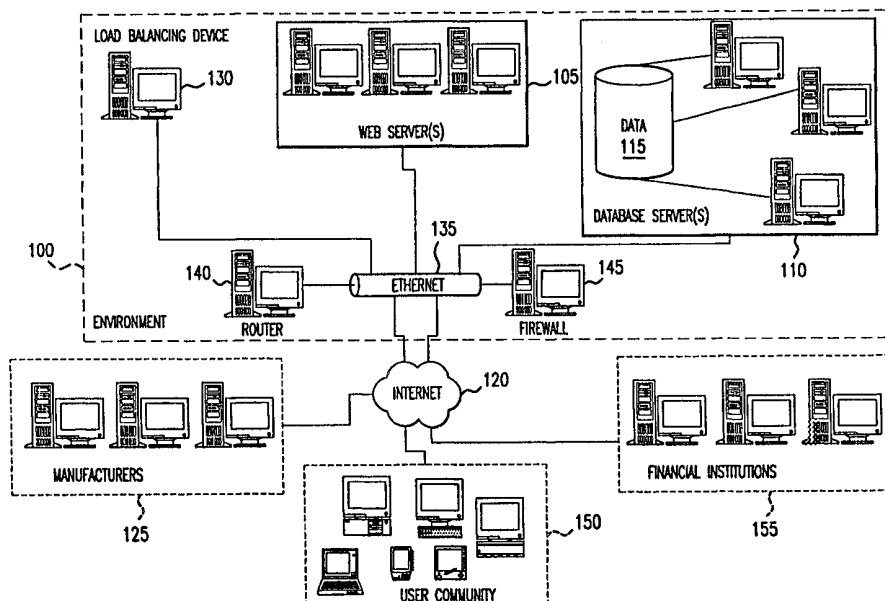




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G06F 17/30	A1	(11) International Publication Number: WO 00/57313 (43) International Publication Date: 28 September 2000 (28.09.00)
(21) International Application Number: PCT/US00/07840 (22) International Filing Date: 24 March 2000 (24.03.00) (30) Priority Data: 60/126,162 25 March 1999 (25.03.99) US (71) Applicant: YUSAVE.COM, INC. [US/US]; 121 Luckie Street, N.W., Atlanta, GA 30303 (US). (72) Inventors: GUNNING, John; 77 East Andrews Drive, N.E., No. 124, Atlanta, GA 30305 (US). SMART, Larry; 2896 Mabry Road, N.E., Atlanta, GA 30319 (US). (74) Agents: KERVEN, David, S. et al.; Needle & Rosenberg, P.C., The Candler Building, Suite 1200, 127 Peachtree Street, N.E., Atlanta, GA 30303-1811 (US).		(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>

(54) Title: SYSTEM AND METHOD FOR IMPLEMENTING WEB-BASED DIRECT MANUFACTURER MARKETING AND TRANSACTIONS

**(57) Abstract**

The present invention provides a method and system for facilitating the direct purchase or marketing of products available from manufacturers (125) to consumers (150). An order for a selected product manufactured by a particular manufacturer is received. A determination is made based upon predetermined approval criteria whether to approve the received order. If the received order is approved, it is forwarded to the particular manufacturer of the ordered product so that the manufacturer may directly deliver the product subject to the order to the consumer.

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SYSTEM AND METHOD FOR IMPLEMENTING WEB-BASED DIRECT MANUFACTURER MARKETING AND TRANSACTIONS

CROSS-REFERENCE TO RELATED PATENT APPLICATION

5 This application claims the benefit, pursuant to 35 U.S.C. §119(e), of applicant's provisional U.S. Patent Application Serial No. 60/126,162, filed March 25, 1999, entitled "SYSTEM AND METHOD FOR IMPLEMENTING WEB-BASED DIRECT MANUFACTURER MARKETING AND TRANSACTIONS".

BACKGROUND OF INVENTION

1. FIELD OF INVENTION

10 The present invention relates to a system and method for facilitating Web-based direct manufacturer marketing and transactions. More particularly, the invention relates to a system and method for facilitating transactions and marketing directly
15 between consumers and manufacturers with respect to the manufacturers' respective products.

2. DESCRIPTION OF RELATED ART

20 The Internet is a global network of connected computer networks. Over the last several years, the Internet has grown in significant measure. A large number of computers on the Internet provide information in various forms. Anyone with a computer connected to the Internet can potentially tap into this vast pool of information.

25 The most wide spread method of providing information over the Internet is via the World Wide Web (the Web). The Web consists of a subset of the computers connected to the Internet; the computers in this subset run Hypertext Transfer Protocol (HTTP) servers (Web servers). The information available via the Internet also encompasses information available via other types of information servers such as GOPHER and FTP.

30 Information on the Internet can be accessed through the use of a Uniform Resource Locator (URL). A URL uniquely specifies the location of a particular piece

of information on the Internet. A URL will typically be composed of several components. The first component typically designates the protocol by which the address piece of information is accessed (e.g., HTTP, GOPHER, etc.). This first component is separated from the remainder of the URL by a colon (':'). The remainder of the URL
5 will depend upon the protocol component. Typically, the remainder designates a computer on the Internet by name, or by IP number, as well as a more specific designation of the location of the resource on the designated computer. For instance, a typical URL for an HTTP resource might be:

`http://www.server.com/dir1/dir2/resource.htm`

10 where http is the protocol, www.server.com is the designated computer and /dir1/dir2/resource.htm designates the location of the resource on the designated computer.

Web servers host information in the form of Web pages; collectively the server and the information hosted are referred to as a Web site. A significant number of Web
15 pages are encoded using the Hypertext Markup Language (HTML) although other encodings using the eXtensible Markup Language (XML) or the Standard Generic Markup Language (SGML) are becoming increasingly more common. The published specifications for these languages are incorporated by reference herein. Web pages in these formatting languages may include links to other Web pages on the same Web site
20 or another. As will be known to those skilled in the art, Web pages may be generated dynamically by a server by integrating a variety of elements into a formatted page prior to transmission to a Web client. Web servers and information servers of other types await requests for the information that they receive from Internet clients.

Client software has evolved that allows users of computers connected to the
25 Internet to access this information. Advanced clients such as Netscape's Navigator and Microsoft's Internet Explorer allow users to access software provided via a variety of information servers in a unified client environment. Typically, such client software is referred to as browser software.

As these technologies have evolved, the use of the Internet has expanded from a
30 vehicle for the sharing of information to an online market place. A variety of

merchants have established Web sites as virtual stores for selling their goods and services.

Typically, these online stores have mirrored the physical stores with respect to distribution channels utilized to acquire inventory. A typical merchant will usually
5 have one or more distributor in the chain between itself and the ultimate manufacturer of a product. Each link in the distribution chain equates to a mark-up in the price of the product distributed resulting in a higher cost to consumers.

Some manufacturers, such as Dell Computers, have begun breaking the distribution chain by offering direct sales to consumers over the Internet through their
10 Web sites. In this approach, the mark-up resulting from a distribution chain can be reduced or eliminated. However, under this approach each manufacturer becomes an island on the Internet requiring consumers to travel from manufacturer to manufacturer to shop for different product or to compare similar products. Further, under this approach each individual manufacturer is required to develop its own transaction
15 support structure for its online virtual store.

The present transaction support system and method addresses these, and other, disadvantages.

SUMMARY OF THE INVENTION

20 The present invention is directed to a transaction support system and method for facilitating a direct purchase or marketing of products available from a variety of manufacturers to a consumer. According to the present invention, an order for a selected product manufactured by a particular manufacturer is received. The received order is stored in some embodiments. A determination is made based upon
25 predetermined approval criteria such as valid payment, product availability or complete shipping information whether to approve the stored order. If the stored order is approved, it is forwarded to the manufacturer of the selected product so that the selected product may be delivered directly from the manufacturer to the consumer.

A typical system includes an order data store for storing consumer orders and a
30 processor in communication with the data store. Some embodiments may include a

consumer data store for storing data associated with consumers, which may in some instances be integrated with the order data store.

In a further aspect, the present invention relates to a system and method for supporting location and comparison by a consumer of products manufactured by at least two different manufacturers culminating in an opportunity for the consumer to purchase one of the products for direct delivery from the manufacturer. Accordingly, a consumer is presented with a menu of one or more product classifiers. A selected product classifier is received. If the product classifier has further product classifiers associated with it, the consumer is presented with a menu of these further product classifiers; a selection from this menu is received. This step may occur several times in some embodiments until no further product classifiers are associated with the most recently selected product classifier. A request to display comparative information is received from the consumer. In response to this request, comparative information for products from at least two manufacturers are displayed based upon one of the selected product classifier. The consumer is provided with a visual representation, such as a link or button, associated with each product about which comparative information is displayed, that upon activation, triggers the order of the product associated with the activated visual representation for direct delivery by the manufacturer of the product.

In yet a further aspect, the invention relates to a system and method for providing a manufacturer access to an aggregation of products from multiple manufacturers that are for sale and direct delivery by the manufacturer of the specific product. Accordingly, product data associated with one or more products manufactured by one of the multiple manufacturers. An interface for designating one or more product classifiers for each product for which product data was received is provided to the manufacturer from which the product data was received. An order for a selected product of the one or more products manufactured by the selected manufacturer is received and is forwarded to the selected manufacturer of the selected product for direct delivery by the selected manufacturer to the consumer.

Additional advantages of the invention will be set forth in part in the description which follows, and in part will be obvious from the description, or may be learned by

practice of the invention. The advantages of the invention will be realized and attained by means of the elements and combinations particularly pointed out in the appended claims. It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only and are not
5 restrictive of the invention, as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate one embodiment of the invention and together with the
10 description, serve to explain the principles of the invention.

FIG. 1 is a diagram of a typical system according to the present invention.

FIG. 2 is a screen shot of a consumer product search interface page.

FIG. 3 is a screen shot of a consumer drill-down to a product type through a hierarchy of product classifiers.

15 **FIG. 4** is a screen shot of a typical consumer product page.

FIG. 5 is a flow chart for handling Web publishing.

FIG. 6 is a screen shot of a typical interface allowing a manufacture to associate product classifier with a particular product.

20 **FIG. 7** is a screen shot of an interface allowing a typical consumer to select features.

DETAILED DESCRIPTION OF THE INVENTION

A preferred embodiment of the invention is now described in detail. Referring to the drawings, like numbers indicate like parts throughout the views. As used in the
25 description herein and throughout the claims that follow, the meaning of “a,” “an,” and “the” includes plural reference unless the context clearly dictates otherwise. Also, as used in the description herein and throughout the claims that follow, the meaning of “in” includes “in” and “on” unless the context clearly dictates otherwise. In the foregoing discussion, the following terms will have the following definitions unless the
30 context clearly dictates otherwise.

- Manufacturer – refers to a company manufacturing and providing products for sale
 - Consumer – individuals visiting a typical system according to the present invention for the purpose of purchasing items.
 - 5 • Attribute - a single logical piece of information, such as a user id, age, or income. In addition, attributes can be logically multi-valued, meaning that an attribute can be a list of items.
 - Site – In the context of this document, site refers to the web site embodying the present invention.
 - 10 • DDA Account Number – Demand Deposit Account.
 - SIC Code – Standard Industry Codes used for classifying a company's main business
 - UPC - Universal Product Code. A system of numbering commercial products using bar codes. A UPC consists of 12 digits: a number system character, a five-
15 digit number assigned to the manufacturer, a five-digit product code assigned by the manufacturer, and a modulo 10 check digit.
 - Configurator – A tool used to input various configurations of products and rules which apply to configurations. Configurations for a lawn mower might be blade width, self-propelled, engine size, etc. Various products have unique
20 properties and features that the Configurator will handle.
 - Batch - A set of data or jobs to be processed in a single program run
- Ranges may be expressed herein as from "about" one particular value, and/or to "about" another particular value. When such a range is expressed, another embodiment includes from the one particular value and/or to the other particular value. Similarly,
25 when values are expressed as approximations, by use of the antecedent "about," it will be understood that the particular value forms another embodiment. It will be further understood that the endpoints of each of the ranges are significant both in relation to the other endpoint, and independently of the other endpoint.

A typical hardware and software environment for implementing the present invention will be seen in FIG. 1. The environment 100 will include:

- a Web server cluster 105 of one or more Web server system,
- a database cluster 110 of one or more database servers connected to a data repository 115 such as a fixed disk drive, network connected disk or other secondary or primary storage device, and
- an optional load-balancing device 130 that may be used to distribute requests among the Web servers in the Web server cluster 105 and/or requests among the database servers in the database cluster 110.

The database cluster 110 typically stores orders. In some embodiments, the database cluster 110 may also store profiles associated with consumers and/or manufacturers. Also, some embodiment may utilize the database cluster 110 to store a hierarchy of product classifiers and feature templates and data. These clusters and/or systems would be connected via a communications network, such as Ethernet 135.

Ethernet 135 may, in some embodiments, utilize a router system 140 and firewall system 145 for the purpose of control and security; the functionality of router system 140 and firewall system 145 may be integrated into a single system in some embodiments.

The communications network such as Ethernet 135 would also have a connection to an external communication network such as the Internet 120 by which end users 150 would utilize the system via user terminals such as user computers, desktop or set-top boxes, wireless devices, Internet appliances or other Internet-enabled device having an input device and an output device. The output device of the typical user terminal will be a visual display; however, "display" as used in this specification and the foregoing claims should not be limited to visual displays but should be understood to encompass other output devices such as auditory output devices, tactile device or other suitable mechanism for rendering output as will be known to those skilled in the art. Similarly, the input device of the typical user terminal will be a pointing device and/or a keyboard; however, input devices may include a stylus, vocal/noise-based input devices, motion-based input device such as eye-blink sensors

or other motion detection device or other suitable mechanism for providing input as will be known to those skilled in the art.

The Web server cluster 105 communicates with the database cluster 110 in this situation via an Ethernet 135 and with a variety of manufacturer computers 125
5 representing manufacturers via a communication channel such as the Internet 120. Further, the environment communicates with financial institution computers 155 representing financial institutions via a communication channel such as the Internet 120. Typically, the financial institutions will perform such tasks as credit card processing and manage deposit/checking accounts for the proprietor of the environment
10 and/or for the various manufacturers.

Each Web server in the Web server cluster 110 supports transactions involving products available from multiple manufacturers. A consumer utilizing a suitable Internet enabled device 150 views material on products from the Web server 110, and if she decides to make a purchase, the Web server receives her order for the product
15 selected. The Web server validates payment information associated with the order through a financial institution computer 155. A further validation may occur to determine with the product subject to the order is available from the manufacturer. This may occur through an access to the database cluster 110 or through real-time communication with the manufacturer 125. Yet another validation may examine the
20 order to determine whether all requisite information is present in the order for the manufacturer to fulfill the order. If the received order is approved according to one or more of these approaches, the order is forwarded to the manufacturer who in turn directly delivers the ordered product to the consumer.

Delivery of the order to the manufacturer may occur via any suitable delivery
25 mechanism such as interactive access via Web server cluster 110, fax delivery, e-mail delivery, direct transfer of formatted or unformatted data to the manufacturer's computer 125 or other suitable mechanism. The delivery vehicle could be originated by the environment 100 or as a result of a request from the manufacturer. The orders to be delivered may require formatting according the specified delivery platform.

An outline of the various functions and data flows of these components follows:

Web Server Cluster 105

1. Customers - Allows customers to create profiles including name, address, credit card, etc.
- 5 2. Manufacturers - Allows manufacturers to create profiles with name, address, contact information, etc
3. Products
 - 10 a. Allows manufactures to enter product for sale on the Web site.
Manufacturers may associate an entered product with one or more product classifiers: departments, categories, groups and types as illustrated in FIG. 6. Manufacturer may also designate features associated with a product from features in a template associated with the product classifiers; manufactures may further extend existing templates to incorporate new features. Template extension in some embodiments may be subject to approval.
 - 15 b. Customers can view products on the Web site by department, category, product group, products or items. Products can be searched by features as well; an example of one possible presentation of a feature selection interface is illustrate in FIG. 7.
- 20 4. Orders
 - a. Customers can view products as described above and add products to a shopping cart for purchase.
 - b. Order availability is checked to ensure inventory is available. Inventory is maintained by the manufacturer through the environment. Real time
25 inventory check may occur via real time request on some products. Other products are updated daily by EDI feed(s).
 - c. Once order is received, the following events occur.
 - i. The credit card is validated and charge is processed.
 - 30 ii. The customer is notified via email that the order was received with the line item and charge information.

iii. The manufacturer is sent an email notification of order.

d. Some order information will be transmitted to manufacturing via EDI, or other suitable automated transmission approach.

5. Returns

5 a. Customers can fill out a return form requesting an RMA number. The RMA is sent to the customer with the appropriate mailing address and instructions. When the manufacturer receives the returned product, it notifies the environment via email, which goes into the email queue to be processed by customer service. Customer service goes into the
10 environment and credits customer account. This process also trigger a debit to the corresponding manufacturer's account.

b. Credit to customer's charge card may be handled manually or via an automated process in connection with financial institution computers
155.

15 6. Fulfillment

a. Manufacturers are prompted to access the environment via email so they can download new order information. Once manufacturers fill and ship orders, they return to the environment to update order status to shipped. This can be done interactively, or in batch utilizing an appropriate
20 format such as a flat file. Additionally, manufacturers can update the order with the tracking number assuming that either FedEx or UPS were used as a carrier. Some manufacturers will access order information and update order information via EDI, or other suitable
transmission/formatting protocol.

25 i. The updated order status is stored in an order data store, typically a database system. In a preferred embodiment, an Oracle database is used.

ii. Customers are notified via email when orders are shipped.

30 iii. Some fulfillment information will be updated automatically via EDI, or other suitable transmission/formatting protocol.

- b. Customer Order Tracking. If shipment was via FedEx or UPS, customer can return to the Web site to track order status. Customer will be able to access tracking number and then go to carrier's web site via live link to track the order.
- 5 7. Email – Server may be integrated with Web cluster 105, or operate standalone (not shown).
 - a. Emails are sent out via the tool in the following scenarios:
 - i. When customer places an order, confirmation is sent to address.
 - 10 ii. When customer places an order, notification is sent to manufacturer.
 - iii. Confirmation is sent to customer when order is marked shipped.
 - b. Emails are also received from customers and manufacturers. These are time stamped and sent to mailbox to be processed by Customer Service.
 - c. Email server may act as a queue for customer service.
- 15 8. Inputs
 - a. Customer information via direct access to Web by customer.
 - b. Order information via direct access to Web via customer.
 - c. Return information via direct access to Web via customer.
 - d. Manufacturer information.
 - 20 e. Product information from manufacturers (inventory levels, price, availability, shipping lead time, features, description, photo, etc.
 - f. Shipping information via direct input on Web site, batch load via Web site, EDI or other delivery approach.
 - g. Email queries from customers or manufacturers.
 - 25 h. Emails from manufacturers indicating a returned product.
 - i. Credits to customer accounts for product returned.
 - j. Credit card authorization numbers and rejections from financial institutions.

9. Outputs

- a. Transaction information to the order data store.
- b. Return/credits on merchandise.
- c. Credit card transaction information.
- 5 d. Transaction information for customer service.
- e. Emails confirming orders with customers.
- f. Emails with orders notification for manufactures.
- g. Emails confirming order shipment to the customer.

Credit Card Transaction 155

- 10 1. A validation service will be used for credit card charges.
- 2. Automated or manual reconciliation may be performed.
- 3. Inputs -Environment 100 receives credit card authorization or rejection information from validation service.
- 4. Outputs - Credit is transferred to holding account of environment provider at
- 15 bank 155.

Bank 155

- 1. Bank will hold cash for disbursement from time of transaction to order being filled. Upon notification of shipment funds will be transferred to manufacturers and environment provider.
- 20 2. Interest will accumulate during holding period.
- 3. Inputs – Validation service arranges wire transfers to bank.
- 4. Output
 - a. Payment to manufacturers is generally made electronically.
 - b. Environment provider receives balance and transaction information.

25 Data warehouse 110

A data store stores data utilized by the environment:

- 1. Customer (Consumer) data
- 2. Sales/shipping data
- 3. Product Data
- 30 4. Manufacturer data

5. Environment activity information

The Web server cluster 105 that will provide the entry point to the environment from three typical classes of users: manufacturers, consumers and administrators. For ease of understanding, the foregoing discussion describes the environment features

- 5 supporting the activities of these three user groups. Each group requires unique features, although some feature overlap does occur.

The features supporting use by manufacturers specifically provide environment features for the purposes of maintaining information related to the marketing and sale of products on behalf of the manufacturer. The manufacturer will initially gain access to these features through a top-level home page. The manufacturer will select to enter the environment as a manufacturer and will engage in a login process. Upon successful login, the manufacturer will be presented with a manufacturer main administration page from which the manufacturer may selected to perform the various administrative tasks as will be described more fully below.

- 15 In one embodiment, upon request the environment will provide for manufacturers an introduction to the environment's features. This introduction will include a tour of the environment and will explain features and services afforded to the manufacturer. The manufacturer is required to sign up for a tour account. The fields required for this tour are Company name, contact name, phone number, and email address. This information may be used to contact the manufacturer about the tour. The manufacturer will be sent a password for the tour/demo after completing the required information.

Each screen throughout the site may provide access to Online Help. The Online Help will provide instructions on using the specific area of the site or a particular page.

- 25 In order to provide products through the environment, manufacturers must first visit the site and create an account. The manufacturer completes an online application, providing necessary information. The application indicates required fields and informs the user of missing information allowing them to re-enter the missing fields.

- In a preferred embodiment, the following lists specify the information required from the manufacturer at sign up.

Basic Information

- Federal ID or TIN
- Company name
- DBA (Doing business as)
- 5 • Primary Address
- Address (if different from primary address) (Address to send/receive payment)
- Main Contact
- Billing Contact
- Shipping Contact
- 10 • Phone
- Business Phone
- Fax
- Invoicing Fax
- Email Address

15 Payment Method

The system will allow the manufacturer to provide payment information concerning one or more payment methods supported by the manufacturer. Each payment method may require additional specific information related to the payment type.

- 20 • Payment method
- Bank Information
- Routing & Transit
- DDA Account Number
- Notice Text
- 25 • Password

Demographic Information

The manufacturer can enter additional demographic information. This information is optional and may be skipped by the manufacturer.

The company profile includes the following attributes:

- Company SIC Code
- Exchange and Stock Ticker Symbol
- Annual Sales Volume
- 5 • Primary Selling Area
- Number of Company Sites
- Number of Products
- Direct Sell (T/F)
- Discounts (T/F)
- 10 • Maximum Discount (%)
- Direct Selling Methods (Mail Order, Store Front, Online, Reseller Channel)

After the data entry portion of sign up is complete, the system may perform a real-time validation of the Manufacturer's information. This validation process may include a credit check or a Harris Online lookup to verify the company information. If
15 this validation fails the system will inform the manufacturer via email. The validation process may be either manual or automated.

After successful validation in a preferred embodiment, the manufacturer is presented with an agreement outlining the Terms and Conditions of using the environment. The user is provided with the choice to accept the agreement or to
20 decline the agreement.

After acceptance, the system will inform the user that the confirmation was received and provide the manufacturer with a client id, a user id, and a password to access the account. This is the Master User Account for the manufacturer.

A manufacturer id, user name and a password are required to access the
25 manufacturer's account. The client id represents the manufacturer. The user id represents a specific user from the manufacturer.

When logging in to the site, if the client id, user id or password is incorrect, the system will inform the user of the mistake and allow them to re-enter the login information. Once logged in, the user may access the following areas in the environment depending on their rights in the system:

- 5 • Profile Maintenance
- Order Management
- Product Maintenance
- User Maintenance

10 If the user attempts to login 3 times unsuccessfully within a specified period of time using a valid username, the system will disable the user account. An email will be sent to the email address stored in the account profile to notify the user that the account is disabled. An internal notification within the environment may also be generated.

Each user has rights. Rights define in which areas of the site a particular user is allowed and the user's capabilities to modify manufacturer information in those areas.

15 Each user account may or may not have the following rights:

- Manage Company Information (Profile)
- Manage Products
- Manage Orders
- Manage Users
- 20 • Manage Portal

The Master User Account will have full access to the manufacturer's information and the ability to create add/delete/modify user accounts. The Master User Account can create, delete, and modify User Accounts and assign rights to those accounts. A limitation on the number of additional User Accounts that may be created
25 can be imposed by the environment. Each user account has a variety of attributes. These attributes may include user name, password, default initial page upon login and designated rights.

The manufacturer will have the ability to provide and maintain a profile page. The manufacturer will provide the textual and graphical elements, which will be

applied to a template. This profile will be accessible by consumers and provides basic information about the manufacturer such as:

- Customer Service Number
- Fax number
- 5 • Logo (Optional)
- Company Website URL
- Short Description of Company

The environment maintains manufacturers' products in a repository such as data repository 115. Each product is associated with its manufacturer, and has attributes that
10 aid in categorization of the product.

In a preferred embodiment, each product may include the following attributes:

- Product Name
- Vendor (Manufacturer) SKU
- UPC Code for product
- 15 • Unit Price
- Unit of Measure
- Retail Price
- Product Warranty (free text)
- Product Text
- 20 • Product Description
- Thumbnail Picture
- Full Size Picture
- Caption for Full Size picture
- Up to three alternate pictures and Captions
- 25 • New product indication
- Lead Time (Time it takes to ship the product, must be a numeric number representing number of days)
- Rated By
- Abstract Text

- Full Description Text
- Product is currently blacked out to the customer. (Used so the product will not have to be deleted, for whatever reason , not just because it is out of stock)
- Inventory count. (This determines whether the item is in stock or not, and also
5 may determine when a product is blacked out to the consumer.)
- Notification Level – triggers e-mail to the manufacturer when the inventory count drops to this designated level
- Hot Product
- New Product
- 10 • Department
- Category
- Product Type
- Product ID
- Allow the manufacturer to attach content (articles from Consumer reports, or
15 other 3rd party sources to help provide validation to their product)

In additional to those required attributes, additional attributes specific to each product type will be maintained. A manufacturer may associate with each product offered one or more product classifiers. The manufacturer may select the product classifiers using a hierarchy of menus as depicted in FIG. 6.

- 20 Further, manufacturer may specify features associated with an offered product. The manufacturer may designate the product as providing any feature from a feature template associated with product type of the offered product. In some embodiments, feature specification may be subject to review by the environment administrators.

- 25 For each item a manufacturer loads, the manufacturer may identify order options for that item (such as size, color, rush charge for shipping) and any upcharge that the manufacturer may impose for a specific option.

- The manufacturer may specify attributes that are configurable by the consumer. These attributes will allow comparison of similar products by criteria such as capacity, size, power, etc. A configuration tool will allow a consumer to compare items based on
30 features for a given product (select by features). A manufacturer will be able to enter

product features based on a template maintained by the environment, but extendable by the manufacturer.

The manufacturer can setup an employee discount. This allows its employees to receive a designated discount when ordering through environment. A pin number, or other appropriate identification information, will be supplied to those manufacturers who wish to provide employee discounts to distribute to company employees to use when registering as a consumer with the environment. Alternatively, the identification information may be entered at the time a purchase is made rather than at the point of registration.

The manufacturer can modify their list of available products. Products may be added, removed, or modified. In the process of adding products, the site will validate data on a field level as it is submitted.

The user will be notified of the following errors:

- Missing data
- Duplicate items
- System failure to save data.

The user will also be notified on a successful submittal of information.

A batch upload capability allows a manufacturer to deliver product information into the repository. A standard data formatting language specified, for example, in XML could be used to receive batch product information from a manufacturer.

The manufacturer may preview existing product pages. This preview feature allows the manufacturer to view the product pages exactly as the consumer would.

Further, manufacturer may, or be required to, participate in various promotions by contributing coupons, cash or products to a promotional pool utilized by the environment. Such promotional contributions might appear randomly upon pages presented to consumers. In a further embodiment, promotional contribution might be targeted at specific consumers based upon stored profiles associated with the particular consumers.

The environment will maintain information about orders and their status. Order placement is made through the consumer interface as described more fully below. The

administrator features are used to maintain the orders internally within the environment. The immediately foregoing discussion relates specifically to order support features provided to manufacturers.

The manufacturer can view the status of all orders in process. The orders may
5 be accessed in a variety of ways. The manufacturer may interactively view all open and closed orders via a Web interface. The manufacturer may download a printable text file of open and closed orders. The manufacturer may request a fax to be sent to a specified fax number containing open and closed orders. Other suitable delivery
vehicles such as via a telephone may also be used as will be understood by those skilled
10 in the art.

Manufacturers can review new orders within the environment and interactively update their statuses. The manufacturer can modify order status related to fulfillment. There are two typical methods for processing orders.

The manufacturer may access and modify orders online through the site. The
15 user processes each order individually. The online procedure is appropriate for processing low numbers of orders. For a greater number of orders, batch processing of status updates is preferred.

A batch procedure allows the manufacturer to download orders in a batch,
process the orders locally, and the upload the orders back to environment. This method
20 is used for large order counts. Any suitable formatting may be used to communicate the orders to the manufacturer. In one embodiment, flat text files may be used. In a further embodiment, an XML specification of an order format may be used for allowing the environment to inter-operate with the manufacturer.

The administrative features will enable administrators of the environment to
25 view all current occurrences of the manufacturer missing the lead-time to ship a product from the time it was ordered. The manufacturer may be automatically notified when a commitment is missed. A penalty may be imposed upon the manufacturer for missing a commitment. In a preferred embodiment, the penalty is conveyed to the consumer whose order was not timely fulfilled.

Turning next to the consumer interface, the environment maintains a list of all registered consumers. Consumer information is stored with a profile in a repository 115. Profiles are the primary “objects” which represent a consumer. The repository will provide basic mechanisms to permit profiles to be added, deleted, modified, and queried. Consumers visiting the site may sign up to create a new account.

Online Help will be provided to aid in explanation of how to use a particular feature or page.

The system provides the ability for a Consumer to create an account. The action requires a set of forms being presented to the Consumer for completion. This information is outlined below. If a customer appears to already exist in the repository, 10 the system will display a message to the Consumer. The Consumer may contact administrators of the environment by email in this case.

The following basic information will be required from the Consumer.

- Name
- 15 • Address
- City
- State
- Zip
- Daytime Telephone
- 20 • E-mail
- Login ID
- Password
- Manufacturer Discount Code (Pin)
- Age
- 25 • Gender

If the shipping address is different from the Consumer’s home address, the Consumer can enter shipping information.

- Shipping Address
- Shipping City
- 30 • Shipping State

- Shipping Zip

All orders are broken down to single items and shipped separately (unless multiple items from one manufacturer can be batched and identified for the manufacturer so that shipping can be done in one package rather than multiple packages going to the same address). Split shipments are the default shipping method. Shipments from different manufacturers will arrive as drop shipments from those manufacturers. Shipments are made directly from the manufacturer to the consumer.

Information required for payment may also be collected at registration; however, in some embodiments, payment information is only collected at time of purchase. Other embodiments may request payment information at registration, but this information may be override by payment information entered at the time of purchase. Payment may be made through credit card, or other form of electronic payment mechanism. The user may enter information about multiple credit cards or payment mechanisms. The following fields are collected if using a credit card:

- Card Type
- Card Number
- Card Holder Name
- Billing Address for Card
- Billing City for Card
- Billing State for Card
- Billing Zip for Card
- Expiration Date

The user may indicate preferences for the following:

- Email notifications
- Permission to give e-mail address to partners

The Consumer may access the account through a user id/password pair. If either the user id or password is incorrect, the system will notify the user with a message. If a cookie is present on the user's machine, it will be used to identify the Consumer and welcome them with a personal message.

If the user attempts to login a preset number times unsuccessfully with a username within a specified period of time, the system will disable the account and instruct the user to contact environment administrator to re-enable the account.

If a Consumer forgets their password, they may request that their password be
5 emailed to the address in the profile. The system will inform the user that the e-mail has been sent.

The Consumer may modify their account. The environment supports an interface by which consumers may edit the information entered at registration. The registration information is stored in the data store, which in a preferred embodiment is
10 an Oracle database.

A profile exists for each registered consumer. Each profile consists of zero or more user attributes (i.e., those that describe the user), and a set of system attributes, maintained implicitly by the repository services. The profile information is used to provide improved service to the customer and to provide correlation between segments
15 of Consumers and their buying habits.

User Attributes may include:

- user id. This is a uniquely identifying number that designates this user within the Consumer database.
- Income. The income of the user, specified as a range.
- 20 • List of sites browsed. A list of the URLs visited by this user. This list could be very large.
- External user id(s). A list of identifiers by which this user may be known to other systems, such as advertising networks, portals, and e-commerce sites.
- Personal privacy policy. A set of rules that determine how this user's profile
25 can be viewed, exported, and modified. Every profile has an associated privacy policy, although in some cases, the user represented by the profile may not have direct control over the policy (e.g., a parent may control a child's profile). If a profile Consumer does not have a privacy policy that is consistent with that of the user, then the profile for that user cannot be exported.

- Notification Preferences. The Consumer may specify the types of notifications they would like to receive (e.g. e-mail, fax, Web, telephone, etc.).

Client profile data may be used to run marketing programs for manufacturer and target consumers with coupons or special offers. These consumers will be notified by email. Promotional items may randomly appear throughout the site for customers to claim. Restriction may be imposed upon the number or frequency of promotional items received. The Consumer will be supplied with a 'Savings Account' for maintaining accumulating reward points. Reward Points may be used to gain additional discounts on merchandise, or possibly free selected items. Reward Points may be earned in a number of ways – time spent on site, amount of products purchased on site, random prizes, registration on the site. The rewards points may be given to help promote good will if a customer service problem was identified. Reward points may also be gained by referring new registrants to the environment.

Consumers may select products through a product selection search interface that may provide several product location methods as illustrated in FIG. 2.

A first approach is a text-base search for a specific product. The search could be by keyword, model name or number or manufacturer.

A second approach is the use of a hierarchically defined set of product classifiers where each lower layer of the hierarchy contains product classifiers of narrower scope than the previous layer. In a preferred embodiment, the layers of the hierarchy are departments, categories, groups and types as depicted in FIG. 3.

The Consumer first selects a Department. Within that Department, the Consumer selects a Category. Within that Category, the Consumer selects a product group, and within that group the consumer may select a product type. At this point the Consumer will see the Product Page as depicted in FIG. 4.

The consumer may choose whether to 'Select products by features' or 'Show all products available.' The consumer will be supplied with a list of the top 3 products matching the specified criteria. The consumer may choose to specify features criteria from the feature template associated with the selected product type. The environment displays products that closest match the specified feature criteria. Comparative

information concerning the products along with a link, or other displayed representation, allowing a consumer to add the product to a shopping cart.

If there are no matches, the consumer will see a list of products close to the criteria. Using best practices for maintaining a list of selected items and placing an order, the system will allow Consumers to complete a transaction with confirmation.

The Consumer may add/remove items from the shopping cart. The Consumer can empty the cart. The Consumer can view the shopping cart on every page via a shopping cart icon link. The shopping cart is maintained across visits to the environment.

The Consumer can choose to checkout from any product page. During the checkout process, the user will select a card, or other payment method, to use for payment. The Consumer can specify shipping preferences as well. The Consumer will see a total for the order including all charges. The Consumer may submit the order from the checkout screen. The consumer must also select things like size, color, etc. for each product; this may occur at the time of adding the product to the shopping cart or at the time of purchase.

The Consumer can modify shipping preferences before the order is confirmed. Shipping charges included with the product will be added to the order.

The environment will provide confirmation of an order when it is submitted. The Consumer will receive a reference identifier for the order.

The Consumer can check the status of orders placed. This will include order status, date shipped, shipper tracking information, and other information pertinent to receiving their product shipment. The consumer may cancel the order before it is shipped. If the consumer is not happy with the product, they can send it back to the manufacturer for a credit to her account. The manufacturer's account must then be updated to reflect the return.

The Consumer may send an inquiry to the environment. The Consumer will receive a response that the inquiry was received. All inquiries will be tracked by date and time and the time of the response coming back from a manufacturer or customer service rep.

Email notifications will be sent to Consumers based on Consumer preferences.

Notifications will be sent when:

- An order is received
- Items have been shipped.
- 5 • An inquiry was received
- An item is unavailable or delayed
- Special Offers
- Special Offers from our Partners

Finally turning to the administrative functions, the administrative functions are
10 those used internally by staff supporting the environment. The main goals for the administrative component are to:

- Provide site maintenance tools
 - Provide a coherent view of administrative activities
 - Provide tools for managing communication with manufacturers and Consumers
- 15 One of the main administrative features is to provide web content to visitors of the site. In general, the environment will use best practices for serving content to the WWW. However, there are several unique features worth noting, and those are discussed below.

The Web Server will store web content intrinsically. Content includes web
20 pages (HTML, ASP, JAVA Script, VBScript, CGI, etc.) and related data that is used to provide the dynamic portions of pages. The following items relate to managing content.

Publishing

The process of moving content from the Author's desktop to the Server is
25 known as publishing. This process must be methodic to prevent errors or incorrect content from being placed on the site. All content must be reviewed before publishing. Publishing also includes the removal or modification of existing content. The flow chart in FIG. 5 shows the process of publishing content through a Staging Server. Content is typically authored at an author's desktop 510. The content is transferred to a
30 staging server 520. A Staging Server behaves very similarly to the Live Server.

Content is reviewed on the Staging Server 530, and a decision is made as to whether to move, publish, the review content to the Live Server 540. If the decision is in the affirmative, the content is published 550.

In order to provide a more user-friendly experience, content delivered can be tailored for each web site visitor. This feature may be used for Consumers as well as manufacturers. Two key requirements enable this feature: consumer attributes and personalization rules.

The Consumer can modify their attributes directly and indirectly through the following actions:

- 10 • Data Entry during sign-up
- Modifying preferences
- Modifying Basic Account Information
- Purchasing products (Indirect)
- Site Navigation (Indirect)
- 15 • Queries or Searches (Indirect)

Site visitors may be identified either through login or a cookie. If a visitor is identified, their profile or list of attributes may be used to personalize content, otherwise a new profile will be generated to capture information on the Consumer. The site will use available information to deliver custom content. The environment maintains a set of rules that are used to cater the site to different users based on the available information. Available information might include cookies, browser features such as Screen Resolution, time of day, etc.

Several techniques may be used to tailor the experience, such as:

- Redirected navigation
- 25 • Custom generated pages
- Dynamic page elements

While a visitor navigates through the site, procedures implementing rules will execute during page generation. The rules use logical statements based on Consumer profile information or other information that is known at the time to modify content by

one of the above techniques. Through this action, the site provides fully customized pages.

Consumer Related Administrative Tasks

5 A Consumer's activity may be viewed including all contact with that Consumer via email or site visits. This activity may include site visits, account changes, telephone contact, mailings to the Consumer, etc. Consumer inquiries may be viewed and replies made.

Manufacturer Related Administrative Tasks

10 A Manufacturer's activity may be viewed including all contact with that manufacturer via email or site visits. This activity may include site visits, account changes, contact made by telephone, mailings to the Manufacturer, etc. Manufacturers who have signed up may be reviewed and new accounts may be created to authorize upload of information to the site.

15 Authorized users may access the product database for review. Valid content can be published to the site. The publishing process is described above. When a product is rejected, the Manufacturer will be notified via e-mail. The environment administrator may at any time override a Manufacturer and turn a product to blackout status. Products can be approved as individual items or as a Batch. A report will be generated listing items that failed to load. Products successfully imported will be
20 marked as Pending.

Authorized users may access the manufacturer profile for review. When validated, content can be published to the site. Through environment administration employee discounts for a manufacturer may be disabled or enabled.

25 The environment is responsible for tracking orders and handling issues concerning product availability, returns, etc. The environment assures that orders are delivered to the manufacturer and fulfilled in a reasonable time. During the fulfillment process, the Consumer may be notified via email an update. An example is that the product has been shipped.

30 Orders will be stored with a status. The status will indicate the stage of the order in the process. A button will be available for each line item that will retrieve the

current tracking information on the item. The following fields will be viewable for each order:

- Confirmation Number
- Line Number
- 5 • Order Date
- Status
- Product (including a link to the product page)
- Manufacturer
- Shipper
- 10 • Tracking Number

Email notification templates may be edited and/or customized. Email Notification Templates provide the layout and content for all e-mails automatically generated by the environment.

Notifications will be sent to the parties automatically when the following events occur. A notification will be made via an e-mail to the consumer as follows:

1. If a product is backordered, the consumer will be notified.
2. If a product is discontinued, the Consumer will be notified.
3. When the Manufacturer ships a product, the Consumer will be notified.
4. If a new product is available and the Consumer has requested notification of new
- 20 products in this category, the Consumer will be notified.

A notification will be made via an e-mail to the manufacturer as follows:

1. Notifications are generated to inform the manufacturer that new orders have been received. The manufacturer is responsible to visit the site to obtain the new orders.
2. When the manufacturer fails to accept an order within a specified time.
- 25 3. When an accepted order is not fulfilled within a specified time.
4. If a consumer cancels an order, the manufacturer will be notified.
5. A customer has confirmed receipt of an order.

Reporting capabilities may be provided. The reports might include:

Site Usage Reports

- 30 • Page Hits

- Page hits by Page
 - Active Users
 - Site Delay
 - Utilization
 - 5 • Disk Space utilization by manufacturer
- Consumer Reports
- Consumer List
 - Consumer grouped by profile attributes
 - Consumer Activity (visits, emails sent, emails, received, other history)
- 10 Manufacturer Reports
 - Manufacturer List
- Order Reports
- Orders by Manufacturer
 - Orders per Day
 - 15 • Average \$ per Order
 - Orders by department, category, product type, and product
- Sales Reports
- Total Sales for Period
 - Sales by Consumer profile
 - 20 • Unit Sales by Product
 - Billing Activity
- Product Reports
- Product List
 - Products by Manufacturer
 - 25 • Products by Category

Throughout this application, various publications may have been referenced. The disclosures of these publications in their entireties are hereby incorporated by reference into this application in order to more fully describe the state of the art to which this invention pertains.

The embodiments described above are given as illustrative examples only. It will be readily appreciated that many deviations may be made from the specific embodiments disclosed in this specification without departing from the invention. Accordingly, the scope of the invention is to be determined by the claims below rather

5 than being limited to the specifically described embodiments above.

What is claimed is:

1. A method for facilitating transactions involving products available from a plurality of manufacturers to a consumer, the method comprising the steps of:
 - a) receiving from a consumer an order for a selected product that is manufactured by one of a plurality of manufacturers;
 - b) determining whether to approve the received order based upon a predetermined approval criteria; and
 - c) if the received order is approved, forwarding the received order to the manufacturer of the selected product for direct delivery to the consumer.
2. The method of claim 1, and further comprising the step of storing the received order.
3. The method of claim 1, wherein the step of forwarding the received order comprises the step of formatting the received order based upon a predetermined delivery platform.
4. The method of claim 1, wherein the step of forwarding the received order comprises the step of transmitting the received order to the manufacturer via a predetermined delivery platform.
5. The method of claim 4, wherein the predetermined delivery platform is selected from the list consisting of a computer network, facsimile, telephone and Web server.
6. The method of claim 1, and further comprising the step of receiving a request for orders from the manufacturer of the selected product.
7. The method of claim 1, and further comprising the step of notifying the consumer of the status of the order.
8. The method of claim 7, wherein the step of notifying the consumer comprises the step of transmitting an order status notification via a predetermined delivery platform.
9. The method of claim 8, wherein the predetermined delivery platform is selected from the list consisting of a computer network, facsimile, telephone and Web server.

10. The method of claim 1, and further comprising the step of receiving from the manufacturer status information concerning the order.
11. The method of claim 1, and further comprising the step of receiving from a shipper status information concerning the order.
12. The method of claim 1, and further comprising the step of storing information concerning the order in a profile associated with the consumer.
13. The method of claim 1, wherein the step of determining whether to approve the received order comprises the step of approving the received order if the received order includes all information necessary to fulfill the received order.
14. The method of claim 1, wherein the received order comprises payment information and wherein the step of determining whether to approve the received order comprises the steps of:
 - i) forwarding the payment information to a validating service;
 - ii) receiving a confirmation from the validating service; and
 - iii) approving the received order if the confirmation indicates that the payment information is valid.
15. The method of claim 1, wherein the step of determining whether to approve the received order comprises the step of approving the received order if the selected product is currently available from the manufacturer of the selected product.
16. The method of claim 1, wherein the received order comprises a purchase amount and further comprising the step of forwarding at least part of the purchase amount to the manufacturer.
17. The method of claim 1, and further comprising the step of providing the consumer with a product selection interface.
18. The method of claim 17, wherein the step of providing a product selection interface comprises the step of providing a product search interface.
19. The method of claim 17, wherein the step of providing a product selection interface comprises the step of providing a hierarchical display of one or more menus, wherein each menu comprises a product classifier.
20. The method of claim 19, wherein the product classifier comprises a product designation.

21. The method of claim 19, wherein the product classifier comprises a product department.
22. The method of claim 19, wherein the product classifier comprises a product category.
23. The method of claim 19, wherein the product classifier comprises a product group.
24. A system for facilitating transactions involving products available from a plurality of manufacturers to a consumer, the system comprising:
 - a) an order data store for storing orders; and
 - b) a processor in communication with the data store for performing the steps comprising of:
 - i) receiving from a consumer an order for a selected product that is manufactured by one of the plurality of manufacturers;
 - ii) storing the received order in the order data store;
 - iii) determining whether to approve the stored order based upon a predetermined approval criteria; and
 - iv) if the stored order is approved, forwarding the received order to the manufacturer of the selected product for direct delivery to the consumer.
25. The system of claim 24, wherein the processor performs the step of forwarding the stored order by performing the step comprising of formatting the stored order based upon a predetermined delivery platform.
26. The system of claim 24, wherein the processor performs the step of forwarding the stored order by performing the step comprising of transmitting the stored order to the manufacturer via a predetermined delivery platform.
27. The system of claim 26, wherein the predetermined delivery platform is selected from the list consisting of a computer network, facsimile, telephone and Web server.
28. The system of claim 24, wherein the processor performs the further the step comprising of receiving a request for orders from the manufacturer of the selected product.

29. The system of claim 24, wherein the processor performs the further the step comprising of notifying the consumer of the status of the order.
30. The system of claim 29, wherein the processor performs the step of notifying the consumer by performing the step comprising of transmitting an order status notification via a predetermined delivery platform.
31. The system of claim 30, wherein the predetermined delivery platform is selected from the list consisting of a computer network, facsimile, telephone and Web server.
32. The system of claim 24, wherein the processor performs the further the step comprising of receiving from the manufacturer status information concerning the order.
33. The system of claim 24, wherein the processor performs the further the step comprising of receiving from a shipper status information concerning the order.
34. The system of claim 24, and further comprising a consumer data store and wherein the processor performs the further the step comprising of storing information concerning the order in a profile associated with the consumer in the consumer data store.
35. The system of claim 24, wherein the processor performs the step of determining whether to approve the stored order by performing the step comprising of approving the stored order if the stored order includes all information necessary to fulfill the stored order.
36. The system of claim 24, wherein the stored order comprises payment information and wherein the processor performs the step of determining whether to approve the stored order by performing the steps comprising of:
 - i) forwarding the payment information to a validating service;
 - ii) receiving a confirmation from the validating service; and
 - iii) approving the stored order if the confirmation indicates that the payment information is valid.
37. The system of claim 24, wherein the processor performs the step of determining whether to approve the stored order by performing the step comprising of

approving the stored order if the selected product is currently available from the manufacturer of the selected product.

38. The system of claim 24, wherein the stored order comprises a purchase amount and wherein the processor performs the further the step comprising of forwarding at least part of the purchase amount to the manufacturer.
39. The system of claim 24, wherein the processor performs the further the step comprising of providing the consumer with a product selection interface.
40. The system of claim 39, wherein the product selection interface comprises a product search interface.
41. The system of claim 39, wherein the product selection interface comprises an hierarchical display comprising a product classifier.
42. The system of claim 41, wherein the product classifier comprises a product designation.
43. The system of claim 41, wherein the product classifier comprises a product department.
44. The system of claim 41, wherein the product classifier comprises a product category.
45. The system of claim 41, wherein the product classifier comprises a product group.
46. The system of claim 24, where in the order data store comprises a database system.
47. The system of claim 46, wherein the database system is a relational database system.
48. The system of claim 24, where in the order data store comprises primary storage.
49. A system for facilitating transactions involving products available from a plurality of manufacturers to a consumer, the system comprising:
 - a) receiving means for receiving from a consumer an order for a selected product that is manufactured by one of the plurality of manufacturers;
 - b) storing means for storing the received order;

- c) determining means for determining whether to approve the order stored by the storing means based upon a predetermined approval criteria; and
 - d) forwarding means for forwarding the order stored by the storing means to the manufacturer of the selected product for direct delivery to the consumer if the order is approved by the determining means.
50. A method for supporting location and comparison by a consumer of products manufactured by at least two different manufacturers culminating in an opportunity for the consumer to purchase one of the products for direct delivery from the manufacturer, the method comprising the steps of:
- a) providing a consumer with a first product classifier menu of one or more product classifiers;
 - b) receiving from the consumer a first selected product classifier from the one or more product classifiers;
 - c) if further product classifiers are associated with a selected product classifier, providing the consumer with a further product classifier menu of the further product classifiers and receiving from the consumer a further selected product classifier from the further product classifiers;
 - d) receiving a request from the consumer to display comparative product information;
 - e) in response to the received request, displaying comparative product information about products from at least two different manufacturers based upon one of the selected product classifiers; and
 - f) providing the consumer with a visual representation associated with each product about which comparative information is displayed, wherein each visual representation, upon activation, triggers the order of the product associated with the activated visual representation, wherein the triggered order is for direct delivery of the product to the consumer by the manufacturer.
51. The method of claim 50, wherein the step of displaying comparative product information is based upon the selected product classifier having no further product classifiers associated with it.

52. The method of claim 50, and further comprising the steps of receiving from the consumer a request to designate feature criteria and providing the consumer with a feature menu of feature criteria associated with one of the selected product classifiers.
53. The method of claim 52, wherein the step of providing a feature menu comprises the step of providing the consumer with a feature menu of feature criteria associated with the selected product classifier having no further product classifiers associated with it.
54. The method of claim 50, and further comprising the step of receiving from the consumer one or more feature criteria selections selected from feature criteria associated with one of the selected product classifiers.
55. The method of claim 54, wherein the step of receiving one or more feature criteria selections comprises the step of receiving from the consumer one or more feature criteria selected from feature criteria associated with the selected product classifier having no further product classifiers associated with it.
56. The method of claim 54, wherein the step of displaying comparative product information is further based upon the received one or more feature criteria.
57. The method of claim 56, wherein step of displaying comparative product information comprises the step of displaying comparative product information about products meeting each of the received one or more feature criteria.
58. The method of claim 56, wherein step of displaying comparative product information comprises the step of displaying comparative product information about products meeting one or more of the received one or more feature criteria.
59. A system for supporting location and comparison by a consumer of products manufactured by at least two different manufacturers culminating in an opportunity for the consumer to purchase one of the products for direct delivery from the manufacturer, the system comprising:
 - a) a product classifier data store for storing product classifiers
 - b) a product data store for store product data; and

- c) a processor in communication with the product classifier data store and the product data store, the processor for performing the steps of:
 - i) providing a consumer with a first product classifier menu of one or more product classifiers from the product classifier store;
 - ii) receiving from the consumer a first selected product classifier from the one or more product classifiers;
 - iii) if in the product classifier store further product classifiers are associated with a selected product classifier, providing the consumer with a further product classifier menu of the further product classifiers from the product classifier store and receiving from the consumer a further selected product classifier from the further product classifiers;
 - iv) receiving a request from the consumer to display comparative product information from the product data store;
 - v) in response to the received request, displaying comparative product information about products in the product data store from at least two different manufacturers based upon one of the selected product classifiers; and
 - vi) providing the consumer with a visual representation associated with each product about which comparative information is displayed, wherein each visual representation, upon activation, triggers the order of the product associated with the activated visual representation, wherein the triggered order is for direct delivery of the product to the consumer by the manufacturer.
60. The system of claim 59, wherein the product classifier data store comprises a product classifier database system.
61. The system of claim 59, wherein the product data store comprises a database system.
62. The system of claim 61, wherein the database system is a relational database system.
63. The system of claim 59, wherein a single data store comprises the product data store and the product classifier data store.

64. A method for providing a manufacturer access to an aggregation of products from a plurality of manufacturers for sale and direct delivery of a selected product to a consumer, the method comprising the steps of:
- a) receiving product data associated with one or more products manufactured by a manufacturer selected from a plurality of manufacturers;
 - b) providing the selected manufacturer with an interface for designating one or more product classifiers for each product for which product data was received;
 - c) receiving an order for a selected product of the one or more products manufactured by the selected manufacturer; and
 - d) forwarding the received order to the selected manufacturer of the selected product for direct delivery by the selected manufacturer to the consumer.
65. The method of claim 64, and further comprising the steps of receiving one or more designated product classifiers for each product.
66. The method of claim 64, wherein the step of providing the selected manufacturer with an interface for designating one or more product classifiers for each product comprises, for each product, the steps of:
- i) providing the selected manufacturer with a first product classifier menu of one or more product classifiers;
 - ii) receiving from the selected manufacturer a first selected product classifier from the one or more product classifiers;
 - iii) if further product classifiers are associated with a selected product classifier, providing the selected manufacturer with a further product classifier menu of the further product classifiers and receiving from the consumer a further selected product classifier from the further product classifiers; and
 - iv) designating the selected product classifiers for a current product.
67. The method of claim 66, wherein the step of providing the selected manufacturer with an interface for designating one or more product classifiers for each product comprises, for each product, the further step of repeating steps i) through iv) for the current product.

68. A system for providing a manufacturer access to an aggregation of products from a plurality of manufacturers for sale and direct delivery of a selected product to a consumer, the system comprising:
- a) a product classifier data store for storing product classifiers
 - b) a product data store for store product data; and
 - c) a processor in communication with the product classifier data store and the product data store, the processor for performing the steps of:
 - i) receiving product data associated with one or more products manufactured by a manufacturer selected from a plurality of manufacturers;
 - ii) storing the received product data in the product data store;
 - iii) providing the selected manufacturer with an interface for designating one or more product classifiers for each product for which product data was stored;
 - iv) receiving an order for a selected product of the one or more products manufactured by the selected manufacturer; and
 - v) forwarding the received order to the selected manufacturer of the selected product for direct delivery by the selected manufacturer to the consumer.
69. The system of claim 68, wherein a single data store comprises the product data store and the product classifier data store.
70. The system of claim 68, wherein the product classifier data store comprises a product classifier database system.
71. The system of claim 68, wherein the product data store comprises a database system.
72. The system of claim 71, wherein a single data store comprises the product data store and the product classifier data store.

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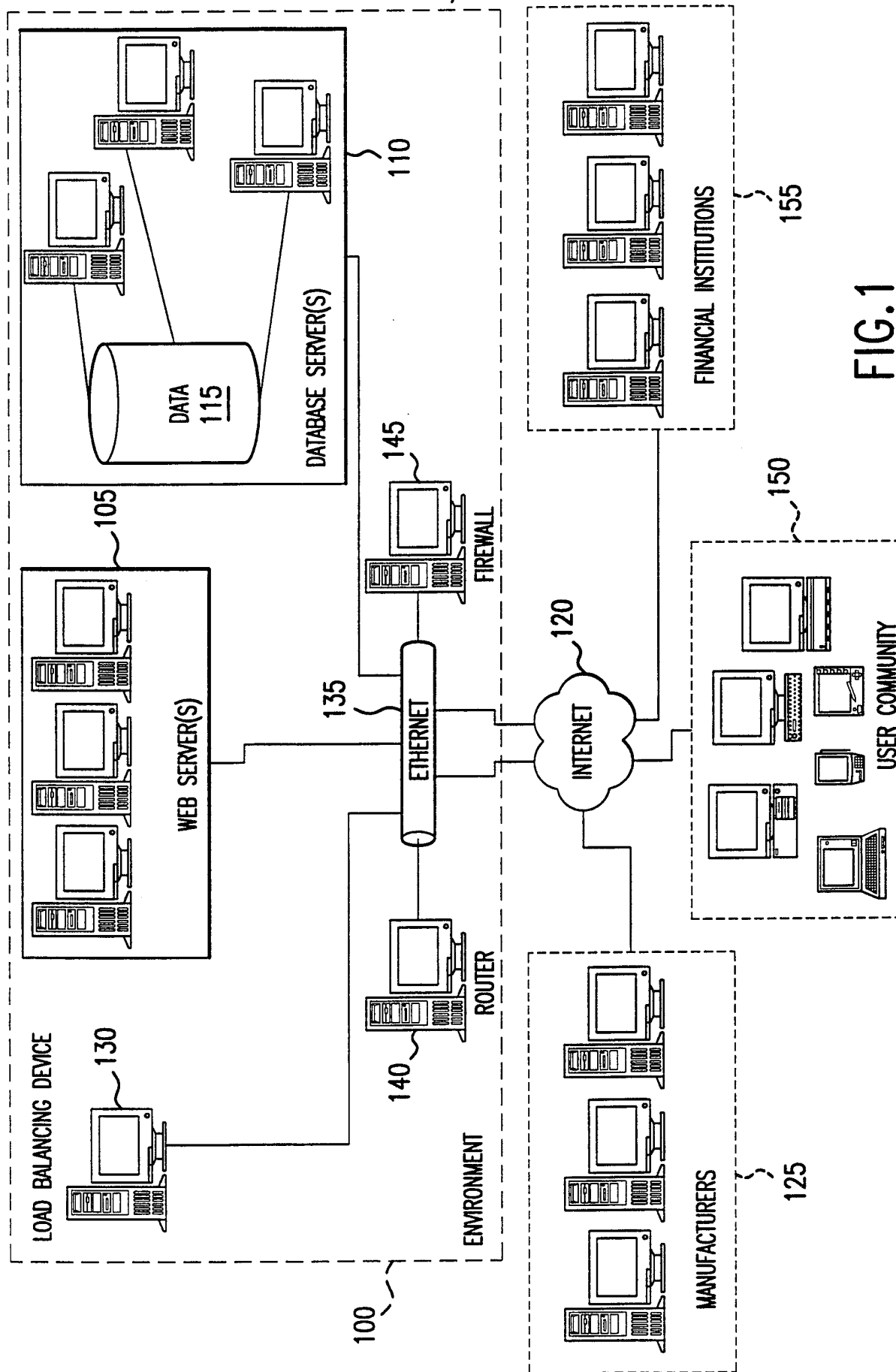


FIG.1

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Housewares Lawn & Garden Luggage Pet supplies
 Home Office Supplies Furniture Computer Accessories Apparel

yuSave.com
 Guaranteed Lowest Prices Anywhere

About yuSave | Guarantee | How we do it |
 Shopping Cart | MyAccount | Help |

Space Holder
for advertising

"I know what I want"

Select a product and enter it's name here.
 Examples: Toshiba DX-750, Pilot Blueprint Pens

GO

"Help me decide"

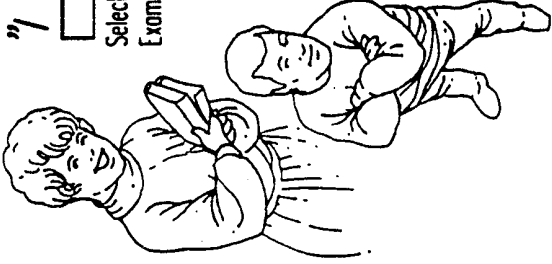

Select product type or enter it's name here.
 Example: VCRs, Pens, Disks

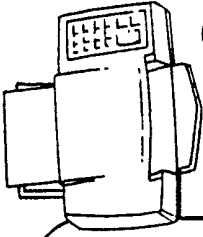
OR GO

"Just Looking"

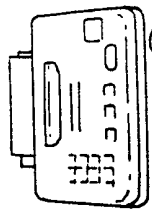
Select a department or enter it's name here.
 Examples: Office Furniture or Clothing

OR GO








Plain Paper
Fax Machine
\$99.00 GO




Plain Paper
Fax Machine
\$69.99 GO




Hand Held
Calculator
\$16.99




Hand Held
Calculator
\$16.99



Hand Held
Calculator
\$16.99



Hand Held
Calculator
\$16.99



Hand Held
Calculator
\$16.99

FIG.2

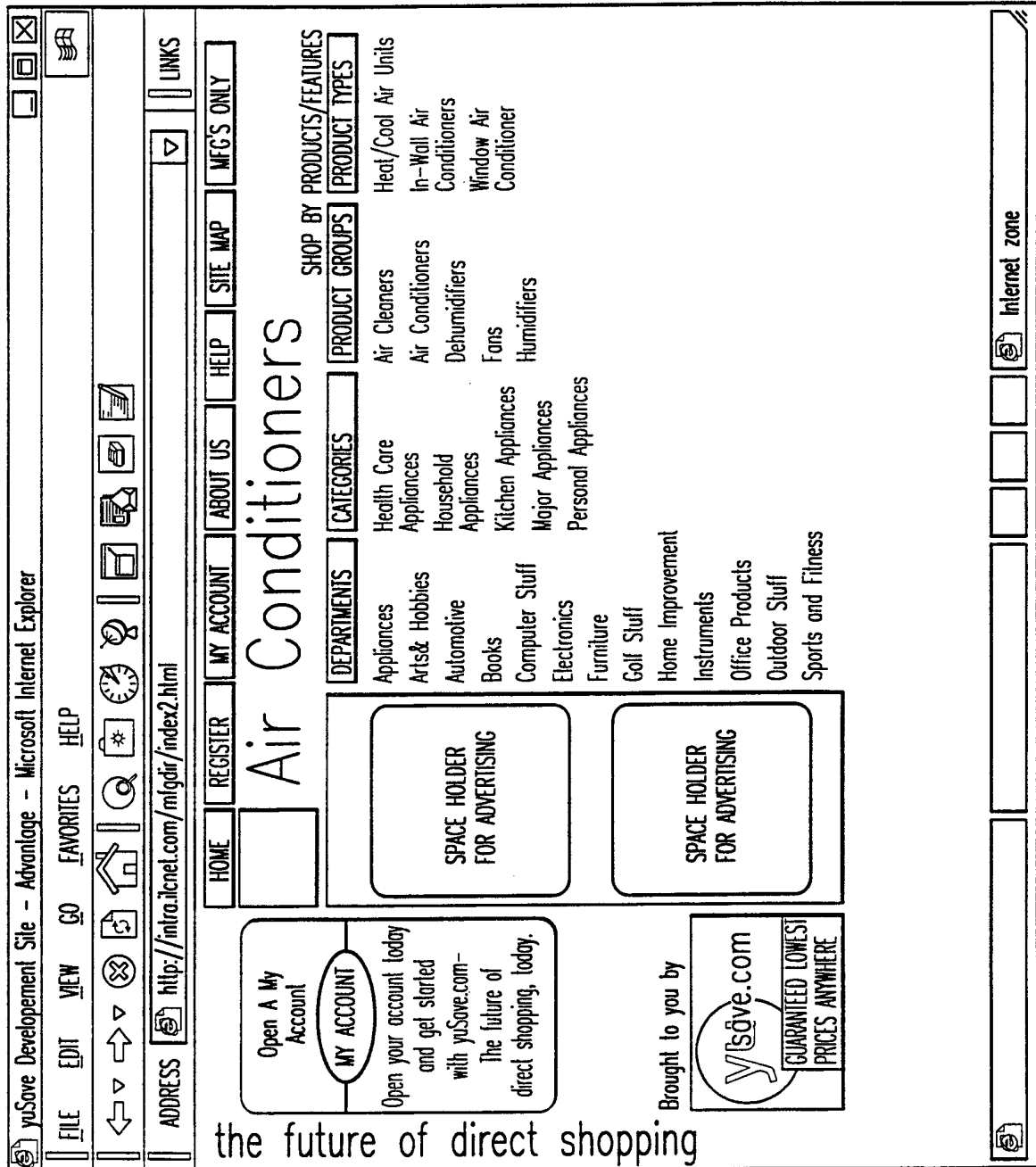


FIG. 3

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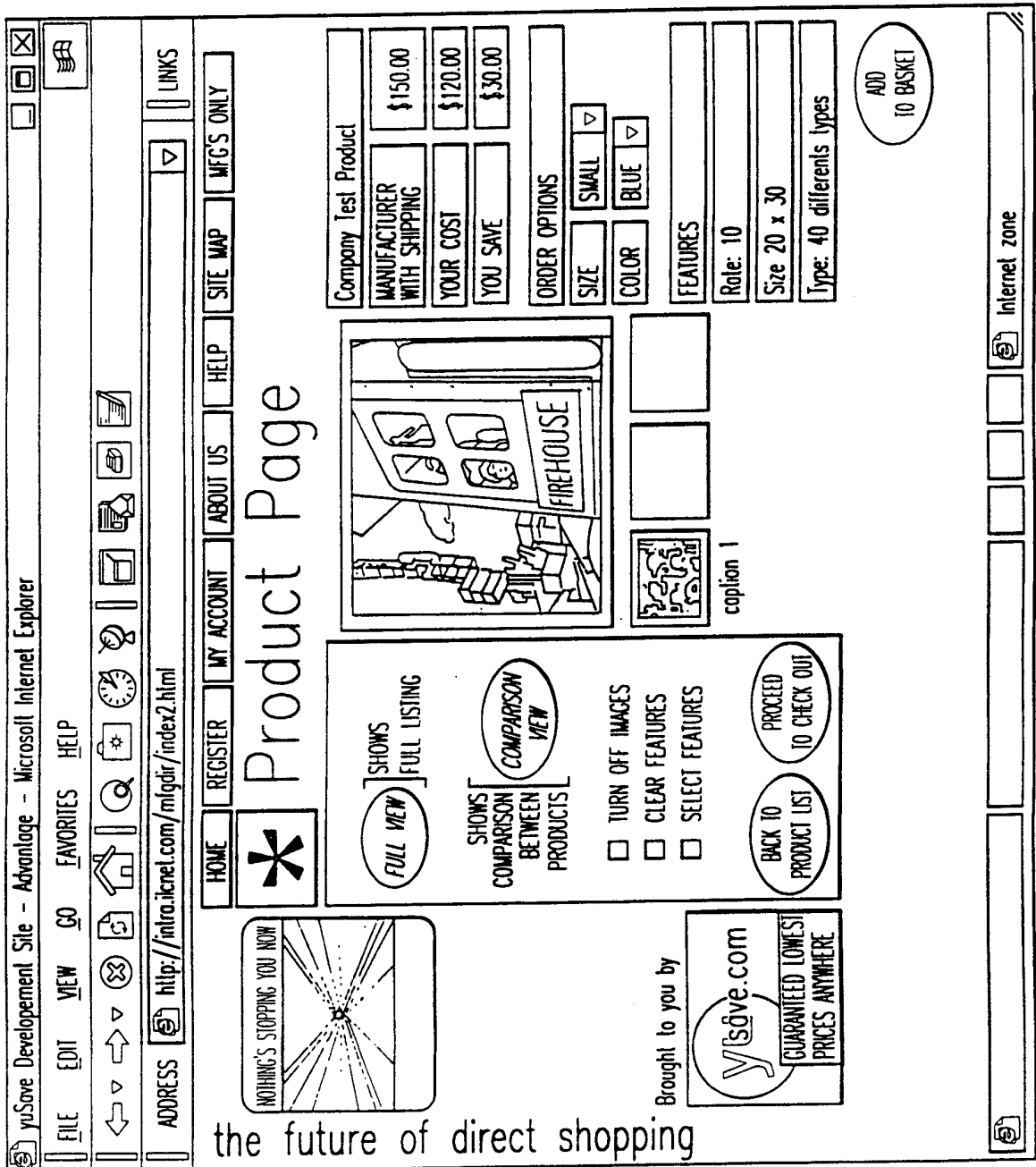


FIG. 4

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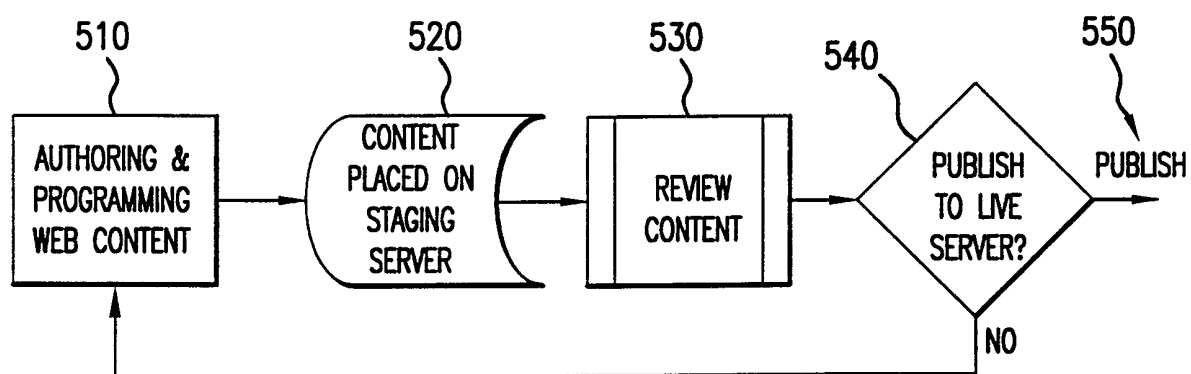


FIG.5

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Associate 227 - Microsoft Internet Explorer

FILE EDIT VIEW FAVORITES TOOLS HELP

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss Ticker net2go

ADDRESS http://www.yusave.com/yusave/Mir/DrillDown/M_DD_Assoc.asp?ISSKUID=8623&bfcdt=1 Go

Shopping Categories

The Shopping Categories table determines how buyers locate your product on [yuSave.com](http://www.yusave.com). In each column, select a Department, Company, Product Group, and existing Product with which to associate your product. Click Add to store the associations.

Department	Categories	Product Group	Product
Apparel	Baby/Children's Care	Cosmetic Tools	Acne Treatments
Baby/Children	Beauty/Spa	Dental/Oral Care	Anti-Aging Treatments
Computer/Printer Supplies	Medical Supplies	Deodorants	Eye Treatments
Furniture	Medicine Cabinet	Eye Care	Facial Astringents
Health/Beauty	Personal Care	Facial Care	Facial Cleansers
Housewares	Vitamins/Herbs	Family Planning	Facial Hydrators
Lawn/Garden		Feminine Needs	Facial Masks
Luggage/Bags		Fool Care	Facial Moisturizers
Office Products		Hair Care	Facial Saunas
Pet Supplies		Hair Care Tools	Facial Scrubs
Sports/Fitness		Health Aids	Facial Strips
Toys & Games		Manicure/Pedicure Tools	Facial Toners
		Men's Department	Fade Creams
		Nail Care	Lip Treatments
		Personal Care Tools	Make-Up Removers

List of existing Associations for Koi Bichromium

Department	Category	Product Group	Product
Health/Beauty	Vitamins/Herbs	Homeopathy E-M	Koi Bichromium

Done

Start | Ne... | kyle... | m... | q... | Ne... | Inb... | AS... | Internet | 1:42 PM

FIG. 6

[illegible]

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/07840

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/30

US CL : 705/26, 27

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

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P ----- Y, P	US 5,905,736 A (RONEN) 18 May 1999 (18.5.99), Fig. 1-6, Entire Document, Especially col. 2, lines 5-20, 30-46, Col. 3, lines 29-67, col. 4, lines 1-10, col. 5, lines 25-67, col. 6, 1-20, col. 9-14.	1-18, 24-38, 46-49. ----- 19-23, 39-45, 64-72
X -- Y	http://www.dejanews.com, pages 1-12, 1995	50-63 ----- 19-23, 39-45, 64-72
A, P	US 5,899,980 A (WILF et al.) 04 May 1999 (04.05.99), Entire Document.	1-72
A	US 5,802,497 A (MANASSE) 01 September 1998 (01.09.98), Entire Document.	1-72

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	*Y* document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*&* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 16 JUNE 2000	Date of mailing of the international search report 19 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 EMMANUEL TODD <i>James R. Matthews</i> Telephone No. (703) 305-3900

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/07840

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,815,665 A (TEPER et al.) 29 September 1998 (29.09.98), Entire Document.	1-72
A	US 5,710,887 A (CHELLIAH et al.) 20 January 1998 (20.01.98), Entire Document.	1-72
A	US 5,825,881 A (COLVIN, Sr.) 20 October 1998 (20.10.98), Entire Document.	1-72