METHOD AND APPARATUS FOR MANAGING MULTIPLE ON-LINE VENDORS THROUGH A REVERSE FRANCHISE

A system for managing (16) a plurality of on-line vendors is provided that permits the vendors to share a common fulfillment/distribution site. In one embodiment, products supplied by the fulfillment site, as well as the interface to the fulfillment site are generic, stripped of any identifying indicia. A session identifier, or similar means, is used to correlate a purchase transaction with the vendor that originated the purchase. Product shipment may also be devoid of any identifying indicia, or it may be customized to an individual vendor. In a preferred embodiment, the fulfillment site includes a management software program which tracks orders and revenue generated therewith. After subtracting a fee for operation of the on-line system, each vendor is awarded a profit allocation based upon a predetermined percentage of sales from the corresponding vendor.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>AL</td>
<td>Spain</td>
<td>ES</td>
<td>Lesotho</td>
<td>LS</td>
<td>Slovenia</td>
<td>SI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armenia</td>
<td>AM</td>
<td>Finland</td>
<td>FI</td>
<td>Lithuania</td>
<td>LT</td>
<td>Slovakia</td>
<td>SK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>AT</td>
<td>France</td>
<td>FR</td>
<td>Luxembourg</td>
<td>LU</td>
<td>Senegal</td>
<td>SN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>AU</td>
<td>Gabon</td>
<td>GA</td>
<td>Latvia</td>
<td>LV</td>
<td>Swaziland</td>
<td>SZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>AZ</td>
<td>United Kingdom</td>
<td>GB</td>
<td>Monaco</td>
<td>MC</td>
<td>Chad</td>
<td>TD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>BA</td>
<td>Georgia</td>
<td>GE</td>
<td>Republic of Moldova</td>
<td>MD</td>
<td>Togo</td>
<td>TG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barbados</td>
<td>BB</td>
<td>Ghana</td>
<td>GH</td>
<td>Madagascar</td>
<td>MG</td>
<td>Tajikistan</td>
<td>TJ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>BE</td>
<td>Guinea</td>
<td>GN</td>
<td>The former Yugoslav</td>
<td>MK</td>
<td>Turkmenistan</td>
<td>TM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>BF</td>
<td>Greece</td>
<td>GR</td>
<td>Republic of Macedonia</td>
<td>ML</td>
<td>Turkey</td>
<td>TR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>BG</td>
<td>Hungary</td>
<td>HU</td>
<td>Mali</td>
<td>ML</td>
<td>Trinidad and Tobago</td>
<td>TT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benin</td>
<td>BJ</td>
<td>Ireland</td>
<td>IE</td>
<td>Mongolia</td>
<td>MN</td>
<td>Ukraine</td>
<td>UA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>BR</td>
<td>Israel</td>
<td>IL</td>
<td>Mauritania</td>
<td>MR</td>
<td>Uganda</td>
<td>UG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belarus</td>
<td>BY</td>
<td>Iceland</td>
<td>IS</td>
<td>Malawi</td>
<td>MW</td>
<td>United States of America</td>
<td>US</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>CA</td>
<td>Italy</td>
<td>IT</td>
<td>Mexico</td>
<td>MX</td>
<td>Uzbekistan</td>
<td>UZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central African Republic</td>
<td>CF</td>
<td>Japan</td>
<td>JP</td>
<td>Niger</td>
<td>NE</td>
<td>Viet Nam</td>
<td>VN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congo</td>
<td>CG</td>
<td>Kenya</td>
<td>KE</td>
<td>Netherlands</td>
<td>NL</td>
<td>Yugoslavia</td>
<td>YU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>CH</td>
<td>Kyrgyzstan</td>
<td>KG</td>
<td>Norway</td>
<td>NO</td>
<td>Zimbabwe</td>
<td>ZW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>CI</td>
<td>Democratic People’s Republic of Korea</td>
<td>KP</td>
<td>New Zealand</td>
<td>NZ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>CM</td>
<td>Republic of Korea</td>
<td>KR</td>
<td>Poland</td>
<td>PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>CN</td>
<td>Kazakhstan</td>
<td>KZ</td>
<td>Portugal</td>
<td>PT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuba</td>
<td>CU</td>
<td>Saint Lucia</td>
<td>LC</td>
<td>Romania</td>
<td>RO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>CZ</td>
<td>Liechtenstein</td>
<td>LI</td>
<td>Russian Federation</td>
<td>RU</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>DE</td>
<td>Sri Lanka</td>
<td>LK</td>
<td>Sudan</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>DK</td>
<td>Liberia</td>
<td>LR</td>
<td>Sweden</td>
<td>SE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estonia</td>
<td>EE</td>
<td></td>
<td></td>
<td>Singapore</td>
<td>SG</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
METHOD AND APPARATUS FOR MANAGING MULTIPLE ON-LINE VENDORS THROUGH A REVERSE FRANCHISE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to U.S. Provisional Patent Application Serial No. 60/131,431, filed on April 28, 1999 and entitled “Method and Apparatus for Managing On-Line Vendors.”

BACKGROUND OF THE INVENTION

Field of the Invention

The method and apparatus of the present invention relate generally to electronic commerce and more particularly relates to the distribution of products using an electronic network.

Description of the Prior Art

The Internet is a global system of linked computer networks that allows numerous existing corporate and institutional networks to communicate using standard communications protocols or signals. That aspect of the Internet known as the World Wide Web (WWW) simplified these communications even more by providing what are known in the art as hypertext links, and by using Hypertext Transport Protocol (HTTP) to allow users to go from one hypertext link to another over the World Wide Web.

As appreciated by those skilled in the art, hypertext is a way of creating and publishing text that groups information into small units, called nodes or sites, that have what are called hypertext links or anchors embedded therein. When a reader of the text selects or “clicks” on a hyperlink, the hypertext software, often referred to as a web browser or simply a browser, displays the site associated with that link. The
collection of these sites is generally referred to as a “web” and the sites themselves are referred to as “websites.”

The Internet has created an exciting marketplace for the buying and selling of products and services. With the widespread popularity of the Internet and World Wide Web as a medium for transacting business, buyers and sellers are able to communicate more easily and less expensively than ever before. Accordingly, many electronic commerce (e-commerce) merchants have sought to sell products or arrange for the sale of products over the Internet, generally through the use of web pages.

E-commerce relies largely on the digitization of marketing and commercial literature. Vendors spend vast sums of money digitizing information relating to products so that users/purchasers can have virtual access to the product. For the most part, Internet vendors compete based on the level of information provided, the ease with which such information can be accessed and the price of the desired product. In an attempt to control the cost of offered products, the strategy of e-commerce merchants has been to reduce the number and influence of intermediaries or middlemen between the vendor and the ultimate purchaser. This trend is referred to as “disintermediation.” Disintermediation seeks to reduce costs by removing wholesalers and distributors as well as retail stores from the chain of commerce.

Due to the extensive start-up costs involved, in a conventional e-commerce model, a merchant or vendor typically services the national market through a single website and a handful of distribution or “fulfillment” centers or sites which deliver the goods through the mails, or electronically in certain applicable cases. Through the single store outlet model, vendors can provide access to a wide variety of items at discount prices. This has resulted in numerous Internet electronic stores (e-stores) or outlets, such as AMAZON.COM and BARNES&NOBLE.COM, competing head-to-head for product sales. As competition increases, however, so do the costs associated with marketing and maintaining customer bases.
E-commerce merchants have also strived to create brand name recognition. Unfortunately, the costs of establishing new national brand names, or simply to reposition existing brand names onto the Internet, are often prohibitive. The advertising efforts and expense frequently exceed the revenues generated, at least for the short term, until such brand name recognition is achieved. National brand names are designed to appeal to a wide segment of the population and, because their identity is inherently associated with a single product, necessarily forego the opportunity to identify products appealing to smaller cross-segments of the population.

Presently, a number of businesses successfully employ a multi-level marketing (MLM) concept for distributing products and/or services. Generally, the strategy behind using a MLM business model is to expand the distribution channels for a company’s products and/or services by retaining a large number of small retailers as representatives. Among the well known companies using this business approach are AMWAY and AVON. However, although these companies distribute their products through a large number of individual representatives, the ultimate purchaser still associates the products offered for sale with the parent company, rather than with the individual representative. The products sold are not customizable by the individual representative, and the purchaser knows that he or she is purchasing products from the parent company. In essence, the representative does not have the opportunity to develop good will in its own name and products.

Relying on price and selection to attract customers who otherwise have no allegiance to the store, large on-line discount e-stores have effectively eradicated small on-line e-stores. Small e-stores are not able to incur the costs associated with establishing an on-line presence and the costs of receiving and processing orders. Moreover, small e-stores are often not able to stock the wide inventory of products necessary to effectively compete with the larger e-stores. Consequently, the good will and customer loyalty that many smaller stores have established are not capitalized on. Therefore, it would be advantageous to provide a product distribution system which
allows a vendor to offer a wide selection of products while also allowing a vendor to build good will in its business name.

Some on-line e-stores employ a concept known as "framing." Framing involves the transporting of users from one network site (and server) to another without their knowledge or control. Quite often, from the user's standpoint, it does not even appear as though the user has ever left the vendor's site. This is used, for example, when an on-line vendor wants to tap the inventory of another server to provide its own customers with the appearance of having a much broader product inventory than it actually has.

Framing, however, has several inherent disadvantages. Aside from the additional hardware requirements (at least two servers are needed) and maintenance involved in running multiple servers, one disadvantage of framing is the inability to maintain control over a vendor's product content. By transporting a customer to another network server, the vendor looses the ability to control which products a customer sees or has access to. Another disadvantage of framing is the inability to effectively monitor consumer transactions which occur on a remote network site or server. This complicates the accounting procedure. Accordingly, it would be desirable to provide a product distribution system which is able to maintain control over vendor product content and fully monitor site traffic which would otherwise need to be performed separately for each server.

There remains a need, therefore, in the field of on-line product distribution and marketing, to permit multiple vendors to create and effectively manage on-line vendors in a simple and cost-efficient manner.
OBJECTS AND SUMMARY OF THE INVENTION

It is an object of the present invention to provide an electronic commerce system capable of managing multiple on-line vendors sharing a central product distribution/fulfillment site.

It is another object of the present invention to provide an on-line product distribution system which is able to control vendor product content and monitor electronic commerce transactions at each vendor site.

It is yet another object of the present invention to provide an on-line product distribution system which allows individual vendors to customize the interface to the shared product distribution site by inserting indicia identifying a specific vendor.

It is a further object of the present invention to provide an on-line product distribution system which allows vendors to control which products its customers can access and purchase.

It is still another object of the present invention to provide an on-line product distribution system which centralizes product fulfillment and distributes the cost of maintaining a large inventory of products or services among multiple vendors.

It is still a further object of the present invention to provide an on-line product distribution system which encourages users to go on-line who would not ordinarily do so.

The present invention revolutionizes electronic commerce by providing a method and apparatus that permits multiple vendors to create and manage an on-line business in a simple and cost-efficient manner. Rather than dominate the Internet, or
other electronic network, with a small number of large retailers, the present invention seeks to populate the Internet with a large number of small retailers.

In accordance with one form of the present invention, a shared fulfillment or distribution system is provided which may be used by multiple vendors, each vendor servicing its own customer base and receiving orders to be fulfilled from a central distribution site.

On-line vendor sites are in effect separated into a front-end or public side (i.e., the side an on-line purchaser sees) and a back-end side (i.e., the side that nobody sees but the on-line vendors). The shared fulfillment/distribution system preferably provides the products that each on-line vendor may offer for sale and handles fulfillment of the orders; In essence, it forms the core or spine which facilitates the operation of the overall e-commerce business. The name and advertising associated with establishing and maintaining brand name loyalty are preserved for vendors and their public side. By dynamically linking multiple vendors, who are preferably all selling the same or similar merchandise, the central distribution/fulfillment system of the present invention permits individual stores to establish a cost effective on-line presence and capitalize on their good will and customer loyalties.

One embodiment of the shared distribution method and apparatus of the present invention includes a management software program that tracks orders and other business related functions and provides each on-line vendor with a pre-determined percentage of the revenue generated from on-line sales through the vendor’s website. Preferably, the management program is additionally capable of compiling such business transaction information to determine consumer product preferences, possibly to measure the effect of a particular advertisement on product sales. Market analysts might be interested in purchasing this information.
By linking numerous on-line vendors with a central product distribution system, price discounts comparable to larger outlet stores can be obtained so that the products being offered for sale are price competitive. In addition, as most vendors will have a non-Internet presence, advertising and marketing efforts may be combined by each vendor. As the cost of operating the fulfillment system is effectively shared by multiple on-line vendors, the demand on any one vendor to meet minimum on-line sales requirements or objectives is substantially reduced, if not eliminated. As the success of the fulfillment system is not dependent upon any one vendor, vendors may create an on-line presence, even if their customer base is very minimal.

The present invention accomplishes these and other objectives by providing, in accordance with a preferred embodiment, a network server that contains multiple network addresses, or multiple network servers, each having their own network address, preferably an Internet Protocol (IP) address. Incoming requests or "hits" are identified with a session identifier (Id), IP address identifier, or by other suitable means known to those of ordinary skill in the art, and are routed to a management unit or processor. The processor sets up a purchase session in a distributed object architecture system or environment (e.g., COBRA, JAVA, JAVA BEAN or the like.) The distributed object architecture system links on-line vendor identification information with product information. Standard web page formats or customized web page formats may be used to display product information and input user data. Price and other data may be retrieved by the system directly from a common database which is preferably shared by multiple vendors. Moreover, prices or other information may be modified and stored for each vendor in a vendor database.

A management software program is preferably centrally provided to receive each order, thereby unifying the checkout process. In one embodiment, the checkout feature is uniform and devoid of any vendor names (i.e., generic). Session Id or similar means are used to tie the consumer purchase with the vendor that originated the sale. This facilitates vendor profit allocation and accounting. Product shipment
information is preferably input by the user through a generic web page interface for all purchases. Alternatively, the interface may be customized to an individual vendor by inserting identifying logos or other indicia. The management software preferably tracks product orders and the revenue generated therewith. After subtracting a predetermined fee for operation of the fulfillment system, the remaining amount is credited to the on-line vendor.

The present on-line vendor management apparatus and method relies on the concept that multiple vendors will ultimately be selling the same or similar merchandise. For example, most drugstores, bookstores and music stores that are on-line will carry similar or at least overlapping product lines. Rather than requiring each vendor to establish its own fulfillment and distribution center and attempt to dominate the market, the present invention encourages multiple vendors to unite and compete with each other. When competitors combine and use a shared distribution/fulfillment system, synergies occur that provide for a variety of new and heretofore unavailable advantages and features.

For example, the present invention can be combined with the Stage-Door concept which is the subject of a commonly owned and invented United States Patent Application entitled “Method and Apparatus for Permitting Stage-Door Access to On-Line Vendor Information,” filed on March 9, 1999, the content of which is herein incorporated by reference (see Appendix A). Data on buying habits, regional preferences, and the like can be collected and compared. Internet sales can be compared with regional advertising or name recognition to identify the most effective way of increasing on-line sales.

These and other objects, features and advantages of the present invention will become apparent from the following detailed description of illustrative embodiments thereof, which is to be read in connection with the accompanying drawings.
BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1A is a schematic diagram of one embodiment of the shared on-line vendor management system formed in accordance with the present invention.

Figure 1B is a block diagram illustrating another embodiment of the shared on-line vending system of the present invention.

Figure 2 is a block diagram of a preferred session identifying means that may be used to identify a user session with a network address that was accessed by the user.

Figure 3 is a block diagram of a preferred purchase management database used to track sales and network origination data.

Figure 4 is a block diagram of a unified web page template that may be used by multiple vendors in accordance with a preferred embodiment of the present invention.

Figure 5 is a logical flow diagram of one embodiment of a shared on-line vendor system formed in accordance with the present invention illustrating the general operation of the system.

Figure 6 is a logical flow diagram of one embodiment of a management unit for a shared on-line vendor system formed in accordance with the present invention.

Figure 7 is a logical flow diagram on one embodiment of a profit allocation management method for a shared on-line vendor system formed in accordance with the present invention.
Figure 1A generally illustrates a system for managing multiple on-line vendors formed in accordance with one embodiment of the present invention. Referring to Figure 1A, a management unit 16 is shown connected to an electronic network 12, preferably the Internet or other equivalent communication network, through a network server 14. Connection to the network 12 may be made using any suitable communication channel, such as a T1, T3, OC-12, or OC-192 data line, or protocol (e.g., TCP/IP) capable of high speed data transfer.

The network server 14 is preferably a Netscape ES server, although other suitable servers for use with the present invention are similarly contemplated. As illustrated in Figure 1A, the network server 14 may be a single server 14 having multiple network addresses 14a, 14b, preferably Internet Protocol (IP) addresses. Preferably, the network server operates in a multi-tasking environment, thereby facilitating the processing of multiple network addresses, as appreciated by those skilled in the art. Alternatively, the network server 14 may comprise multiple individual servers, each server having its own unique network address (not shown).

With continued reference to Figure 1A, a user or client 10 preferably communicates over the network 12 through a remote computer or terminal. The remote computer is preferably connected to a network interface 13, which may be a conventional internal or external modem. In a preferred embodiment, the network interface 13 is connected with the Internet 12 and/or any of the Internet service providers (ISP) such as America Online, CompuServe or Prodigy, allowing access to a wide range of on-line connections. Each user 10 is connected to the network 12 via a network connection 11, preferably using a public switched telephone network such as those provided by a local or regional telephone company. It is to be appreciated that such network connection 11 may also be provided, for example, by dedicated data
lines or wireless communication channels, including cellular, satellite, microwave, or
electromotive force (EMF) networks.

The management unit or processor 16 of the present invention preferably
receives a request from an incoming user 10 over the network 12 and creates a session
identifier (Id). The session Id provides a means of correlating a particular request or
transaction with a vendor's network address. As illustrated in Figure 2, the session Id
30 preferably includes an incoming network address portion 32 and a transaction
identification (Id) portion 34. Referring again to Figure 1A, the session Id and related
information are preferably stored by the management unit 16 into a database 18,
operatively connected to the management unit 16. The database 18 may be
implemented as a computer software program, such as Oracle or a suitable equivalent
thereof known by those skilled in the art, and may ultimately be stored in hardware
memory (e.g., random access memory) or other storage medium (e.g., computer disk).

The database 18 preferably allows the management unit 16 to track and store
user information, such as purchase type/description and quantity, which may be
compiled later by the fulfillment/distribution site. This information may subsequently
be used by advertisers, market analysts, or other individuals in determining consumer
purchasing preferences, prime motives (i.e., primary reason for visiting the vendor
site), or the like. As illustrated in Figure 3, the management unit 16 preferably stores
purchase information in a purchase database 40. The purchase database 40 may be
organized into different sections, for example, a session Id section 42, a purchase
section 44 and a section containing other information 46. Session Ids 30 are
preferably stored in the session Id section 42 and correlated with purchase information
44 and optional additional information 46.

In a preferred embodiment, the management unit 16 includes a cryptographic
processor (not shown). Any commercially available cryptographic processor may be
used, such as a MC68HC16 microcontroller, manufactured by Motorola Inc., or an
equivalent thereof. The cryptographic processor supports the authentication of communications between users and vendors allowing for secure e-commerce transactions, should such feature be desired.

Referring again to Figure 1A, the management unit 16 preferably brokers the user 10 to a workstation 20, such as manufactured by Sun Microsystems, Silicon Graphics Inc., or any suitable equivalent thereof. Preferably, a single workstation 20 is provided having a multi-tasking operating system which is shared among multiple vendors, each vendor being allocated a separate virtual space within the workstation 20. Alternatively, the present invention contemplates that multiple workstations 20a, 20b, 20c may be provided, with each vendor being assigned to a separate workstation.

Although a preferred embodiment of the present invention embeds an incoming network address identified in the session Id, those skilled in the art will appreciated that it is also possible to establish a token or to broker users to a designated workstation 20. For example, Figure 1B illustrates a brokering system 16a, 16b, 16c that may be used in which all users that access a specific network address are brokered to a predetermined workstation 20. Sales information may be stored in batches, as per the workstation 20, and individual user transactions need not be stored for determining on-line vendor profit allocation. Moreover, multiple brokers 16a, 16b, 16c may be used to further broker incoming users to a sub-broker 16b, 16c that corresponds to a specific network address. The sub-broker may be used to distribute users among multiple workstations.

The workstation 20 of the present invention preferably includes a processor 22 and a plurality of objects 24. Each object 24 preferably comprises multiple layers. For example, a first layer may include general information regarding the layout of an Internet web page 50 (see Figure 4) and a second layer may include data to be correlated to the web page 50. As shown in Figure 4, a basic web page layout 50 for use with the present invention may include a vendor logo area 52, a task bar area 54,
product description areas 56 and corresponding price information areas 58. It is to be appreciated that other identifying indicia may also be included in the logo area 52 to further customize the web page 50 according to each particular vendor.

Although the general layout of the web page 50 may be standard for each vendor, preferably each vendor can uniquely customize the web page, for example by inserting its own identifying logo or other identifying indicia, thus distinguishing one vendor site from another. Shared data, such as task bar data 54 and product descriptions 56, are preferably retrieved from a common database 26 (see Figure 1A) located at the fulfillment/distribution site. Similarly, customized information, such as logo data 52 (or other vendor identification indicia) and price data 58, if modified from a predetermined price set by the franchiser, are preferably retrieved from a vendor database 28 (see Figure 1A). The common database 26 and vendor database 28 are preferably operatively connected to the workstation 20. It should be appreciated that if multiple workstations 20a, 20b, 20c are employed, each workstation may be connected to its own vendor database. Alternatively, the vendor database 28 may be shared among workstations.

In order to prevent unauthorized access to the hosting database server or to the workstation 20, a firewall may be utilized (not shown). As appreciated by those skilled in the art, a firewall is a mechanism designed to limit access to certain critical or sensitive areas of the computer system, for example, the operating system. The firewall may be implemented as a computer software program or, alternatively, the firewall may be implemented in hardware to perform the same or similar gatekeeping task.

With reference to the logical flow diagram of Figure 5, a general method 60 of managing multiple on-line vendors, in accordance with one embodiment of the present invention, will now be described in detail. As illustrated in Figure 5, a user begins a purchasing session by entering a vendor site 62, preferably by selecting (i.e.,
"clicking") a hypertext link designating a network address associated with the vendor's site. A session Id is preferably created 64 which identifies the network address that the user has accessed. An object is assigned 66 which permits the user to navigate through a series of web pages, each web page including the vendor's logo and product/price information. After the user identifies a product to purchase 68, user payment information is obtained 70 for fulfilling the requested product order. Preferably, information pertaining to the transaction, such as item type, quantity, price, etc., is stored together with the session Id 72, or other equivalent identifying characteristic, thereby permitting the transaction to be correlated with the network address that was accessed.

Another embodiment of the shared fulfillment/distribution system of the present invention is illustrated in Figure 6. With reference to Figure 6, a user first enters the vendor site 82, preferably by accessing the network address associated with that site. A session Id is then preferably created 84 which correlates the network address to the user's purchase session. Based on the incoming network address, a logo or similar identification indicia is preferably retrieved 86 from the distribution site database, or similar storage location. This retrieved logo uniquely identifies the vendor corresponding to the selected network address and is preferably inserted on subsequent web pages throughout the vending session.

As the user navigates through the on-line store, which preferably comprises a series of web pages, product information is retrieved 88. Such product information may comprise text, describing the product in detail, or it may comprise graphics illustrating product color, style, etc. Furthermore, any combination of text and graphics may be provided to aid the user in making an informed purchase decision. Preferably, a product filter 90 is provided which can be configured by the vendor as desired to either limit or block out an entire class of products (e.g., adult material, tobacco products, etc.) or individual products and brand names (e.g., Tylenol™ pain reliever, etc.) that the vendor does not want to be displayed or made available through
the site. If a product filter 90 is available, product filtering information is preferably retrieved and applied 92. In a similar fashion, certain products or classes of products may be added by a particular vendor which may not be available to other vendors.

It is to be appreciated that, in accordance with the present invention, product information may be stored in a database with identifiers or tags that permit the product filters to operate. For example, a “kosher” tag, or other suitable identifier, may be applied to each product which permits all products to be easily sorted and identified. Any number of predetermined sorting tags may be used, such as brand name, ingredients, or any descriptive category.

As products are retrieved, the price information associated with those products must also be retrieved. Preferably, the retail price of a particular product is standard among all vendors. However, the present invention contemplates that a vendor may desire to control the selling price of a particular product. Accordingly, the present invention preferably provides a price modification mechanism 94 by which the vendor may adjust the price of any item (or items) as desired (either up or down), preferably within certain prescribed limits set by the fulfillment site. If price modifications are enabled, they are applied 96 to the selected product(s).

It is to be appreciated that vendors preferably may not be allowed to lower the price of a particular product below the transfer cost set by the fulfillment/distribution site. However, the present invention contemplates that certain allowances may be provided for vendors with large volumes of sales or who are otherwise deemed to have credit or be entitled to further discounts.

With continued reference to Figure 6, the product and price information is preferably input into the vendor web pages 98 so as to create the appearance of a vendor-specific Internet site. When the user selects a product 100, the product information and incoming network address identifier or session Id are preferably stored 102. The user may then continue to shop for additional products 104. This is similar in concept to a virtual shopping cart system utilized by conventional on-line
purchasing sites. In fact, the virtual shopping cart concept may be incorporated with
the present invention as a suitable method for totaling customer purchases.

After the user has completed the shopping session, the user is preferably
directed to a payment information page or screen 106. It is to be appreciated that the
layout and format of the payment information screen 106 may be standard for all
vendors, or it may be uniquely customized as determined by the vendor.

Just as customized product and price information are preferably provided by
the franchiser distribution system, customized shipping instructions are preferably
provided 108, corresponding to a particular session Id.

Although all products are preferably shipped in generic packaging for each
shipper so as not to identify a specific vendor, customized packaging and/or labels
may be offered, thereby presenting the appearance that the requested products
originated from the vendor's store. For example, a small vendor who is using the on-
line distribution system of the present invention to supplement an otherwise limited
product selection or inventory, may request that all on-line orders associated with a
particular network address be shipped to the vendor's store for subsequent delivery to
the user, rather than being shipped directly to the end customer. If customized
shipping is requested, the customized shipping information is preferably retrieved and
utilized 110.

Once orders are processed, the shipping information, which may include
generating packaging labels and the like, are preferably transmitted to the fulfillment
site 112 for proper delivery. Upon completion of the purchase session, subsequent
users 114 may either access the program again by entering the site 82, or the program
may simply terminate 116 when a vendor ceases operation.

In a preferred embodiment, a secure payment transaction protocol is utilized
for transmitting payment and shipping information to the fulfillment site 112.
Processing of credit card transactions may be supported with commercially available
software, such as the Secure Webserver manufactured by Open Market, Inc. or a suitable equivalent thereof. A suitable interface for network access security may, for example, prompt the user for a personal identification number (PIN) or similar access code prior to transmitting the purchase order. This insures that customer credit account and purchase information is kept strictly confidential, thereby reducing the likelihood of fraud or theft.

As illustrated in Figure 7, the management program 120 preferably periodically retrieves sales data 122 and product cost data 124. The sales data is preferably sorted by session Id to identify the vendor that is to be credited with the corresponding product sale 126. Using this information, vendor profit allocation may be easily determined 128 and the vendor awarded with its predetermined share of the profits. The profit awarded to the vendor is preferably a fixed percentage of the gross sales attributable to the vendor, such as twenty percent (20%), or any other amount agreed upon by the contracting parties. This profit allocation may be returned in the form of a cash or check rebate. Moreover, the rebate may be returned to the vendor electronically, by direct transfer into the vendor’s bank account (i.e., direct deposit). Similarly, the present invention contemplates other non-monetary transactions as a means of awarding vendor profits, including inventory credits, stock transfers, or 401K account deposits.

In essence, the present invention allows an e-commerce business to be “franchised” over an electronic network, such as the Internet. In this scenario, vendors may be referred to as franchisees and the distribution site owners may be referred to as franchisers. Thus with the present invention, a franchiser running a fulfillment/distribution site can offer vendors/franchisees a substantially complete unbranded e-commerce business comprised of front-end software (e.g., custom web pages), content and fulfillment services. Vendors/franchisees would then use their own brand names and individual network URL addresses to market their franchises.

For ease of understanding, traditional definitions of the terms “franchise,” “franchiser” and “franchisee” have been employed herein. In effect, however, the
methods and apparatus of the present invention provide a “reverse franchise” system. In a conventional franchise operation, for example, the franchiser typically operates a “plan” and the franchisee carries out the plan; Moreover, cost accounting and product distribution are traditionally performed by the franchisee. With the on-line distribution system of the present invention, the opposite is true. In addition, a franchise, in the customary sense, has physical boundaries (e.g., a store) while the present invention is, in essence, a “virtual store,” with essentially no physical boundaries. As an example of one application of the system defined by the present invention, consider the on-line drugstore example described herein below.

**EXAMPLE: AN ON-LINE DRUGSTORE BUSINESS**

In a preferred embodiment of the present invention, a system for running an on-line drugstore business is provided. In accordance with the present invention, a franchiser (i.e., the distribution/fulfillment site) provides all of the basic elements or services used to run an on-line drugstore. These basic elements preferably include a website front-end displaying product inventory, complementary content and a product fulfillment system (which may include prescriptives). These basic elements are hereinafter collectively referred to as "the business." A franchisee (i.e., the vendor) pays a predetermined subscription fee to the franchiser for the use and maintenance of these services.

Preferably, the franchiser supplies elements to the franchisee in unbranded or generic form, namely, without any identifying indicia. The franchisee preferably provides to the franchiser customized HTML template overlays, which incorporate the franchisee's brand name (and/or identifying logo or other identifying indicia) and possibly certain product selection. These custom HTML overlays are preferably hosted by the franchiser on the franchiser's server. Alternatively, the franchisee's templates may reside elsewhere, such as on a separate server, if multiple servers are employed.
Each franchisee is preferably assigned a unique network URL address. A user who accesses the URL address of the franchisee will see the franchisee's custom identifying templates and content as an overlay on the franchisor's front-end and product database. Orders placed to this site are fulfilled by the franchisor's fulfillment system. The packaging supplied by the franchisor is preferably generic (i.e., unbranded), although custom packaging and/or labeling identifying the franchisee as the source of the product may be supplied if requested by the franchisee. The present invention further contemplates that the franchisee may preferably be able to use "personalization" features of the franchisor's front-end software to more closely tailor the franchisor's site to the franchisee's specific market and customer base. This may include blocking certain classes of products or specific name brands offered for sale by the franchisee.

Since all transactions are preferably performed on the franchisor's system, the franchisor's control software is able to monitor sales information for each franchisee, both for general marketing purposes (e.g., to determine consumer buying preferences, etc.) as well as to support any commission structure. For privacy reasons, the type of information available to the franchisor may be restricted to include, for example, only customer names and amount of products purchased, rather the description of the products purchased. This information may be ultimately compiled by the franchisor and sold to third parties interested in consumer product preference or related research.

Those skilled in the art will appreciate that the present invention may be used to distribute any number of products or services. Whether books, pharmaceuticals, music, consumer electronics or the like are being sold, so long as at least a portion of the products or services supplied by two or more on-line vendors overlap, the present invention may be employed to sell and distribute these products. An example illustrating the applicability of the methods and apparatus of the present invention is described below in the context of an on-line drugstore business.

A shared on-line product distribution system formed in accordance with the present invention provides a means for managing multiple on-line vendors transacting
business over an electronic network. The shared distribution system includes a central product fulfillment site operatively communicating with a plurality of vendor sites over the electronic network. Each of the vendor sites has a unique network address associated with the site which may be accessed by users selecting the vendor's network address. Order requests placed at the vendor sites are received and processed by the product fulfillment site, which distributes the requested products to the corresponding users who purchased them. With the system of the present invention, vendors are provided with all the necessary elements to create and run an on-line electronic commerce business in a simple and cost-effective manner.

Those of ordinary skill in the art will recognize that the present invention has wide commercial applicability to Internet and electronic commerce in general. Although illustrative embodiments of the present invention have been described herein with reference to the accompanying drawings, it is to be understood that the invention is not limited to those precise embodiments, and that various other changes and modifications may be effected therein by one skilled in the art without departing from the scope or spirit of the present invention.
WHAT IS CLAIMED IS:

1. A method of sharing an on-line fulfillment/distribution system comprising the steps of:
   providing a plurality of network addresses linked to the fulfillment/distribution system;
   receiving a request for a web page from a remote user;
   identifying the network address corresponding to the request; and
   inserting identifying indicia corresponding to the network address in the web page requested by the user.

2. The method of Claim 1, further comprising the steps of:
   receiving a product order request from the user;
   distributing the requested product to the user; and
   correlating the distributed product with the network address in the web page requested by the user.

3. A shared on-line fulfillment/distribution system comprising:
   a first network address;
   a second network address;
   at least one network server that receives requests directed to the first network address and the second network address; and
   a product management unit for displaying at least one web page containing product data, wherein when the first network address is detected a first identifying indicia is inserted into the web page and when the second network address is detected a second identifying indicia is inserted into the web page.

4. A method of managing on-line vendors using an electronic network comprising the steps of:
   providing a plurality of remote order input sites operatively connected to the network;
providing a product fulfillment site operatively connected to the order input sites, the fulfillment site hosting a plurality of vendor sites, each of the vendor sites having a unique network address associated therewith;

receiving an order request from one of the order input sites;
identifying the network address corresponding to the received order request;
displaying an interface page at the order input site, the interface page including product information and identifying indicia customized to the vendor site associated with the identified network address.

5. The method of Claim 4, further comprising the steps of:
identifying a product selected for purchase from the order input site;
receiving payment information from the order input site; and
transmitting the product order and payment information to the fulfillment site for distributing the product.

6. The method of Claim 5, further comprising the steps of:
determining product sales corresponding to each of the vendor sites; and
computing a profit allocation for each of the vendor sites for awarding profits to the vendor sites.

7. The method of Claim 4, wherein the step of displaying the interface page further comprises the steps of:
determining whether a product filter is enabled at the vendor site, the product filter preventing the display of predetermined products available from the fulfillment site; and
applying the product filter if enabled.

8. The method of Claim 4, wherein the step of displaying the interface page further comprises the steps of:
determining if a requested product contains a price modification in effect at the vendor site, the price modification adjusting the price of the product within a predetermined amount compared to the price set by the fulfillment site; and
applying the price modification to the product if the price modification is in effect.

9. The method of Claim 4, further comprising the steps of:
collecting product sales data from the vendor sites; and
determining product marketing information based on the product sales data.

10. An apparatus for managing multiple on-line vendors, the apparatus comprising:
a plurality of vendor sites, each of the vendor sites receiving order requests
from users of the vendor site and having a unique network address associated
therewith, the users accessing each of the vendor sites through an electronic network
by selecting the network address corresponding to the vendor site; and
a product fulfillment site operatively connected to the electronic network, the
product fulfillment site receiving the order requests from the vendor sites and
distributing products purchased by the users of the vendor sites.

11. The apparatus of Claim 10, wherein the product fulfillment site comprises:
a management unit, the management unit creating a session identifier for each
order request received from the user, the session identifier correlating the received
order request with the network address of the vendor site through which the order
request was received;
a database operatively connected to the management unit for storing session
identifiers and related product information; and
a network server operatively connected to the electronic network, the network
server providing an interface between the management unit and the network.

12. The apparatus of Claim 11, wherein the management unit comprises:
a storage device; and
a processor operatively connected to the storage device, the storage device
storing a program for controlling the processor and the processor being operative with
the program for computing a total product sales corresponding to each of the vendor
sites and for determining a profit allocation for each of the vendor sites based on the total product sales for the vendor site.

13. The apparatus of Claim 12, wherein the management unit further comprises a cryptographic processor for authenticating communications between users and the vendor sites.

14. A method of franchising an on-line drugstore comprising the steps of:

- providing a product fulfillment site operatively connected to an electronic network, the fulfillment site hosting a plurality of vendor sites, each of the vendor sites having a unique network address associated therewith;
- receiving an order request from a remote user connected to the network, the user accessing one of the vendor sites by selecting the network address associated with the vendor site;
- creating a session identifier, the session identifier correlating the network address of the vendor with the order request;
- displaying product and price information to the user, the product and price information including indicia uniquely identifying the vendor site to the user;
- receiving payment and shipment information from the user; and
- transmitting the order request, payment and shipment information to the fulfillment site for distributing the product to the user purchasing the product.

15. The method of Claim 14, further comprising the steps of:

- computing a vendor profit allocation for each of the plurality of vendor sites, the vendor profit allocation being determined from a total of product sales associated with the vendor site; and
- awarding the profit allocation to a vendor operating the corresponding vendor site.

16. A method of distributing products through an on-line reverse franchise comprising the steps of:
providing a product fulfillment site operatively connected to an electronic
network, the fulfillment site hosting a plurality of vendor sites, each of the vendor
sites having a unique network address associated therewith;

receiving an order request from a remote user connected to the network, the
user accessing one of the vendor sites by selecting the network address associated
with the vendor site;

creating a session identifier, the session identifier correlating the network
address of the vendor with the order request;

displaying product and price information to the user, the product and price
information including indicia uniquely identifying the vendor site to the user;

receiving payment and shipment information from the user; and

transmitting the order request, payment and shipment information to the
fulfillment site for distributing the product to the user purchasing the product.

17. A method of operating a franchised on-line fulfillment/distribution system, the
fulfillment/distribution system being associated with a plurality of on-line addresses,
comprising the steps of:

receiving a request for web page data, the request being addressed to one of
the on-line addresses;

retrieving the requested web page data;

identifying the on-line address from the request;

retrieving vendor data indexed by the on-line address;

merging the web page data with the vendor data; and

providing the merged data in response to the request.

18. A franchised on-line fulfillment/distribution system, comprising:

a server associated with a plurality of on-line addresses, each address being
associated with a franchised vendor;

a product management unit in communication with the server;

a first database in communication with the product management unit, the first
database storing vendor-independent information, the vendor-independent information
containing fields; and

25
a second database in communication with the product management unit, the
second database storing vendor-specific information, the vendor-specific information
indexed by the on-line address associated with a respective vendor and containing
information associated with the fields of the vendor-independent information.

19. The system of Claim 18, further comprising a third database in
communication with the product management unit, the third database storing
completed orders of the system, the completed orders indexed by the on-line
addresses of the vendors.

20. An on-line commercial method comprising the steps of:
    receiving, at an on-line fulfillment site associated with a plurality of on-line
    addresses, an order request addressed to one of the on-line addresses;
    completing the requested order; and
    storing a record of the order indexed by the on-line address of the order
    request.
FIG. 5

1. Enter site
2. Create session ID
3. Assign to object
4. Identify products to purchase
5. Payment information
6. Store session ID with products purchased and/or payment information
FIG. 7

120

RETRIEVE SALES DATA WITH SESSION IDS
122

RETRIEVE PRODUCT COST DATA
124

SORT SESSION IDS TO IDENTIFY VENDOR SALES
126

COMPUTE VENDOR PROFIT ALLOCATION
128
INTERNATIONAL SEARCH REPORT

INTERNATIONAL APPLICATION No.
PCT/US00/11052

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60
US Cl. : 705/26

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/26, 27, 28, 5, 8, 10, 21

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

Please See Extra Sheet.

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

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y,P</td>
<td>US 6,026,374 A (CHESS) 15 FEBRUARY 2000, claim 1, col.1 lines 6-7, col.2 lines 33-45, col.4 lines 42-47.</td>
<td>1-20</td>
</tr>
<tr>
<td>Y,P</td>
<td>US 6,029,141 A (BEZOS ET AL.) 22 FEBRUARY 2000, the abstract, the summary, col.1 lines 20-23, col.2 lines 3-17, 29-37, col.3 lines 21-32, col.6 lines 15-20, 41-58, 63-67, col.7 lines 35-40, 52-60, col.13 lines 1-8, col.14 lines 16-20, col.14 line 62 to col.15 line 4, and col.15 lines 25-33, 61-67, claim 2</td>
<td>1-20</td>
</tr>
</tbody>
</table>

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

Date of the actual completion of the international search: 27 JUNE 2000

Date of mailing of the international search report: 28 JUL 2000

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks

Box PCT
Washington, D.C. 20231
Facsimile No. (703) 305-3230

Authorized officer:

CUONG H. MATTANG

Telephone No. (703) 305-4553

Form PCT/ISA/210 (second sheet) (July 1998)
# INTERNATIONAL SEARCH REPORT

**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y,P</td>
<td>US 5,930,764 A (MELCHIONE ET AL.) 27 JULY 1999, col.8 lines 8-14, col.43 lines 17-23, claims 84, 87, 190</td>
<td>1-20</td>
</tr>
<tr>
<td>A</td>
<td>INSIGHTS, Just say no to daddy-O'---ARBY's franchisees give the cold shoulder to burger chain, Restaurant business, 1 July 1992, pg.20</td>
<td>1-20</td>
</tr>
<tr>
<td>A</td>
<td>ALLEN, FTC: Earnings claims may be exempt from disclosure law, Nation's Restaurant News, 07 April 1997, vol.31 issue 14, from pg.3.</td>
<td>1-20</td>
</tr>
<tr>
<td>A</td>
<td>ENCYCLOPAEDIA BRITANNICA ONLINE, CHAIN STORE &amp; MARKETING, from <a href="http://www.search.eb.com/">http://www.search.eb.com/</a></td>
<td>1-20</td>
</tr>
</tbody>
</table>
B. FIELDS SEARCHED
Documentation other than minimum documentation that are included in the fields searched:

MICROSOFT PRESS, COMPUTER DICTIONARY 3RD EDITION
bARRON'S EDUCATIONAL SERIES, INC, DICTIONARY OF BANKING TERMS, EDITION 1997

B. FIELDS SEARCHED
Electronic data bases consulted (Name of data base and where practicable terms used):
WEST2.0/DERWENT, DIALOG CLASSIC, NPL (CORPORATE RESOURCENET, PROQUEST DIRECT)
search terms: reverse, auction, vendor, chain, merge, order, filler, distribute, address, amazon.com, data, information,
listing, product, display, network, site, shipment, receive, transmit, award, identifier, profit allocation, payment,
retrieve