

mapped, and tagged with each vendor's internal product code by the product code translator 230, corresponding to the items selected by the retail client 310. The system then generates multiple individual vendor orders for each item comprising the single retail client order, and the multiple orders 312 are configured per the predetermined standards or protocols established for each vendor. Multiple purchase orders for the several vendors are printed, authorized, and sent by for example telephonic facsimile or other electronic form such as e-mail or Electronic Data Interchange ("EDI") (not shown), depending on the level of technological sophistication available to the respective vendors and the shipping company 312. The vendors then execute the orders 314 and inform the shipping company when the orders are ready to be picked up. The shipping companies receive confidential vendor and destination information 316 for each order number from the system operator. Once it receives confirmation from the vendor, the shipping company picks up each order 318 and delivers it to the retail client or to the end-customer in the case of fulfillment orders, as more fully described below with reference to FIG. 7, in the system operator's packaging without any information or markings that would identify the wholesale source. When the retail client receives the goods 320, it contacts the system operator for returns, exchanges, or complaints concerning damaged goods. The system operator then completes the business cycle 322 by billing the retail client, collecting payments, and providing any and all relevant commercial information required by the retail client.

In accordance with the invention, payment means for purchases/orders can be accomplished by, for example, direct payment via their computer screens through a

"secure transaction" processing system, through credit arrangements with the system's operator, COD terms, electronic fund transfers ("EFT"), or other appropriate means.

Components

5 In accordance with the instant invention, the primary components of the product procurement system comprise the following:

Client System Terminals installed at retail stores are loaded with software applications that make possible product and price searches from the system's databases, which are then downloaded and stored on the client system. These client terminals are provided by the system's operator and consist of a personal computer 10 ("PC") with a processor speed of at least 333 MHz., a hard-disk with storage capacity of at least 4 gigabits, a dial-up modem (at least 56K), a monitor, and a keyboard.

A dial-up connection, through a regular or high speed telephone connection.

A Virtual Private Network that consists of a Commercial Server made accessible to member stores by means of assigned passwords. The Commercial Server hosts the 15 latest product and price information, account information, and other data and software necessary for the functioning of the entire system. The functionality of the VPN system may also be accomplished by a Web based system. Such a Web based system would be available in parallel with the VPN system but would not replace it until all Client Terminals have access to high speed "always on" connections.

20 The Back-office Server hosts all product and pricing information, all vendor and account master files, and also the Best Price Transaction Engine and the Product Code Translator.

The Best Price Search Engine is a software application that searches through all products in the Product Master File to locate the absolute Best Price on each of the products. The result of this Best Price Search is continuously up-loaded to the Commercial Server for access by member stores.

5 The Product Code Translator is a software application that converts individual internal product codes assigned to products by manufacturers/distributors to a commonly interpretable UPC code.

10 The Bar Code Scanner device is an optional tool that is provided to the retailer to enable efficient ordering. The scanner is a hand held device that stores scanned UPC codes from shelves and registers required quantities as entered by the person taking the order. The hand held device can then be plugged directly into the Client System for direct transfer into the order cart and eventual ordering after review.

The functionality of the System can be best understood in relation to the Customer's usage and the system operator's capabilities:

15 Customer Usage

In accordance with the system of the instant invention, listed below are some of the several purposes for which a customer may use the Product Procurement System.

20 To check the existence of a product or to find out pricing or other information on the product, a simple 'alpha' search by vendor, product, or both in provided selection fields is performed. The system immediately displays all relevant information for the selection.

Compiling an inventory order can be accomplished by either inputting items to be ordered through linking the hand held scanner to the system and doing a download of scanned items into the order cart or by selecting items one by one and entering them into the system. Once a customer decides to order the items selected, the order can be transmitted to the System by simply clicking the SEND button. Once the SEND button is clicked, the System automatically connects to the servers and transmits the order. A confirmation number for the order along with a total dollar amount is also displayed for the customer's records. This information is stored on the Client Terminal's hard disk for future reference. Customers are always prompted to complete a download of the latest price information before ordering/ referencing any product.

The system facilitates accessing historical information related to inventory usage /purchasing by instantly providing information related to purchases made through the system, such as month to date or year to date purchases by product. This can be used for various management decision-making purposes, such as identifying fast selling items versus the slow moving ones.

Accessing account information on payments made to the system's operator to date, balances outstanding, and payment due dates can be immediately accessed on the system. Order tracking and order status information is also readily available through the system.

Customers have the ability to connect to the Internet through the provided Internet account or by clicking on the several links provided. For example, if a store-owner wants to access industry specific news, the "Industry News" button provides a

direct link to such information. Similarly, the system has several "portal" type links already built in to encourage the user to use the system for most of their Internet related needs. Each user is also provided with a free e-mail account for their use.

System Capabilities

5 In accordance with the invention, the system operator regularly receives product Databases from all Manufacturers / Distributors with whom it has agreements. Such information comes in various forms, such as, for example, paper catalogs, e-mail, electronic disks, Faxes, etc. The system operator utilizes the Product Code Translator to standardize and "clean" all information received from various sources as well as
10 update the database with new and discontinued items. All pricing information is also updated, including, for example, discount information, special purchases, etc. The System's servers run a Best Price search using a Search Engine to arrive at the lowest possible prices on all products. A Best Price catalog is created at the back-office server. This Best Price catalog is loaded onto a Commercial Internet Server for client
15 access and downloaded via the system's VPN to member retailers. Member Retail stores access this Best Price catalog for placing orders and for referencing purposes. All orders placed by member stores are received by the Commercial Server for transmission to the system's back office. All orders received from member stores are split by the back office server according to Best Price source. Each order may be sent
20 to several supply sources. These split orders are faxed or otherwise transmitted by appropriate means to the suppliers. A shipping advice is also prepared for the appropriate shipping carrier with pickup and delivery details. The delivery address and

identity of the ordering store is not revealed to the supplier. The order is then delivered by the shipping company to the appropriate store. The system's operator then bills the retail clients directly. The System continuously downloads current and updated information to member retail stores along with appropriate Banner Ads and other

5 contents for the Portal Site

What is claimed is:

1. A system for single-source wholesale product procurement by retail sellers of goods comprising:

a. a server system comprising:

5

i. a server engine,

ii. an industry-wide product-price database electronically coupled to said server engine;

iii. a best-price search engine electronically coupled to said database;

and

10

iv. an electronic catalog of best-price wholesale products in electronic communication with said routing engine and compiled from said product-price database by said routing engine;

b. at least one retail client system communicatively linked with said server system,

15

c. at least one wholesale vendor communicatively linked with said server system and from which product-price information is downloaded to said product-price database; and

d. at least one shipping company communicatively linked to said wholesale vendor and said server system.

20

2. The system of claim 1 wherein the retail client system for ordering wholesale products from a single-source comprises:

- a. a display component for displaying information identifying a product and a corresponding price.
 - b. a software application component for accessing said server system;
 - c. a single-source routing component that in response to a product search query
5 sends a request to said server system to search said electronic catalog for a best-price source for a product;
 - d. an order cart component that in response to performance of an add-to-shopping-basket action sends a request to the client system to add the product to an order cart and temporarily save it on the client system's desktop;
 - 10 e. a final order component that in response to performance of a finished-shopping action sends a request to said software application to prepare a final product order;
 - f. an electronic check-out component that in response to said preparing of a final order sends a request to said client system to close the software application; and
 - 15 g. an uploading component that in response to performance of an upload-order action sends a request, via a communications link, to the system server to transmit the product order.
3. The client system of claim 2 wherein the display component is a browser.
4. The client system of claim 2 wherein the product search query is selected from
20 the group consisting of a product brand name, a product manufacturer, a product description, a uniform product code, and downloading information from a bar code scanning gun.

5. The client system of claim 2 wherein the communications link between the client system and the server system is selected from the group consisting of an Internet connection, a point-to-point dial-up connection, a Virtual Private Network connection, a wireless connection, and a DSL connection.

5 6. The system of claim 1 wherein said at least one wholesale vendor is communicatively linked with said server system via a communication link selected from the group consisting of an Internet connection, a point-to-point dial-up connection, a VPN, and a telephonic facsimile.

7 7. The system of claim 1 wherein said at least one shipping company is
10 communicatively linked with said server system via a communication link selected from the group consisting of an Internet connection, a point-to-point dial-up connection, a VPN, and a telephonic facsimile

8. A method for developing an industry-wide best-price electronic catalog comprising the steps of:

- 15 a. contacting wholesale vendors in a particular industry;
- b. receiving each wholesale vendor's product-price database;
- c. cleaning and standardizing product information data;
- d. periodically updating new, discontinued, and special price offers from said wholesale vendors as and when appropriate;
- 20 e. running a best-price search;
- f. identifying wholesale vendor sources with a best-price nationwide for a particular product.

- g. identifying alternate second and third best-price sources;
- h. moderately marking up identified best-price products; and
- i. uploading a best-price product-price list to a server system for direct access by retail client systems.

5 9. The method of claim 8 wherein the particular industry is the Health and Nutrition Supplement Industry.

10. The method of claim 8 wherein the product-price database is a database of health and nutrition supplements.

10 11. The method of claim 8 wherein the step of identifying wholesale vendor sources further comprises the step of identifying wholesale vendors of health and nutrition supplements with a best-price nationwide for a particular health and nutrition supplement product.

12. A method for single-source wholesale product procurement by a retail client system comprising the steps of.

- 15 a. accessing a server system;
- b. downloading a recent product-price list;
- c. conducting a product search;
- d. building a shopping list of products;
- e. saving said shopping list of products as a temporary shopping basket on a

20 desktop of the retail client system;

- f. preparing a final product order;
- g. completing an electronic check-out from a system software application;

- h. uploading said final product order onto a server system; and
- i. receiving a confirmation message of said order from said server system.

13. The method of claim 12 wherein the step of accessing a server system
comprises the further step of using a dial-up Internet account provided by said server
5 system's operator.

14. The method of claim 12 wherein the step of conducting a product search
comprises the further step of searching by means selected from the group consisting of
product brand name, product description, product manufacturer, uniform product code,
and downloading information from a bar code scanning gun.

10 15. A method for processing and delivering product purchase orders from at least
one retail client system comprising the steps of:

- a. receiving purchase orders from at least one retail client system;
- b. communicating said purchase orders to a back office;
- c. splitting said purchase orders into multiple lots based upon a best-price
15 source for each product order;
- d. assigning each purchase order a purchase order number;
- e. printing said purchase orders;
- f. authorizing said purchase orders;
- g. communicating said purchase orders to their respective wholesale vendors,
20 whereby said vendors execute said purchase orders and inform a shipping
company when fulfillment of said purchase orders is complete;

h. communicating said purchase orders to a shipping company for shipment, whereby said shipping company receives confidential vendor and destination information for each purchase order number from a system operator, picks up each order, which is shipped in said system operator's packaging without
5 information or markings that would identify the wholesale vendor source, and delivers each order to an appropriate retail client;

i. communicating with retail clients when they receive a delivery of goods and managing any retail client concerns regarding the delivery; and

j. completing the business cycle by billing retail clients for purchase orders,
10 collecting payments from said retail clients, and providing relevant commercial information required by the retail clients.

16. The method of claim 15 wherein the step of receiving purchase orders further comprises receipt by a server system via a communication link selected from the group consisting of an Internet connection, a point-to-point dial up connection, a Virtual
15 Private Network connection, and a wireless connection.

17. The method of claim 15 wherein the step of communicating said purchase orders to a back office further comprises communication via a communication link selected from the group consisting of a point-to-point dial-up connection, a Virtual Private
Network connection, and a wireless connection.

20 18. The method of claim 15 wherein the step of communicating said purchase orders to their respective wholesale vendors further comprises communication via a communication link selected from the group consisting of a point-to-point dial-up

connection, an Internet connection, telephonic facsimile, a Virtual Private Network connection, and a wireless connection.

19. The method of claim 15 wherein the step of communicating said purchase orders to a shipping company further comprises communication via a communication link

5 selected from the group consisting of a point-to-point dial-up connection, an Internet connection, telephonic facsimile, a Virtual Private Network connection, and a wireless connection.

ABSTRACT OF THE DISCLOSURE

A system and method for comparing nonstandard and incompatible databases of suppliers of goods and services in a given industry and for offering an industry-wide best-price for any good or service within that industry is provided. In one aspect, an electronic system or business network for providing uniquely identified business type information to subscribers using a uniform system protocol wherein at least one entity requests information and a uniform server maintains such requested information in a uniform updated form allows a business to access best product price information from a myriad of suppliers. A transaction routing engine facilitates the exchange over a communications link. A comprehensive electronic database of products or services permits participating customer outlets to obtain best-price products or services from suppliers without the need for direct contact with those suppliers. An intelligent ordering system, order processing and execution, and business tools and utilities are also provided.

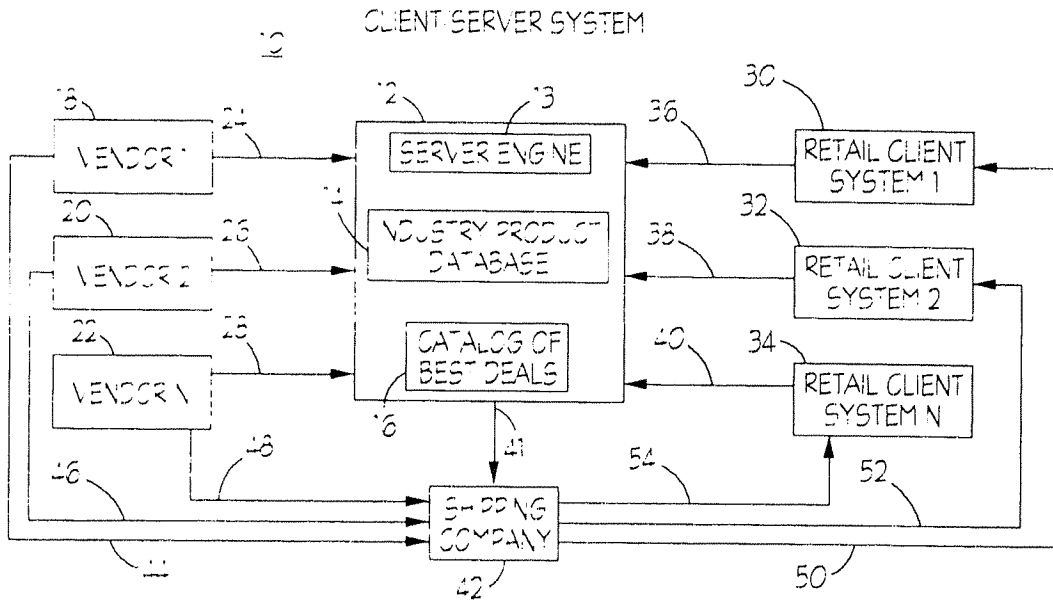


FIGURE 1

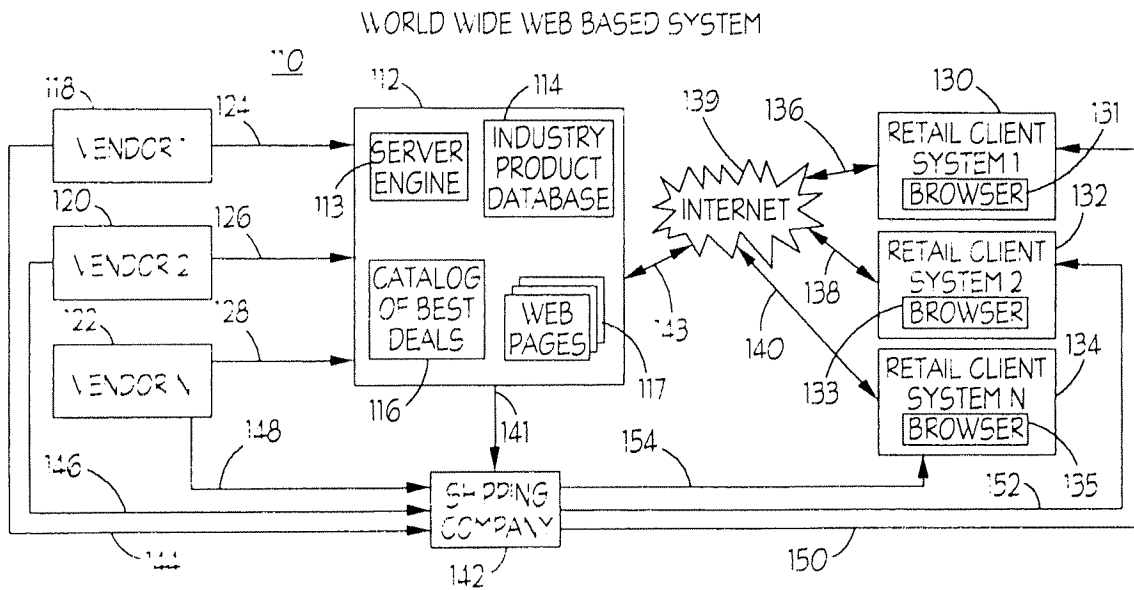


FIGURE 2

DATABASE DEVELOPMENT PROCESS

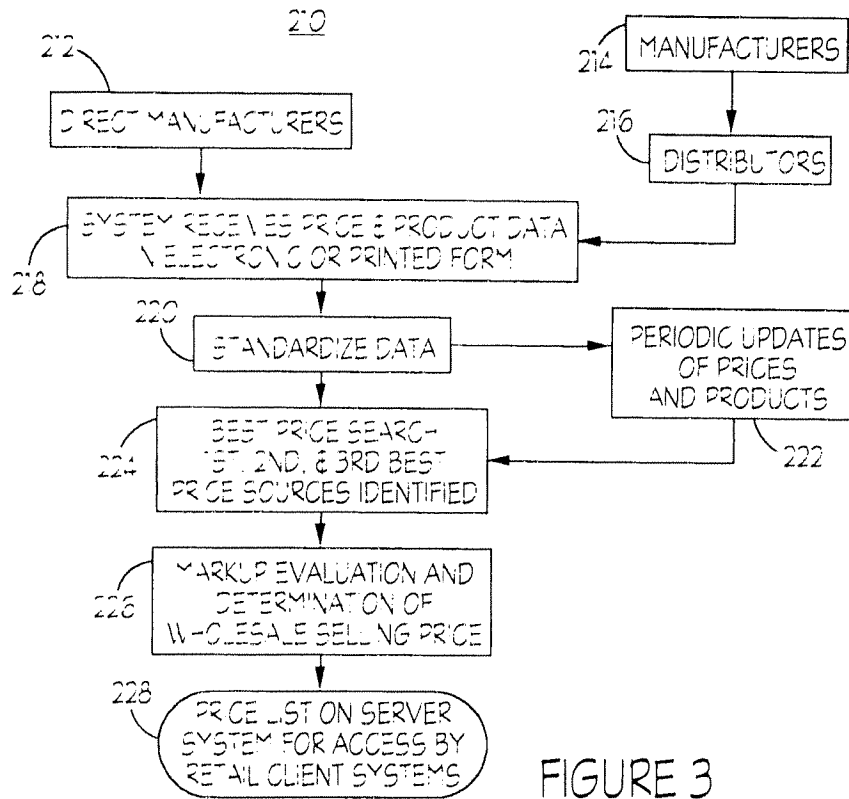


FIGURE 3

PRODUCT CODE TRANSLATOR PROCESS

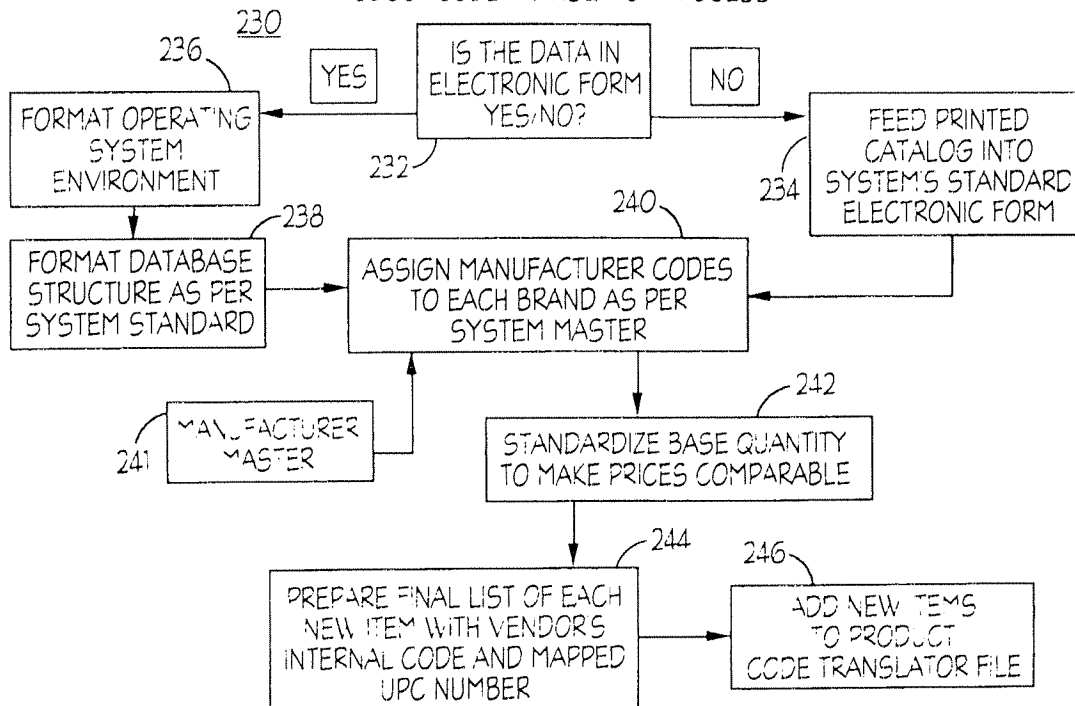
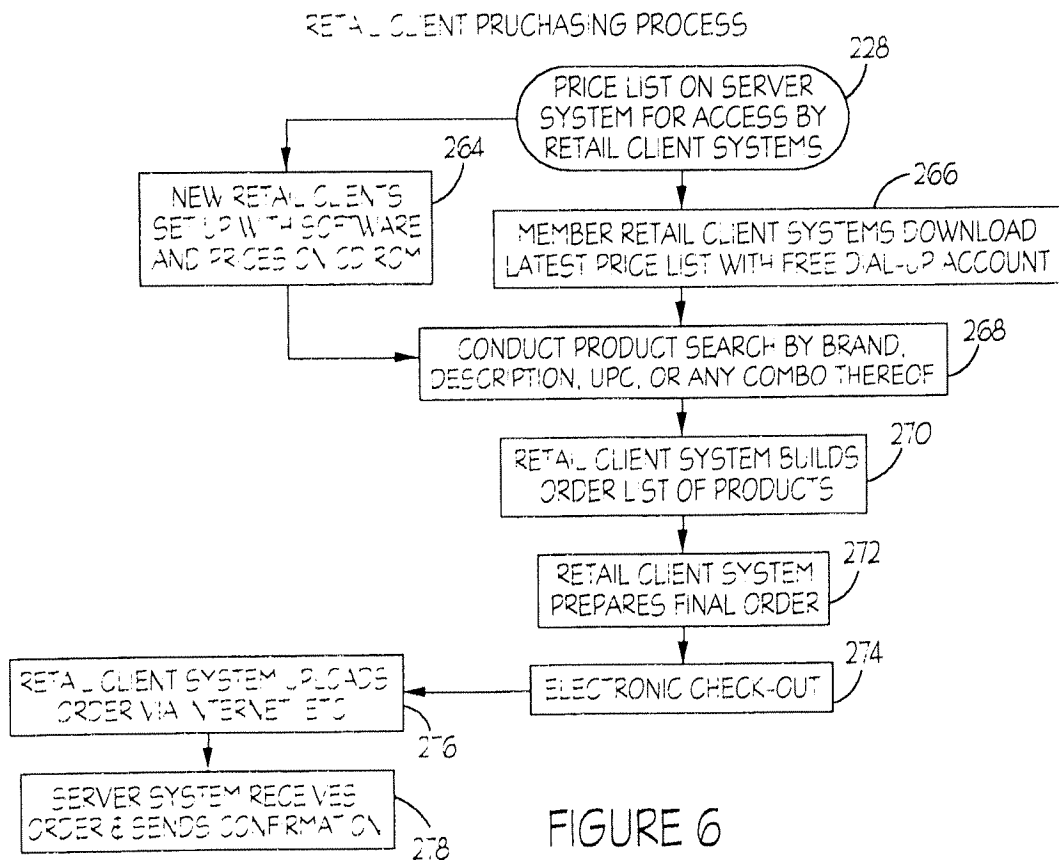
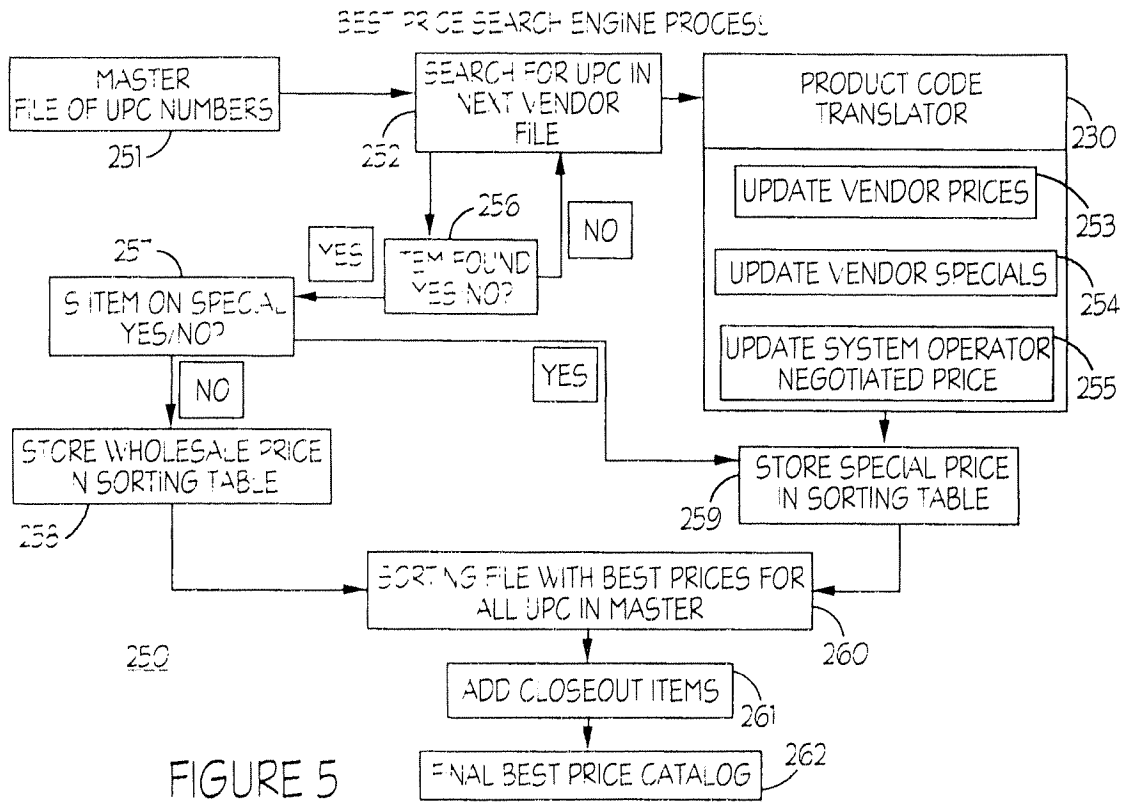


FIGURE 4



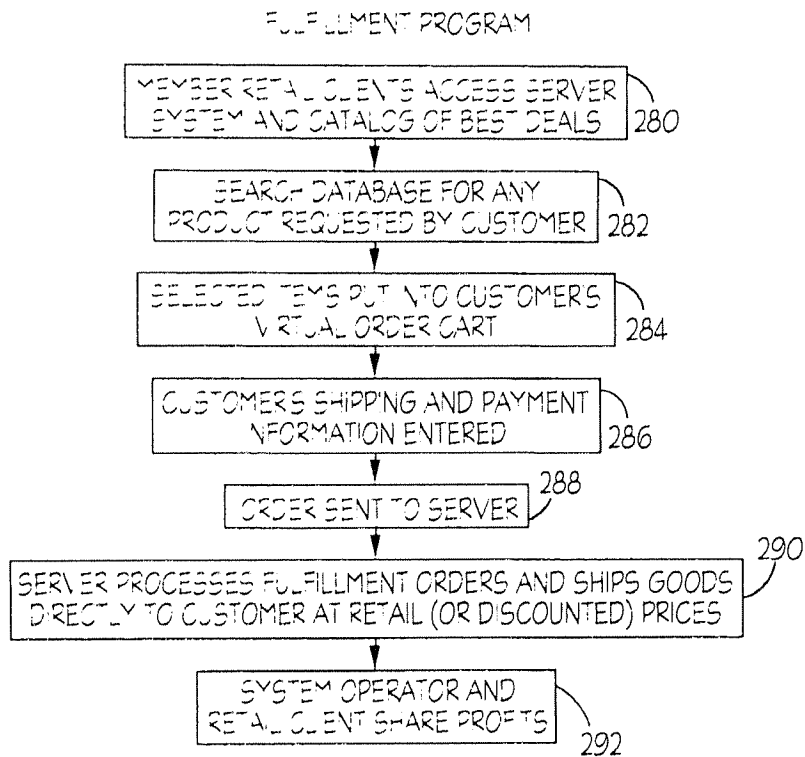


FIGURE 7

TRANSACTION ENGINE & ORDER PROCESSING

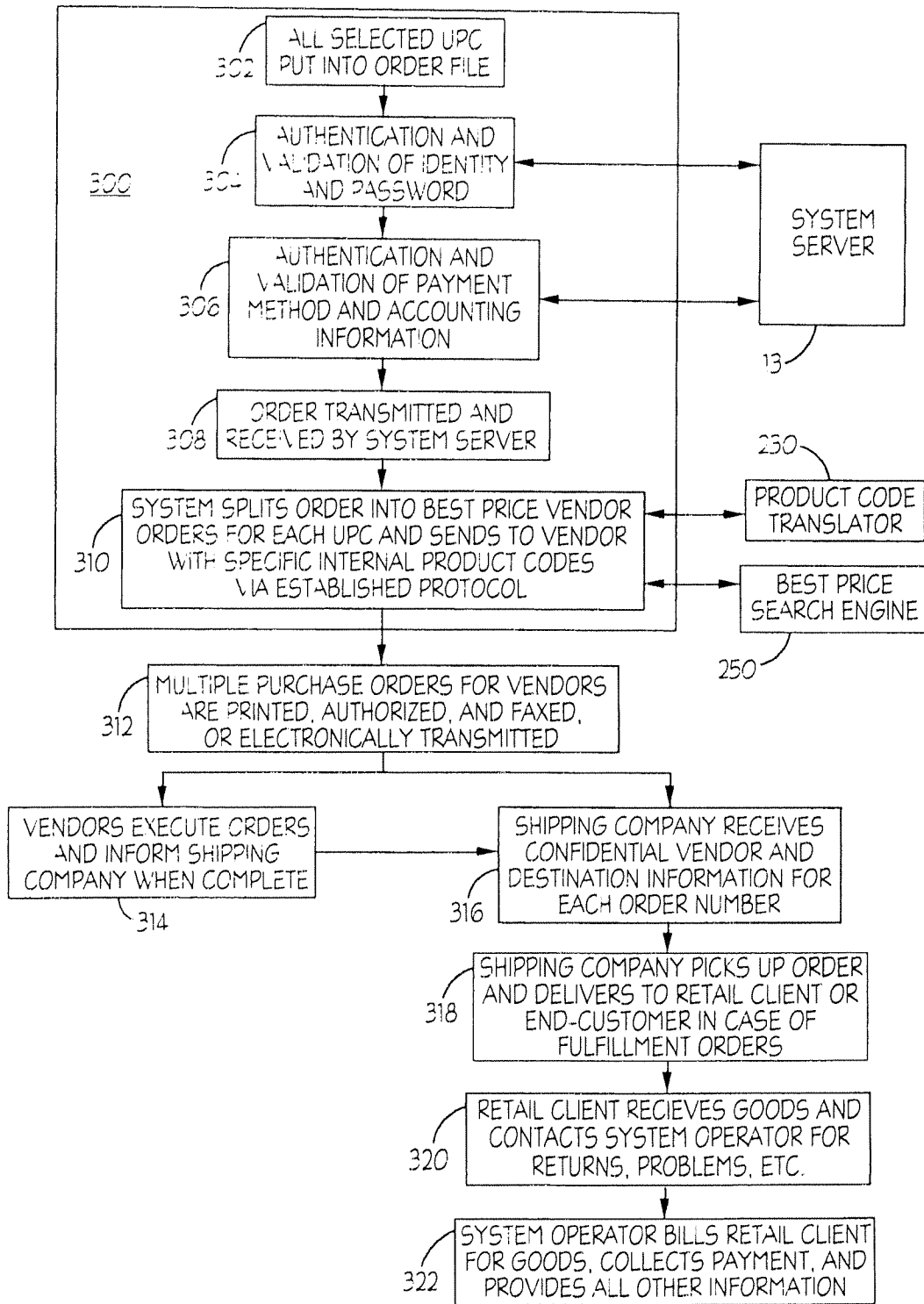


FIGURE 8

PATENT APPLICATION
System and Method for Providing Lowest Costs Purchasing

Inventor(s):

Dilip Chopra, a citizen of United States, residing at,
19702 E. Dorado Avenue
Aurora, CO 80015

Assignee: None

Entity: Independent Inventor

System and Method for Providing Lowest Costs Purchasing

BACKGROUND OF THE INVENTION

The present invention relates generally to systems and methods for facilitating
5 lowest costs purchasing of products and/or services. More particularly, the present invention
relates to systems and methods for identifying and/or presenting an optimized, final purchase
cost savings to consumers or inquirers for a defined grouping of products and/or services,
which could be purchased from multiple sources across any geopolitical, geographic,
technological, and /or functional boundaries.

10 Given the advancement of technologies, more and more consumers are
purchasing products or ordering services online via the Internet or some other electronic
communication connection. When online shopping, the consumer typically uses sources or
vendors with which the consumer is familiar or has an account. Unfortunately, the consumer
does not know if the particular source or vendor with which he/she is shopping is providing
15 products and/or services that represent the lowest purchase cost. In addition, browsing the
large number of different sources or vendors online to find the best prices (or lowest purchase
cost) for products or services can be extremely time consuming.

Certain price search engines already exist. However those search engines only
are configured to find product prices from vendors for a single particular product, and do not
20 take into consideration varied cost factors, such as: special discount arrangements that may
exist between buyers and sellers; special time/volume based sales prices; promotions,
coupons, rebates, or buyer/seller co-operative arrangements; shipping/delivery/set-up/testing
costs; etc. Those search engines are not helpful for searching for the lowest purchase cost of
a group of products and/or services. Using groceries as an example, while one particular
25 grocery retailer may have a few products on sale or at cheaper prices than other retailers,
other products provided by that retailer may not be cheaper. In fact, the total cost of all items
needed (or inquired about) by the consumer from the grocery retailer may be more expensive
than from other grocery retailers in a geographical area. The search engines currently known
in the art do not provide consumers with price information regarding an entire order for
30 products and/or services.

Thus, what is needed is a system and method for efficiently, conveniently, and
economically determining a source or vendor that can provide a group of products and/or
services at a lowest purchase cost. In addition, it would be advantageous that the system and

method facilitate the purchase of the group of products and/or services from the lowest purchase cost source(s) or vendor(s).

SUMMARY OF THE INVENTION

5 In accordance with an embodiment of the invention, a system and method for providing products and/or services to consumers from one or more sources or vendors is provided. The system comprises a computer system configured to receive an order from a consumer for a plurality of products or services. The consumer can generate the order using a computing device. The computer system receives the order and electronically searches for
10 prices for each of the products and/or services in the order. The computer system then groups the products and/or services into one or more groups and determines one or more sources or vendors that can provide the one or more groups at a lowest purchase cost. The computer system then helps facilitate the purchase of the products and/or services from the one or more sources or vendors.

15 In accordance with one embodiment of the present invention, the computing device that the consumer uses to enter orders comprises ordering software loaded onto the computing device and configured to receive and transmit orders over a communication connection to the computer system.

 In accordance with another embodiment of the present invention, the
20 computing device that the consumer uses to enter orders receives an interactive application or applet from the computer system via a communication connection. The application or applet is configured to generate orders from the consumer and transmit the orders from the computing device to the computer system. The interactive application or applet may be created using Java, Java 2, HTML, XML or any other suitable programming language.

25 In accordance with one embodiment of the present invention, the communication connection connecting the computing device and the computer system may comprise any suitable communication connection known in the art, including, but not limited to, the Internet, a virtual private network, a dedicated private network, a wireless connection, a satellite connection, a direct dial phone connection, a local area network, a wide area
30 network, or any other suitable connection currently know or hereinafter developed. In addition, the computing device may comprise any suitable computing device, such as a personal computer, a network workstation, a cellular phone, a satellite phone, an interactive television, a handheld computing device, a smart card device, etc.

In accordance with another embodiment of the present invention, the computer system searches for the lowest purchase cost for the plurality of products and/or services by electronically searching source or vendor databases electrically connected to the computer system, such as via the Internet or some other connection. In accordance with yet another
5 embodiment of the present invention, the computer system can search for the lowest purchase cost by downloading price information from the vendors into a database associate with the computer system and searching that database. Any suitable search method can be used.

A more complete understanding of the present invention may be derived by referring to the detailed description of preferred embodiments and claims when considered in
10 connection with the figures.

BRIEF DESCRIPTION OF THE DRAWINGS

In the Figures, similar components and/or features may have the same reference label. Further, various components of the same type may be distinguished by
15 following the reference label with a second label that distinguishes among the similar components. If only the first reference label is used in the specification, the description is applicable to any one of the similar components having the same first reference label irrespective of the second reference label.

Fig. 1 is a block diagram illustrating one embodiment of a system embodying
20 the present invention;

Fig. 2 is a flow chart illustrating a method for determining lowest cost provider(s) for a plurality of products; and

Fig. 3 is a flow chart illustrating more detailed aspects of the method
illustrated in Fig. 2.

25

DESCRIPTION OF THE SPECIFIC EMBODIMENTS

The present invention relates generally to systems and methods for facilitating lowest price purchases of products and/or services. More particularly, the present invention relates to systems and methods for receiving orders for products and/or services, searching
30 source or vendor databases to locate the lowest prices for those products and/or services, and facilitating the purchase of products and/or services from the vendors having the lowest prices. In addition, a related single source product or service procurement system is disclosed in U.S. Patent Application No. 09/490,883, filed January 24, 2000, the entirety of which is incorporated herein by reference for all purposes. The systems and methods of the present

invention may be combined with or used in conjunction with the systems and methods disclosed in Patent Application No. 09/490,883.

Referring now to Fig. 1, one embodiment of a system 100 for facilitating the lowest price purchase of products and/or services is shown. System 100 comprises a plurality of consumer computing devices 102 configured to communicate with a lowest purchase cost server 106 via a communication connection 104. In addition, system 100 further includes a plurality of product and/or service sources or vendors 108, which are configured to communicate with lowest purchase cost server 106 also via a communication connection 104. As discussed in more detail below, consumer computing devices 102 communicate orders or requests for products and/or services to lowest purchase cost server 106, which in turn searches sources 108 to locate one or more sources that can provide the products and/or services at a lowest cost.

As one skilled in the art will appreciate, communication connection 104 may comprise any suitable connection for facilitating communications between computing devices, including, but not limited to, the Internet, a virtual private network, a dedicated private network, a wireless connection, a satellite connection, a phone connection, a local area network, a wide area network, or the like. In addition, consumer computing devices 102 may comprise any suitable computing devices, such as personal computers, network workstations, cellular phones, satellite phones, interactive televisions, handheld computing devices, smart cards, or the like.

Referring now to Figs. 2 and 3, flow charts 200 and 300 illustrate an embodiment of a method for determining a lowest cost source for a group of products and/or services. First, a consumer creates a request or order for a group of products and/or services using computing device 102 (step 202). The request can be for any product or service conceivable. For example, requests can be created for groceries or other household goods, hotel rooms, restaurants, products to be sold in retail shops, parts used in manufacturing facilities, or any other product or service.

To enter an order, computing device 102 may be loaded with software configured to generate order information from consumers, or an order entry application can be downloaded from lowest purchase cost server 106 to computing device 102 to facilitate the order entry process. If an application is downloaded from server 106, computing device 102 will include a browser or other suitable program for running the downloaded application. In addition, as one skilled in the art will appreciate, the downloadable order entry application can be created using any programming language suitable for creating interactive applications

Examples of such programming languages include, but are not limited to, Java, Java 2, HTML, XML, or the like.

Order information entered into the order entry software or downloaded application running on computing device 102 can include information such as, item type, 5 item brand, price or price range information, a preferred source for the products and/or services desired, or any other order information that may be deemed relevant. Once the order information is entered, the order is transmitted from computing device 102 over communication connection 104 to lowest purchase cost server 106 (step 202). The transmitted order may take into account certain cost factors, including, but not limited to: 10 special time and/or volume based sales prices; promotions, coupons, rebates, or buyer/seller co-operative arrangements; introduction/closeout price rate structures; or shipping/delivery/set-up/testing costs and/or estimates.

Lowest purchase cost server 106 is configured to receive product or service orders from computing devices 102 and search sources and/or vendors 108 to find the lowest 15 costs for the products or services in the orders (step 206). In accordance with one embodiment of the present invention, lowest purchase cost server 106 is in electrical communication with sources or vendors 108, for example via communication connection 104. As mentioned above communication connection 104 can be any suitable communication connection. Each of the sources or vendors 108 may comprise one or more 20 databases for holding product and price information. Thus, lowest purchase cost server 106 can gain access to the vendor databases and search those database for price information about the products or services set forth in the orders. Lowest purchase cost server 106 can use any suitable technology to search the vendor databases. For example, server 106 can send out database search queries to vendors' systems using XML or other suitable protocols. As one 25 skilled in the art will appreciate, the type of vendor databases used will dictate the format of the query requests.

Referring now to Fig. 3, flow chart 300 illustrates the search methodology in more detail. In particular, lowest purchase cost server 106 receives an order and segregates the order into individual products and services (step 302). Lowest purchase cost server 106 30 then searches multiple sources or vendors 108 to obtain price information for each of the individual items (step 304). In accordance with this aspect of the present invention, each of the vendors 108 searched may offer all of the items listed in the order being searched, or alternatively, some vendors 108 may offer only a subset of items in the order.