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(57) Abstract

A controller receives an indication of items that a customer is to purchase from a first vendor. The items have an associated total price, such as the sum of the retail prices of the items and any applicable taxes. In response to the received indication, the controller transmits an indication of an offer for a benefit from a second vendor. The benefit may be, for example, a subsidy such that the items may be purchased for less than the total price. The offer also defines an obligation that the customer must fulfill in exchange for the benefit. For example, the customer may be obligated to participate in another transaction with the second vendor. Upon receiving an indication that the customer accepts the offer, the items are provided to the customer for less than the total price. It is then determined whether the customer has fulfilled the obligation. If not, then a penalty is applied. For example, a credit card account of the customer may be charged to recoup an amount of the previously-provided subsidy.
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METHOD AND APPARATUS FOR PROVIDING CROSS BENEFITS AND PENALTIES

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is related to the following co-pending, commonly-owned U.S. Patent Applications, the entirety of which are incorporated herein by reference:

FIELD OF THE INVENTION

The present invention relates to methods and apparatus for facilitating commerce.

BACKGROUND OF THE INVENTION

There is a great deal of competition among vendors to attract and retain customers. Even when a customer has browsed a vendor's inventory, he will not make a purchase if an item's price is greater than the amount the customer is willing to pay.

One way to increase customer willingness to purchase is to provide discounts on items purchased. Unfortunately, vendors must use discounts sparingly, since reducing purchase prices likewise reduces margins and the reduced margins may not be offset by increased sales volume.

A vendor may also offer promotions to provide an incentive for customers to make purchases. For example, a vendor may offer a "buy one get one free" promotion whereby a purchase of an item yields the benefit of an additional item at no cost. Similarly, a vendor may provide a discount on a purchase in exchange for signing up for a credit card account provided by the vendor.

Promotions may also be provided among two or more vendors. For example, a first vendor may advertise that if a particular product is purchased, another product may be purchased from or given away by a second vendor.

A related application of the present application, U.S. Patent Application No. 09/219,267 entitled "METHOD AND APPARATUS FOR FACILITATING ELECTRONIC COMMERCE THROUGH PROVIDING CROSS-BENEFITS
DURING A TRANSACTION", filed on December 23, 1998, discloses methods and apparatus that permit a customer that is purchasing items (goods and/or services) from a first vendor to receive a benefit (e.g. a credit for the price of the items) from a second vendor. The second vendor typically requires that, in return, an obligation be fulfilled, such as signing up to become a customer of the second vendor.

Of particular importance is assuring that customers fulfill any obligations that were imposed in exchange for their subsidies. Otherwise, customers will have an incentive to obtain benefits from the second vendor without providing the second vendor with what it expected (e.g. acquiring a new customer).

Accordingly, it would be advantageous to deter such customers from reneging on their respective obligations.

SUMMARY OF THE INVENTION

In accordance with the present invention, a controller receives an indication of items that a customer is to purchase from a first vendor. The items have an associated total price, such as the sum of the retail prices of the items and any applicable taxes. In response to the received indication, the controller transmits an indication of an offer for a benefit from a second vendor. The benefit may be, for example, a subsidy such that the items may be purchased for less than the total price.

The offer also defines an obligation that the customer must fulfill in exchange for the benefit. For example, the customer may be obligated to participate in another transaction with the second vendor. Upon receiving an indication that that the customer accepts the offer, the items are provided to the customer for less than the total price.
It is then determined whether the customer has fulfilled the obligation. If not, a penalty is applied. For example, a credit card account of the customer may be charged to recoup an amount of the previously-provided subsidy.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A is a schematic illustration of an embodiment of an apparatus for providing an offer in accordance with the present invention.

FIG. 1B is a schematic illustration of another embodiment of an apparatus for providing an offer in accordance with the present invention.

FIG. 2 is a schematic illustration of a device that may be a controller of FIG. 1A or alternatively a vendor server of FIG. 1B.

FIG. 3 is a schematic illustration of a vendor server of FIG. 1A.

FIG. 4 is a tabular representation of an embodiment of a customer database of FIG. 2.

FIG. 5 is a tabular representation of an embodiment of a vendor database of FIG. 2.

FIG. 6 is a tabular representation of an embodiment of a transaction database of FIG. 2.

FIG. 7 is a tabular representation of an embodiment of a subsidizer database of FIG. 2.

FIG. 8 is a tabular representation of an embodiment of an offer rules database of FIG. 2.

FIGS. 9A and 9B are a tabular representation of an embodiment of an offers database of FIG. 2.
FIG. 10 is a tabular representation of an embodiment of an offer summary database of FIG. 2.

FIG. 11 is a tabular representation of an embodiment of an item database of FIG. 3.

FIG. 12 is a flow chart illustrating an embodiment of a method for providing an offer for a benefit to a customer.

FIG. 13 is a flow chart illustrating an embodiment of a method for providing items for less than their total price.

FIG. 14A is a flow chart illustrating an embodiment of a method for determining whether a customer has fulfilled his obligation.

FIG. 14B is a flow chart illustrating an embodiment of a method for determining whether obligation expiration dates have passed without corresponding obligations having been fulfilled.

FIG. 15 is a flow chart illustrating an embodiment of a method for applying a penalty.

FIG. 16 illustrates an example of a billing statement.

**DETAILED DESCRIPTION OF THE INVENTION**

Applicants have recognized that the budgets, such as acquisition budgets, of various vendors may be advantageously used to facilitate commerce. A customer that purchases items from a first vendor may be paid, directly or indirectly, by a second vendor (a "subsidizing vendor"), so that the customer pays a reduced price, perhaps nothing at all, for his desired items. In exchange, the customer participates or agrees to participate in a transaction with the second vendor. As used herein, this
"transaction" may be any interaction with the second vendor or another party. For example, the customer may be required to sign up for a service that is provided by the second vendor. Since many service providers are willing to pay significant amounts of money (e.g. often $50 to $1000) to acquire a new customer, the ability to acquire a customer by essentially "intervening" in a sale between others can benefit all parties involved. Even a vendor that has not traditionally used an acquisition budget or other budget in this manner may be willing to pay a particular amount of money in exchange for, e.g., acquiring a new customer of a provided service, having a customer purchase an item, having a customer participate in a survey.

The customer is benefited by the reduced price of his items, the first vendor is benefited by the increased sales and customer satisfaction that such an arrangement can bring, and the second vendor is benefited by the additional transaction, particularly the acquisition of a new customer in one embodiment.

The customer may participate in the transaction with the subsidizing vendor after he receives the benefit. For example, the customer may be required to sign up for a particular service within a week, or may be required to purchase something from the subsidizing vendor during a predetermined period of time. Since the benefit is provided before the customer fulfils his obligation, there is the risk that the customer will receive the benefit yet not fulfill his obligation at all. Applicants have also recognized that it can be advantageous to deter such customers from reneging on their respective obligations. In particular, the present invention includes various ways to apply a penalty if the customer has not fulfilled the obligation. The threat of the penalty deters customers from not fulfilling their respective obligations. As a result, subsidizing vendors become more willing to provide benefits. Also, subsidizing
vendors become more willing to provide greater benefits (e.g. higher reductions in purchase prices) since customers are more likely to in turn provide the subsidizing vendors with what they desired. Further, since the present invention allows a benefit to be provided before the second transaction is completed or even initiated, a greater variety of such second transactions may be requested of the customer.

Thus, the present invention allows both customers and vendors to benefit, and commerce is greatly facilitated.

Referring to FIG. 1A, an apparatus 100 includes a controller 110 that is in communication with a vendor server 120. The controller 110 and the vendor server 120 may comprise computers, such as those based on an Intel® Pentium® microprocessor, that are adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of vendor servers may be in communication with the controller 110. Each such vendor server can be associated with a different vendor.

Those skilled in the art will understand that devices in communication with each other need not be continually transmitting to each other. On the contrary, such devices need only transmit to each other as necessary, and may actually refrain from exchanging data most of the time. For example, a device in communication with another device via the Internet may not transmit data to the other device for weeks at a time.

The vendor server 120 may be a "Web server" of a vendor (e.g. a retail seller). A vendor server may be operable to generate and/or serve Web pages (documents on the World Wide Web that typically include an HTML (Hypertext Markup Language) file and associated graphics and script files) that may be accessed via the World Wide Web and allow purchases from the vendor to be made in a manner known in the art. A Web site typically consists of several such Web pages and
associated databases served by one or more HTTP (Hypertext Transfer Protocol) servers (e.g. the vendor server 120) on the World Wide Web. Alternatively, the vendor server 120 may be a computer involved in operating a physical store. Such a computer, for example a point of sale (POS) server, would perform such tasks as inventory management and transaction processing for the store.

The controller 110 is also in communication with a subsidizing vendor server 140. The subsidizing vendor server 140 may also comprise a computer, such as those based on an Intel® Pentium® microprocessor, that is adapted to communicate via the Internet (e.g. via a modem) or other medium. Any number of subsidizing vendor servers may be in communication with the controller 110.

The subsidizing vendor server 140 may be a "Web server" of a subsidizing vendor. The subsidizing vendor server 140 may be operable to generate and/or serve Web pages that may be accessed via the World Wide Web and allow transactions with the subsidizing vendor in a manner known in the art. Alternatively, the subsidizing vendor server 140 may be a computer such as a POS terminal server that is involved in operating a physical store. Such a computer would perform such tasks as inventory management and transaction processing for the store. In another embodiment, the subsidizing vendor server 140 may merely provide offers for benefits as described below.

The vendor server 120 may be in communication with a customer terminal 130 that transmits data regarding a customer transaction (e.g. a purchase). Any number of customer terminals may be in communication with the vendor server 120. The customer terminal 130 may be a POS terminal, such as the NCR 7454 manufactured by NCR Corporation or the IBM 4683 manufactured by International
Business Machines. As is known in the art, POS terminals perform such processes as calculating the total price of goods or services to be purchased, and calculating the amount of change due to a customer. POS terminals may furthermore track purchases made and adjust databases of inventory accordingly. A typical POS terminal includes or is operably connected to such input devices as (i) an optical bar code scanner for reading bar codes and transmitting signals indicative of those bar codes to the processor of the POS terminal, and/or (ii) a card reader operative to read cards such as magnetic strip cards that have magnetizable strips or surfaces on which data may be recorded. The card reader in turn transmits signals representing such read data to the processor

202. One such card reader is the OMNI™ 1450 payment terminal, manufactured by VeriFone, Inc., which includes a built-in, magnetic-stripe reader, a PIN pad and an integrated smart card reader.

In another embodiment, the customer terminal 130 may be a computer, such as those based on an Intel® Pentium® microprocessor, that is adapted to communicate via the Internet (e.g. via a modem) or other medium. Such computers are able to appropriately access a Web page to communicate with a vendor server in a manner that is known to those skilled in the art.

In some embodiments, the customer terminal 130 may be a portable type of computer, such as a laptop computer, a palm-top computer, a hand-held computer, or a "PDA" (Personal Digital Assistant). For example, the customer terminal 130 may be the Nino 300 pen-based Personal Companion, manufactured by Philips Electronics N.V.; or the InfoMobile smart phone manufactured by Samsung Electronics, each of which utilizes the Windows® CE operating system of Microsoft Corporation.

In still other embodiments, the customer terminal 130 may be a
telephone, an automated teller machine (ATM), a slot machine, a vending machine or other device that provides goods or services to a customer. The vendor server in such an embodiment could include an IVRU (Interactive Voice Response Unit), such as the Vision 2001 or the Insight IVR/Web, both from Interactive Voice Technologies, Corp., or the OmniVox for Windows® NT from APEX Voice Communications. An IVRU allows a user of a DTMF (Dual Tone Multi-Frequency) signal-generating telephone to communicate with a computer. The DTMF signals received from the user's telephone are interpreted by the vendor server and transformed into commands for the computer. The vendor server may also communicate with the user by generating and transmitting voice or other audio signals, such as an list of IVRU menu options, as instructed by the vendor server.

The use of the controller 110 is especially advantageous in an embodiment where a plurality of subsidizing vendors and/or a plurality of vendor servers serving customers participate in the described invention. A parent application, U.S. Patent Application No. 09/274,281 entitled "METHOD AND APPARATUS FOR PROVIDING CROSS-BENEFITS VIA A CENTRAL AUTHORITY", filed March 22, 1999, the entirety of which is incorporated by reference herein as part of the present disclosure, discloses an invention utilizing such a controller. In such an embodiment, it can be advantageous to require customers and/or vendors to "register" with the controller 110 before allowing participation in the present system of providing customers with offers for benefits.

Referring to FIG. 1B, an apparatus 150 represents another embodiment of an apparatus for facilitating commerce in accordance with the present invention. Specifically, in the apparatus 150 a vendor server 160 communicates with a customer
terminal 170, and also with a subsidizing vendor server 180 without the intervening controller 110. Accordingly, the embodiment illustrated by FIG. 1B is appropriate for a direct relationship between the vendor servicing customers and the subsidizing vendor.

Referring to FIG. 2, reference numeral 200 indicates a device that may be the controller 110 (FIG. 1A). In another embodiment such as is illustrated by FIG. 1B, the functionality of the device 200 may be performed by another device, such as the vendor server 160 (FIG. 1B), which operates to directly or indirectly provide a customer with an offer for a subsidy from a second vendor.

The device 200 comprises a processor 202, such as an Intel® Pentium® microprocessor. The processor 202 is in communication with a data storage device 210, such as an appropriate combination of magnetic, optical and/or semiconductor memory. For example, the data storage device 210 may comprise one or more of a ROM, RAM and hard disk. The processor 202 and the data storage device 210 may each be (i) located entirely within a single computer or other computing device; (ii) connected to each other by a remote communication medium, such as a serial port cable, telephone line or radio frequency transceiver; or (iii) a combination thereof. In one embodiment, the controller 110 may comprise one or more computers that are connected to a remote server computer for maintaining databases.

The data storage device 210 stores a program 220 for controlling the processor 202. The processor 202 performs instructions of the program 220, and thereby operates in accordance with the present invention, and particularly in accordance with the methods described in detail herein. The program 220 may be stored in a compressed, uncompiled and/or encrypted format. The program 220 furthermore includes program elements that may be necessary, such as an operating
system, a database management system and "device drivers" for allowing the processor 202 to interface with computer peripheral devices. Appropriate device drivers and other necessary program elements are known to those skilled in the art, and need not be described in detail herein.

The storage device 210 also stores (i) a customer database 230, (ii) a vendor database 240, (iii) a transaction database 250, (iv) a subsidizer database 260, (v) an offer rules database 270, (vi) an offers database 280 and (vii) an offer summary database 290. The databases 230, 240, 250, 260, 270, 280 and 290 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

FIG. 3 illustrates the vendor server 120 of FIG. 1A. As described above with reference to FIG. 1B, in one embodiment the vendor server may communicate with a subsidizing vendor server 180 without the intervening controller 110. Accordingly, the description of the vendor server 120 is applicable to the vendor server 160 of FIG. 1B. In such an embodiment, the databases stored by the data storage device of the vendor server could include the databases depicted in FIGS. 2 and 3.

The vendor server 120 comprises a processor 302, such as an Intel® Pentium® microprocessor, which is in communication with a customer terminal 315 and the controller 110. Any number of customer terminals may be in communication
with the processor 302. The processor 302 is also in communication with a data
storage device 310, such as an appropriate combination of magnetic, optical and/or
semiconductor memory. For example, the data storage device 310 may comprise one
or more of a ROM, RAM and hard disk. The processor 302 and the data storage device
310 may each be (i) located entirely within a single computer or other computing
device; (ii) connected to each other by a remote communication medium, such as a
serial port cable, telephone line or radio frequency transceiver; or (iii) a combination
thereof. In one embodiment, the vendor server 120 may comprise one or more
computers that are connected to a remote server computer for maintaining databases.

The data storage device 310 stores a program 320 for controlling the
processor 302. The processor 302 performs instructions of the program 320, and
thereby operates in accordance with the present invention, and particularly in
accordance with the methods described in detail herein. The program 320 furthermore
includes program elements that may be necessary, such as an operating system, a
database management system and "device drivers" for allowing the processor 302 to
interface with computer peripheral devices. Appropriate device drivers and other
necessary program elements are known to those skilled in the art, and need not be
described in detail herein.

The data storage device 310 also stores (i) a customer database 330, (ii)
an item database 340, and (iii) a transaction database 350. The customer database 330
and the transaction database 350 of the vendor server 120 may be similar or identical to
the customer database 230 and transaction database 250 of the controller 110. For
example, the controller 110 may store data that is derived or copied from the vendor
server 120, and vice versa. If each vendor server stores data regarding its own
customers and its own transactions, the controller 110 could aggregate this data from each vendor server to store in its customer database 230 and transaction database 250, respectively. The databases 230 and 250 of the controller 110 would then store customer and transaction data for each vendor.

The databases 330, 340 and 350 are described in detail below and depicted with exemplary entries in the accompanying figures. As will be understood by those skilled in the art, the schematic illustrations and accompanying descriptions of the databases presented herein are exemplary arrangements for stored representations of information. A number of other arrangements may be employed besides those suggested by the tables shown. Similarly, the illustrated entries of the databases represent exemplary information, and those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein.

Referring to FIG. 4, a table 400 represents an embodiment of the customer database 230 (FIG. 2) and/or the customer database 330 (FIG. 3). The table 400 includes entries 402, 404, 406 and 408, each defining a customer that may purchase items from a vendor. The data of an entry may be input, for example, when a customer registers for a frequent shopper card or when a customer first makes a purchase from a vendor. Those skilled in the art will understand that the table 400 may include any number of entries. The table 400 also defines fields for each of the entries 402, 404, 406 and 408. The fields specify (i) a customer identifier 420 that uniquely identifies the customer, (ii) a name 422 of the customer, (iii) a billing address 424 of the customer, (iv) credit card information 426 (or another payment identifier) which may be used to render payment in purchasing the items, (v) an electronic mail ("e-mail") address 428 for facilitating communication with the customer, (vi) whether the
customer may receive offers 430 for benefits, and (vii) a number of times 432 the customer has reneged on his obligations.

For each entry of the table 400, the data specified by the fields 422, 424, 426 and 428 may be received from the corresponding customer (e.g. via the corresponding customer terminal and/or the vendor server that interacts with the customer). For example, the data may be received when the customer makes a purchase from a vendor's Web site by requiring the customer to enter information into an HTML form provided on a Web page of the Web site.

The data specified by the field 430 may be initially set to "YES" and updated to reflect, for example, that the customer desires not to receive any offers, or that the customer has been barred from receiving offers (e.g. after reneging more than a particular number of times). The data specified by the field 432 may be initially set to "0" and updated to reflect, for example, the number of times that the customer has not met his obligations.

Upon registration of a new customer, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique customer identifier to store in the field 420 of the entry corresponding to the new customer. Alternatively, the new customer may submit a value, such as his social security number, to be used as the customer identifier. Once information is stored for a customer, it may be retrieved upon reference to the appropriate customer identifier.

In one embodiment, data stored in the customer database 330 may be accessed by all vendors that service customers and all subsidizing vendors that are in communication with the controller 110. Thus, the customer need not take any steps to
provide information such as a credit card account number when participating in a transaction with such vendors. Appropriate security features may be included to allow selective access to such data, as is apparent to those skilled in the art.

Referring to FIG. 5, a table 500 represents an embodiment of the vendor database 240 (FIG. 2). The table 500 includes entries 502, 504, 506 and 508, each defining a vendor that services customers and that may have those customers receive offers for subsidies. The data of an entry may be input, for example, when the corresponding vendor registers for participation in the program described herein for providing offers for benefits. Those skilled in the art will understand that the table 500 may include any number of entries. The table 500 also defines fields for each of the entries 502, 504, 506 and 508. The fields specify (i) a vendor identifier 520 that uniquely identifies the vendor, (ii) a vendor name 522, (iii) a vendor e-mail address 524 for facilitating communication with the vendor, and (iv) an amount owed 526 to the vendor (e.g. promised but unpaid subsidy amounts) from a subsidizing vendor (or other party).

For each entry of the table 500, the data specified by the fields 522 and 524 may be received from the corresponding vendor (e.g. via the corresponding vendor server). For example, the data may be provided when the vendor registers with the controller 110 in the embodiment of FIG. 1A.

For each entry of the table 500, the data specified by the field 526 may be increased as the vendor provides subsidy amounts and decreased as the vendor receives reimbursement (e.g. from a subsidizing vendor) for previously-provided subsidy amounts.

Upon registration of a new vendor, the controller 110 in the embodiment
of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique vendor identifier to store in the field 520 of the entry corresponding to the new vendor. Alternatively, the new vendor may submit a value to be used as the vendor identifier. Once information is stored for a vendor, it may be retrieved upon reference to the appropriate vendor identifier.

Referring to FIG. 6, a table 600 represents an embodiment of the transaction database 250 (FIG. 2) and/or the transaction database 350 (FIG. 3). The table 600 includes entries 602, 604 and 606, each defining a transaction with a vendor server. Typically, the transaction includes a purchase of items by a customer. Those skilled in the art will understand that the table 600 may include any number of entries. The table 600 also defines fields for each of the entries 602, 604 and 606. The fields specify (i) a transaction identifier 620 that uniquely identifies the transaction, (ii) a vendor identifier 621 that identifies the vendor, (iii) a time 622 of the transaction, (iv) the items ordered 624, (v) credit card information 626 that may define a credit card account that was charged to pay for the items purchased, (vi) an amount charged 628 for the items, (vii) a delivery address 630 for the items, and (viii) a customer identifier 632 (if any) that identifies the customer that made the purchase.

For each entry of the table 600, the data specified by the fields 624, 626, 630 and 632 may be received via the corresponding customer terminal, while the data specified by the fields 620, 621, 622 and 628 may be generated by the corresponding vendor server. However, the origination of the data specified by the various fields will depend on the particular embodiment of the present invention. For example, the items ordered (field 624) may be identified by being scanned by a bar code scanner that transmits a representative signal to a POS terminal. Alternatively, the items ordered
may have been selected by a customer via a Web page displayed by his personal computer, or via a customer's telephone in communication with an IVRU. Other ways to indicate items that the customer desires to purchase will be apparent to those skilled in the art.

Similarly, the credit card information (field 626) may be read by a card reader that transmits a representative signal to a POS terminal. Alternatively, the credit card information may be entered by a customer into a form on a Web page that is displayed by his personal computer. The credit card information may instead have been previously read, stored and retrieved from the customer database or a cookie stored on the customer terminal. Those skilled in the art will understand that other payment identifiers besides credit card information may be employed, such as debit card numbers or electronic cash identifiers. The use herein of a credit card as a means of payment is merely exemplary and not limiting on the scope of the present invention.

When an entry of the table 600 is created, a unique transaction identifier (field 620) may be generated and the time of the transaction (field 622) may be recorded (e.g. with reference to a clock signal generated by the customer terminal, vendor server, controller or other device). The transaction identifier and the time are stored in the fields 620 and 622 respectively of the entry corresponding to the new transaction. Once information is stored for a transaction, it may be retrieved upon reference to the appropriate transaction identifier. The data represented by an entry of the table 600 may be transmitted from the customer device to the controller 110 in the embodiment of FIG. 1A, or to the vendor server 160 in the embodiment of FIG. 1B.

Referring to FIG. 7, a table 700 represents an embodiment of the subsidizer database 260 (FIG. 2). The table 700 includes entries 702, 704 and 706,
each defining a subsidizing vendor that may subsidize purchases or provide other
benefits to customers of other vendors. The data of an entry may be input, for example,
when a subsidizing vendor registers for participation in the program described herein
for providing offers for benefits. Those skilled in the art will understand that the table
700 may include any number of entries. The table 700 also defines fields for each of
the entries 702, 704 and 706. The fields specify (i) a subsidizing vendor identifier 720
that uniquely identifies the subsidizing vendor, (ii) a name 722 of the subsidizing
vendor, (iii) an account 724 (if any) that is used to pay for the subsidies or other
benefits, (iv) an amount owed 726 by the subsidizing vendor (e.g. in exchange for
subsidies provided to customers on behalf of the subsidizing vendor), and (v) a rank
728 used to prioritize subsidizing vendors and/or subsidies provided by or on behalf of
those subsidizing vendors.

For each entry of the table 700, the data specified by the fields 722 and
724 may be received from the corresponding subsidizing vendor (e.g. via the
corresponding vendor server). For example, the data may be provided when the
subsidizing vendor registers with the controller 110 in the embodiment of FIG. 1A, or
with the vendor server 160 in the embodiment of FIG. 1B. Upon registration of a new
subsidizing vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor
server 160 in the embodiment of FIG. 1B, would generate a unique subsidizing vendor
identifier to store in the field 720 of the entry corresponding to the new subsidizing
vendor. Alternatively, the new subsidizing vendor may submit a value to be used as the
subsidizing vendor identifier.

The amount owed (field 726) is calculated and updated for each
subsidizing vendor. Typically, the amount owed is increased when an offer from a
particular subsidizing vendor is accepted by a customer, or when the corresponding subsidy is provided to the customer. The amount owed is likewise decreased when the subsidizing vendor repays the vendor which provided the subsidy amount.

The rank (field 728) of each subsidizing vendor is updated by the controller 110 according to a ranking scheme. For example, a subsidizing vendor may pay for a preferential rank, and/or rank may be determined by the number (or percentage) of corresponding offers from the subsidizing vendor that are accepted. The ranks may be established periodically (e.g. once per year) or substantially continuously based on various criteria such as profitability to the vendor servicing the customer or to the entity operating the controller 110.

Once information is stored for a subsidizing vendor, it may be retrieved upon reference to the appropriate subsidizing vendor identifier.

Referring to FIG. 8, a table 800 represents an embodiment of the offer rules database 270 (FIG. 2). The table 800 includes entries 802, 804, 806, 808 and 810, each defining, among other things, an offer rule. When an offer rule is satisfied during a transaction, the vendor provides an offer for a specified benefit, such as a subsidy. The data of an entry may be input, for example, when a subsidizing vendor registers for participation in the subsidizing program described herein. Those skilled in the art will understand that the table 800 may include any number of entries. The table 800 also defines fields for each of the entries 802, 804, 806, 808 and 810. The fields specify (i) an offer rule identifier 820 that uniquely identifies the offer rule, (ii) a subsidizing vendor identifier 822 that uniquely identifies the subsidizing vendor and that corresponds to a subsidizing vendor identifier of the subidizer database 260, (iii) customer activity 824 (if any) that is required in order for an offer to be provided, (iv) a
subsidy amount 826, (v) when the offer rule is effective 828 (i.e. other requirements in order to satisfy the offer rule), (vi) an additional transaction 830 (i.e. an obligation) that is required of the customer in exchange for the subsidy, (vii) an obligation expiration date / time 832 by which the obligation must be fulfilled (i.e. by which the additional transaction must be performed), and (viii) a penalty 834 that is applied if the customer has not fulfilled the obligation by the obligation expiration date (if any). As described below, several types of transactions, such as making additional purchases, initiating service agreements or participating in surveys, may be required of the customer in exchange for the subsidy.

For each entry of the table 800, the data specified by the fields 824, 826, 828, 830, 832 and 834 may be received from the corresponding subsidizing vendor (e.g. via the corresponding subsidizing vendor server) for each offer rule the subsidizing vendor establishes. For example, the data may be provided when the subsidizing vendor registers with the controller 110 in the embodiment of FIG. 1A, or with the vendor server 160 in the embodiment of FIG. 1B. Upon creation of an offer rule, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique offer rule identifier to store in the field 820 of the entry corresponding to the new offer rule. The corresponding subsidizing vendor identifier would also be stored in the field 822. Once information is stored for an offer rule, it may be retrieved upon reference to the appropriate offer rule identifier.

The customer activity that is required in order for an offer to be provided may be set by the subsidizing vendor. Alternatively, the required customer activity may be set for each subsidizing vendor by the controller 110 in the embodiment of FIG.
1A, or the vendor server 160 in the embodiment of FIG. 1B. For example, the subsidizing vendor may be unable to decide which type of customer activity should be required. In still another embodiment, the required customer activity may be set and thereafter dynamically adjusted based on acceptance rates of provided offers.

Similarly, the penalty (field 834) may be set by the subsidizing vendor or by the controller 110 for each subsidizing vendor. In another embodiment, respective portions of the penalty may be set by the controller 110 and the subsidizing vendor. For example, the subsidizing vendor may set a portion of the penalty amount to be equal to the subsidy amount, and the controller 110 may set the remaining portion of the penalty amount to be a $3 supplemental fee, as illustrated by the entry 804 and its respective field 834.

Referring to FIGS. 9A and 9B, a table 900 represents an embodiment of the offers database 280 (FIG. 2). The table 900 includes entries 902, 904, 906, 908 and 910, each defining an offer for a subsidy that was provided to a customer during a transaction with the vendor. Those skilled in the art will understand that the table 900 may include any number of entries. The table 900 also defines fields for each of the entries 902, 904, 906, 908 and 910. The fields specify (i) an offer identifier 920 that uniquely identifies the offer, (ii) a transaction identifier 922 that uniquely identifies the transaction during which the offer was provided, (iii) a subsidizing vendor identifier 924 that uniquely identifies the subsidizing vendor on whose behalf the vendor provides the offer, (iv) an identifier of an offer rule 926 that was applied during the transaction, (v) when the offer was provided 928, (vi) an expiration date 930 (if any) for the offer, (vii) a subsidy amount 932, (viii) a total price 934 that the customer would have to pay without the subsidy, (ix) a total price 936 that the customer would have to
pay with the subsidy, (x) when the offer was accepted 938 (if it was accepted), (xi) whether the obligation corresponding to the subsidy was fulfilled 940, (xii) an actual fulfill date 942 by which the obligation was fulfilled (if it was fulfilled), and (xiii) whether the obligation expiration date (if any) has passed 944 without the obligation being fulfilled. As described above with reference to FIG. 8, offer rules define specific subsidies. Thus, the identifier of an offer rule stored in field 926 may be used to determine a corresponding subsidy amount.

The subsidy amount may be a fixed amount, such as $50. The subsidy amount may further be dependent on various criteria such as the total price of the items. For example, the subsidy amount could be for the lesser of the total price and $50. Similarly, the subsidy amount could be for the lesser of a portion of the total price and $50. For example, the subsidy amount could be for the lesser of $50 and half the total price. Although the exemplary table of FIG. 9 illustrates subsidies as a type of benefit to be provided, this is merely one of many possible benefits that may be provided, as described herein.

For each entry of the table 900, the data specified by the fields 928, 934, 936 and 938 may be received from the corresponding customer terminal for each offer that has been provided. For example, when the offer is provided a new entry of the table 900 may be created. At that time, the date and time that the offer was provided (field 928) may be recorded (e.g. with reference to a clock signal generated by the customer terminal, vendor server, controller or other device), and the total price (field 934) and the total price with the subsidy amount (field 936) may be received, e.g., from the POS terminal. The field 938 of the new entry would initially be set to "open" to indicate that the offer is open (not yet accepted or rejected). The field 938 may be
updated accordingly when an offer is rejected or accepted.

Fields 922, 924 and 926 of the new entry would be set to the appropriate identifiers upon reference to, e.g., the transaction identifier field 620, the subsidizing vendor identifier field 720 and the offer rule identifier field 820 respectively. The offer expiration date (field 930) could be calculated from the date and time when the offer was provided (field 928) (e.g. a predetermined time after the time in field 928 or "none" if there is no desired expiration date).

The subsidy amount (field 932) is determined from the corresponding offer rule applied, as described above with respect to field 826. Whether the obligation was fulfilled (field 940) for the new entry would initially be set to "NO" to indicate that the corresponding obligation has not yet been fulfilled. The field 940 may be updated accordingly when an obligation is fulfilled, or "partially fulfilled" (e.g. some but not all required acts have been performed).

The actual fulfill date (field 942) of the new entry would initially be set to "N/A" ("not applicable") to indicate that the obligation has not been fulfilled. If the obligation is fulfilled, the date and time when it is fulfilled is recorded and stored in field 942. Whether the obligation expiration date has passed (field 944) for the new entry would initially be set to "NO" to indicate that the obligation expiration date has not yet passed. Periodically the controller 110 may determine whether the current date and time is after any obligation expiration date of the entries. If so, and if the corresponding obligation has not been fulfilled, then the field 944 is set to "YES". If the corresponding obligation is fulfilled before the obligation expiration date, the field 944 is set to "N/A" to indicate that the obligation was fulfilled within the required time period.
Upon creation of an entry in the table 900, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would generate a unique offer identifier to store in the field 920. Once information is stored for an offer, it may be retrieved upon reference to the appropriate offer rule identifier.

Referring to FIG. 10, a table 1000 represents a record of an embodiment of the offer summary database 290 (FIG. 2). In such an embodiment, the offer summary database 290 would typically include a plurality of records, each record defining a summary of offers for subsidies that have been provided on behalf of a particular subsidizing vendor. The table 1000 includes a subsidizing vendor identifier 1002 that uniquely identifies the subsidizing vendor, a total number of offers provided 1004 on behalf of the subsidizing vendor, a total number of those offers that were accepted 1006, a total number of "reneged offers" 1008 (offers for which the corresponding obligation was not fulfilled by the obligation expiration date), and a total amount 1009 of the subsidies due in connection with accepted offers.

The table 1000 also includes entries 1010 and 1012, each defining offers provided due to satisfaction of a particular offer rule of the subsidizing vendor. Those skilled in the art will understand that the table 1000 may include any number of entries. The table 1000 also defines fields for each of the entries 1010 and 1012. The fields specify (i) an offer rule identifier 1020 that uniquely identifies the offer rule, (ii) a number 1022 of offers provided due to satisfaction of the offer rule, (iii) a number 1024 of these offers that were accepted, (iv) a number 1026 of these offers that are reneged offers, and (v) an amount 1028 of the subsidies due in connection with the accepted offers. If desirable, the information stored in the offer summary database 290 (FIG. 2)
may be organized in other ways, such as by the vendor through which the offer was provided. Such an embodiment would allow a comparison of the acceptance rate of offers at different vendors.

For each subsidizing vendor, the controller 110 in the embodiment of FIG. 1A, or the vendor server 160 in the embodiment of FIG. 1B, would create a record such as the record 1000 and store the appropriate subsidizing vendor identifier 1002. For each offer rule associated with the subsidizing vendor, a corresponding entry is created and the offer rule identifier is stored in field 1020 of the entry. For each entry, the data specified by the fields 1022, 1024, 1026 and 1028 may be adjusted as offers are provided, as acceptances of the offers are received and as reneges of offers are detected. For example, when an offer is provided, the corresponding offer rule is identified and thus the corresponding entry is identified. The field 1022 of that entry is increased by one to reflect the newly provided offer. Similarly, when an offer is accepted, field 1024 of that entry is increased by one to reflect the new acceptance and the amount of the subsidy associated with the accepted offer is added to the field 1028 of the entry. If an obligation is not fulfilled, the field 1026 of the appropriate entry is adjusted accordingly.

The sum for all entries of the number of offers (indicated by the field 1022) is stored as the total number of offers 1004 for the corresponding record. Similarly, the sum for all entries of the number of offers accepted (indicated by the field 1024) is stored as the total number of offers accepted 1006 for the corresponding record; the sum for all entries of the number of reneged offers (indicated by the field 1026) is stored as the total number of reneged offers 1008 for the corresponding record; and the sum for all entries of the amount of subsidies due (indicated by the field 1028)
is stored as the total amount of subsidies 1009 for the corresponding record. Once
information is stored for a subsidizing vendor, it may be retrieved upon reference to the
appropriate subsidizing vendor identifier. Accordingly, data for account reconciliation
for each subsidizing vendor may be derived from such stored information. Such data
may be encrypted to ensure that the amounts owed by the subsidizing vendor are not
deleted or altered.

Referring to FIG. 11, a table 1100 represents an embodiment of the item
database 340 (FIG. 3). The table 1100 includes entries 1102 and 1104, each defining
an item sold via a vendor server. Those skilled in the art will understand that the table
1100 may include any number of entries. The table 1100 also defines fields for each of
the entries 1102 and 1104. The fields specify (i) an item identifier 1120 that uniquely
identifies the item, (ii) an item description 1122, (iii) an item price 1124 for which the
item is typically sold, and (iv) an availability 1126 of the item which may be based on
an inventory level of the item.

For each entry of the table 1100, the data specified by the fields 1122,
1124 and 1126 may be received from the corresponding vendor. For example, the data
may be provided when a vendor prepares to sell the item, and adjusted as the vendor
receives new inventory and sells existing inventory. Upon the entering of a new item,
the vendor server would generate a unique item identifier to store in the field 1120 of
the entry corresponding to the new item. Once information is stored for an item, it may
be retrieved upon reference to the appropriate item identifier.

Referring to FIG. 12, a flow chart 1200 illustrates an embodiment of a
method for providing an offer for a benefit (e.g. a reduced price) to a customer that is to
purchase items from a vendor. Although the illustrated method is described below as
being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed, e.g., by the vendor server 160 in the embodiment of FIG. 1B.

An indication of items a customer is to purchase from a first vendor is received (step 1202), typically from a customer terminal. Such an indication may be received via a Web server, for example, in an embodiment where the first vendor sells via the Internet. The Web server, which may be the vendor server, may receive data from the customer terminal, and such data would indicate, for example, item identifiers of items selected for purchase, hyperlinks that the customer clicks on, buttons that the customer actuates, mouse movements or other data input to the customer terminal.

The indication of items to purchase may be received from a "cookie" stored on the customer terminal (e.g. on a personal computer of the customer). Such a cookie is a block of data that a Web server (e.g. the vendor server) stores on a client system (e.g. a customer terminal). When a user returns to the same Web site, the browser of the customer terminal sends a copy of the cookie back to the Web server. Cookies may be used to identify users of the customer terminal, to instruct the Web server to send a customized version of a Web page, to submit account information for the user, and for other administrative purposes. The data stored in the cookie may also indicate, for example, the customer identifier and whether the customer is barred from receiving further offers.

The indication of items to purchase may be received via a telephone, for example, in an embodiment where a vendor sells via an IVRU. The information may also be received via a POS terminal, for example, in an embodiment where a vendor sells at a retail store. The POS terminal receives data such as Universal Product Codes
("UPC") that identify items scanned with a bar code scanner, prices of those items, and information received from a customer's frequent shopper card. Similarly, the information may be received via a device, such as a PDA (Personal Digital Assistant) or a scanner mounted on a shopping cart, that the customer uses to indicate the items he has selected for purchase or the items in which he is otherwise interested.

The indication of items to purchase may also be received via a sensor that senses the presence or location of a customer. For example, infrared or pressure sensors may be disposed in a store and operable to sense when a customer is near particular products or areas.

The indication of items to purchase may also be received via a device that scans items with a bar code scanner and provides the prices of those items that are scanned. Such devices are known and are frequently located in supermarkets to allow customers to determine the prices of items, especially items that are on sale or otherwise subject to special pricing.

An offer for a subsidy from a second vendor is selected (step 1204). For example, in an embodiment where one or more rules (and thus one or more subsidies) are included, if a rule is satisfied then a corresponding offer for a subsidy is provided. Similarly, a subsidizing vendor may be selected from a plurality of subsidizing vendors, and a subsidy from the selected subsidizing vendor is selected and offered. Rules may specify which subsidizing vendor is selected.

The subsidy may be selected based on the items to purchase. For example, a rule may specify the following required customer activity in order for a particular offer to be provided: the customer must purchase a particular item or items. Similarly, the customer may be required to purchase one or more items that have a
particular price (e.g. a price greater than $10.00) in order for a particular offer to be provided.

The subsidy may also be selected based on the total price and the subsidy amount of the subsidy. For example, the subsidy may be selected such that the subsidy amount is close to (e.g. within $5 of) the total price of the items. Such an embodiment is advantageous in that an overly generous subsidy amount is not provided (e.g. a $500 subsidy amount for a $100 total price), and a subsidy amount that is too small to cover the total price of the items is also not provided (e.g. $10 subsidy amount for a $100 total price). In other words, where it is desirable to have the subsidy amount approximately equal to the total price of the items, the subsidy is selected based on the amount of funds requested (e.g. the total price).

Since the benefit may but need not be a subsidy amount, those skilled in the art will understand that other types of benefits may be based on various factors such as the items the customer desires to purchase, the prices of the items or the total price of the items. For example, the benefit may comprise a "product upgrade", such that the customer receives different items than the ones he selected to purchase. Similarly, the benefit may comprise a free or discounted item that is separate from those the customer initially selected to purchase.

An indication of the offer (or offers) is transmitted to the customer (step 1206), typically via the customer terminal and a corresponding offer is created in the offers database 280. For example, text and/or images may be displayed on a Web page that is displayed on the customer terminal, text may be displayed on a monitor of a POS terminal, or an audio signal may be transmitted via an IVRU to a telephone. In one embodiment, the indication of the offer is transmitted before the items are purchased.
Such an embodiment can be advantageous by "surprising" the customer with an unexpected benefit. Alternatively, the indication of the offer may be transmitted after the items are purchased. Such an embodiment can be advantageous in environments where it is not practical or desirable to interject with an offer before a transaction is completed.

The indication of the offer may be transmitted via a device, such as a PDA (Personal Digital Assistant) or a display mounted on a shopping cart of the customer, that accompanies the customer as he browses a store. Similarly, a display disposed in a particular location in the store (e.g. below a product display) may provide an offer to a customer that is near particular items or areas.

The indication of the offer may be transmitted via a device that scans items with a bar code scanner and provides the prices of those items scanned. In one embodiment, such a device could display an offer upon scanning the bar code of an item.

A plurality of offers, instead of only one, may be provided to the customer. The plurality of offers may be for subsidies from one or more subsidizing vendors. The customer may accept one or more of the offers. The customer may thus obtain a plurality of benefits from a plurality of different subsidizing vendors. For example, the customer may accept a plurality of offers in order to receive an aggregate subsidy amount that equals or exceeds an amount that is requested / desired by the customer.

In one embodiment, the offer specifies a subsidy amount and an obligation to fulfill in exchange for the subsidy amount. For example, an additional transaction may be required of the customer. In an embodiment where the subsidizing
vendor provides services, the customer may be required to sign up for a service that is provided by the subsidizing vendor (e.g. initiate a service agreement with the second vendor). The customer may be required to switch from a current service provider to the subsidizing vendor, so that the service will no longer be provided by the customer's current service provider.

Examples of services include telephone service, Internet service, banking services, credit card account services, insurance service, securities trading service, utilities service, satellite television service, and cable television service, but many other services may be provided by the subsidizing vendor. Telephone service can include long distance service such as is provided by Sprint Communications Company, L.P or wireless telephone service such as is provided by AT&T. Signing up for banking services may further include the requirement to transfer a particular minimum balance to a new bank account. Signing up for credit card account services may similarly include the requirement to apply for a credit card account and also transfer a particular minimum balance to a new or existing credit card account. Signing up for securities trading services may include the requirement to open an account with a particular minimum balance amount.

In another embodiment, the additional transaction may involve an existing account. For example, the customer may be required to transfer a particular minimum balance to an existing credit card account, savings account or checking account. In another embodiment, the customer may be required to execute a minimum number of trades using his securities trading account.

In another embodiment, the additional transaction may be the purchase of one or more items. For example, the customer may be required to buy a particular
item or a minimum dollar amount of items from the subsidizing vendor or another predetermined vendor.

In another embodiment, the additional transaction may be the sampling of one or more items. For example, the customer may be required to test drive a particular vehicle or download software on a trial basis.

In still other embodiments, the additional transaction may include listening to and/or viewing an advertisement, participating in a survey or otherwise providing information, refraining from a particular activity, or installing particular software.

A response to the offer is then received from the customer terminal (step 1208). The customer may indicate his response by, for example, clicking a button on a Web page, actuating particular keys on a touch-tone telephone, verbally responding via a telephone to an IVRU, actuating a button on a keypad in communication with a POS terminal, or verbally responding to a cashier who in turn actuates buttons on the POS terminal.

If the response does not indicate an acceptance of the offer, then the transaction with the customer is processed conventionally (steps 1210 and 1212). Otherwise, the offer is accepted and a credit card number is received from the customer (step 1214). The credit card number may have been received at any time, although FIG. 12 illustrates an embodiment in which the credit card number is received following acceptance of the offer. For example, the credit card number may have been received before the offer for the subsidy was transmitted.

The received credit card number may be used to pay for the items and/or to pay a penalty amount if the customer subsequently fails to fulfill his obligation. To
assure that a credit card account remains open until the penalty amount can be charged thereeto, (i) the customer may be required to provide more than one credit card number, (ii) it may be required that the credit card number identifies an account that has been open for a predetermined amount of time, and/or (iii) it may be required that the credit card number identifies an account that has been used a predetermined number of times.

Having accepted the offer, the items are provided to the customer for less than the total price of the items (step 1216). Thus the customer is charged a lower price for the items than he otherwise would have been charged. The customer may even receive the items for free and/or receive a credit (e.g. money back or store credit).

In another embodiment, the benefit to the customer may be different than a reduced price on the items he desires to purchase. For example, the customer may be given a product upgrade to another (higher value) item or the customer may be given an additional item for a reduced price or for free. The customer may also be provided with cash, store credit or another monetary award.

The obligation to fulfill in exchange for the subsidy typically includes an obligation expiration date by which the obligation must be fulfilled. If the customer has not fulfilled his obligation by any applicable obligation expiration date, a penalty is applied (steps 1218 and 1220). Various methods for determining whether the obligation has been fulfilled and for applying a penalty are described below.

An entry is created in the transaction database 250 to reflect, e.g., the time of the transaction, the items ordered, and the amount charged. Similarly, the corresponding entry of the offers database is updated to reflect, e.g. whether the offer was accepted.

Referring to FIG. 13, a flow chart 1300 illustrates an embodiment of a
method for providing items for less than their total price, described above with respect to step 1216. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed, e.g., by the vendor server 160 in the embodiment of FIG. 1B.

The subsidy amount of the selected subsidy is determined (step 1302). For example, once a subsidy is accepted, the corresponding entry of the offers database 280 (FIG. 2) is accessed to determine the subsidy amount (e.g. with reference to the field 932 of FIG. 9).

The total price of the items is charged to the specified credit card account (step 1304), and the subsidy amount is credited to the credit card account (step 1306). For example, if the items the customer desires to purchase are $80, and a subsidy amount for the subsidy is $20, the credit card account is charged $60 for the items by (i) a charge of $80 in a first credit card account adjustment, and (ii) a credit of $20 in a second credit card account adjustment. The crediting may, but need not, be performed after the charging. The crediting may be performed after the charging in order to, for example, assure that a line item for the charged amount (e.g. $80 in the above example) appears above a line item for the credited amount (e.g. $20 in the above example).

As is known in the art, the credit to the credit card account is initiated by transmitting credit data to a credit card clearinghouse. The credit data includes, among other things, the amount of the credit, the credit card account number and a "merchant identifier" of the merchant (e.g. the vendor) initiating the charge. The credit data may further include a unique offer identifier, such as is stored in field 920 for the
corresponding entry of the offers database 280, that identifies the offer. Thus the offer identifier may be printed on the customer’s credit card bill, allowing the customer to identify the offer (e.g. to assure that a subsidy amount was in fact applied or to request information regarding the offer).

The transaction between the customer and the vendor is marked as paid in full (step 1308) since customer has paid the amount required. Accordingly, conventional actions such as printing a receipt for the transaction (if at a POS terminal) or initiating delivery of the items (if ordered remotely via a Web site) may be performed once the transaction is paid in full.

The embodiment illustrated in FIG. 13 is only one of several embodiments. In another embodiment, the customer may be charged in a single credit card account adjustment, rather than in two as is described in FIG. 13. For example, if the items the customer desires to purchase are $80, and a subsidy amount for the subsidy is $20, the specified credit card account may be charged $60 in a single credit card account adjustment.

Referring to FIG. 14A, a flow chart 1400 illustrates an embodiment of a method for determining whether a customer has fulfilled his obligation described above with respect to step 1218. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed, e.g., by the vendor server 160 in the embodiment of FIG. 1B.

A signal is received, and the signal represents a fulfillment code and an offer (step 1402). The signal may be received from, e.g., the subsidizing vendor server or the customer terminal. For example, the customer may receive the fulfillment code
after he has fulfilled his obligation, and in turn input the code to the central controller,
e.g., via a voice response unit, email message or a form on a Web site. The customer's
terminal may also have a stored file (e.g. a cookie) that stores the fulfillment code and
that is read by the controller 110 when the customer accesses a particular Web site.

The fulfillment code may have been stored in the cookie after the customer fulfilled an
obligation online. In such an embodiment, the customer would need only access a Web
site, rather than enter the fulfillment code himself. In another embodiment, the
subsidizing vendor server may input the code to the central controller, e.g., via a Web
site, email message or a voice response unit when the customer fulfills his obligation.

The fulfillment code may be anything that indicates that the customer
has fulfilled his obligation. For example, the fulfillment code may be a set of numeric
or alphanumeric characters that are recognized as indicating fulfillment of the
obligation. In an embodiment where the customer is required to input the fulfillment
code, it is especially advantageous to deter or prevent fraud by customers.

Accordingly, the fulfillment code in such an embodiment will ideally be difficult to
forge, and will not be useful if it is copied and used again by the same customer or by
another party.

One method for generating a code which may be used as a fulfillment
code is to encrypt one or more data elements to generate an encrypted value. Such
methods are known to those skilled in the art, and are disclosed, for example, in
commonly-owned, U.S. Patent Application Serial No. 08/919,339, entitled "METHOD
AND DEVICE FOR GENERATING A SINGLE-USE FINANCIAL ACCOUNT
NUMBER", filed August 28, 1997, incorporated by reference herein as part of the
present disclosure. For example, an offer identifier, a subsidizing vendor identifier, a
private key and/or a random number may be encrypted to generate a fulfillment code. Using the encryption processes described in the above-referenced patent application, such a fulfillment code would be extremely difficult to forge without knowledge of, e.g., the encryption algorithm or the private key. Furthermore, the central controller 110 may store a database that records which fulfillment codes have been received. Thus, if a fulfillment code is used more than once, the controller 110 may detect such duplicate use (known as a "replay attack") and refuse to recognize the corresponding obligation as fulfilled.

Encrypting data to generate the fulfillment code also permits that data to be determined from the fulfillment code. For example, if the fulfillment code is generated by encrypting the offer identifier, then the offer identifier may be determined by decrypting the fulfillment code, as is also described in the above-referenced patent application. Accordingly, the fulfillment code may indicate any data that may be useful in determining whether an obligation has been fulfilled, such as the customer identifier and the corresponding obligation expiration date.

Another method for generating a code that may be used as a fulfillment code is to select a code from a set of predetermined codes. Such methods are also described in the above-referenced patent application. For example, there may be a database of hundreds of unique codes. When a code is needed, one is selected from the database, and is marked in the database as unavailable for future use. Thus, a code in the database is not reused when there are other codes that have not yet been selected.

As described above, the received signal represents a fulfillment code and an offer. The signal may represent the fulfillment code, which in turn indicates an offer (e.g. decrypting the fulfillment code can yield an offer identifier). Alternatively, the
signal may represent the fulfillment code and the offer separately. For example, the offer may be represented by the corresponding offer identifier, which can be either separate from the fulfillment code or ascertainable from the fulfillment code.

Each subsidizing vendor server may be operable to generate fulfillment codes in accordance with any of the above-described methods. For example, each subsidizing vendor may generate a fulfillment code and provide that fulfillment code to a customer when that customer fulfills his obligation. Alternatively, the subsidizing vendor may generate a fulfillment code and provide that fulfillment code to the central controller 110.

From the received signal, the corresponding entry of the offers database 280 is identified (step 1404). For example, the received signal may indicate an offer identifier, and thus the entry of the offers database 280 that includes this offer identifier in the corresponding field 920 may be identified.

From this entry, the obligation expiration date may be determined. If it is determined that the obligation expiration date has passed (step 1406), then the identified entry is updated accordingly (step 1408). For example, the entry may be updated to show that the obligation was not fulfilled and that the obligation expiration date has passed by modifying the data stored in fields 940 and 944 respectively.

If it is determined that the obligation expiration date has not passed (step 1406), then it is determined whether the fulfillment code shows that the obligation was fulfilled (step 1410). The fulfillment code may be validated to determine whether the obligation was fulfilled. As described above, in one embodiment the fulfillment code may be decrypted to yield one or more data elements of interest. Thus, the fulfillment code may show that the obligation was fulfilled if, for example, (i) a valid data element
is produced from such decryption, (ii) the data element indicates a customer identifier
that matches a customer identifier input by the customer, (iii) the data element indicates
a vendor identifier that matches a vendor identifier input by the customer, and/or (iv)
the data element indicates a date (e.g. when the obligation was fulfilled) that matches a
date input by the customer.

In an embodiment where the fulfillment code is selected from a plurality
of predetermined fulfillment codes, the fulfillment code may show that the obligation
was fulfilled if, for example, (i) the fulfillment code is determined to match any of the
codes that were stored in the database, (ii) the fulfillment code is determined to not
have been redeemed previously, and/or (iii) the fulfillment code is determined to be a
code that was stored in the database which the particular subsidizing vendor could
access.

If the fulfillment code shows that the obligation was not fulfilled, then
the controller 110 transmits a message (step 1412) indicating that the fulfillment code is
invalid. The message may be transmitted to the party from which the signal was
received in step 1402. For example, if the customer had logged onto a Web page to
transmit the fulfillment code to the controller 110, then the controller 110 may in turn
transmit the message via a Web page displayed to the customer.

If the fulfillment code shows that the obligation was fulfilled, then the
controller 110 updates the entry (step 1414) of the offers database 280 that was
identified in step 1404. For example, the entry may be updated to show that the
obligation was fulfilled and the date and time that the obligation was fulfilled by
modifying the data stored in fields 940 and 942 respectively.

Another method for determining whether a customer has fulfilled his
obligation is applicable if the controller 110 is required to interact with the customer when the customer fulfills his obligation. For example, if the obligation is to apply for a credit card account, the controller 110 may generate an HTML form and present that form to the customer via a Web page. The form may be presented in a "frame" of his browser, so the customer may view a plurality of Web sites (e.g. Web sites of the vendor and the subsidizing vendor) simultaneously. The customer would in turn input information via that form, and the information would be received by the controller 110. Thus, the controller would be able to easily determine if and when the customer has fulfilled his obligation. In an embodiment where the input information is not received by the controller 110, a cookie storing the fulfillment code could be stored on the customer terminal, and that cookie could be read when the customer terminal accesses a Web page that is accessible to the controller 110.

Another method for determining whether a customer has fulfilled his obligation is for the controller 110 to otherwise access information regarding the customer's actions. For example, in an embodiment where the customer is obligated to switch service providers (e.g. to the subsidizing vendor) or sign up for a new service provider (e.g. the subsidizing vendor), the controller 110 may determine a service provider that currently provides a service to the customer. For example, the controller 110 may access a database of customers of the subsidizing vendor, or may query the subsidizing vendor to receive an indication of whether a particular customer is serviced by the subsidizing vendor. The controller may thus determine whether the service in question is provided by the subsidizing vendor.

Alternatively, a subsidizing vendor may itself determine that the customer has not fulfilled his obligation by the obligation expiration date, and then
inform the controller 110 or corresponding vendor that serviced the customer.

Similarly, the subsidizing vendor may also apply the penalty instead of the controller 110 or corresponding vendor.

The controller 110 may instead receive an indication that the customer has switched service providers. For example, the controller 110 may access a database to determine new customers (e.g. signed up within the past thirty days) of the subsidizing vendor. From this database, the controller 110 may determine if any of the new customers had been offered a subsidy. If so, and if the subsidy included an obligation to switch service providers to this subsidizing vendor, then it is determined that these new customers have fulfilled their obligation.

In an embodiment where the customer is obligated to purchase from the subsidizing vendor within a predetermined time period, the customer's actions may be similarly monitored to determine whether his obligation is fulfilled. For example, the controller 110 may request information on the transactions the customer participated in with the subsidizing vendor. In response, the appropriate subsidizing vendor server can respond with, e.g., data from its transaction database that indicate such transactions. The subsidizing vendor may alternatively provide the controller 110 with access to its transaction database, which is searched by the controller 110.

The controller 110 may thus determine whether the customer has purchased from the subsidizing vendor at least a predetermined number of times during the predetermined period of time. For example, the obligation may be to purchase five or more times this month from the subsidizing vendor. Similarly, the controller 110 may determine whether the customer has purchased from the subsidizing vendor at least a predetermined number of times during each of a plurality of predetermined
periods of time. For example, the obligation may be to purchase five or more times from the subsidizing vendor during each month of this year.

Referring to FIG. 14B, a flow chart 1450 illustrates an embodiment of a method for determining whether obligation expiration dates have passed without a corresponding obligation having been fulfilled. The illustrated method may be performed periodically, such as once at the end of each day, in order to determine which obligations have not been fulfilled by their respective obligation expiration dates. For each obligation, an appropriate penalty may be assessed (if appropriate), the customer may be reminded of his obligation, or the customer may be encouraged to fulfill the obligation. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed, e.g., by the vendor server 160 in the embodiment of FIG. 1B.

The controller 110 selects an entry in the offers database 280 (step 1452). For example, the controller may select the first entry in the offers database 280. From the entry, it is determined whether the corresponding obligation has been fulfilled (step 1454). For example, the field 940 of the entry indicates whether the corresponding obligation was fulfilled. If the corresponding obligation has been fulfilled, then it is determined whether there are more entries to select (step 1462). If so, another entry is selected (step 1452), for example, the next entry stored sequentially in the offers database 280.

If the corresponding obligation has not been fulfilled, then it is determined whether the corresponding obligation expiration date has passed (step 1456). For example, the obligation expiration date is stored in field 832 of the selected
entry, and the current date may be determined with reference to a signal received from an internal clock device or an external reference. If the current date is after the obligation expiration date, then the obligation expiration date has passed.

If the obligation expiration date has passed, then a penalty is applied (step 1458) as described herein. If the obligation expiration date has not passed, then the controller 110 can, if desired, transmit a message to the customer (step 1460). The message may be transmitted, for example, via email, via a Web site when the customer next accesses the Web site or via a telephone IVRU. The message may indicate, for example, the obligation expiration date and the amount by which the customer has "partially fulfilled" the obligation. Such a message can serve to both remind the customer of his obligation and inform him of what remains to be done to fulfill his obligation. For example, if an obligation involves ten periodic actions (e.g. purchases), then the "partial fulfillment" of the obligation can be the number (less than ten) that the customer has performed to date. If it is unlikely that a customer will fulfill his obligation, other appropriate actions may be taken. Each additional entry of the offers database 280 is selected and processed as described above.

The above-described message may also be transmitted in response to an inquiry from a customer. For example, the customer may input his customer identifier to the controller 110 via a Web page. The controller 110 in turn responds by displaying a Web page that specifies each obligation of the customer, the corresponding obligation expiration date and the amount by which the customer has partially fulfilled the obligation. Thus a customer may check his record of compliance with obligations.

The above-described message may also be provided to the customer in subsequent transactions. Such a message would remind the customer of previous
obligations and thus the need to fulfill future obligations.

Referring to FIG. 15, a flow chart 1500 illustrates an embodiment of a method for applying a penalty, described above with respect to step 1220. Although the illustrated method is described below as being performed by the controller 110 in the embodiment of FIG. 1A, the illustrated method may alternatively be performed, e.g., by the vendor server 160 in the embodiment of FIG. 1B.

A penalty amount is determined (step 1502) in any of a number of ways. For example, the penalty amount may be the difference between the total price and the price charged for the items. Thus, such a penalty would serve to recoup the subsidy amount previously provided to the customer. For example, if the total price of the items the customer purchased was $80, and the subsidy amount for the subsidy is $20, the customer was charged $60 for the items ($60 = $80 - $20). Accordingly, the penalty amount would be the $20 subsidy amount.

In another embodiment, the penalty amount could equal the sum of the subsidy amount (or a portion thereof) and a supplemental fee. Referring again to the above example, $5 could be added to the $20 subsidy amount to produce a $25 penalty amount. The $5 supplemental fee serves to more strongly deter reneging, since the customer would be in a worse position than if he had never accepted the offer for the subsidy.

In another embodiment, the penalty amount may be based on the degree to which the obligation has been unfulfilled. The degree to which the obligation has been unfulfilled may be, for example, the percent of required transactions remaining to be completed. Thus if the customer completed twelve of twenty required purchases, then the penalty amount may be forty percent of the subsidy amount \((\frac{[20 - 12]}{20} =\))
40%).

The subsidizing vendor may select how the penalty amount is calculated. For example, the subsidizing vendor may opt to have a $10 supplemental fee included, and may further opt to apply the same penalty amount regardless of the degree to which the obligation has been partially fulfilled. Alternatively, controller 110, the customer or the vendor from which the customer originally purchased the items may select how the penalty amount is calculated.

The credit card account number to which the penalty amount is to be charged is also determined (step 1504). For example, the appropriate entry of the offers database 280 specifies a transaction identifier in field 922. The transaction identifier in turn indicates an entry of the transaction database 250 that may specify credit card information in field 626. Alternatively, the entry of the transaction database 250 may specify a customer identifier in field 632. The customer identifier can indicate an entry of the customer database 230, which in turn may specify credit card information in field 426. The two fields 626 and 426 may each specify a different credit card account. For example, each entry of the customer database 230 may store in field 426 a credit card account that the customer desires to use as a default credit card account, while each entry of the transaction database 250 may store in field 626 a credit card account that was actually used by the customer in a transaction. Accordingly, the penalty amount may be charged to the credit card account that was actually used by the customer in a transaction, or to a default credit card account.

The penalty amount is charged to the credit card account (step 1506). As is known in the art, the charge to the credit card account is initiated by transmitting charge data to a credit card clearinghouse. The charge data includes, among other
things, the amount of the charge and the credit card account number. The charge data
may further include a unique offer identifier, such as is stored in field 920 for the
Corresponding entry of the offers database 280, that identifies the offer. Thus the offer
identifier may be printed on the customer’s credit card bill, allowing the customer to
identify the offer (e.g. to request information regarding the offer).

The step 1506 of charging the penalty amount to the credit card account
may be performed in a single transaction or in a plurality of transactions. For example,
a third of the penalty amount may be charged to the credit card account once a month
for three months. Such an embodiment is advantageous in that many customers prefer
a series of smaller charges over time rather than one charge. It can be further desirable
to charge interest or another surcharge if the penalty amount is charged in a plurality of
transactions over time. For example, 10% of the penalty amount may be charged to the
credit card account once a month for eleven months. Accordingly, the total of the
eleven charges is 110% (110% = 10% x 11) of the penalty amount.

In addition to (or instead of) charging the credit card account of the
customer, the controller 110 may charge an account of the vendor from which the
customer originally purchased the items. Such a charge is useful where it is necessary
to provide that vendor with an incentive to only provide offers to customers that are
unlikely to renege. Since the vendor is penalized if the customer reneges, the vendor
will typically take steps if possible to reduce offers given to customers that may, or are
likely to, renege.

Other means besides a credit card account may be used in applying a
penalty. For example, another account such as a debit account or an escrow account
may be charged. Alternatively, a customer may be sent a bill (e.g. via postal mail or
electronic mail) for a penalty amount.

Although in FIG. 15 the penalty is described as a charge to a credit card account, the present invention encompasses further types of penalties. In another embodiment, the penalty may include withholding provision of the items to the customer until the customer has fulfilled the obligation. For example, appropriate "ship now" commands to the shipping department or entity responsible for delivery can be suppressed or delayed until the obligation is fulfilled. Alternatively, the shipping department or entity responsible for shipping can be instructed to await instructions before shipping.

In another embodiment, the penalty may include having the customer accept another offer for a subsidy. Thus the controller 110 could transmit to the customer an indication of a second offer for a second subsidy from the subsidizing vendor. The second offer would define a second obligation, which may or may not be the same as the first obligation of the original offer. When the customer accepts the second offer, the first obligation could be deemed fulfilled. If the customer does not accept the second offer, another penalty (e.g. a penalty amount charged to his credit card account) could be applied.

In another embodiment, the penalty may include preventing the customer from receiving offers for subsidies (or particular categories of offers for subsidies) in the future. For example, the controller 110 may adjust the field 430 of the appropriate entry of the customer database 230. Similarly, the penalty may include preventing the customer from making purchases from the vendor that provided the customer with the items.

In another embodiment, the penalty may include disabling one or more
of the items purchased in order to deprive the customer of the use of the items. For example, if the customer purchases software, the controller 110 can prevent the software from operating, e.g., by transmitting a code that prevents the software from being executed, by refusing to transmit a code required to reactivate expired software or by refusing to allow the software to access a required Web site.

Referring to FIG. 16, a billing statement 1600 illustrates the effect of various subsidy amounts and penalties on a customer's credit card account. The billing statement 1600 is provided for purposes of illustration only.

The billing statement 1600 includes indicia 1602 and 1604 that indicate the customer name and the credit card account number respectively. The billing statement 1600 also includes indicia 1610, 1612, 1614 and 1618 that each indicates a credit card account adjustment (e.g. a charge or a credit to the credit card account). Each such credit card account adjustment includes a field for (i) a date 1620 of the credit card account adjustment, (ii) a description 1622 of the credit card account adjustment, and (iii) an amount 1624 of the charge or credit. In FIG. 16, each charge amount is shown as a positive value and each credit amount is shown as a negative value.

The indicia 1610 and 1612 indicate credit card account adjustments that occur when the customer purchases items from a first vendor ("Amazon.com®"). The indicia 1610 indicate a charge for the total price of the items ("$25.00"), and the indicia 1612 indicate a credit for the subsidy amount ("-$25.00"). Since the charge of $25.00 is equal in magnitude to the credit of $25.00, the net effect is that the customer is charged $0 for the items. Thus the items are provided to the customer for free. The indicia 1612 also indicate an offer code "12345678" that uniquely identifies the offer.
for the subsidy amount, which the customer has accepted.

The indicia 1614 and 1616 indicate credit card account adjustments that occur after a penalty is applied. The indicia 1614 indicate a charge for the difference between the total price of the items ($25.00) and the price charged for the items ($0). The difference is the subsidy amount of $25.00, which was indicated previously by the indicia 1612. The charge indicated by the indicia 1614 serves to "reverse" the subsidy amount previously given to the customer. The indicia 1616 indicate a charge for a supplemental fee of $5.00. Thus the net effect of the four credit card account adjustments is a charge of $30.00 ($30.00 = $25.00 - $25.00 + $25.00 + $5.00). In this example, the net effect of the credit card account adjustments ($30) is a charge greater than the charge for the total price of the items ($25).

Amounts collected in connection with applied penalties may be provided to the respective subsidizing vendors to compensate them for subsidy amounts they provided. However, other parties besides the subsidizing vendor may receive a portion or all of the penalty amounts. For example, the entity operating or controlling the central controller may receive, e.g. the portion of the penalty amount that is in excess of the original subsidy amount. Such amounts may themselves be provided as subsidy amounts to the same or other customers.

Exemplary Applications

The following are several examples which illustrate various applications of the present invention. These examples are presented only to demonstrate the wide applicability of the present invention. These examples do not constitute a definition of
all possible embodiments or all possible applications. Those skilled in the art will understand that there are many more applications of the present invention consistent with the present disclosure. Further, although the following examples are briefly described for clarity, those skilled in the art will understand how to make any changes, if necessary, to the above-described apparatus and methods to accommodate these and other embodiments and applications.

Telephone Service Example:

A customer of an on-line book vendor selects three books having a total price of $80. The customer is presented with an offer via a Web page. The offer specifies that the customer may receive the three books for free if he agrees to sign up within a week for at least six months of AT&T long distance telephone service. The customer accepts and signs up for the service within a week. However, he cancels the service after three months. His credit card account is charged $40 (half of the subsidy amount). Alternatively, his last long distance telephone bill could include the $40 charge.

Periodic Obligation Example:

A customer in a retail store brings $30 of items to a POS terminal. The customer is presented with an offer via the POS terminal, which is read to him by the cashier operating the POS terminal. The offer specifies that the customer may receive the items for free and also receive a $10 gift certificate if he agrees to rent one video tape per week at Blockbuster® for the next two months.
ATM Example:

A customer withdrawing cash from his bank account via an ATM is provided with an extra $10 if he agrees to immediately participate in a survey at the ATM.

Item Sampling Example

A customer accessing an online car magazine is offered a free subscription in exchange for test driving a particular vehicle from a particular car dealer. After accepting the offer, the customer is provided a unique twelve-digit code. The customer does test drive the required vehicle, and provides the car dealer with the twelve-digit code. The car dealer in response enters the customer's twelve-digit code and the car dealer's own ten-digit code into a particular Web site used for verifying obligation fulfillment. The car dealer prints a receipt for the customer to show that the car dealer did in fact verify fulfillment of the obligation.

Software Plug-in Example:

A customer of an on-line vendor receives an offer for a discount off of his purchase if he agrees to install a plug in to his browser that directs the browser to display banner advertisements of a particular Web site.

Although the present invention has been described with respect to a preferred embodiment thereof, those skilled in the art will note that various substitutions may be made to those embodiments described herein without departing from the spirit and scope of the present invention.
What is claimed is:

1. A method for providing an offer, comprising the steps of:
   receiving an indication of at least one item that a customer is to purchase from a
   first vendor, the at least one item having an associated total price;
   transmitting, in response to the received indication of the at least one item, an
   indication of an offer for a subsidy from a second vendor, the offer defining an obligation;
   receiving an indication that that the customer accepts the offer;
   providing the at least one item to the customer for less than the total price;
   determining whether the customer has fulfilled the obligation; and
   applying a penalty if the customer has not fulfilled the obligation.

2. The method of claim 1, in which the step of receiving an indication of at least one
   item that a customer is to purchase from a first vendor comprises:
   receiving at least one item identifier via a Web site.

3. The method of claim 1, in which the step of transmitting an indication of the offer
   is performed before the at least one item is purchased.

4. The method of claim 1, in which the step of providing the at least one item to the
   customer for less than the total price comprises:
   charging the customer a second price for the at least one item, the second price
   being less than the total price.

5. The method of claim 4, in which the step of providing the at least one item to the
   customer for less than the total price comprises:
   crediting an amount of funds to an account, the amount of funds being based on a
difference between the total price and the second price.
6. The method of claim 5, in which the step of crediting comprises:
   crediting the amount of funds to a credit card account.

7. The method of claim 4, in which the step of charging the customer the second price
   for the at least one item comprises:
   charging the second price to an account.

8. The method of claim 7, in which the step of charging the second price to an account
   comprises:
   charging the second price to an account in one account adjustment.

9. The method of claim 7, in which the step of charging the second price to an account
   comprises:
   charging the second price to a credit card account.

10. The method of claim 4, in which the step of charging the customer the second price
    for the at least one item comprises:
    charging the total price to an account; and
    crediting an amount of funds to an account, the amount of funds being based on a
    difference between the total price and the second price.

11. The method of claim 10, in which the step of crediting is performed after the step
    of charging the total price.

12. The method of claim 4, in which the step of providing the at least one item to the
    customer for less than the total price comprises:
    providing the at least one item to the customer for free.

13. The method of claim 1, in which the step of determining whether the customer has
    fulfilled the obligation comprises:
determining a service provider that provides a service to the customer.

14. The method of claim 13, in which the step of determining a service provider that provides a service to the customer comprises:
determining whether the service is provided by the second vendor.

15. The method of claim 13, in which the service comprises at least one of:
telephone service,
Internet service,
banking services,
credit card account services,
insurance service,
securities trading service,
satellite television service, and
cable television service.

16. The method of claim 1, in which the step of determining whether the customer has fulfilled the obligation comprises:
receiving an indication that the customer has switched service providers.

17. The method of claim 16, in which the step of receiving an indication that the customer has switched service providers comprises:
determining a new customer of the second vendor; and
determining if the new customer had been offered a subsidy.

18. The method of claim 1, in which the step of determining whether the customer has fulfilled the obligation comprises:
determining whether the customer has purchased from the second vendor during a predetermined period of time.
19. The method of claim 18, in which the step of determining whether the customer has fulfilled the obligation comprises:
   determining whether the customer has purchased from the second vendor at least a predetermined number of times during the predetermined period of time.

20. The method of claim 18, in which the step of determining whether the customer has fulfilled the obligation comprises:
   determining whether the customer has purchased from the second vendor at least a predetermined number of times during each of a plurality of predetermined periods of time.

21. The method of claim 1, in which the step of determining whether the customer has fulfilled the obligation comprises:
   receiving a code from the second vendor; and
   validating the code.

22. The method of claim 21, in which the step of validating the code comprises:
   comparing the code with a plurality of stored codes to determine if the code matches any of the plurality of stored codes.

23. The method of claim 21, in which the step of validating the code comprises:
   decrypting the code.

24. The method of claim 21, in which the code is received via at least one of a Web site and a voice response unit.

25. The method of claim 1, in which the step of applying a penalty comprises:
   applying a penalty to the customer if the customer has not fulfilled the obligation.

26. The method of claim 1, in which the step of applying a penalty comprises:
   charging a penalty amount.
27. The method of claim 26, in which the step of charging a penalty amount comprises:
charging the penalty amount to an account.

28. The method of claim 27, in which the step of charging a penalty amount to an
account comprises:
charging the penalty amount to a credit card account.

29. The method of claim 28, in which the credit card account was used to purchase the
at least one item.

30. The method of claim 26, further comprising:

determining the penalty amount based on a difference between the total price and a
second price, the second price being a price charged for the at least one item.

31. The method of claim 30, in which the penalty amount equals the difference
between the total price and the second price.

32. The method of claim 30, in which the penalty amount equals a sum of:
the difference between the total price and the second price, and
a supplemental fee.

33. The method of claim 26, further comprising:
determining a degree to which the obligation has been unfulfilled; and
determining the penalty amount based on the degree to which the obligation has
been unfulfilled.

34. The method of claim 26, in which the step of charging a penalty amount comprises:
charging each of a plurality of portions of the penalty amount at a respective time.
35. The method of claim 1, in which the step of applying a penalty comprises: withholding provision of the at least one item to the customer until the customer has fulfilled the obligation.

36. The method of claim 1, in which the step of applying a penalty comprises: transmitting an indication of a second offer for a second subsidy from the second vendor, the second offer defining a second obligation; and receiving an indication that that the customer accepts the second offer.

37. The method of claim 1, in which the step of applying a penalty comprises: preventing the customer from receiving offers for subsidies.

The method of claim 1, further comprising: receiving a credit card identifier that identifies a credit card account.

39. The method of claim 1, further comprising: generating an offer identifier that uniquely identifies the offer.

40. The method of claim 39, further comprising: printing the offer identifier on a billing statement.

41. The method of claim 1, further comprising: transmitting a form for receiving information.

42. The method of claim 1, further comprising: selecting the subsidy from a plurality of subsidies.

43. The method of claim 42, in which the step of selecting a subsidy from a plurality of subsidies comprises: selecting a vendor from a plurality of vendors; and
selecting a subsidy from the selected vendor.

44. The method of claim 42, in which the step of selecting a subsidy from a plurality of subsidies comprises:
selecting a subsidy from a plurality of subsidies based on the at least one item.

45. The method of claim 44, in which the step of selecting a subsidy from a plurality of subsidies comprises:
selecting a subsidy from a plurality of subsidies based on a price of the at least one item.

46. The method of claim 44, in which the step of selecting a subsidy from a plurality of subsidies comprises:
selecting a subsidy from a plurality of subsidies based on the total price, and
a subsidy amount of the subsidy.

47. The method of claim 42, in which the step of selecting a subsidy from a plurality of subsidies comprises:
selecting at least two subsidies from a plurality of subsidies based on the at least one item.

48. The method of claim 1, in which the obligation comprises an obligation to participate in a transaction with the second vendor.

49. The method of claim 48, in which the transaction with the second vendor comprises at least one of:
signing up for a service,
transferring a balance from a first credit card account to a second credit card account,
purchasing a particular item,
sampling a particular item,
listening to an advertisement,
participating in a survey,
refraining from a particular activity, and
installing software of the second vendor.

50. A method for providing an offer, comprising the steps of:

receiving an indication of at least one item that a customer is to purchase from a
first vendor, the at least one item having an associated total price;
receiving a credit card identifier that identifies a credit card account;
transmitting, in response to the received indication of the at least one item, an
indication of an offer for a subsidy from a second vendor, the offer defining an obligation;
receiving an indication that that the customer accepts the offer;
charging the customer a second price for the at least one item, the second price
being less than the total price;
determining whether the customer has fulfilled the obligation; and
charging a penalty amount to the credit card account if the customer has not
fulfilled the obligation.

51. A method, comprising the steps of:

receiving an indication of at least one item that a customer is to purchase from a
first vendor, the at least one item having an associated total price;
transmitting, in response to the received indication of the at least one item, an
indication of an offer for a subsidy from a second vendor, the step of transmitting an
indication of the offer being performed before the at least one item is purchased, the offer
defining an obligation to apply for a credit card account;
receiving an indication that that the customer accepts the offer;
providing the at least one item to the customer for less than the total price;
determining whether the customer has fulfilled the obligation; and
applying a penalty to the credit card account to the customer if the customer has not fulfilled the obligation.

52. The method of claim 51, in which the step of providing the at least one item to the customer for less than the total price comprises:
charging to the credit card account a second price for the at least one item, the second price being less than the total price.

53. The method of claim 52, in which the step of charging comprises:
charging the total price to the credit card account; and
crediting an amount of funds to the credit card account, the amount of funds being based on a difference between the total price and the second price.

54. The method of claim 53, in which the step of crediting is performed after the step of charging the total price.

55. The method of claim 52, in which the second price is zero.

56. The method of claim 55, in which the step of charging comprises:
charging the total price to the credit card account; and
crediting the total price to the credit card account.
FIG. 1A
FIG. 1B
<table>
<thead>
<tr>
<th>CUSTOMER IDENTIFIER</th>
<th>NAME</th>
<th>BILLING ADDRESS</th>
<th>CREDIT CARD INFORMATION</th>
<th>E-MAIL</th>
<th>MAY RECEIVE OFFERS?</th>
<th>RENEGED</th>
</tr>
</thead>
<tbody>
<tr>
<td>C0001</td>
<td>DAN MANN</td>
<td>123 MAIN ST.</td>
<td>VISA 1111-1111-1111</td>
<td><a href="mailto:DMANN@ISP.COM">DMANN@ISP.COM</a></td>
<td>YES</td>
<td>1</td>
</tr>
<tr>
<td>C0002</td>
<td>STEVE DAVIS</td>
<td>3 RIVERPLACE ROAD</td>
<td>AMEX 4444-5555 6666-3333</td>
<td><a href="mailto:SDAVIS@SCHOOL.EDU">SDAVIS@SCHOOL.EDU</a></td>
<td>NO</td>
<td>4</td>
</tr>
<tr>
<td>C0003</td>
<td>JEFF SMITH</td>
<td>2 THRUSH LANE</td>
<td>DIS 2222-3333 4444-7777</td>
<td><a href="mailto:SMITH@WEBTV.COM">SMITH@WEBTV.COM</a></td>
<td>NOT UNTIL 3/17/2002</td>
<td>15</td>
</tr>
<tr>
<td>C0004</td>
<td>GEORGE ALAN</td>
<td>15 LAUREL AVENUE</td>
<td>VISA 1111-4444-8888-3333</td>
<td><a href="mailto:ALAN@WORK.COM">ALAN@WORK.COM</a></td>
<td>YES</td>
<td>0</td>
</tr>
</tbody>
</table>

**FIG. 4**
<table>
<thead>
<tr>
<th>VENDOR IDENTIFIER</th>
<th>VENDOR NAME</th>
<th>E-MAIL ADDRESS</th>
<th>AMOUNT OWED TO VENDOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>V001</td>
<td>VENDOR X</td>
<td><a href="mailto:X@X.COM">X@X.COM</a></td>
<td>$0.00</td>
</tr>
<tr>
<td>V002</td>
<td>VENDOR Y</td>
<td><a href="mailto:Y@Y.COM">Y@Y.COM</a></td>
<td>$100.00</td>
</tr>
<tr>
<td>V003</td>
<td>VENDOR Z</td>
<td><a href="mailto:Z@Z.COM">Z@Z.COM</a></td>
<td>$987.13</td>
</tr>
<tr>
<td>V004</td>
<td>VENDOR Q</td>
<td><a href="mailto:Q@Q.COM">Q@Q.COM</a></td>
<td>$45.00</td>
</tr>
<tr>
<td>Transaction Identifier</td>
<td>Time of Transaction</td>
<td>Items Ordered</td>
<td>Amount Charged</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------</td>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>T000002</td>
<td>1/9/2001 9:00 PM</td>
<td>P123</td>
<td>$0.00</td>
</tr>
<tr>
<td>T000003</td>
<td>1/10/2001 3:02 AM</td>
<td>P456, P789</td>
<td>$0.00</td>
</tr>
<tr>
<td>SUBSIDIZING VENDOR IDENTIFIER</td>
<td>SUBSIDIZING VENDOR NAME</td>
<td>ACCOUNT</td>
<td>AMOUNT OWED BY SUBSIDIZING VENDOR</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------</td>
<td>-----------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>S001</td>
<td>CREDIT CARD COMPANY X</td>
<td>BANK ACCOUNT</td>
<td>$855.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#2345678</td>
<td></td>
</tr>
<tr>
<td>S002</td>
<td>LONG DISTANCE TELEPHONE Y</td>
<td>MC 1111-2222-</td>
<td>$4,390.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3333-4444</td>
<td></td>
</tr>
<tr>
<td>S003</td>
<td>SATELLITE TELEVISION Z</td>
<td>PREPAID BALANCE</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$10,500</td>
<td></td>
</tr>
<tr>
<td>Offer Rule Identifier</td>
<td>Subsidizing Vendor Identifier</td>
<td>Customer Activity</td>
<td>Subsidy Amount</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------</td>
<td>------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>R0001 S011</td>
<td></td>
<td>Put items in shopping cart</td>
<td>Up to $50</td>
</tr>
<tr>
<td>R0002 S012</td>
<td></td>
<td>Access web site 101</td>
<td>Up to $50</td>
</tr>
<tr>
<td>R0003 S012</td>
<td></td>
<td>Access web site 102 from web site 103</td>
<td>$40</td>
</tr>
<tr>
<td>R0004 S013</td>
<td></td>
<td>Ready to purchase at least $100 of items</td>
<td>$100</td>
</tr>
<tr>
<td>R0005 S014</td>
<td></td>
<td>Download coupons from retail kiosk</td>
<td>$75</td>
</tr>
<tr>
<td>OFFER IDENTIFIER</td>
<td>TRANSACTION IDENTIFIER</td>
<td>SUBSIDIZING VENDOR IDENTIFIER</td>
<td>OFFER RULE APPLIED</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------</td>
<td>------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>F001</td>
<td>T000 123</td>
<td>S111</td>
<td>R1230</td>
</tr>
<tr>
<td>F002</td>
<td>T000 456</td>
<td>S222</td>
<td>R4561</td>
</tr>
<tr>
<td>F003</td>
<td>T000 789</td>
<td>S345</td>
<td>R7892</td>
</tr>
<tr>
<td>F004</td>
<td>T000 109</td>
<td>S678</td>
<td>R0123</td>
</tr>
<tr>
<td>F005</td>
<td>T000 555</td>
<td>S901</td>
<td>R3454</td>
</tr>
</tbody>
</table>

FIG. 9A
<table>
<thead>
<tr>
<th>Obligation Expiration Date Passed?</th>
<th>Obligation Fulfilled Date</th>
<th>Actual Fulfill Date</th>
<th>When Accepted</th>
<th>Total Price With Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>1/15/2001</td>
<td>7:00 PM</td>
<td>NO, ONLY $100 OF $150 REQUIRED PURCHASES</td>
<td>$47.12</td>
</tr>
<tr>
<td>YES</td>
<td>1/13/2001</td>
<td>11:10 AM</td>
<td>PARTIALLY 3 OF 8 VIDEOS RENTED</td>
<td>$19.95</td>
</tr>
<tr>
<td>NO</td>
<td>1/14/2001</td>
<td>10:09 AM</td>
<td>YES</td>
<td>$15.00</td>
</tr>
<tr>
<td>NO</td>
<td>1/20/2001</td>
<td>OFFER STILL OPEN</td>
<td>N/A</td>
<td>$48.00</td>
</tr>
</tbody>
</table>

**Total Price**

<table>
<thead>
<tr>
<th>Total Price With Subsidy</th>
</tr>
</thead>
<tbody>
<tr>
<td>$97.12</td>
</tr>
<tr>
<td>$19.95</td>
</tr>
<tr>
<td>$10.00</td>
</tr>
<tr>
<td>$15.00</td>
</tr>
<tr>
<td>$48.00</td>
</tr>
<tr>
<td>Offer Rule Identifier</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>R1111</td>
</tr>
<tr>
<td>R2222</td>
</tr>
</tbody>
</table>

**Subsidizing Vendor Identifier:** S888

**Total Number of Offers:** 1,794

**Total Number of Offers Accepted:** 1,003

**Total Number of Reneged Offers:** 18

**Total Amount of Subsidies:** $52,800.00

**Fig. 10**
<table>
<thead>
<tr>
<th>ITEM IDENTIFIER</th>
<th>ITEM DESCRIPTION</th>
<th>ITEM PRICE</th>
<th>AVAILABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>P001</td>
<td>WAR AND PEACE</td>
<td>$13.95</td>
<td>IN STOCK</td>
</tr>
<tr>
<td>P002</td>
<td>SUN Tzu: The Art of War</td>
<td>$15.95</td>
<td>AVAILABLE IN 2-3 DAYS</td>
</tr>
</tbody>
</table>

FIG. 11
1. Receive an indication of items a customer is to purchase from a first vendor (1202)
2. Select a subsidy (1204)
3. Transmit offer for subsidy (1206)
4. Receive response from customer (1208)
5. If customer accepted offer? (1210)
   - Yes: Receive credit card number (1214)
   - No: Process transaction conventionally (1212)
6. If yes, provide items for less than total price (1216)
7. If customer fulfilled his obligation? (1218)
   - No: Apply penalty (1220)
   - Yes: End (END)

FIG. 12
1300

Determine subsidy amount of selected subsidy 1302

Charge total price to the credit card account 1304

Credit subsidy amount to the credit card account. Include offer identifier in credit data 1306

Mark transaction as paid in full 1308

FIG. 13
RECEIVE SIGNAL REPRESENTING A FULFILLMENT CODE AND AN OFFER 1402

IDENTIFY CORRESPONDING ENTRY IN OFFERS DATABASE 1404

HAS OBLIGATION EXPIRATION DATE PASSED? 1406

UPDATE CORRESPONDING ENTRY OF OFFERS DATABASE TO SHOW THAT THE OBLIGATION WAS NOT FULFILLED AND THAT THE OBLIGATION EXPIRATION DATE HAS PASSED 1408

NO

DOES THE FULFILLMENT CODE SHOW THAT THE OBLIGATION WAS FULFILLED? 1410

TRANSMIT "INVALID CODE" MESSAGE 1412

YES

UPDATE CORRESPONDING ENTRY OF OFFERS DATABASE TO SHOW THAT THE OBLIGATION WAS FULFILLED AND THE DATE/TIME IT WAS FULFILLED 1414

FIG. 14A
SELECT AN ENTRY IN OFFERS DATABASE

HAS THE CORRESPONDING OBLIGATION BEEN FULFILLED?

APPLY PENALTY

HAS OBLIGATION EXPIRATION DATE PASSED?

MORE ENTRIES?

TRANSMIT MESSAGE TO CUSTOMER INDICATING ACTUAL FULFILL DATE AND AMOUNT OF PARTIAL FULFILLMENT

FIG. 14B
1500

1502

Determine Penalty Amount

1504

Determine Credit Card Account Number

1506

Charge the Penalty Amount to the Credit Card Account. Include Offer Identifier in Charge Data

FIG. 15
<table>
<thead>
<tr>
<th>DATE</th>
<th>DESCRIPTION</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/09/01</td>
<td>AMAZON.COM® PURCHASE</td>
<td>$25.00</td>
</tr>
<tr>
<td>8/10/01</td>
<td>AMAZON.COM®/AT&amp;T CREDIT (OFFER CODE = 12345678)</td>
<td>-$25.00</td>
</tr>
<tr>
<td>8/23/01</td>
<td>AMAZON.COM®/AT&amp;T CREDIT REVERSAL</td>
<td>$25.00</td>
</tr>
<tr>
<td>8/23/01</td>
<td>AMAZON.COM®/AT&amp;T CREDIT REVERSAL FEE</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

FIG. 16