

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 March 2002 (07.03.2002)

PCT

(10) International Publication Number
WO 02/19210 A1

(51) International Patent Classification⁷: **G06F 17/60**

(21) International Application Number: PCT/US01/26483

(22) International Filing Date: 24 August 2001 (24.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/228,190 25 August 2000 (25.08.2000) US
09/710,690 10 November 2000 (10.11.2000) US

(71) Applicant (for all designated States except US): **INTERNATIONAL APPAREL GROUP, LLC** [US/US]; Suite B, 11 Columbia, Aliso Viejo, CA 92656-3041 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CARMICHAEL, Chris** [US/US]; 4 Shelter Cove, Laguna Niguel, CA 92677 (US). **MAGNUSON, Don** [US/US]; 603, Tibidabo, San Clemente, CA 92672 (US). **JORDON, Connie** [US/US]; 4 Shelter Cove, Laguna Niguel, CA 92677 (US). **CROTTY, Greg** [US/US]; 4 Monett Court, Moris Planes, NJ 07950 (US).

(74) Agent: **VERAVANICH, Polaphat**; Lyon & Lyon LLP, Suite 4700, 633 West Fifth Street, Los Angeles, CA 90071-2066 (US).

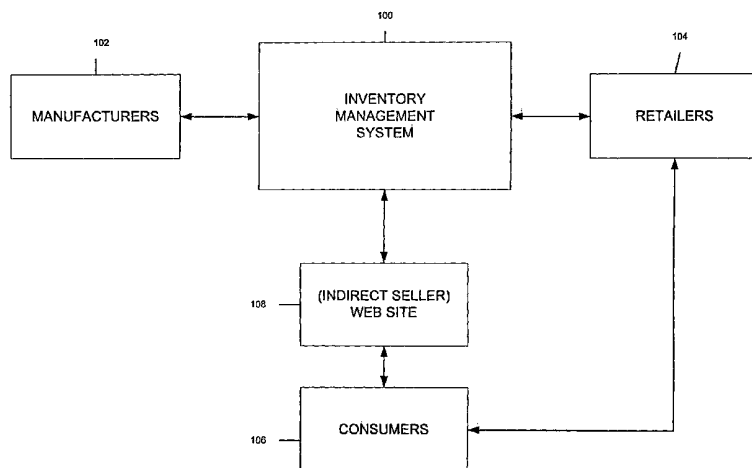
(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: METHODS AND SYSTEMS FOR DISTRIBUTING PRODUCTS



(57) Abstract: A method for distributing products is provided wherein a request for a product is received from a consumer (106), preferably using a web based interface. An indirect seller (108) provides the web based interface and preferably maintains the inventory management system (100). The system selects the nearest retailer (104) to the consumer (106) that has current stock of the requested product. Inventory levels of product are maintained by an inventory management system (100) that receives shipping information from manufacturers (102) and sales information from retailers (104). A terminal may also be provided at retail locations. The inventory management system (100) reconciles the shipment and sales information to provide an accurate accounting of quantities of products sold to consumers (106) and to provide an accurate accounting to the manufacturers (102) of inventory levels. The inventory management system (100) is further capable of processing payment information from consumers (106), retailers (104), and factors in order to provide funds to manufacturers (102) in an expeditious manner.



WO 02/19210 A1



-
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

METHODS AND SYSTEMS FOR DISTRIBUTING PRODUCTS

5

COPYRIGHT NOTICE

A portion of the disclosure of this patent document contains material which is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the Patent and Trademark Office patent file or records, but otherwise reserves all copyright rights
10 whatsoever.

BACKGROUND

The field of the present inventions relates generally to product distribution systems, and more particularly to centralized distribution methods and systems operated on a wide-area
15 network, i.e., a global computer network such as the internet. With the increased usage of the internet amongst the general population, many retailers and manufacturers have turned to the internet as a means to sell products to consumers. Unfortunately, current methods of conducting electronic commerce ("ecommerce") have proved suboptimal for retailers, manufacturers, and their consumers.

20 For example, one of the advantages that a retailer seeks when conducting ecommerce is to eliminate or reduce many of the costs of conducting business through a traditional brick and mortar store front. In practice, however, ecommerce retailers ("etailers") have been

- 2 -

forced to create their own product distribution systems, such as, e.g., maintaining a large network of physical warehouses, thereby vitiating many of the cost savings they originally thought they would realize.

Manufacturers have also faced distribution hurdles when attempting to implement
5 ecommerce strategies. Generally, manufacturers are prepared to distribute their products in bulk to retailers, who then would distribute products to individual consumers. A problem manufacturers must solve when trying to implement a web presence, and ecommerce, is that they must now distribute small quantities of product to individual consumers, rather than the customary bulk quantities to retailers. Another problem manufacturers face is that their
10 retailer relationships may suffer if the retailers complain about lost sales due to the manufacturers' decision to sell directly to a consumer via a web site.

Additionally, with both traditional and ecommerce distribution strategies, manufacturers have typically been unable to capture a complete picture of the final distribution of their products to consumers. This results from the current distribution between
15 manufacturers and retailers wherein retailers place bulk orders from manufacturers, typically at trade shows, that is meant to maintain a supply of product for a given time period, such as a season, a quarter, etc. The current relationship normally results in inefficiencies on many levels. When retailers order too much product, discounting of the manufacturers' products at the end of a time period results. When retailers order too little product, consumers are left
20 unserved or underserved. In certain cases, retailers may purposefully order too much product in order to sell that product to other retailers with whom the manufacturer does not have, or has chosen not to have, a relationship. This type of activity is referred to as "backdooring"

- 3 -

product. Due to these, and other, inefficiencies in the distribution chain from manufacturer to retailer, manufacturers often suffer from decreased brand protection and decreased customer loyalty. The current arrangements also deprive manufacturers of valuable direct market data, i.e., exactly what is being sold to consumers, since retailers maintain the direct sales
5 information.

The individual consumer is also not always satisfied with the current ecommerce experience. Currently, buying from etailers is much like purchasing from catalogs. The consumer will order from a web site run by an etailer who will typically ship the product to the consumer from a remote warehouse. With current ecommerce methods, consumers are
10 deprived of the in-person customer service that they normally received when shopping at a physical store. Also, consumers dealing with an etailer who only ships from a remote warehouse and does not maintain a physical store front will often encounter problems returning merchandise when their orders are unsatisfactory. Moreover, current ecommerce methods typically do not allow consumers the option of picking up items from or returning
15 items to a physical location near their residence, thereby causing more inconveniences for the typical consumer.

Those skilled in the art have failed to provide for a fully integrated product distribution method that enables retailers, manufacturers, and indirect sellers, such as, e.g., ecommerce web sites, to better implement ecommerce strategies. Consequently, the present
20 inventors have recognized a need for a distribution method and system that enables manufacturers to implement ecommerce strategies without having to establish their own consumer distribution networks, that enables indirect sellers and retailers to conduct

- 4 -

ecommerce without having to establish costly, and counterintuitive, physical warehouse locations, and that enables consumers to benefit from dealing with a local retailer rather than only with a remotely located etailer. The present inventions address these and other problems.

5

SUMMARY OF THE INVENTION

The present inventions are directed to methods of distributing products using a wide area network, systems to distribute products while utilizing a wide are network, and methods for providing sales statistics to manufacturers and retailers, where the system and methods are
10 operated using, or over, a wide area network or a global computer network.

In accordance with one aspect of the present inventions, a method of distributing products using a wide area network is provided. In a preferred embodiment, a request for a product is received from a consumer who is located at a specific location. Requests may be received via a web based interface that is incorporated as part of an inventory management
15 system. Using the location of the consumer, an appropriate retailer is determined in order to fulfill the request. The appropriate retailer has physical stock of the product and is preferably the retailer nearest to the consumer that has such stock. In one embodiment, the postal zip code of the consumer is used to determine the appropriate retailer. After a retailer is determined, the request from the consumer is submitted to the retailer for subsequent
20 fulfillment. The request may be fulfilled by shipping the product to the consumer or by allowing the consumer to pickup the product from the retailer's physical store. When the consumer picks up the product from the retailer, the consumer is provided with a copy of the

- 5 -

request that also includes a code that is assigned to that request. The retailer is also provided with the code to enable the retailer to properly provide the consumer with the requested product at the time of pick up.

5 Additionally, an inventory management system for tracking of product sales is maintained. The inventory management system tracks individual sales of product by receiving reports of shipments of products from manufacturers to retailers and of sales from retailers to consumers. The inventory management system then reconciles the reports of shipments to retailers and sales to consumers to determine an accurate accounting of quantities of products actually sold to consumers, rather than just items shipped to retailers.

10 A terminal may also be provided at the retailer's location in order to allow a user, either a consumer or the retail staff, to communicate directly with the inventory management system. The terminal may be a kiosk, a PC, or any other device suitable for interacting with the system from the retailer's location. In this embodiment, a request for product is received from a user of the terminal. This request is transmitted from the terminal to the inventory
15 management system. Using the request, a retail location with stock of the product is identified and the location is transmitted from the inventory management system to the terminal. Finally, the identified retail location is displayed to the user via a display on the terminal.

20 The inventory management system is also capable of processing funds from retailers and consumers. Payment information is received from consumers and is converted to an electronic debit format if necessary. Payment information is also received from retailers and is likewise converted to an electronic debit format if necessary. Additionally, payment

- 6 -

information may also be received from factors and converted to an electronic debit format. After processing the payment information, funds are provided to the appropriate manufacturers.

In accordance with another aspect of the present inventions, a system for distributing
5 products utilizing a wide area network is provided. In a preferred embodiment, an inventory management system is designed to receive and maintain information on transfers of products from manufacturers to retailers, transfers of products from retailers to consumers, and payment information from retailers and consumers. The inventory management system also includes a web based interface designed to allow consumers to interact with the inventory
10 management system. The inventory management system is preferably maintained and operated on a server that is capable of transmitting orders, for products, received from consumers to selected retailers. The server preferably is also capable of interacting with the inventory management system. In one embodiment, a terminal located at a retailer is also provided that is capable of providing inventory information to a user of the terminal. The
15 terminal receives a request for inventory information on a product from the user, transmits the request to the inventory management system, receives inventory information, in the form of a retailer location, from the inventory management system, and displays the retailer location to the user.

The present inventions further include a method for providing sales statistics to
20 manufacturers and retailers. Shipment information on products shipping from manufacturers to retailers and sales information on products provided to consumers by retailers is received. The shipment information and the sales information are maintained in a database.

- 7 -

Subsequently, the shipment information and the sales information are analyzed to determine statistics on actual sales to consumers. These statistics may then be provided to manufacturers or retailers on request. Additionally, the actual sales may be further categorized by geographic territories.

5 These and other aspects of the present inventions are described herein in greater detail.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a flow chart illustrating one embodiment of the distribution method of the present inventions.

10 FIG. 2 is a generalized diagram of the process of the determination of a retailer to fulfill a consumer's request for a product.

FIG. 3 is a flow chart illustrating an embodiment of the distribution method and system that includes a terminal.

15 FIG. 4 is a flow chart illustrating the processing of payments for products tracked by the present inventions.

FIG. 5 is a generalized diagram of another embodiment of a distribution model of the present inventions.

DETAILED DESCRIPTION

20 The present inventions focus on the quadrangular relationship between manufacturers, retailers, consumers, and indirect sellers, such as, e.g., web based ecommerce enablers, web sites, and other web based interfaces. The present inventions are configurable to any size

- 8 -

manufacturer/retailer distribution chain in any industry of choice. In some embodiments, the present inventions reside at the indirect sellers. The present inventions form a business conduit that brings together the sectors of manufacturing, retail, inventory/asset management for both, and sales statistics. Furthermore, the present inventions are capable of enabling
5 routine ordering, shipping, tracking, and processing capital transactions between industry trading partners and an indirect seller in a seamless manner.

The present inventions will support and enhance a retailer's presence and image to a consumer, while promoting a manufacturer's products, and co-branding the indirect seller with the retailer and the manufacturer. They are designed to provide a comprehensive
10 delivery system to a consumer based on supply and geography. The present inventions may notify retailers, in an interactive manner, of stock levels, and may expedite shipment from the manufacturer when necessary to satisfy store-level and ecommerce demand. The retailer may also receive the benefit of an indirect seller's pre-negotiated shipping rates, if available.

The present inventions will benefit an indirect seller by providing for the order and
15 fulfillment of manufacturer products, showcased on the indirect seller's web site for example, by using a preexisting retail outlet or chain as the supplier or fulfillment agent. Therefore, the indirect seller need not carry physical inventory. This will enable the indirect seller to focus its resources on product marketing, for example, without expending resources on carrying inventory. Indirect sellers will be free to showcase product choices to consumers, focusing
20 the consumers' attention on the details and specifications of the product, as well as how the product functions and fits, without being concerned with maintaining physical inventory levels for fulfillment of any consumer orders or requests for products.

- 9 -

Turning to FIG. 1, one embodiment of the distribution method of the present inventions is illustrated. An inventory management system ("IMS") 100 receives information from manufacturers 102 regarding the manufacturers' 102 shipments of products to retailers 104. This communication from the manufacturers 102 to the IMS 100 may take the form of a
5 suitable electronic data interchange ("EDI") format. Additionally, the communication may be sent in any suitable manner, including a transmission using a wide area or global computer network such as the internet, a transmission over a local network established between the IMS 100 and a particular manufacturer, or a wireless transmission. The IMS 100 maintains and stores the information from the manufacturers 102 in a database. Preferably, the IMS 100 and
10 its associated databases are maintained on a server that is situated remotely from the manufacturers 102 and the retailers 104.

In a similar manner as with shipping information from the manufacturers 102, the IMS 100 additionally receives sales information from the retailers 104. The retailers 104 will transmit information on sales of products to consumers 106 to the IMS 100 using any suitable
15 format, including any suitable EDI format. In one embodiment, the sales information comprises sales generated through an indirect seller 108, such as, e.g., a web site based etailer, and normal sales generated through walk-in traffic or other sales not originating from the indirect seller 108. In that embodiment, all sales from the retailers 104 are captured, not just sales generated by the indirect seller 108 nor just sales generated by traditional means.

20 The retailers 104 may transmit their sales information using any suitable manner, including a communication over a wide area or global computer network, a transmission over a direct connection between a particular retailer and the IMS 100, or a wireless transmission.

- 10 -

In an alternative embodiment, the retailers 104 may transmit their information to the IMS 100 by entering the transaction into internet-enabled hardware or into a register system that interfaces to the internet-enabled hardware. This type of arrangement enables the retailers 104 to automatically transmit sales information on a real-time basis as the retailers 104 scan
5 UPC codes or SKUs on products being sent to consumers 106. As with the shipping information received from manufacturers 102, the IMS 100 stores and maintains the sales information received from the retailers 104 in a database.

Accordingly, all inventory, from all manufacturers 102 and for every all participating retailers 104 is maintained by the IMS 100 and resides on a database system operated and
10 maintained by the IMS 100. The shipping information and the sales information may comprise product, action, and demographic information. The shipping information and the sales information will be used by the IMS 100 to generate specialized sales and marketing reports for the manufacturers 102 and the retailers 104, and will be discussed *infra*.

The IMS 100 may be designed to perform regular reconciliations of the shipping
15 information received from the manufacturers 102 and the sales information from the retailers 104. These reconciliations may be performed on a daily basis, for example. Performing these regular reconciliations of shipping information and sales information would facilitate the manufacturers' 102 and retailers' 104 efforts to maintain consistent inventory control since either would be aware of update and accurate inventory levels, if they desired such reports
20 from the IMS 100. Additionally, algorithms may be implemented by the IMS 100 that would enable the IMS 100 to determine if a specific product would need to be suggested to a particular retailer to stock or order based upon geographic or demographic demand for that

- 11 -

product. These recommendations could be made at the request of either the manufacturers 102 or the retailers 104.

Preferably, the IMS 100 is maintained by the indirect seller 108. Moreover, the IMS 100 preferably includes an interface that enables consumers 106 to place requests for products
5 to the indirect seller 108 that will ultimately be fulfilled by the retailers 104. This interface preferably is an internet based interface or a web based interface such as a web site. In a preferred embodiment, as shown in FIG. 1, the consumers 106 enter requests for product, such as, e.g. orders, using a web site that is maintained by the indirect seller 108 and is also included as part of the IMS 100.

10 The IMS 100 receives a request via the web site and determines the best retailer for fulfillment of the particular request. The request may be for a specific product or a specific product configuration. As seen in FIG. 2, the IMS 100 preferably determines an appropriate retailer 204 based upon the retailer closest in proximity to the consumer's 106 location which has current inventory of the requested product. This may be accomplished, for example,
15 based upon the consumer's 106 postal zip code. If the closest retailer to the consumer 106 does not have active stock of the product, the IMS 100 will locate the next nearest retailer 204(i). The IMS 100 continues this process until a retailer is located that has stock of the product and is also located near the consumer 106. In one embodiment, if the IMS 100 continues this process and does not find a retailer with sufficient stock to fulfill the
20 consumer's 106 order within a predetermined area, the IMS 100 will notify the consumer 106 that the product is not in stock. This notification preferably is accomplished by a notification displayed to the consumer 106 via the web based interface maintained by the indirect seller

- 12 -

108. The predetermined area may be based upon geographic considerations or delivery time considerations. For example, the IMS 100 may continue trying to find an appropriate retailer 204 within an area that is designated as a one to three day shipping time area relative to the consumer 106.

5 Once an appropriate retailer 204 is located, the IMS 100 transmits the consumer's 106 request to the appropriate retailer 204 for fulfillment. This may be accomplished, for example, by a facsimile transmission of a pick ticket/order form to the retailer 204 or by transmitting an electronic version of a pick ticket/order form to the retailer 204 via an appropriate means, such as, e.g., via a wide area or global computer network. In one
10 embodiment, the retailer 204 will box and ship the product in branded packaging materials that are provided by the indirect seller 108. In this embodiment, the packing materials will display insignias representative of the indirect seller 108. In this manner, the indirect seller 108 will have the capability of fulfilling product requests placed through its web site without having to maintain physical inventory levels while still being able to provide the consumer
15 106 with a branded package. The retailer 204 also benefits since the retailer 204 does not lose a sale of product to the indirect seller 108 and the retailer 204 is also capable of participating in ecommerce without having to implement an internet strategy, such as operating its own web site. The fulfillment may be accomplished through a parcel shipping method such as, e.g., the United States Postal Service, any appropriate postal service if delivery is required in a
20 foreign country, the United Parcel Service, Federal Express, or any other carrier that has the capability of delivering a product to a consumer 106.

- 13 -

When the retailer 204 ships product to the consumer 106, one embodiment of the present inventions enables the retailer 204 to ship the product using a shipping account with discounted shipping rates prenegotiated by the indirect seller 108. When the retailer 204 uses a discounted shipping rate prenegotiated by the indirect seller 108, the consumer 106 will also
5 benefit from lower shipping costs.

Alternatively, the consumer 106 may be given the option of personally picking up a product from the appropriate retailer 204. If the consumer 106 indicates this preference to the IMS 100, the IMS 100 will provide the consumer 106 with a hard copy of the request. The hard copy preferably will include an identification code unique to that request, such as, e.g., a
10 bar code. The IMS 100 will also notify the appropriate retailer 204 that the consumer 106 has chosen to personally pick up the product and will provide the retailer 204 with a copy of the request and any unique identifying number assigned to that request. The IMS 100 will provide a copy of the request and any unique identifying number via a suitable method such as, e.g., a facsimile transmission or an electronic transmission over a wide area or global
15 computer network. The retailer 204 will then utilize the unique identifying number to both fulfill the request and to verify that the correct consumer is receiving the product when the consumer 106 personally picks up the product. In one embodiment, the retailer 204 will package the requested product in branded packaging provided by the indirect seller 108, as previously described.

20 Consumers 106 will also be given the option of returning unsatisfactory products to a local retailer. As previously described, retailers 104 will provide sales information to the IMS 100 for use by the IMS 100, along with the shipping information provided by the

- 14 -

manufacturers 102 in maintaining inventory data and in generating inventory reports. To maintain an accurate accounting of the sales information, retailers 104 preferably will notify the IMS 100 when consumers 106 return a product. This will be accomplished in substantially the same manner as when retailers 104 provide sales information to the IMS 100, although with returns, the retailers 104 will provide return information rather than sale information. The IMS 100 will then add the products returned to the inventory information maintained on the database, rather than subtracting the number of products as is the case with sales information.

Turning now to FIG. 3, another embodiment of the present inventions is illustrated. In the embodiment shown in FIG. 3, a terminal 308, or kiosk, preferably located at a retail store location. The terminal 308 is any device suitable for interacting with the IMS 100, such as, e.g., a kiosk, a PC, or a wireless device. The terminal 308 will preferably link with a web site interface that is incorporated as part of the IMS 100. A user 306 may use the terminal 308 to transmit requests for product to the IMS 100. The user 306 may do this in order to check whether an alternate retailer has current stock of the requested product. The user 306 may be a consumer or may be a customer service personnel of the retail location or another staff member of the retail location. Typically, the user 306 will use the terminal 308 when the user 306 has failed to find a desired product at the current retail location. The terminal 308 will transmit the user's 306 request to the IMS 100 using a suitable format, such as, e.g., an EDI format, and through a suitable method, such as, e.g., a transmission via a wide area or global computer network, a direct link to the IMS 100, or a wireless communication. The IMS 100 will then analyze its database to determine which retailers 104 currently have stock of the

- 15 -

requested product and will determine, of the retailers 104 with stock, the retailer closest to the user's 306 location. This is accomplished in substantially the same manner as the previously described procedure for determining the closest retailer to a consumer 106 that has current stock of the requested product. After determining the closest retailer to the user 306 with
5 current stock, the IMS 100 transmits the identity of the closest retailer to the terminal 308, via one of the aforementioned formats and methods. The terminal 308 then presents the user 306 with the identity of the closest retailer on a display integrated as part of the terminal 308. The closest retailer, in some cases, may be the retail location in which the terminal 308 is presently located. This may occur, for example, in a situation where the user 306 was unable
10 to find the product although the retail location actually had current stock of the product, either on the sales floor or in storage. In other cases, the closest retailer may be a different retail location than the retail location in which the terminal 308 is situated.

Turning to FIG. 4, the present inventions also process payments from participants in the distribution chain, including manufacturers 102, retailers 104, consumers 106, and indirect
15 sellers 108. Also, the present inventions will process payments from factors, parties that intermediate transactions between manufacturers 102 and retailers 104, when those parties are involved. Payment information is received from retailers 104, consumers 106, and, if applicable, factors (step 402). For example, retailers 104 typically pay for shipments from manufacturers 102 via a line of credit, collect on delivery, or through factors. When factors
20 are used, the payment information is provided by the factor rather than directly by the retailers 104. Payment information is also received from consumers 106. Payment information from consumers 106 may be provided by way of credit card payments, debit card payments,

- 16 -

automatic teller machine payments, smart card payments, cashier's check payments, money order payments, personal check payments, cybercash payments, electronic debit payments, or any other suitable means of providing funds to cover requested products. Payment information preferably is transmitted from the retailers 104, the consumers 106, and/or the

5 factors using a wide area or global computer network such as the internet. For example, consumers 106 may provide payment information to an indirect seller 108 by entering the payment information on a suitable form provided on the web site interface, operated by the indirect seller 108, that is incorporated as part of the IMS 100. Alternatively, this payment information may be transmitted by any suitable means such as, e.g., facsimile, telephone,

10 wireless communication, or a direct link from the party providing the payment information. Once payment information is received, a determination is made as to whether the payment information is in an electronic debit format (step 404). If the payment is not in an electronic debit format, the payment information is converted into an electronic debit format (step 406). It is desirable to convert all payment information into an electronic debit format since

15 electronic debit formats receive priority when funds are cleared from accounts at financial institutions. After the payments are converted into an electronic debit format, if necessary, the payment information is further processed by submitting a request to clear the payment with an appropriate financial institution, i.e., the financial institution associated with the particular payment information, to clear the funds for the payment (step 408). Once the funds

20 are cleared from the appropriate financial institution, the funds are distributed to the manufacturers 102 (step 410). The funds may be deposited directly into a financial account of a manufacturer, provided the manufacturer provides appropriate account information. Any

- 17 -

funds that are due to the retailers 104, as a result of processing product requests originating from the indirect seller 108, are also distributed to the retailers 104. Additionally, any shipping costs that are due may be electronically paid to the appropriate shipping company.

The present inventions also provide for efficient analysis of shipping and sales
5 information to generate targeted marketing data. In one embodiment of the present inventions, at the end of a predetermined period, the IMS 100 executes a periodic processing of the inventory database to determine discrepancies between the quantity of product shipped by manufacturers to retailers and the quantity of product sold by retailers to consumers. The IMS 100 is then able to provide audit and accounting information to all parties in the
10 distribution chain. This period processing may be accomplished at the end of any definable period, such as, e.g., daily, weekly, monthly, quarterly, biannually, annually, seasonally, etc.

The inventory database maintained by the IMS 100 may also be manipulated and archived to provide for industry and product statistics to manufacturers and retailers. Marketers employed by requesting parties may then access this data to provide superior
15 decision support to company management. The IMS 100 is capable of analyzing the shipping and sales information stored on its database to determine product trends on a local level, such as, e.g., by geographic territory or by demographics, rather than just analyzing trends on a national scale, although the IMS 100 is capable of analyzing trends on a national scale, or even international scale, also. The market data provided by the IMS 100 may then be used by
20 manufacturers and/or retailers to adjust their product inventories. Additionally, the manufacturers may use this market data to remind their associated retailers to restock

- 18 -

inventory of certain products or to suggest that their associated retailers stock certain products that the data indicate is in demand in a certain area.

FIG. 5 illustrates another embodiment of the distribution method of the present inventions. The various parties of a distribution chain acted on by this embodiment of the distribution method illustrated in FIG. 5 are an inventory management system 500, a
5 manufacturer 530, and a retailer 560. Product inventory movement from a warehouse 532 maintained by the manufacturer 530 to a retailer 560 is categorized as sales or returns 534. The manufacturer 530 then delivers product to the retailer 560 using a suitable distribution method 590. The manufacturer transmits 536 the shipping information to the inventory
10 management system 500 using an appropriate data transmission format, such as, e.g., EDI. The inventory management system 500 contains an inventory management/reconciliation component 502 that receives and maintains the shipping information. This shipping information is stored in a database 504.

An indirect seller 506, such as, e.g., an internet ecommerce provider, operates a web
15 site that enables consumers to request product. The web site is interfaced with, and preferably a component of, the inventory management system 500. Additionally, a terminal or kiosk 574 that interfaces with the inventory management system 500 may be located with a retailer's 560 physical location. A user of the terminal 574 will be able to submit requests for product to the inventory management system 500 while at a physical store location. This enables a
20 user to locate an alternate retailer with available stock of a certain product when that particular product is not found at the current retailer's 560 store. The terminal 574 is linked to the inventory management system 500 and transmits user requests to the system 500 in an

- 19 -

appropriate manner, such as, e.g., a connection via a wide area or global computer network, a wireless communication, or a direct link. After receiving a consumer request for product, from the indirect seller 506 via the web site, or a request from a user utilizing the terminal 574, the inventory management system 500 access the inventory management/reconciliation component 502 to determine 508 a retailer 560 to forward the request. The retailer 560 is
5 determined by choosing the closest retailer to the consumer with current stock of the requested product and is displayed to the consumer via the web site of the indirect seller 506 or a display on the terminal 574, if the terminal 574 is used to transmit the request. If no retailer is available, the inventory management system 500 preferably notifies the indirect
10 seller 506 who subsequently notifies the consumer of a lack of available stock. This notice will be displayed to the consumer using the web site of the indirect seller 506, or to the user of a terminal 574 via a display on the terminal 574.

After receiving a request from the inventory management system 500, the retailer 560 retrieves the product from retail inventory 562 and prepares the product for fulfillment. In
15 one alternative, the consumer physically retrieves 564 the product from the retail location. After the consumer retrieves the product, the retailer 560 provides information on this sale to the inventory management system 500 through a suitable format, such as, e.g., an EDI communication 566. In another alternative, the retailer 560 ships 568 the product to the consumer. Here, the retailer 560 preferably packages 570 the product into branded packaging
20 provided by the indirect seller 506 and arranges for a shipping company 572 to distribute the package to the consumer. Additionally, to increase consumer convenience, the consumer will have the opportunity to return product to the retailer 560. After the consumer returns a

- 20 -

product, the retailer 560 provides information on the return to the inventory management system 500 through a suitable format, such as, e.g., an EDI communication 566.

The inventory management system 500 also contains a payment processing component 510 for clearing payments received from consumers, for purchased products, and
5 from retailers and/or factors, for products shipping to retailers from manufacturers. The payment processing component 510 receives payment information, converts the payment information to an electronic debit format if necessary, and arranges for fund transfers to and from appropriate financial institution 512. Additionally, the inventory management system 500 is capable of analyzing the sales and shipping information stored in the database 504 in
10 order to provide targeted marketing and up to date sales information to marketing personnel 538 associated with the manufacturer 530. This marketing and sales information will also be available to other parties, such as, e.g., retailers or other interested marketing entities, upon request.

The foregoing description of the present inventions has been presented for purposes of
15 illustration and description. It is not intended to be exhaustive or to limit the present inventions to the precise forms disclosed.

- 21 -

CLAIMS

WHAT IS CLAIMED IS:

1. A method of distributing products, using a wide area network, comprising the
5 steps of:
receiving a request for a product from a consumer, wherein the consumer has a
specific location,
determining an appropriate retailer to fulfill the request, wherein the retailer is
determined based upon the location of the consumer and whether the retailer has physical
10 stock of the product,
submitting the request to the retailer for subsequent fulfillment of the request, and
maintaining an inventory management system for tracking of individual sales of
product, wherein the inventory management system utilizes a tracking method comprising the
steps of
15 receiving reports of shipments of products from manufacturers to retailers,
receiving reports of sales of products from retailers to consumers, and
reconciling the reports of shipments and the reports of sales to determine an
accurate accounting of quantities of products actually sold to consumers.
- 20 2. The method of claim 1 wherein the retailer is a retailer located in closest
proximity to the location of the consumer that has physical stock of the product.

- 22 -

3. The method of claim 1 wherein the location of the consumer used to determine the appropriate retailer is a postal zip code.

4. The method of claim 1 wherein the fulfillment of the product is a method of fulfillment chosen from the group consisting of shipping the product to the consumer and allowing the consumer to pick up the product from the retailer.

5. The method of claim 1 wherein the fulfillment of the product is accomplished by allowing the consumer to pick up the product from the retailer, and further comprising the steps of:

providing a copy of the request to the consumer, wherein the copy includes a code that is unique to the request, and

providing the retailer with the code to enable the retailer to provide the consumer with the product when the consumer picks up the product.

15

6. The method of claim 1 wherein the receiving a request for product step is accomplished via a web based interface that enables a consumer to transmit the request for product.

20

7. The method of claim 6 wherein the web based interface is incorporated as a component of the inventory management system.

- 23 -

8. The method of claim 1 further comprising the steps of:

providing a terminal at a retail location that is capable of communicating with the inventory management system using a wide area network,

receiving a request for a product at the terminal from a user of the terminal,

5 transmitting the request from the terminal to the inventory management system,

identifying a retail location that has stock of the product and that is located proximally to the user,

transmitting the identified retail location that has stock of the product from the inventory management system to the terminal, and

10 displaying the identified retail location to the user of the terminal via a display located on the terminal.

9. The method of claim 1 wherein the inventory management system is capable of processing of funds from retailers and consumers, wherein the processing of funds

15 comprises the steps of:

receiving payment information from consumers for products shipped to the consumers from retailers,

converting the payment information received from the consumers to an electronic debit format if necessary,

20 receiving payment information from the retailers for products shipped from manufacturers to the retailers,

- 24 -

converting the payment information from the retailers to an electronic debit format if necessary, and

providing funds to the manufacturers after processing the payment information from the consumers and the payment information from the retailers.

5

10. The method of claim 9 further comprising:

receiving payment information from factors for shipments of product sent from manufacturers to the factors and subsequently to the retailers,

converting the payment information from the factors to an electronic debit format if

10 necessary, and

providing funds to the manufacturers after processing the payment information from the factors.

11. The method of claim 9 wherein the payment information from the consumers
15 is a type of payment chosen from the group consisting of credit card payments, debit card payments, automatic teller machine payments, smart card payments, cashier's check payments, money order payments, personal check payments, cybercash payments, and electronic debit payments.

20 12. The method of claim 1 further comprising the steps of:

allowing the consumer to return the product to the retailer that fulfilled the consumer's request,

- 25 -

receiving a notification from the retailer that the consumer has returned the product,
and

updating the reports of sales of product from retailers to consumers maintained by the
inventory management system.

5

13. A system for distributing products while utilizing a wide area network,
comprising:

an inventory management system for receiving and maintaining information on
transfers of products from manufacturers to retailers, information on transfers of products
10 from retailers to consumers, and payment information from retailers and consumers, wherein
the inventory management system is designed to interact with consumers through a web based
interface, and

a server for maintaining and operating the inventory management system, the server
being capable of transmitting orders for products received from consumers to selected
15 retailers, and the server being further capable of interacting with an inventory management
system.

14. The system of claim 13 further comprising:

a terminal located at a retailer, wherein the terminal is capable of providing inventory
20 information to a user using a method comprising the steps of:

receiving a request for inventory information on a product from the user,
transmitting the request to the inventory management system,

- 26 -

receiving inventory information from the inventory management system, and displaying the inventory information to the user.

15. The system of claim 14 wherein the inventory information comprises a
5 location of an alternate retailer that has physical inventory of the product.

16. A method of distributing products, using a wide area network, comprising the steps of:

maintaining records of product shipments from manufacturers to retailers and product
10 sales from retailers to consumers in an inventory management system,

accepting a request for a product from a consumer with a specific location,

transmit the request to the inventory management system,

identifying a retailer that has stock of the product, wherein the identification is
accomplished by identifying retailers that are in close physical proximity to the location of the
15 consumer, in a manner that progresses from retailers that are closest to the location to retailers
that are further away from the location, until a retailer that is in closest physical proximity to
the location of the consumer and has existing stock of the product is identified, and

transmitting the request from the inventory management system to the retailer for
subsequent fulfillment of the request.

20

- 27 -

17. The method of claim 16 wherein the inventory management system communicates with consumers using an interface chosen from the group consisting of a web site, a wireless communications interface, and a telephonic interface.

5 18. A method of providing sales statistics to manufacturers and retailers, comprising the steps of:

receiving shipment information on products shipping from manufacturers to retailers,

receiving sales information on products provided to consumers by retailers,

maintaining the shipment information and the sales information in a database, and

10 analyzing the shipment information and the sales information to determine statistics on actual sales to consumers.

19. The method of claim 18 further comprising the step of:

providing the statistics on actual sales to manufacturers or retailers requesting the

15 statistics.

20. The method of claim 18 further comprising the step of:

categorizing the actual sales to consumers by geographic territories.

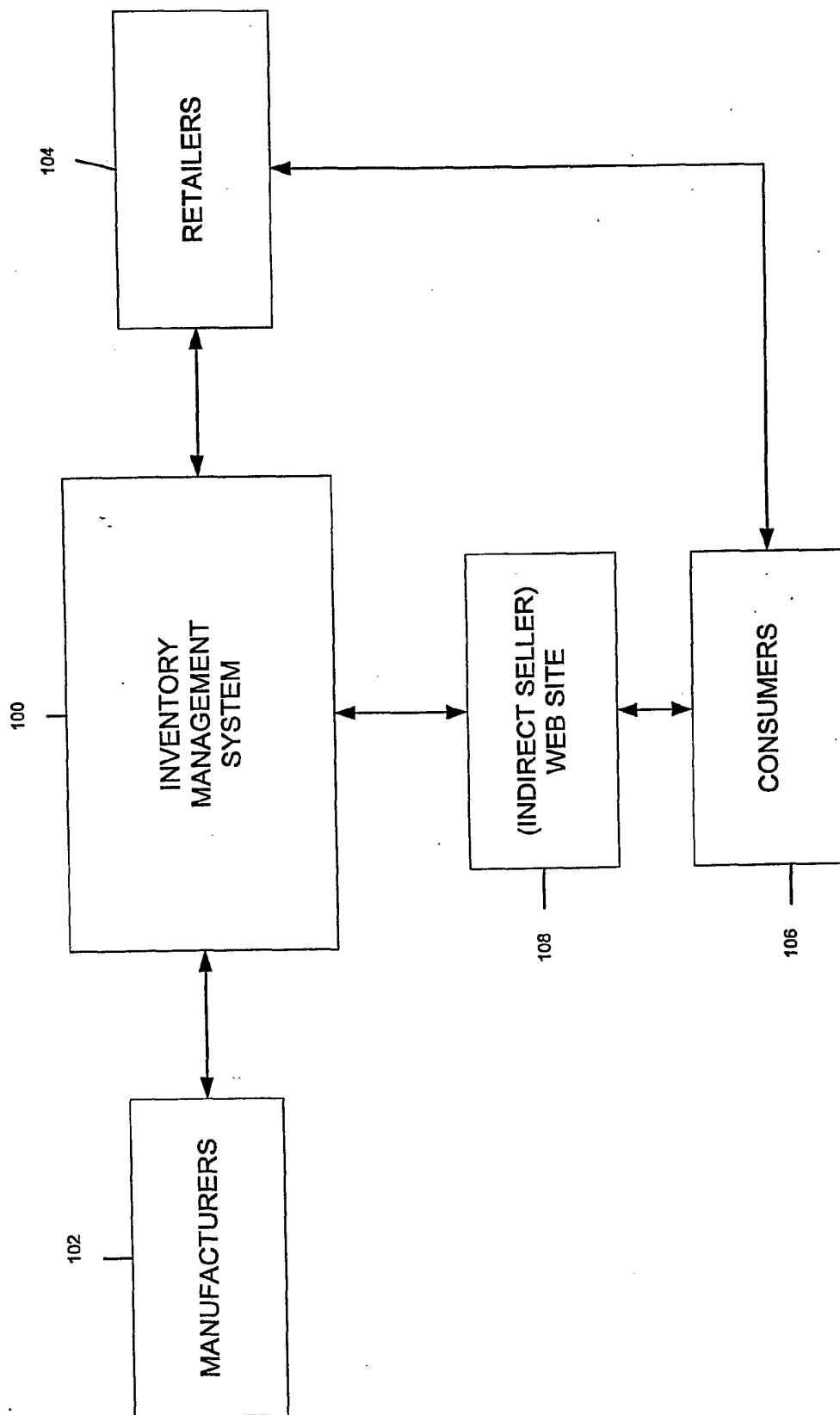
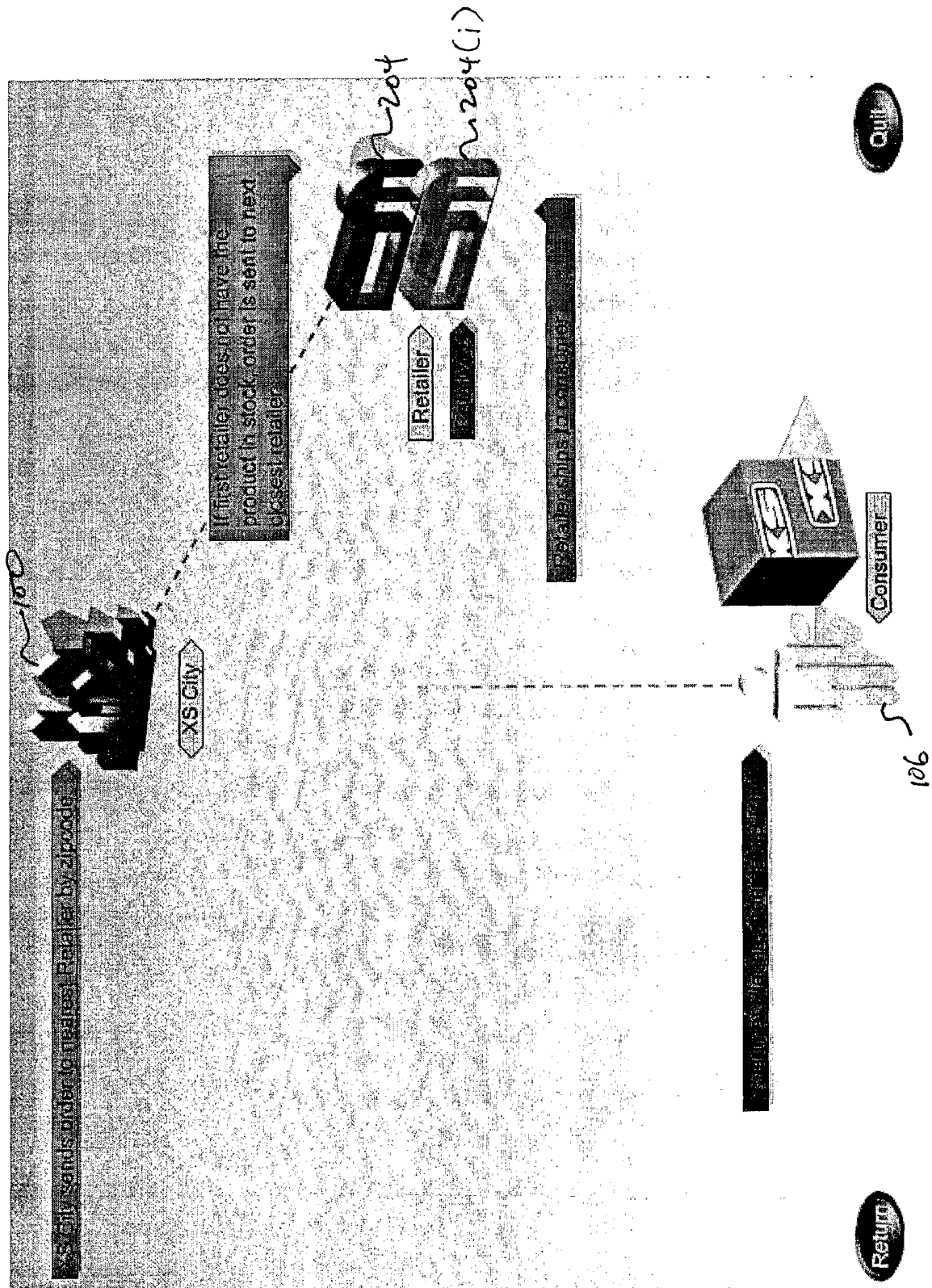


FIGURE 1



© 2000 International Apparel Group LLC

FIG. 2

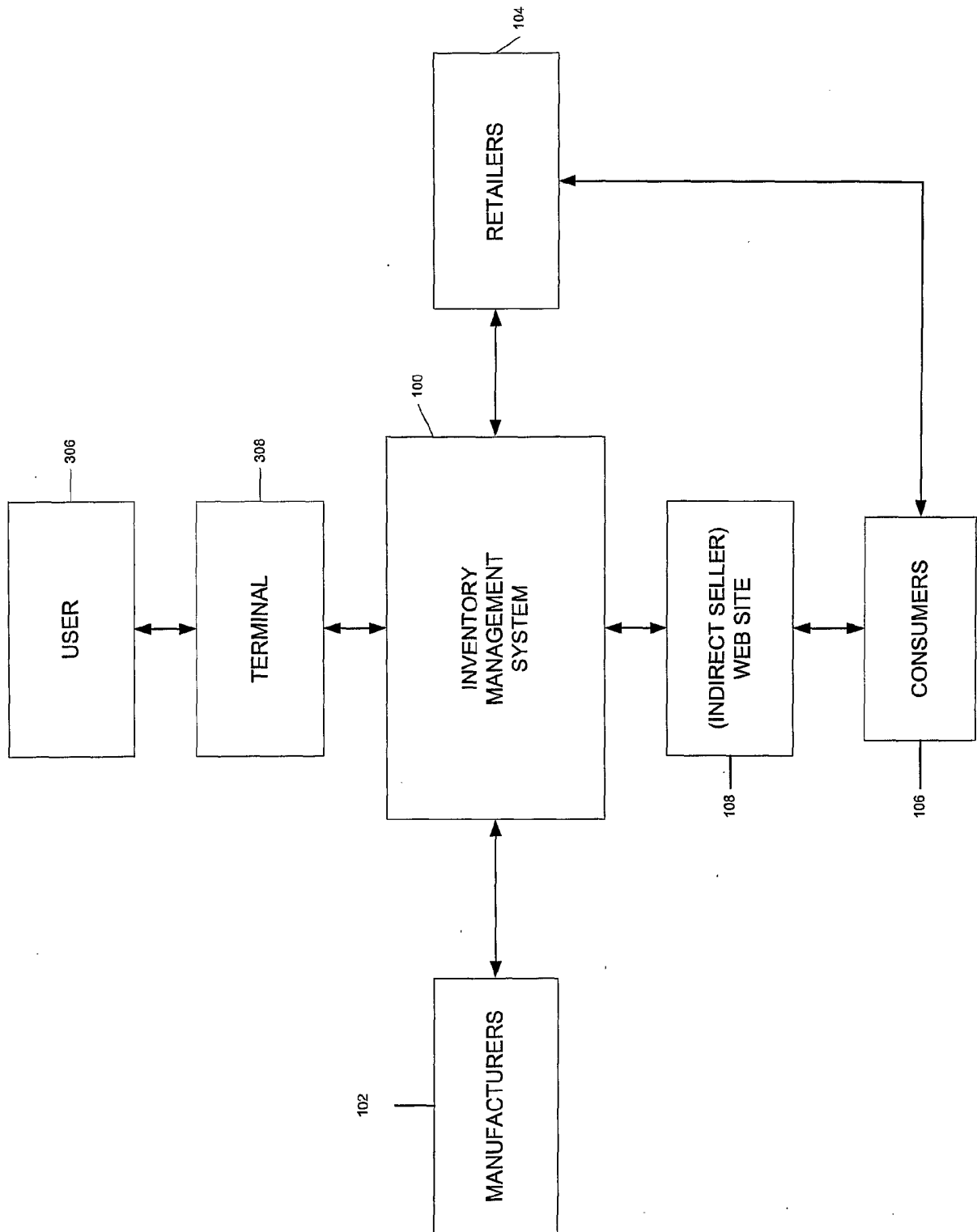


FIG 3

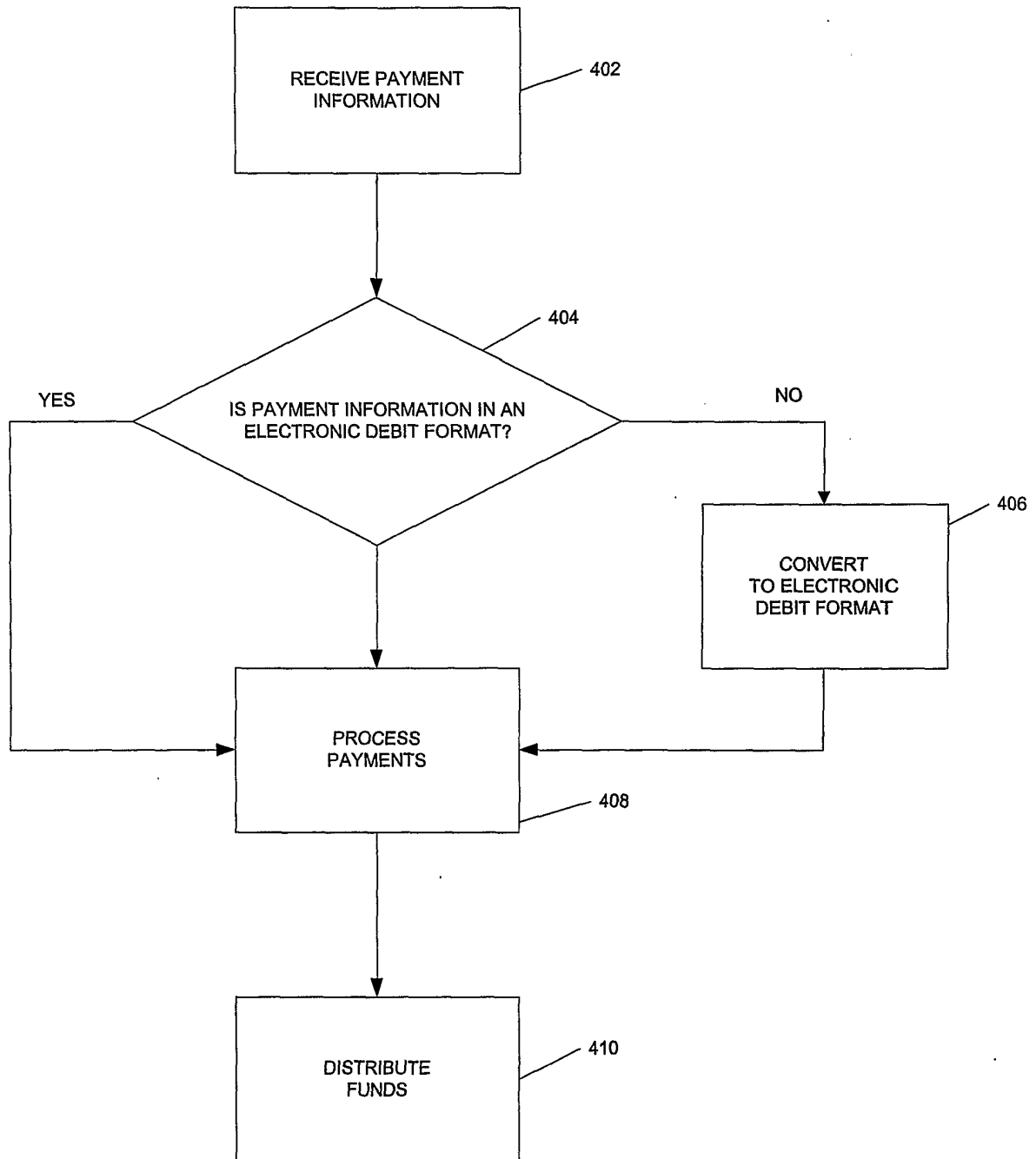


FIGURE 4

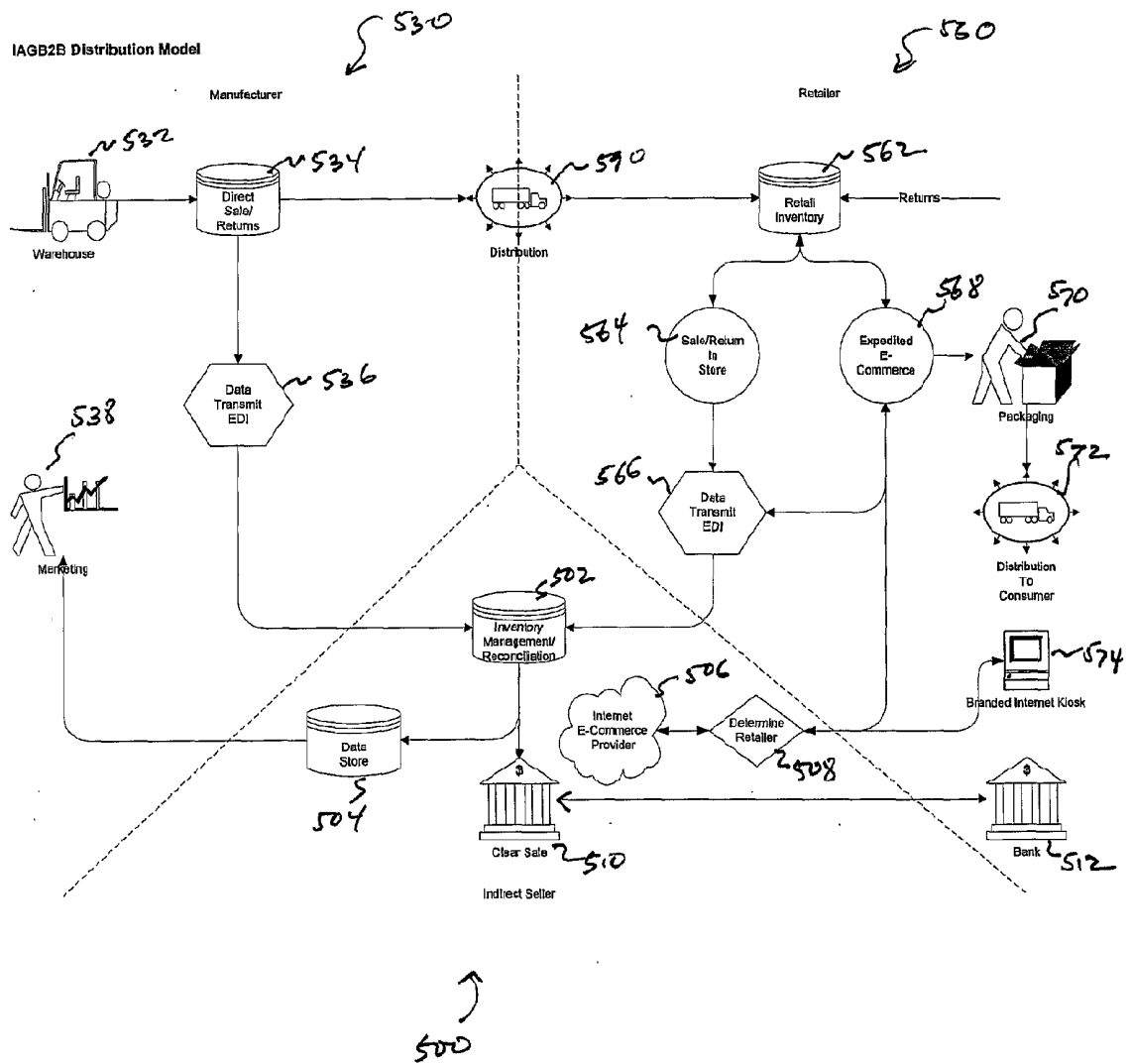


FIG. 5

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/26483

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60

US CL : 705/22, 26, 28

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. : 705/22, 26, 28

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)
BRS, Dialog**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DENNIS, Net Serves Up Service, Marketing Computers, December 1996, Vol. 16, No. 11, page 2, lines 1-19.	1-17
A	Virtual Retailing: Do It Best Introduces On-line Hardware Retailing Site, Do-It-Yourself Retailing, July 1999, page 2, 3rd paragraph.	1-17
A	FETTO, 'Twas Long Before Christmas, American Demographics, August 1999, page 2, 1st paragraph.	1-17
A, P	SPRINGER, Shopeaze, Haggan to Collaboate on Website, Supermarket News, 29 May 2000, page 1, last paragraph.	1-17
X	US 6,009,407 A (GARG) 28 December 1999 (18.12.1999), column 10, lines 1-21.	18-20
---		-----
Y		1-17
A	US 4,797,818 A (COTTER) 10 January 1989, column 2, lines 14-57.	1-17
A, P	US 6,249,772 B1 (WALKER et al) 19 June 2001 (19.06.2001), column 9, line 56 through column 10, line 9.	1-20
Y	US 5,978,774 A (ROGERS et al) 02 November 1999 (02.11.1999), column 8, line 58 through column 9, line 7.	12



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"B" earlier application or patent published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"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

26 September 2001 (26.09.2001)

Date of mailing of the international search report

28 JAN 2002

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

Robert Olszewski

Telephone No. (703) 305-3800

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/26483

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 6,085,172 A (JUNGER) 04 July 2000 (04.07.2000), column 2, lines 41-62.	12