Internet-based services. A user interacts with the service computer 20 usually using a personal computer such as a PC or Macintosh, or another user device such as an Internet appliance, as known in the art. Such known computer or device of a user is referred to as "local computer". Such local computers may also be connected into an intra-net network which, for example, is a network internal to a company, as known in the 25 art. In this case, a user accesses the service over the local network which in turn provides external communication with the service computer system, as known in the art. Alternatively, the preferred embodiment may utilize other types of networks, as known in the art, without using the 30 Internet.

The service computer system includes databases, which
are discussed subsequently. The databases may reside on the
same computer or on different computers depending on a
particular implementation. The computer (or computers) of

5 the system are selected depending on the processing power
required by the service, as understood by a person skilled in
the art and can, for example, be a PC, workstation,
multiprocessor, or another computer with sufficient
processing and storage capabilities for a given
implementation. The system computer runs an operating system

10 selected as known in the art, e.g., Unix or Windows NT.

Fig. 1 illustrates the options that may be selected from
the main web page of the preferred service. It is not
necessary to locate all the options on the same web page (or

15 the same display). Some of the options can be accessed
through other pages (or displays). Also, other options can
be offered, such as "help" (as known in the art), which is
not illustrated in Fig. 1.

20 In one preferred embodiment, the main web page contains
a main menu 100 which includes login procedure 101, an option
of creating or modifying user profiles 102, an option of
earning points by viewing promotions 103, an option of buying
or selling points 104, an option of spending points for goods
and services 105, an option of posting or modifying questions

25 106, an option of reviewing and rating the answers 107, an
option of answering questions 108, an option of earning
points and ratings including taking exams 109, a capability
to send a request for proposal 110, a payment for the points
capability 111, and binding arbitration 112. These functions

30 are discussed in further details subsequently. It should be
noted that payment 110 preferably relates to the use of a
credit or debit card in a secure way as known in the art so

as to buy the points. The binding arbitration 112 relates to
the use of service administration to resolve disputes among
the users of the service. These functions are not
illustrated in separate drawings. Also, as noted, all these
5 options do not need to appear as part of the main menu and
can be accessed in other ways.

    Fig. 2 is a flowchart of the preferred software
supporting the login procedure. At block 210 a user selects
the login option on the web page of this service.
10
Thereafter, the system determines whether a "cookie"
supporting the preferred service is stored in the memory of a
local computer of the user attempting to login. As noted,
usually (but not necessarily), the local computer is an
ordinary personal computer as customarily used at home or
15 office such as a PC or Macintosh. It can, however, be any
computer including an Internet appliance or a server. As
known in the art, a cookie is a locally stored file, e.g., a
file stored on the hard drive of the local computer of the
user. This cookie file is associated with the preferred
20 service provided over Internet and can interact with the
browser of the local computer. This cookie file employed by
the service has been configured, transmitted, and stored in a
conventional way as known in the art relating to Internet
services. Preferably it includes information about the user
including his/her user ID and password.
25

    If the cookie is stored on the computer of the user (see
215), control flow is transferred to blocks 220 and 225 where
the user ID and password are derived from the cookie and
provided to the system computer by a secure link, such as a
30 secure socket layer protocol available from Netscape
Communications or using another technology known in the art

for secure transmission of information. The entire cookie
file is also provided to the system over the secure network.

5   Alternatively, if at block 215 it is determined that a
cookie supporting the preferred service has not been
previously stored at the local computer, a user is prompted
to enter his/her user name and password as illustrated at
block 240. Thereafter, the password and user ID information
is provided to the system computer (see 230) using a secure
link, as known in the art and discussed above.
10

        At the system computer, the user ID and password,
received over the secure link, are authenticated by searching
a database of user profiles maintained by the service. See
block 235. Such databases are known in the art. See block
15 250. If the match for this user profile has not been found
in the database, i.e., a record for the user with this user
ID and password does not exist in the database, the system
computer sends an appropriate message to the user and
displays another prompt asking the user to enter user ID and
20 password at block 240. Otherwise, if the system has located
the user profile in the database and therefore confirmed that
this is a valid user (see block 260), the system then
accesses user profile database to prepare a custom screen
configured in accordance with this user's preferences and
then presents this customized screen. See 270 and 280.
25

        The preferences concerning user's custom page
configuration are stored in the user profile database. The
page includes at least some of the selections identified in
connection with Fig. 1. The page may contain interactive
30 forms, menus, graphics and other features as known in the art
and conventionally used, for example, in Internet-based
services.

Returning to block 240, instead of entering a user name and password, a user may interactively indicate that he/she is a new user. In this case, control flow is transferred to block 245 where the new user profile is created as discussed in greater detail in connection with Fig. 3.

Fig. 3 illustrates the preferred computer processing for creating a profile for a new user and for modifying an existing profile. At block 305 the system determines, based on an interactive input from the user, whether the user wants to create a new profile or to modify an existing one. If a new profile is to be created for a new user, control flow is transferred to block 310, where the user interactively provides to the system his/her address information, e.g., the billing address. Subsequently, at block 315 the user interactively specifies his/her user name and password. This interactive input, as well as various other interactive inputs discussed herein, is performed using an electronic interactive form as known in the computer art preferably relating to Internet applications.

Next, at block 320 a user is provided with a listing of areas of expertise from which he/she interactively selects his/her areas of expertise, if any. Next, at block 325 the user may enter additional key words that further define his/her skills and expertise. At the following block 330 the user optionally supplies his/her resume in an electronic form compatible with the software of the preferred service, e.g., preferably in the HTML format. The user may type the resume into an on-line form provided by the service or he/she may supply an already prepared electronic resume. Also, as illustrated in block 335, if the user has his/her own web page, the user may specify its address (URL) so as to create a link to his/her page. At block 340 the user enters

appropriate information regarding billing, as known in the
art, preferably including a credit or debit card number.

At block 345 the billing information provided to the
system is verified preferably by electronically contacting
the services customarily used for that purpose, for example,
by contacting credit card provider to validate the indicated
credit card information. At block 350 the information
entered by the user is looked up in the user profile database
and if a record for this user exists, at 360 the record is
updated according to the entered information. Otherwise, at
365 a new database record for the user is created. At block
370, user's account maintained by the service is
electronically credited with initial points. These points
may simply be given to the user as an initiation incentive or
they can be paid by charging user's credit card. If at 305
the user indicates that there is an existing profile that
needs to be modified, at 375 the user provides his/her login
information and the system retrieves an existing profile of
this user stored in the database (see 380). Thereafter, the
user can modify his/her profile in the same manner as
discussed above in connection with creating a new profile.
Accordingly, the flow is transferred to block 310.

Fig. 4 illustrates a subsystem that enables a user of
the preferred service to earn points for viewing promotions
provided by the service. When a user selects this option,
he/she is presented with an electronic catalog of products
and companies. Such electronic catalogs are known in the
art, for example, in Internet-related electronic commerce
applications. At 405, the user selects a product category or
a company of interest and at 407 the user selects whether to
view advertisement pages or to receive promotional e-mail.
If the advertisement page option is selected, at 410 the user

views advertisement pages supplied by the chosen company or
relating to the selected product or category of products. In
addition, a user can view product advertisements by clicking
on a banner ad preferably provided on the screen as it is

5 customarily done on web pages (see 415). At 420, after the
advertisement(s) have been reviewed, the user chooses whether
to purchase a product or to receive points for viewing the
advertisements.

10   If the points option is selected, the system verifies
user ID and password at 430 and then credits a certain amount
of points to the account of the user (see 435). The number
of points reflects the amount of advertisement reviewed by
the user. Finally, at 440 the system subtracts the points
earned by the user from the points stored in connection with

15 the company whose advertisements have been reviewed. If a
user has reviewed advertisements from several companies, a
pro rata share of points are subtracted from the accounts of
each such company. In the event that a user decides to
purchase an advertised product, control flow is transferred

20 to 445 where a user orders the product. Electronically
ordering a product is known in the art, for example, in
shopping applications using the Internet. In addition, as a
reward for the purchase, the distributor of the product may
award a certain number of points to the user. In this case
flow of control returns to 430 where the user receives the

25 points and the points are then subtracted from the total
number of points allocated to the company.

    As noted, a user can elect to receive promotional e-
mail. By responding to it a user earns points that are

30 credited to his/her account. If at 407 the user chooses the
promotional e-mail option, control is transferred to 450
where the user e-mail information is obtained from the user

profile. Then, at 455, the promotional e-mail is sent to the
user. At 460, upon receiving this e-mail, the user returns
an acknowledgment and preferably a reply. For example, the
e-mail can be a promotional questionnaire and the reply can
5 be the user's answer. The system of the service verifies
user's reply at 465 and credits the appropriate number of
points associated with the e-mail to the user.

Fig. 5 is a flowchart illustrating how a user buys or
sells points used as currency of the preferred service. At
10 500, the user chooses whether he/she is buying or selling the
points. If the user is buying the points, control is
transferred to 505 where the user indicates whether he/she
wants to purchase the points on the auction or from the
system administrator. If the auction option is chosen (see
15 510), the user purchases one of the offers posted on the
auction or posts a bid with his/her desired offer of a
purchase including the quantity and price information.
Otherwise, the user can purchase the points from the service
administrator for a fixed price (see 515).

20
Similarly, in selling the points, the user chooses (see
520) whether to sell the points for a fixed price to the
service administrator (see 530) or to sell them at the
auction (see 525). At the auction, the user may either sell
the points in accordance with an existing offer to buy or may
25 post an offer to sell the points. After the points have been
sold, the payment is credited to the user, e.g., to his/her
credit card.

An example of electronic auction entries comprising
30 offers to buy ("bids") and offers to sell ("offers") is
provided below.

Auction Table

Bid	Offer
10,000 Points for $100	
50 points for $1	100 points for $3
Quantity and Price needed	Quantity and Price offered

All users as well as the service administrator can
electronically post entries to the Auction Table. The
auction may also allow negotiations between the users. The
service administrator can act as an intermediary in the
negotiations so that inter-user anonymity is preserved. As
noted, payment for the transactions can be done by credit or
debit cards.

"Auction price" (A_p) is determined by extrapolating the
price where the quantity demanded and offered is equal. In
effect, the market determines the A_p. The auction price
(A_p) is used as a benchmark for determining the fixed price
(F_p) offered by the service administrator.

The administrator sells for the price above A_p and buys
for the price below A_p, as illustrated below:

$$F_p \text{ sell} = A_p \, 1.x; \text{ where } x > 0$$
$$F_p \text{ buy} = A_p \, (1-x); \text{ where } 1 > x > 0$$

As apparent from the above formula, x accounts for a
commission charged by the service. Other methods of
determining the fixed price can be used as understood by a
person skilled in the art. If there is no prevailing A_p, the
administrator provides one.

Fig. 6 is a flowchart of software that enables a user to
redeem points. As mentioned before, a user has access to an
electronic catalog of products and services that can be

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purchased for the points earned as a result of using the
preferred service. Such on-line catalogs are known in the
art, e.g., in connection with electronic commerce on the
Internet. At 610 a user selects from the electronic catalog
5   a desired product or service that he/she wants to purchase
for the points received in connection with the preferred
service. Next, at 615, the system verifies the user ID and
password, which the user must enter again so as to assure
that the proper individual is redeeming the points.

10   Thereafter, at 620 the user specifies to the system the
number of points that he/she is willing to redeem for the
desired product or service. Preferably, the number of points
corresponds to the price assigned by the vendor to the
selected product or service. At 625 the system subtracts the
15 specified number of the points from the electronic account of
the user and enters these points in an electronic escrow
account associated with this transaction. The escrow account
points are then electronically provided to the merchant along
with the identification of the user. At 635 the merchant
20 verifies that the number of points matches the point value
assigned to the requested product or service and at 650, if
the value is correct, ships the product to the user or
provides an authorization for the user to receive the product
or service. If the number of points specified by the user is
incorrect, an appropriate message is sent to the user, the
25
transaction is canceled, and the points originally authorized
and placed in escrow are returned to the user. If the sale
takes place, at 640 the merchant confirms that the
transaction has been completed and requests the points
corresponding to the product or services. At 645 merchant's
30 account is incremented by the points held in escrow.

Fig. 7 illustrates a flowchart of software for receiving and processing users' questions. After a user has been authenticated based on his/her user ID and password as discussed in connection with Fig. 2, the user may enter or

5 modify questions. If, as indicated at 710, a new question is being entered, control is transferred to block 715, where the user is provided with a capability to specify attributes of the question. The attributes preferably include several fields. One of them is the text of the question itself. Another field is expiration date of the question, i.e., the

10 deadline after which the question ceases to be available for answering (i.e., it no longer appears in the list of questions that can be answered). The preferred implementation includes a default expiration date, e.g., two weeks from the date of the question. A user, however, can

15 extend the deadline for a fee which would be electronically deducted from the points in the account of the user. This fee can be adjusted based on administrator's incentives policies. The user also specifies, as another attribute, the point value allocated to this question. In addition, the

20 user may select a rating filter which is a threshold value of the expertise level which is in the minimum required for answering this question. The filter may also be based on specific key words that should be present in the profiles of the users who will receive the question. The maximum number of answers can also be specified as one of the attributes.

25 In other words, after a specified number of answers, the question automatically expires and is not available to be answered by subsequent respondents for payment. Other attributes can also be introduced in other implementations.

30   Next, the system deducts the number of points allocated to the answer from the account of the user originating the question. See 720. If the user does not have the required

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number of points on his/her account, the user is notified
accordingly by a message generated by the system and control
is transferred back to 715. As illustrated at 725, after the
question, including the reward amount and the other
5 attributes, have been specified, the system searches its
database of questions and answers for the answer to the same
or similar question.

As noted, the system does not discard questions and
selected answers. This information is stored in the
10 question-answer database maintained by the system. The
database is organized based on the subjects of the questions
and further refined using key words. Also, the identity of
the originator of each question and the respondents whose
answers had been chosen are stored in connection with the
15 question but not publically available. This question-answer
information is stored in the database in a conventional way
as known in the art.

The search for a preexisting answer can be performed
20 using the key words specified as one of the attributes of the
question or as a full text search. As noted, preferably, the
stored questions and answers are searched before soliciting
new answers. Therefore, only if the answer was not found in
the database or the user indicated that he/she is not
satisfied with such an existing answer, the question is
25
posted for others to answer. Other embodiments of matching
new questions to existing stored questions and answers can be
based on various techniques known in computer art, other than
the key words and full text searching.

30   If at 735 the existing answers have been chosen from the
database, control is transferred to 736 where the system
distributes the points to both the originator of the stored

question and the person who provided the stored answer based
on a ratio selected for a specific implementation. Also,
some points may be credited to the service administrator as a
fee. In some implementations the points are awarded only to
5 the person who provided the answer. Then the ratings of the
persons associated with the preexisting question and answer
are increased. See 737. In some implementations only the
rating of the person who provided the answer is increased.
It should be noted that the system may identify several
existing question-answer pairs, and the user may choose more
10
than one answer. At 738, the list of answers is adjusted by
retaining only the selected answers.

If the existing stored answer has not been chosen,
control is transferred to 740. As indicated at 740, a user
15 can electronically specify to the system a bidding rule used
in soliciting the answers. That is, a user can specify how
the pont value of a question should change (usually increase)
with the passage of time. One example of such a bidding rule
is illustrated in Fig. 7A. As shown in 7A, a user specifies
20 the price as one of the attributes of the question. Then the
user can specify an increment used to increase the price if
no answers or no satisfactory answers are received within a
given time interval. As shown in Fig. 7A, first, the user
indicates the current price (see 780). The maximum price that
the user is willing to pay for the answer and the amount of
25
the increment are specified and stored as well (see 781).
Then, the user specifies the time interval after which the
price would be incremented in accordance with the specified
increment value as shown in 782. At 783 the system increases
the value that the user has to pay for the answer as time
30 elapses. Preferably, after each such increment in the answer
value, an appropriate amount is subtracted from the account
of the user. And, if no additional points are available on

the account, the user is notified accordingly. Finally at
784 the new point value is posted to all the potential
respondents.

5   At 750 the system posts the question to the relevant
users and control returns to the main menu. The relevant
users are the users who satisfy the requirements specified in
the attributes of the question as discussed above. As noted,
these attributes are used for filtering so as to identify the
users to whom the question can be posted. If the question
10 has already been posted but the user, who originated the
question, wants to modify it, control is transferred from 710
to 755. At this point, the user can alter the attributes
associated with the question as well as the bidding rule.
However, preferably, the user is not allowed to decrement the
15 initial point value of the question.

     Fig. 8 illustrates the steps employed in choosing and
rating answers. At 800 a user is presented with a list of
answers to his/her inquiry. This list may be preprocessed by
20 the system based on various criteria specified by the user.
For example, answers from persons with ratings lower than a
specified threshold may be discarded. Also, answers
requesting point worth higher than specified in the question
may be discarded. The answers can also be filtered based on
other characteristics such as the date of the answer or key
25 words.

     A user selects some answers from the list and ignores
others. If the answer is ignored as shown by 804 it is
removed from the list of answers and an optional courtesy
30 message may be sent to such a respondent indicating that
his/her answer has not been chosen. See 841. For the
answers that have been picked by the user, as shown by 802,

the user may specify to the system the relative importance of
each answer if more than one answer has been chosen. If the
user does not specify the relative importance, all the
answers are deemed equally important. (In these cases the
5 available points are divided equally between the people whose
answers have been chosen). In addition, as shown at 803, if
the user desires, he/she can send messages to the respondents
by internal system mail. Such a message may be used for
clarification of the answer and may also be used to negotiate
the point value of the answer if a higher point value is
10 requested in the answer.

    After the best one or more answers have been selected at
802, the system at 821 distributes the points to the
respondents who provided the chosen answer(s) as discussed
15 subsequently in connection with Fig. 13. The system also
adjusts the rating of the individuals whose answers were
chosen as illustrated at 822 and discussed in more detail in
connection with Fig. 14. Thereafter, as illustrated at 823,
the system deletes all the answers from the answer list
20 except for the top-rated answers. At 824, a message is sent
to each respondent whose answer was chosen.

    The originator of the question retains the capability to
communicate with the respondents who provided the best
answers. By deleting the remaining answers, the system
25 encourages users to pick out the best answers. These answers
are stored in the question-answer database. As discussed
before, in the preferred embodiment, question-answer records,
stored in the question-answer database, are retrieved when
the same or similar questions are asked by other users. If a
30 question and answer(s) stored in the database are reused, the
points are awarded not only to the user who provided the
answer(s), but also to the originator of the questions. In

other embodiments, only the person who provided the answer
may be rewarded. In addition, the question originator can
support updates to answers so that people who provided the
best answers are encouraged to keep them current. This may
5 be done by periodically paying with points for the updates.

The communication link between the user and the
respondents who provided the best answers enables the system
to promote building of relationships between the users of the
service. Such a communication is implemented as an internal
10 system mail as known in the art. It should also be noted that
the respondents whose answers have been ignored, see 804, are
offered by internal system mail to review the chosen answers
for a fee, i.e., points. In other embodiments, this fee may
be waived so that all participants can verify that the best
15 answer(s) were chosen.

Fig. 9 is a flowchart of software supporting a user who
provides an answer to one of the posted questions. At 900
the user gains access to the list of pending questions. The
20 list has preferably been already filtered based on user's
preferences and/or qualifications so as to eliminate the
questions irrelevant to the given user. Such a filtering may
involve removing the questions valued at fewer points than
the user agreed to consider and may also include presenting
to the user only to the questions in certain categories. The
25 system also filters out the questions which require a higher
rating than the rating of this user. The filtering (901) is
performed by comparing the preferences and qualifications
stored as part of the user profile with the attributes of the
question. Also, in some embodiments users may be
30 specifically notified that a potentially worthwhile question
became available. Such a question is typically closely
related to the stored user preferences.

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The user may ignore any or all of the questions as shown at 904. The question that has been ignored by a user is no longer accessible to that user. The user is also provided with a capability to communicate with the originator of a
5 question in order, for example, to clarify the question or to negotiate the point value of the answer. See 903. Preferably, this is accomplished using internal system mail capabilities as known in the art.

As illustrated at 904, the user may answer one or more
10 questions by typing text into electronically provided form. See 905. The respondent may also specify keywords associated with the answer as shown at 906. In some implementations, such keywords may be generated automatically by the system as known in the art. Thereafter, the answer is included in the
15 list of answers to the questions and made available to the originator of the question.

Fig. 10 illustrates software supporting increasing the rating of users who wish to be considered as experts so that
20 they receive questions directed to users with higher ratings. At 1002 an authenticated user specifies his/her area of expertise or requests a test in a certain area so as to build up the rating. In addition, an administrator can supply other questions such as requiring the user to locate a specific web link or to determine the answer to a common
25 problem. Also, to boost ratings, a user may provide to the administrator his/her recent achievements, e.g., publications, in the field.

If the testing option is selected, at 1003 the system
30 searches its database of testing materials and displays to the user a list of available tests in the field specified by the user, including the cost of taking the tests in points or

dollars and a potential improvement of the rating that may be
achieved by a specified result in each test. Some test fees
may be waived by the administrator to encourage users to
establish high ratings. In response, the user may

5 interactively select the desired test and, in this case, at
1004 the system deducts a certain amount of points from the
account of the user as a fee for taking the selected test.
Thereafter, at 1005, the user is tested and his/her
interactive answers are analyzed by the system. Based on the
test results, the system adjusts the user's rating in

10 accordance with his/her performance on the test. See 1006.
If the user's qualifications rating has been changed, the
user profile stored in the profile database is also adjusted,
as shown at 1007, so as to reflect the new rating. The
examination score is also stored as part of the profile.

15

In addition, the user can modify other portions of the
profile, for example, he/she can interactively specify
additional areas of interest or expertise and support the
claim of being an expert by examination results or other

20 data. Further, as shown at 1008, if the examination results
were exceptionally good, to encourage such users to actively
participate in the service, the user receives a certain
number of bonus points. Finally, at 1009 the updated profile
including user's examination results and his/her new rating
is displayed to the user.

25

The service of the preferred embodiment can also be
employed for locating experts or consultants for tasks that
involve more work than answering questions as discussed
previously. A user of the service can define a proposal for

30 a research or consulting assignment and then use the
preferred service to locate an expert or consultant and
negotiate a fee for the task. Such more involved proposals

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are not posted together with questions, but are posted
separately to selected experts. Such experts are chosen by
the system by searching the database of user profiles on the
basis of the requirements of the proposal and qualifications
5 of experts.

More specifically as illustrated in Figure 11, at 1101
the user selects the option of providing a proposal and
describes the task for which he/she needs an expert. As
shown at 1102, the user then specifies the selection
10 criteria, preferably, by identifying qualifications,
availability and costs of an expert that the user desires to
retain for the project. Next, at 1103, based on the user's
input, the system searches its database of user profiles and
identifies the experts which most closely meet the user's
15 requirements by matching, within a given degree of accuracy,
the user's requirements to the stored profiles of experts
specifying their qualifications and preferences. Such a
search can be performed using known techniques. Thereafter
at 1104, the system sends the proposal to the identified
20 experts.

The selected experts receive and review the proposal
and, if they are interested in the job, electronically
respond to the originator of the proposal. The preferred
service also charges the experts a fee in connection with
25 proposals for such larger research or consulting tasks. (In
other embodiments, this fee may be waived). The value of
this fee is also provided to a potential respondent along
with the proposal as illustrated at 1105. If a given expert
chooses not to respond (see 1106), an appropriate
30 notification is provided to the originator of the proposal as
shown by 1107. Otherwise, if an expert responds to the
proposal, the points are deducted from the account of the

expert as a fee for participation as illustrated at 1108.
Then the originator of the question receives expert's
response at 1109. The system may also supplement the
response with historical data regarding the responding

5 expert. This data is stored in the user profile database.
Thereafter, the user chooses an appropriate expert and the
parties negotiate a contract for the expert to perform the
task. To facilitate the contractual process, personnel of
the preferred service may act as arbitrators and then receive
an appropriate commission.

10

Figure 12 illustrates administrative functions supported
by the system of the preferred embodiment. One of these
functions is monitoring the quality of the answers. (1201)
This can be accomplished by periodically reviewing the

15 answers, and if the answers are inadequate, changing
parameters of the service so as to improve quality.

Point allocation 1202 and rating mechanism 1203 are
discussed in further detail subsequently. Another function

20 performed by the system is, as discussed before, matching
questions and answers. The system stores the history of
questions and best answers in the question-answer database.
When a new question is issued, this database is searched in
order to locate an appropriate answer if a similar question
had previously existed. A variety of techniques known to

25 persons skilled in the art can be employed to perform such a
search, including an appropriate keyword or full text search.

As shown by 1205, the system provides facilities for

30 user communications, e.g., internal system mail can be sent
among the users. For example, users may communicate so as to
clarify questions and negotiate point values of the answers.

The communication provided by the system is anonymous i.e., identities of users are not revealed in e-mails. Only the user profile database stores true identities of the participants.

As shown by 1206, the system also provides arbitration so as to facilitate an agreement on the value of a task. Such an arbitration is particularly useful for larger tasks that require a request for a proposal as discussed above. As shown by 1207, the system also stores and manages profiles of its users in the user profile database. This profile management includes storing account histories and point allocations for the users, as well as user's preferences and expertise in various areas.

Fig. 13 illustrates how the system allocates the points payable in connection with an answered question. The preferred distribution scheme splits the question point value three ways. The points are divided between (1) the person(s) who answered the question; (2) the service administrator as a fee, and (3) the originator of the question. The weights associated with the split are established by the service administrator. Preferably, the greatest share of the points is paid to the selected respondent(s) and the administrator's share is the smallest. In some embodiments the service administrator may receive no fee. The points credited back to the person who asked the question serve as an incentive for informing the service of the best answer(s).

This distribution scheme can be adjusted, for example, so that the points paid back to the originator of the question can be increased to provide a higher incentive at the expense of lowering the service administrator's fee. If no one answers a question, depending on the trade-offs of a

given embodiment, the points can be credited back to the user
less the service fee or can be divided equally among all the
participants or handled otherwise based on the decision of
the service administrator.

5

As illustrated in Fig. 13, at 1301 the system ascertains
the point value and based on the stored distribution scheme
(1302), increments the accounts of the users whose answers
were picked (see 1304), credits the points to the account of
the originator of the question (see 1303) and also credits
10
the points to the service administrator's account (see 1305).
As noted, the exact allocation depends on the trade-offs of a
particular embodiment as understood by a person skilled in
the art. If more than one answer was selected, the points
are divided between all the chosen respondents preferably so
15 that people who provided better answers receive more points.

Fig. 14 illustrates an adjustment of users' ratings. In
general, questions with high point values or more difficult
questions have a greater positive impact on the rating than
20 questions with lower point value. Ratings of respondents can
be determined in various ways depending on the trade-offs of
a specific embodiment and the factors not mentioned here may
be used in other embodiments. For example, the frequency of
responses in addition to the point value associated with them
may be used. Or, to encourage users to answer questions,
25
some questions may be branded as rating enhancing. That is,
an answer to such a question has a disproportionally higher
effect on the rating relative to the question point value.

The factors effecting the user rating are illustrates in
30 Fig. 14. At 1401, if responses of a given user are not
chosen over a period of time, the rating of this user

decreases. In other words, a user cannot be inactive over a relatively long period of time and still have a good rating.

As illustrates in 1402, the ratings increase if user's answer is picked as one of the best answers. The increase in rating is proportional to the point value of the question asked. The increase may also depend on the importance attached to the question by the service administrator.

As discussed before, if a user took an examination to improve ratings, the difficulty level of the exam is taken into account in the rating process. See 1403. As shown at 1404, if previous answers and questions of a user are frequently chosen, the rating is also improved.

Fig. 15 illustrates searching of the database of questions and answers. Users may perform such a searching for a fee. As shown at 1501, a new question is searched against the database records using search technology known in the art. It should be noted that there is a concrete incentive for people to enter keywords and metadata in connection with questions and answers, because they are rewarded when a stored answer or question is located and chosen. When the answer to a question having a low point value is found in the database in connection with a previous question, having a higher point value, an intermediate stage of negotiation may be needed as illustrated as 1502 to provide proper compensation. Alternatively, the system may be set up without allowing this addition negotiation. At 1503 the system displays the search results and at 1504 the user chooses the desired answer(s), if any.

Figs. 16A-H illustrate an example of sample electronic forms that may be used by the service. Different forms can

also be employed as understood by a person skilled in the
art. The forms also show illustrative information. Fig. 16A
shows a sample main menu form and Fig. 16B shows a sample
form that enables a user to enter a question. A form for
modifying a question is similar to the form shown in 16B.
Fig. 16C is an example of a display of a list of questions
provided to a user. Fig. 16D shows a sample electronic form
used for answering a question. Fig. 16E shows a sample
electronic form listing active questions of a user. Fig. 16F
is a sample electronic form for received answers and Fig. 16G
shows a sample electronic form for sending a message. Fig
16H shows a sample display of a list of messages.

In addition to the rating and rewarding techniques
discussed above for the preferred service, various other
techniques may be employed to encourage the user to use the
service effectively.

As noted, the ratings can be based on consistent useful
contributions made by users. Consistency is encouraged by
decreasing ratings with the passage of time. Thus, to
maintain a high rating, a user should consistently provide
the answers that are picked as the best ones. Also, a higher
quality of responses can be maintained if user's rating
decreases when his/her answer is not picked, particularly if
the chosen answer is provided by another user with a lower
rating. Conversely, user's rating should increase more if
his/her answer is chosen over an answer of another user with
a higher rating.

An originator of the question may be provided with a
capability to enter comments when choosing an answer. Such
comments can also be used to supplement ratings because they

may help other users to better discriminate between answer choices on the basis of the ability of the respondents.

Ratings may be expressed as numerical figures or as
5 qualitative descriptions. For example, there can be five levels of a qualitative user rating: wizard, expert, knowledgeable, layman, oblivious. Percentiles can be used for numerical values. So a rating of 50 percentile means that 50% of users are better than this user. In general, the service should aim to normalize the rating, so as to enable a
10 comparison between users.

To discourage users from making random guesses, an implementation may impose a cost on answering a question. This cost can be a minimal point deduction which is refunded
15 if the answer is selected. The originator of the question may specify this cost as an optional attribute to a question, to make sure that only serious respondents contribute answers.

20   When viewing the list of questions available to be answered, a user may notice a question that he/she would like answered as well. An implementation may allow that user to add points to the question's point worth, thereby making the question more valuable to be answered. This user would then receive answers to the question as well, and respondents to
25 such questions will have a greater incentive to provide good answers.

An implementation may impose a minimum price for asking a question. This may be needed so as to keep the point worth
30 of the questions at a level where it is worthwhile for users to answer them. This minimum price should not be more than the number of points the implementation chooses to give new

users, so as to enable new users to use their introductory
points to ask at least one question. Also, an implementation
may choose not to award these introductory points.

5   The present invention is not to be limited in scope by
the specific embodiments described herein. Indeed,
modifications of the invention in addition to those described
herein will become apparent to those skilled in the art from
the foregoing description and accompanying figures.
10   Doubtless, numerous other embodiments can be conceived that
would not depart from the teaching of the present invention,
whose scope is defined by the following claims.

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Claims:

1.   A method for providing a service to users
communicating with a computer over a network, which enables
5 the users to determine answers to questions, comprising:
        (a)   receiving a question at the computer, wherein
the question has been entered by a user using a facility
accessible to the network and the question specifies a number
of points reflective of the worth of an answer;
        (b)   electronically posting the question to the
10 users;
        (c)   electronically receiving a plurality of
answers to the question from a plurality of users;
        (d)   enabling the user originating the question to
select one or more preferred answers from the plurality of
15 answers; and
        (e)   electronically crediting at least some of the
points specified in the the question to one or more users who
provided the one or more preferred answers.

20   2.   The method of claim 1 further comprising
electronically crediting some of the points specified in the
question to an account of the user originating the question.

3.   The method of claim 1 further comprising
electronically crediting some of the points specified in the
25
question to service administrator's account as a fee for
using the service.

4.   The method of claim 1 further comprising sending an
electronic message from a user providing an answer to the
30 user originating the question.

5.   The method of claim 1 further comprising electronically deleting the plurality of answers except for the selected one or more preferred answers.

6.   The method of claim 5 further comprising maintaining an electronic communication capability between the user originating the question and users whose answers have not been deleted.

7.   The method of claim 1 further comprising electronically enabling the user originating the question to specify keywords associated with the question.

8.   The method of claim 1 wherein electronically posting the question further comprises electronically enabling the user originating the question to specify qualification rating of desired respondents to the question.

9.   The method of claim 1 wherein electronically posting further comprises posting the question only to users whose profile, stored in a profile database, substantially matches attributes specified in the question.

10.   The method of claim 1 further comprising electronically increasing qualification rating of one or more users whose answers have been selected as the one or more preferred answers.

11.   The method of claim 1 further comprising storing the question and the selected one or more preferred answers in a database of questions and answers.

12. The method of claim 1 further comprising searching a database of questions and answers to ascertain whether the database already contains an answer to the question, and if so, not performing steps (b)-(e) and electronically crediting
5 at least some of the points associated with the question to a user whose answer was found in the database.

13. The method of claim 1 further comprising exchanging points stored on a user account for a product or a service selected by the user.
10

14. The method of claim 1 further comprising electronically enabling a user to purchase points from an auction maintained by the service.

15   15. The method of claim 1 further comprising electronically enabling a user to purchase points from an administrator of the service.

16. The method of claim 1 further comprising
20 electronically crediting points to an account of a user in exchange for viewing advertisements by the user.

17. The method of claim 1 further comprising providing a user with an interactive test, stored in electronic form, and electronically increasing a rating of the user based on
25 the user performance on the test.

18. The method of claim 1 further comprising electronically reducing a rating of a user whose answers are infrequently chosen.
30

19. The method of claim 1 further comprising electronically decreasing a rating of a user who does not provide answers over a predetermined interval of time.

5   20. The method of claim 1 further comprising electronically enabling a user to specify a bidding rule in connection with a question.

21. The method of claim 20 wherein the bidding rule is such that a value of the answer increases with elapsed time.
10

22. The method of claim 1 wherein the service does not accept answers after the question has been posted for a predetermined interval of time.

15   23. The method of claim 1 wherein the question is a request for a proposal and the answers are responses to the request for a proposal.

24. The method of claim 23 wherein points are
20 subtracted from the account of a user responding to the request for a proposal and no points are credited to the account of the user.

25. The method of claim 1 wherein the network is the Internet.
25

26. A computer system for assisting users communicating from local computers with the system over a network to ascertain answers to questions comprising:
          (a) storage of data representing qualification
30 ratings of at least some of the users;
          (b) a historical question and answer database for storing questions and at least one answer for each question;

(c) software for enabling a user originating a question to post the question to other users, wherein the question specifies a point value;

(d) software for enabling the users to provide answers to the question; and

(e) software for enabling the user originating the question to review the answers and to select at least some of the answers as best answers.

27. The system of claim 26 wherein the network is the Internet.

28. The system of claim 26 wherein the users are anonymous to each other.

29. The system of claim 26 further comprising software for electronically crediting at least a portion of the point value specified in the question to an account of the user originating the question.

30. The system of claim 26 further comprising software for electronically crediting a portion of the point value associated with the question to one or more users who provided the best answers.

31. The system of claim 26 further comprising software for sending an electronic message from a user to the user originating the question.

32. The system of claim 26 further comprising software for electronically deleting the answers except for the best answers.

33. The system of claim 26 further comprising software for maintaining an electronic communication between the user originating the question and the users whose answers have not been deleted.

5

34. The system of claim 26 further comprising software for electronically enabling the user originating the question to specify keywords associated with the question.

10

35. The system of claim 26 further comprising software for electronically enabling the user originating the question to specify qualification rating of respondents to the question.

36. The system of claim 26 further comprising software

15 for providing the question only to users whose profile, stored in a profile database, substantially matches attributes specified in the question.

37. The system of claim 26 further comprising software

20 for electronically increasing qualification rating of one or more users whose answers have been selected as the best answers.

38. The system of claim 26 further comprising software for storing the question and the selected one or more best

25 answers in a database of questions and answers.

39. The system of claim 26 further comprising software for searching a database of questions and answers to ascertain where the database already contains a desired

30 answer to the question, and electronically crediting at least some of the point value associated with the question to a user whose answer was found in the database.

40. The system of claim 26 further comprising software for exchanging points stored on a user account for a product or a service selected by the user.

5

41. The system of claim 26 further comprising software for electronically enabling the users to purchase points from an auction maintained by the service.

42. The system of claim 26 further comprising software
10 for electronically enabling the users to purchase points from an administrator of the service.

43. The system of claim 26 further comprising software for electronically crediting points to an account of a user
15 in exchange for viewing information by the user.

44. The system of claim 26 further comprising software for providing a user with an interactive test, stored in electronic form, and electronically increasing the rating of
20 the user based on the performance on the test.

45. The system of claim 26 further comprising software for electronically reducing a rating of a user whose answers are infrequently chosen.

25

46. The system of claim 26 further comprising software for electronically decreasing a rating of a user who does not provide answers over a predetermined interval of time.

47. The system of claim 26 further comprising software
30 for electronically enabling the user to specify a rule for changing point value of the question.

48. The system of claim 47 wherein the rule is such that the point value increases with elapsed time.

49. The system of claim 26 wherein no answers are accepted after the question has been posted for a predetermined interval of time.

50. The method of claim 26 wherein the question is a request for a proposal.

51. The system of claim 50 wherein the answers are responses to the request for a proposal.

52. The system of claim 26 wherein the network is the Internet.

53. An article of manufacture comprising computer memory storing software for (a) posting a question to a community of users by one of the users in the community; (b) receiving answers from at least some of the users in the community; (c) rating the answers; and (d) rewarding at least some of the users who provided the answers.

54. The article of manufacture of claim 53 further comprising software supporting communication over Internet.
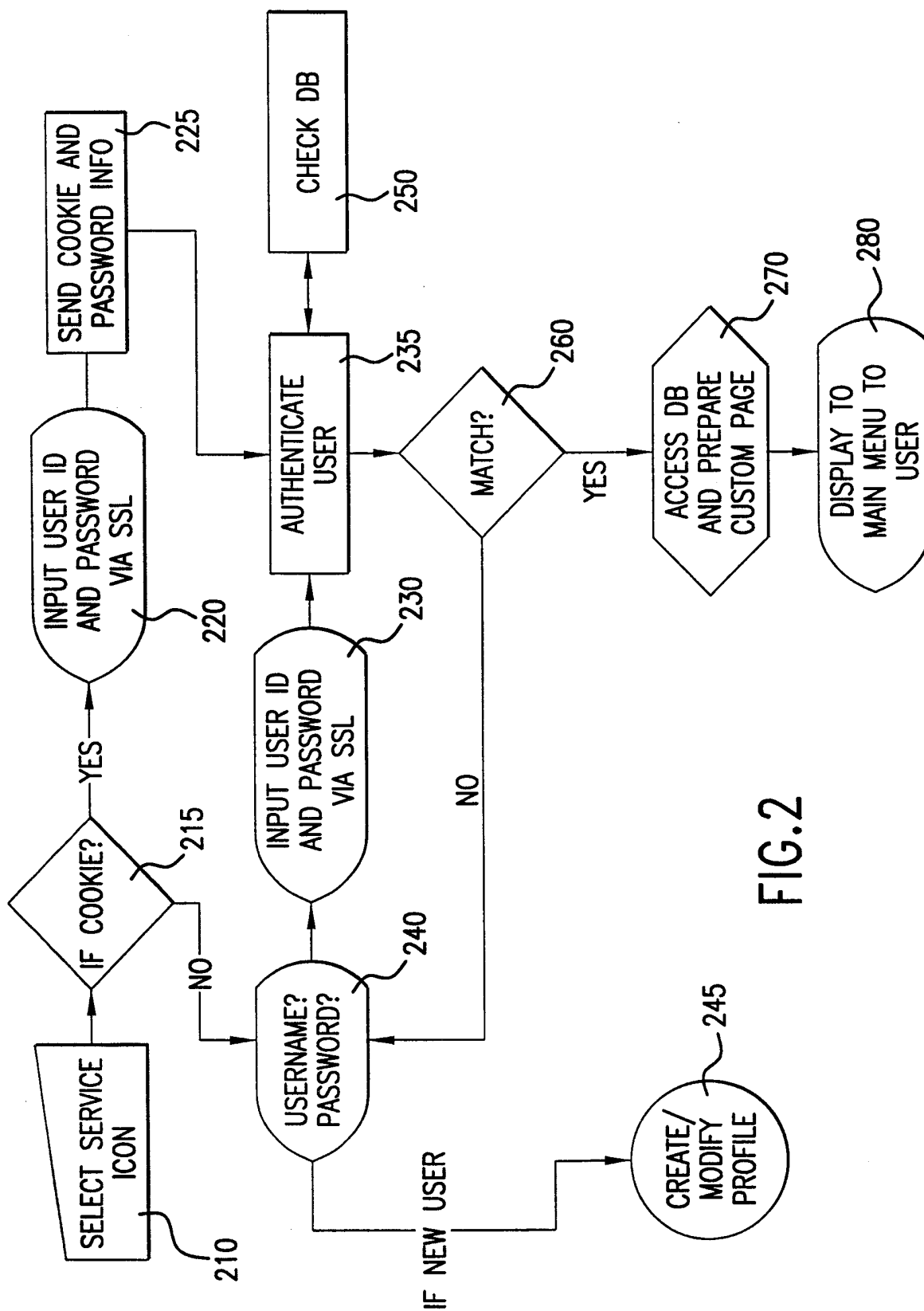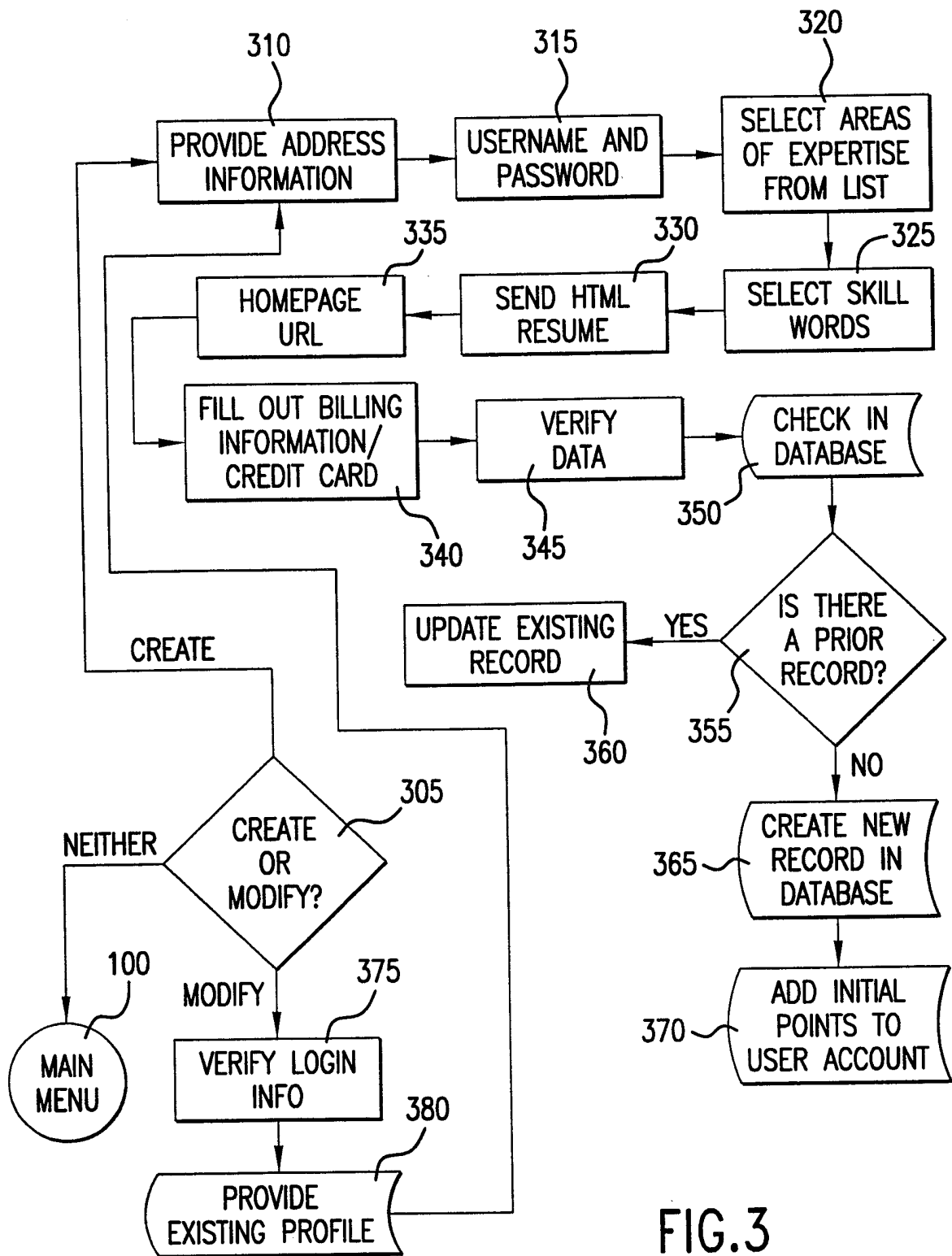
1/24

SEE FIG.2
USER LOGIN   101

SEE FIG.3
CREATE/MODIFY
PROFILE   102

SEE FIG.4
EARN POINTS   103

SEE FIG.5
BUY/SELL POINTS   104

SEE FIG.6
SPEND POINTS   105

SEE FIG.7
ASK/MODIFY
QUESTIONS   106

SEE FIG.8
REVIEW/RATE
ANSWERS   107

SEE FIG.9
ANSWER
QUESTIONS   108

SEE FIG.10
EARN POINTS
AND RATING   109

SEE FIG.11
RFP EXPERTS   110

PAYMENT   111

BINDING
ARBITRATION   112

100

MAIN
MENU

FIG.1

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FIG.2

FIG.3

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FIG.4

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FIG.5

FIG. 6

IF AUTHENTICATED → SELECT ASK/MODIFY QUESTION SCREEN ⟵ 705

710

ASK — MODIFY

715 — SPECIFY QUESTION ATTRIBUTES

MODIFY ATTRIBUTES AND BIDDING RULE — 755

720 — DEDUCT QUESTION POINT WORTH FROM USER'S ACCOUNT

725 — SEARCH EXISTING DATABASE FOR PREVIOUSLY RECORDED ANSWERS/ INFORMATION

736 — DISTRIBUTE POINTS

735 — ANYTHING CHOSEN AS AN ANSWER?

YES

ADJUST RATING — 737

740 — NO

SPECIFY BID RULE

ADJUST ANSWER LIST— ONLY SELECTED ANSWERS RETAINED — 738

750 — POST QUESTION TO ALL RELEVANT USERS

RETURN TO MAIN MENU

FIG.7

CURRENT
BID PRICE —780

↓

SPECIFY
INCREMENT —781
MAX VALUE

↓

SPECIFY
TIME TO —782
INCREMENT

↓

INCREMENT
BID —783
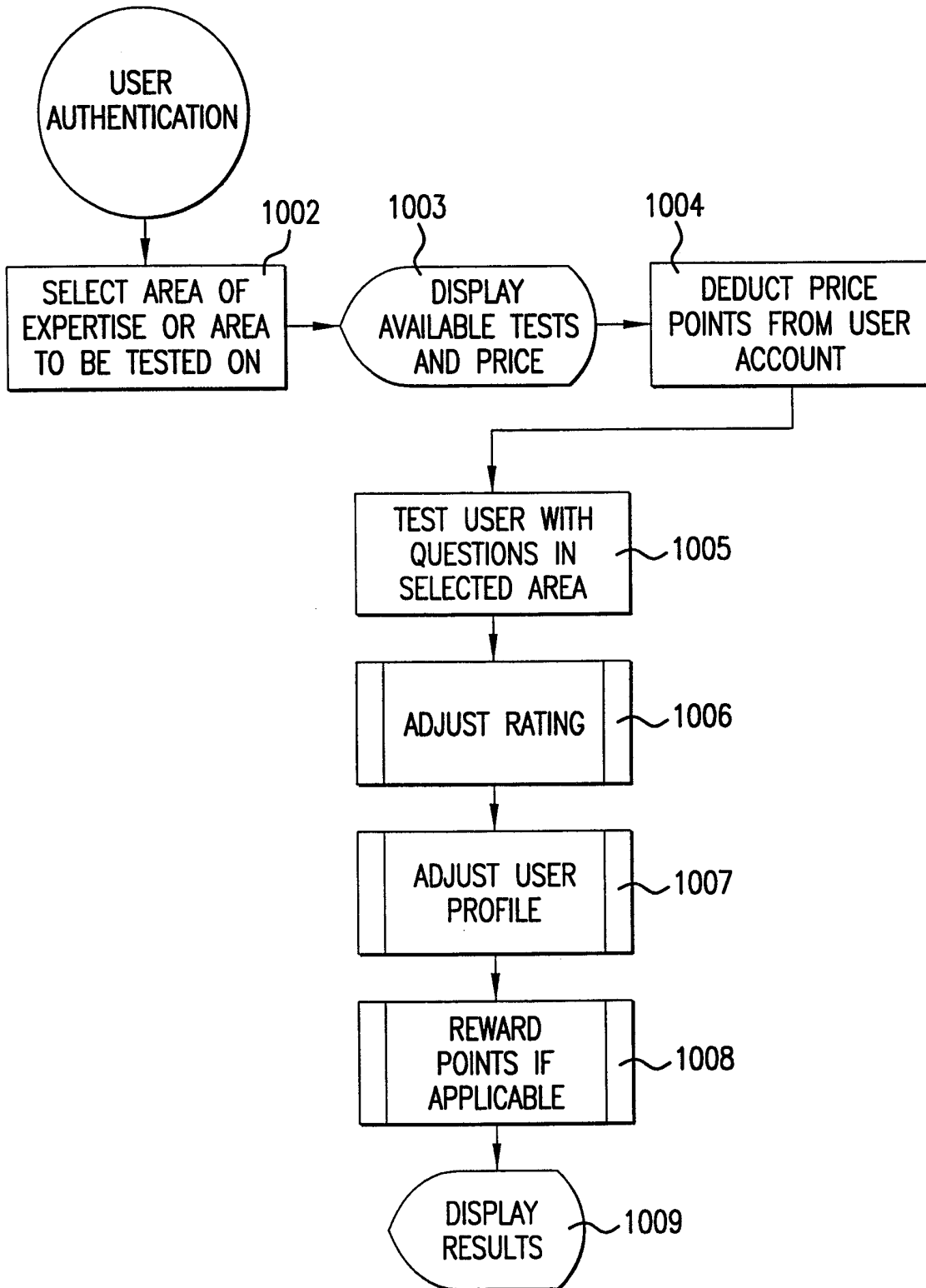PRICE

↓

CALL BID
VALUE FOR
ALL —784
RESPONDENTS

FIG. 7A

FIG.8

FIG.9

FIG.10

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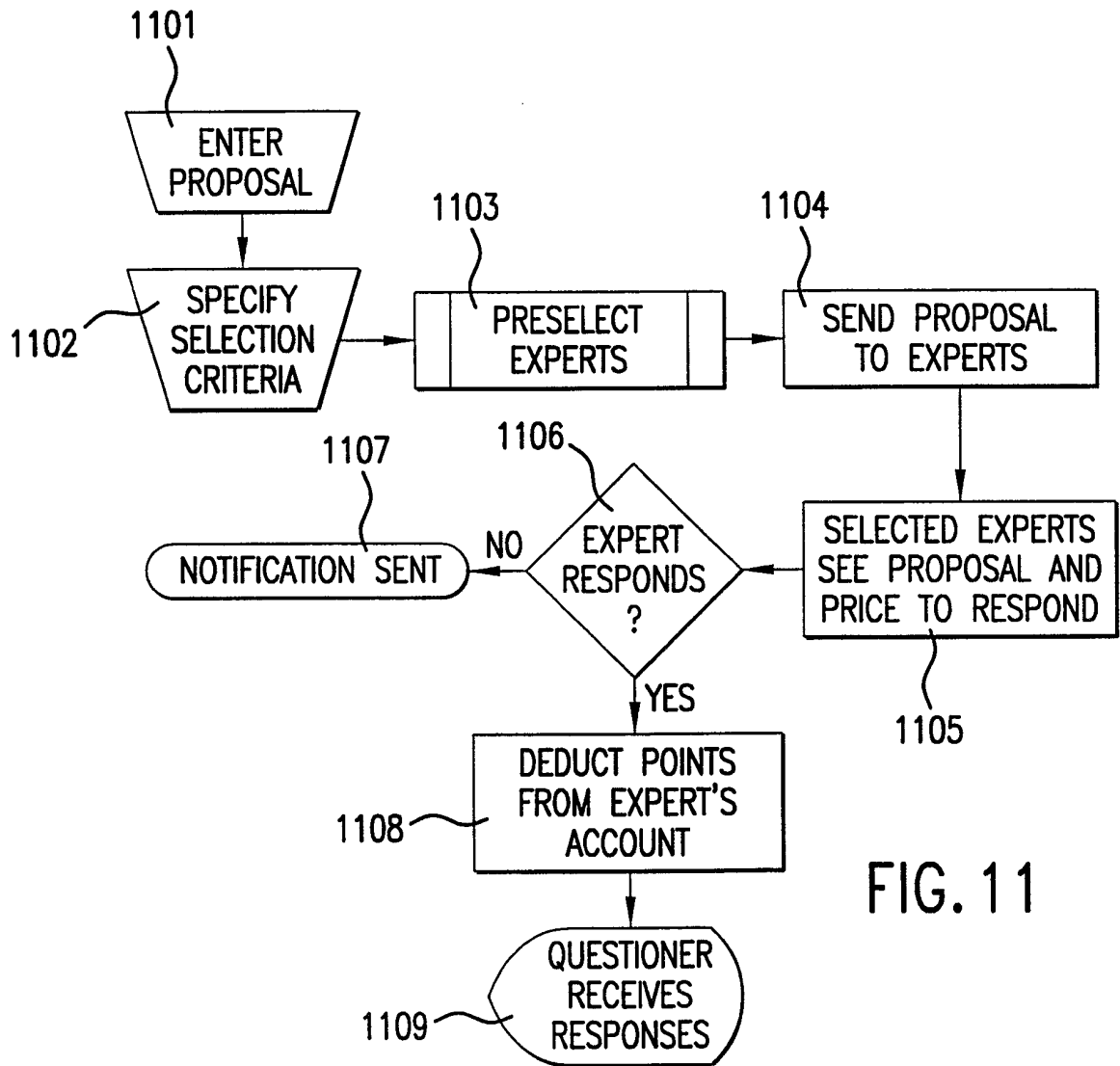
FIG. 11

FIG. 12

FIG. 13

RATING
ADJUSMENT
FACTOR

1400

FIG. 14

RATINGS DECREASE
WITH TIME, OR THEY
HAVE A TIME DECAY
VALUE   1401

RATING INCREASES IF
THE USER'S ANSWER
IS PICKED AS A BEST
ANSWER   1402

PERFORMANCE IN
RATING EVALUATION
EXAMS (SEE EARN
POINTS)   1403

WHEN OLD ANSWERS
ARE CHOSEN, RATING
SHOULD BE
POSITIVELY
INFLUENCED   1404
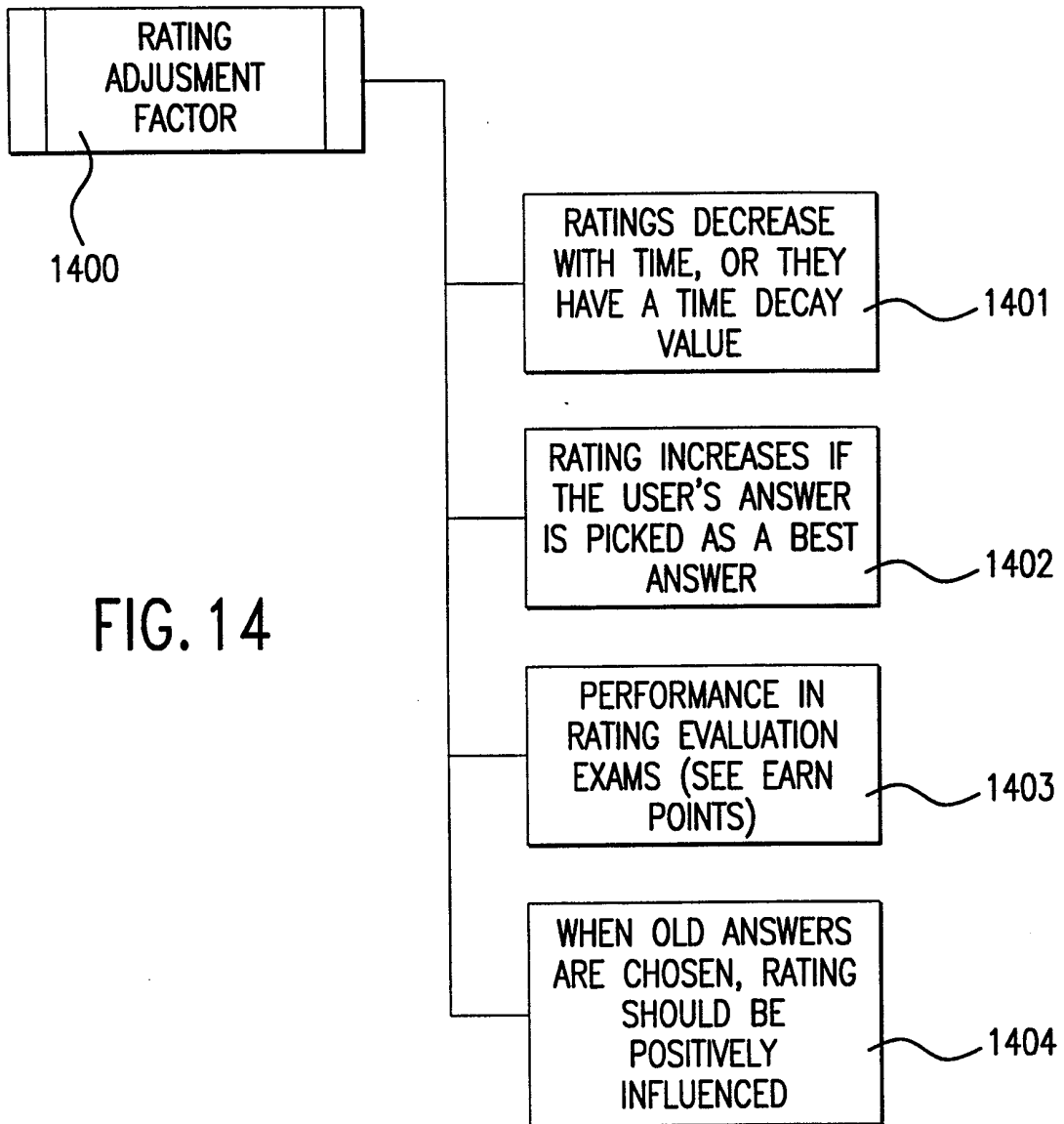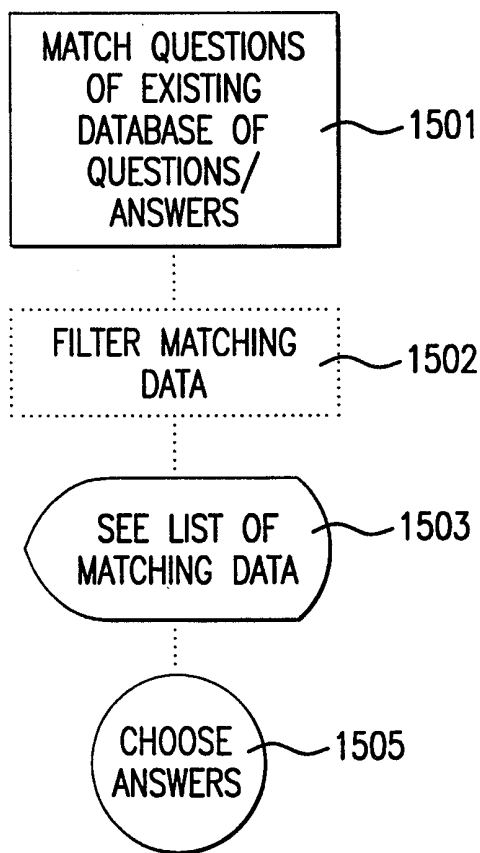
FIG. 15

MAIN MENU FOR ADEEL

ACCOUNT CREATED ON: 12/9/97

NUMBER OF POINTS: 453

YOUR CREDIT RATING: 10

1. ASK A NEW QUESTION
2. ANSWER QUESTIONS ASKED BY OTHERS
3. SEE QUESTIONS ASKED BY YOURSELF WHICH...
   - ARE BEING ASWERED BY OTHER PEOPLE. YOU CAN MODIFY YOUR QUESTIONS AND SEE ANSWERS RECEIVED TO DATE.
   - HAVE BEEN ANSWERED BUT NOT RATED BY YOU AS YET
   - HAVE BEEN ANSWERED AND RATED BY YOU
4. PERUSE AND MODIFY YOUR ANSWERS TO OTHER PEOPLE'S QUESTIONS
5. SEE YOUR MESSAGES.
6. CHANGE YOUR PERSONAL PROFILE (INCLUDES PREFERENCES FOR THIS SITE)
7. MANAGE YOUR POINTS-YOU CAN ADD FROM HERE AS WELL
8. LOG OUT OF THE SYSTEM
9. READ SERVICE
10. GET HELP.

FIG. 16A

ENTER YOUR QUESTION HERE:

```
WHERE CAN I GO FOR A GREAT SNOWBOARDING      △
EXPERIENCE?

                                             ▽
```

YOU NEED TO DESCRIBE THE QUESTION USING THE FOLLOWING KEYWORDS.

KEYWORD 1

| SNOWBOARDING | ▽ |

KEYWORD 2

| VERMONT | ▽ |

KEYWORD 3

| WINTER | ▽ |

YOU HAVE 453 POINTS IN YOUR ACCOUNT

QUESTION WORTH: | 100 | POINTS

EXPIRY DATE: | 12/12/99 | (mm/dd/yy). QUESTIONS EXPIRE IN ONE
WEEK IF YOU SPECIFY NO EXPIRY DATE

MINIMUM RATING (add this): | | (1-100)-PEOPLE BELOW THIS
RATING LEVEL WILL NOT SEE YOUR QUESTION

| SUBMIT QUESTION |

CANCEL QUESTION ENTRY AND GO TO THE MAIN MENU

FIG. 16B

HERE IS A LIST OF QUESTIONS YOU CAN ANSWER

WORTH	QUESTION TEXT	EXPIRY DATE	ANSWER IT	MESSAGE	IGNORE
50	I WANT TO KNOW HOW TO MAKE MONEY ON THE INTERNET	8/19/98	ANSWER	SEND	☐
25	WHAT IS THE MEANING OF LIFE	8/18/98	ANSWER	SEND	☐
23	THIS IS BUG	11/11/98	ANSWER	SEND	☐
10	ARE WE GOING TO EVER FINISH THIS?	NO DATE	ANSWER	SEND	☐
10	WHEN SHOULD WE HAVE THE APPLICATION READY FOR TESTING?	NO DATE	ANSWER	SEND	☐
4	ANOTHER TRIAL FOR THIS THING	11/11/98	ANSWER	SEND	☐
1	WHAT IS STATIC HTML?	NO DATE	ANSWER	SEND	☐
1	WHAT IS DYNAMIC HTML?	NO DATE	ANSWER	SEND	☐

IGNORE SELECTED QUESTIONS

GO TO THE MAIN MENU

FIG.16C

THIS IS THE QUESTION, WORTH 50 POINTS

I WANT TO KNOW HOW TO MAKE MONEY ON THE INTERNET

PLEASE ENTER YOUR ANSWER HERE:

DAY TRADING IS AS GOOD A START AS ANY. DO
YOU ALREADY HAVE A BUSINESS,

YOU NEED TO DESCRIBE YOUR ANSWER USING THE FOLLOWING KEYWORDS.

KEYWORD 1

NO KEYWORD

KEYWORD 2

NO KEYWORD

KEYWORD 3

NO KEYWORD

SUBMIT ANSWER

FIG. 16D

QUESTIONS ASKED BY ROMAN

THESE ARE ALL THE QUESTIONS CURRENTLY ACTIVE. TO SEE OTHER
QUESTIONS, CLICK HERE.

MODIFY	ANSWERED	WORTH	QUESTION TEXT
☐	YES (1)	60	ANd ANOTHER IRREVERENT PIECE-WE ARE GOING IN CIRCLES BECAUSE THE COURSE IS NOT VERY WELL STRUCTURED.
☐	YES (2)	20	A NEW QUESTION FROM ROMAN
☐	NO	34	A NEW QUESTION YAHOO IS A GOOD CHOICE
☐	NO	10	WHERE IS EVERYBODY?
☐	NO	10	NEVERTHELESS MY DEAR, THE POSSIBILITY SHOULD NOT BE DENIED SOLELY ON THE BASIS OF DOUBT. THERE IS MORE TO IT.
☐	NO	10	ARE WE GOING TO EVER FINISH THIS?
☐	NO	1	WHAT IS DYNAMIC HTML?
☐	NO	1	WHAT IS STATIC HTML?
☐	NO	0	THIS IS A QUESTION WORTH 0 POINTS

GO TO THE MAIN MENU

FIG. 16E

THE ANSWER RECEIVED FOR A QUESTION

YOU ASKED THE FOLLOWING QUESTION, WORTH 20 POINTS

A NEW QUESTION FROM ROMAN

YOU WILL RECEIVE 4 POINTS FOR PICKING AN ANSWER BELOW.

CHOICE	RATING	ANSWER TEXT	MESSAGE	IGNORE
○	10	A NEW ANSWER FROM ADEEL	SEND	☐
○	0	AND THIS IS FROM AJIT	SEND	☐

| SUBMIT ANSWER CHOICE | | IGNORE SELECTED ANSWERS |

GO TO THE MAIN MENU

BACK TO THE LIST OF QUESTIONS

FIG.16F

PLEASE FILL OUT THE INFORMATION TO SEND A MESSAGE
TO THE PERSON WHO ASKED THE FOLLOWING QUESTION:

WORTH   100

ASKED
ON   7/30/98

TEXT   I HAVE A QUESTION ABOUT SUPER COMPUTERS.
         CAN YOU MAKE ONE AT HOME?

ENTER YOUR MESSAGE HERE:

YOU CAN. THERE IS PROOF THAT IT CAN BE DONE
WITH 70,000 USD, EXCLUDING LABOR COSTS. TWO
MATHEMATICIANS RESEARCHING Pi HAVE DONE IT
AT COLUMBIA

SEND MESSAGE

FIG. 16G

MESSAGES FOR ROMAN

DELETE	DATE	MESSAGE	REPLY
☐	7/4/98	THIS IS AN INANE QUESTION.	REPLY
☐	7/8/98	I WILL ANSWER IT FOR A LOT MORE POINTS THAN JUST 25 MEASLY ONES.	REPLY
☐	1/2/99	WELL, SO WHAT DO YOU NEED THAT REMAINS TO BE DONE AND THAT REMAINS TO BE SEEN BY PEOPLE.	REPLY

DELETE SELECTED MESSAGES

GO TO THE MAIN MENU

FIG.16H