REQUEST FOR BID METHOD

A method to request bids for products and/or services (202) over a communications network (100). A buyer submits a request for quotation (RFQ) (200) over the network (100) to a request for bid (RFB) application (110). The (RFB) application (110) converts the (RFQ) (200) to a sales lead (150) and submits it to vendors (V). The vendor (V) prepares a quotation (160) and sends it to the (RFB) application (110). The (RFB) application (110), in turn, generates and directs a buyer quotation (165) to the corresponding buyer (B). The buyer (B) can then contact the vendor (V) to accept or reject the buyer quotation (165).
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.
REQUEST FOR BID METHOD

BACKGROUND OF THE INVENTION

1. Field of the Invention. The present invention relates generally to the field of requesting bids for products and/or services. More specifically, the present invention discloses a method to request bids for products and/or services over a communications network.

2. Statement of the Problem. Economies are comprised of buyers and vendors of goods and services of all varieties. The manner in which they connect is often inefficient, costing society time and money.

Traditionally, vendors spend a lot of money to attract buyers and initiate a business transaction. Common strategies include: hiring sales and marketing people, attending trade shows, printing catalogs, and purchasing TV, radio, newspaper, trade publication, Yellow Page, signage, and billboard advertisements. And now, with the Internet available, vendors can add these strategies to the list: conducting extensive home page development, participating in search engine wars, purchasing banner ads, space on vertical and horizontal marketing hubs or portals, results from click-through shopping robots, participating in web auctions, etc. Often however, the vendor's promotional efforts land on people who are not interested that day in what the vendor is promoting. And when a buyer does contact a vendor, often the two parties find out that they are not a good match for the particular need the buyer has at that time (e.g., the vendor does not have the right products, or is unable to meet the buyer's timeframe or cost constraints, etc.).
Buyers also have problems locating an acceptable vendor. To find the vendor with the best combination of price, service, quality, reputation, geographic nearness and other desirable features, a buyer often checks the Yellow Pages, catalogs, trade directories, classified ads, Internet, personal acquaintances, etc. to develop a list of possible vendors. Then the buyer must contact each possible vendor, and separately convey to each one of them the buyer's particular need, and then proceed toward possibly making the purchase from one of them. And the Internet has not improved the situation much. Even with the latest e-commerce applications being used today, the buyer saves very little time, if any, in finding the best vendors and conducting the initial vendor screening. If the buyer does not do a thorough job of researching for the best list of possible vendors, the buyer can very well fail to meet the purchase goal at all, or pay too much, or receive too little for all of the time and effort and money spent in making the purchase.
SUMMARY OF THE INVENTION

The request for bid (RFB) method of the present invention is driven by the buyer to match buyers with a multitude of appropriate vendors while reducing or entirely removing the need for any initial screening. Any buyer, or potential buyer, can use the RFB application (e.g., an Internet application implementing the RFB method of the present invention) and communicate (e.g., directly online or by phoning a call center and instructing the operator), the buyer's immediate needs and initiate a process that results in the buyer receiving nearly instantaneous quotations or bids from vendors who feel they are a good match for the buyer's needs. Vendors that use the RFB application are able to cut much of their less effective marketing and promotional costs, and focus instead on working only with inexpensive pre-qualified RFB sales leads which they can examine in detail before purchasing them at a very small cost.

A primary object of the present invention is to provide a low cost, anonymous request for bid method to help the buyer with nearly any purchase of goods or services online.

Another object of the present invention is to provide vendor bidding where the vendors are bidding against each other and the price moves downward.

Another object of the present invention is to allow buyers and vendors to use the system even if they do not have Internet connections, since buyers and vendors can interface with the system via phone, mail, and fax as well as with an Internet connection.

Another object of the present invention is to provide the buyer with a detailed information form to fill out regarding the request for bid, so that the vendors do not need to contact the buyer to ask simple questions prior to submitting their bids.
Another object of the present invention is to allow vendors that register with the system to limit their sales leads to certain products and to customers residing in certain geographic areas.

Another object of the present invention is to allow the system owner to implement the system without needing vendors to pre-register with the system administrator; the administrator employs a database of virtually all vendors in the U.S. and foreign countries and sends sales leads even to vendors that have not pre-registered with the site owner.

Yet another object of the present invention is to provide bids after only minimal, if any, research and initial screening time. The buyer does not have to search the local Yellow Pages, the Internet, or any other directories to find qualified vendors. Nor does the buyer have to contact each vendor and repeat the same information to all of them in order to go through the initial screening process.

Yet another object of the present invention is to provide a search resulting in a predetermined number of prospective vendors wherein the search process first goes to the most specific category of buyers based upon conventional classifications such as found in the Standard Industrial Classification or in the Yellow Pages (or a combination of the two) and, if an insufficient number is found in the first level, then the search continues in each succeeding level of increased generality.

Yet another object of the present invention is to provide a list of prospective vendors from conventional databases such as those based upon the Standard Industrial Classification or the Yellow Pages (or a combination of the two) based upon the buying power of the buyer.
These and other advantages, features, and objects of the present invention are more readily understood in view of the following detailed description and the drawings.
BRIEF DESCRIPTION OF THE DRAWINGS

The present invention can be more readily understood in conjunction with the accompanying drawings, in which:

Figure 1(a) is a high level diagram showing the interaction between buyers, vendors, and the RFB application of the present invention over a network such as the Internet.

Figure 1(b) is a high level diagram of the network of Figure 1(a) showing the interconnection of each component on the network.

Figure 2 is a sample RFQ form for a refrigerator provided by the RFB application.

Figure 3 is a flowchart showing one embodiment of a user logon method of the present invention.

Figure 4 is a sample user profile selection page provided by the RFB application.

Figure 5 is a flowchart showing one embodiment of a buyer RFQ submission method of the present invention.

Figure 6 is a sample buyer page displayed by the RFB application.

Figure 7 is a sample category search results page provided by the RFB application.

Figure 8 is a flowchart showing RFB application functions available to the vendor.

Figure 9 is a sample vendor page provided by the RFB application.

Figure 10 is a sample page a vendor can use to refine a request to receive sales leads.

Figure 11(a) is a flowchart showing one embodiment of a method to process sales leads by the RFB application.
Figure 11(b) is a flowchart showing one embodiment of a method to select vendors for a particular sales lead by the RFB application.

Figure 12 is a flowchart showing one embodiment of a method to process vendor quotations by the RFB application.

Figure 13 is a flow chart showing one embodiment of a method to close an RFQ by the RFB application.

Figure 14 is a flow chart illustrating one embodiment of an exemplary method to request a quote from a buyer platform.

Figure 15 is a flow chart illustrating one embodiment of an exemplary method to generate a sales lead at a host.

Figure 16 is a flow chart illustrating one embodiment of an exemplary method to request a sales lead from a vendor platform.

Figure 17 is a flow chart illustrating a search for vendors through levels of generality.

Figure 18 is a flow chart illustrating a search for vendors based on the buying power of the buyer.
DETAILED DESCRIPTION OF THE INVENTION

1. Overview. Figures 1(a) and 1(b) show an overview of an implementation of the method of the present invention over a communication network 100 (e.g., the Internet, a telephony network, mail delivery etc.). As shown in Figure 1(b), an RFB application 110 allows any buyer (or potential buyer) 120 of goods or services to initiate a process that results in the buyer 120 receiving multiple buyer quotations 165 quickly and easily from various vendors 140. Preferably, the RFB application 110 provides this service to the buyer 120 at no cost, or else at a nominal cost so as to discourage any frivolous use. The buyer 120 initiates the process by accessing the RFB application 110 via the communications network 100 and submitting a request for a quotation (RFQ) 130 to a host 10 (e.g., by phoning a call center 60, accessing an Internet site 30, etc.). The buyer 120 is prompted for all or most of the pertinent information of the product (or service) which is fairly readily available to the buyer 120 and which a typical vendor 140 for the goods or services in question generally needs to know in order to provide a useful quotation and/or other useful information to the buyer 120. For example, this can be simply a category and model number or a detailed description including plans, drawings, or any other description.

The interconnection of buyers 120, vendors 140, and the RFB application 110 is shown in more detail in Figure 1(b). Any number of buyers 120 and vendors 140 can connect to the communications network 100 (e.g., Internet, Intranet, etc.) using conventionally available interfaces (e.g., a PC, laptop, PALM PILOT, digital phone having Internet service, etc.) through a direct connection 125, 145
(e.g., DSL), through a conventionally available Internet Service Provider (ISP) 30, through the postal system 40 conventional telephone networks such as a fax server 50 or call center 60, etc. Thus, the network 100 allows the buyer 120 and vendor 140 to communicate with the RFB application 110 by ISP 30, mail 40, fax 50, and phone via a call center 60. A host 10 is also connected to the network 100 through a direct connection 115 or ISP (not shown). The host 10 can be any conventionally available computer or computer network (e.g., PC, laptop, etc.) that is capable of executing the RFB application 110. The host 10 also has access to memory 20 (e.g., hard disk, RAM, ROM, any combination thereof, etc.) with which to store user profiles, billing information, RFQ's, etc.

It is to be expressly understood the configurations shown in Figures 1(a) and 1(b) are merely illustrative of an exemplary communication network system with which the method of the present invention can be carried out. Other configurations will become apparent to those skilled in the art and the method of the present invention is not intended to be limited by the configuration shown in these figures.

A sample RFQ form 200 (e.g., an electronic form or email) submitted by a buyer 120 (i.e., at the buyer interface or platform) over the network 100 to the RFB application 110 (i.e., to the host 10) is shown in Figure 2. Figure 2 illustrates a form in which the buyer 120 is asked several questions regarding a general request for a quotation on a product such as a refrigerator. Requiring the buyer 120 to submit this information in the RFQ form 200 saves the buyer 120 and the vendor 140 a large amount of time by eliminating a lot of repeated questions and discussions about what the buyer 120 needs. This increases the value of the sales lead 150 to the vendor 140
considerably. In a preferred embodiment, along with other common
questions a vendor 140 asks, the buyer 120 is requested to indicate
the strength of the local buying preference 210, the price range 220,
when the goods or services are needed 230 and where whether
service 240 and/or installation 250 is required, the time limit 230 for
how long a quotation will be accepted by the buyer 120, etc. The
RFQ form 215 contains all necessary questions to enable vendors
140 to bid or quote the product or service.

After the buyer 120 completes the RFQ form 200 and submits
this information as an RFQ 130 from the buyer interface over the
network 100 to the host 10, the RFB application 110 converts it
electronically using conventional sort, filter, and match routines into a
sales lead 150. Where the RFQ needs to be converted to a different
media (e.g., fax to email), this too is done by the RFB application 110
at the host 10. Conversion is well known, such as the conventionally
available services that automatically provide faxes to an email
address, or manual entry of data from order forms into computers.
The sales lead 150 is then distributed (e.g., various electronic means
such as email or fax, or non-electronic means such as mail or courier)
preferably at no charge, or for a small charge to discourage frivolous
use, to each vendor 140 that has registered with the RFB application
110 to receive that type of sales lead 150. The RFB application 110
may also select vendors 140 from a vendor prospect database if
there are not enough registered vendors 140 for a particular category.

The sales lead 150 which is provided to each vendor 140
includes most of the information submitted by the buyer 120,
including whether the buyer 120 is looking for new or used goods, or
parts, service (professional or otherwise), or assistance which the
buyer 120 requested in a more general or generic manner (e.g., a
written description 260). The sales lead 150 also preferably includes the price range 220 the buyer 120 is looking for, the strength of the buyer's "buy local" preference 210, and the time limit 230 for a vendor 140 to submit a quote. The sales lead 150 preferably omits the buyer's identity, or enough information about the buyer 120 to allow a vendor 140 to contact the buyer 120 directly in any manner. It does, however, include sufficient geographical information about the buyer 120 to help the vendor 140 evaluate the sales lead 150 and determine how to respond to the sales lead 150 based on the geographical location of the buyer 120. Furthermore, the sales lead 150 includes the buyer 120 purchasing history (how many times that buyer 120 buys from an RFB application vendor 140 to fulfill the purpose of an RFQ 130), the category purchasing history (how many times that item, such as a refrigerator, is purchased from a vendor 140), and all other information which the RFB application 110 can readily provide to help the vendor 140 evaluate the sales lead 150. Finally, the sales lead 150 also includes the cost of the sales lead 150 should the vendor 140 decide to purchase it. The cost is preferably calculated by the RFB application 110 based on a linear mathematical formula as applied to the high end and low end of the project price range 220 specified by the buyer 120 in the RFQ 130. Calculating the cost of the sales lead 150 in this manner eliminates the need for human intervention and results in a sales lead 150 cost which is somewhat proportionate to the size of the transaction.

It is to be expressly understood that any quantity or type of product or buyer information can be requested, either additional information or less than that described above for Figure 2. Preferably the questions are categorized in detail so as to more readily match a buyer 120 with a vendor 140. However, written descriptions can be
used and sorted using Boolean identifiers or manually read and converted by an administrator of the RFB application 110. Furthermore, any method of calculating the cost of a sales lead 150 can be used and is not to be limited to the linear mathematical formula described above. For example, a fixed fee, percentage (e.g., commission), or external advertising can be used to eliminate the cost to both buyers 120 and vendors 140.

If a vendor 140 decides not to purchase the sales lead 150, the vendor 140 merely discards it. If a vendor 140 decides to purchase the sales lead 150, the vendor 140 can communicate that intention to the RFB application 110 by merely replying to the sales lead 150, by email or otherwise (e.g., phone, pager, courier, fax, etc.), with a vendor quotation 160. The vendor quotation 160 is physically sent to the RFB application 110, but the content of the vendor quotation 160 is intended for the buyer 120 that submitted the RFQ 130. A vendor quotation 160 preferably includes one or more of the following items in the body of the quotation or in documents attached, electronically or otherwise, to the quotation: a quoted price to the buyer 120, a request for more information from the buyer 120 (e.g., so that accurate pricing can be provided later), the Internet address where the buyer 120 can learn more about the vendor 140 or its products, delivery time, credit terms, product features, service and other special capabilities of the vendor 140, and any other information which the vendor 140 desires to provide to the buyer 120 so that the buyer 120 has an incentive to pursue the process of possibly making a purchase from that vendor 140.

When the RFB application 110 receives the quotation 160, the RFB application 110, in the case of a registered vendor, debits the vendor 140 account for the cost of the sales lead 150, and, by email,
fax, mail, or otherwise, the RFB application 110 forwards a buyer quotation 165 (i.e., containing appropriate routing instructions, such as an email address or fax number) to the buyer 120.

It is to be expressly understood that accounts are conventionally established and maintained and the method of the present invention is not to be limited by the precise method of establishing and maintaining those accounts. For example, the buyer 120 and the vendor 140 can establish accounts with the RFB application 110, or by a separate application or even separate account management server (not shown). Alternatively, conventional billing (e.g., a monthly statement sent to the buyer 120 or vendor 140), or credit card billing (either by telephone, by email, fax, or by written agreement) can be used.

Once the RFB application 110 has forwarded a buyer quotation 165 to the buyer 120, it is up to the buyer 120 to decide whether or not to conduct business with that vendor 140. Preferably, when the buyer 120 chooses to ignore or discard a buyer quotation 165, that vendor 140 never knows who the buyer 120 was. Hence, the buyer's identity is protected from aggressive vendors 140 and from marketing companies which otherwise would have tried to make a profit by learning the buyer's name and purchasing profile.

To assist the buyer 120 in making a decision about which buyer quotation 165 to work with, the buyer 120 can enter the RFB application 110 and check for references about experiences which other users of the RFB application 110 have had with that vendor 140. If a buyer 120 decides to pursue a business transaction with a vendor 140 that provided a buyer quotation 165, the terms and conditions of the transaction are negotiated directly between the buyer 120 and the vendor 140, and the RFB application 110 has no
further involvement with the parties other than to gather information later which can be used to profile the buyer 120, the vendor 140, and the category of product specified in the RFQ 130.

It is to be understood that some communications between the buyer 120 and vendor 140, and indeed, even between the buyer or vendor and the RFB application administrator can be over one or more of many different communication networks including: the Internet, an Intranet, phone, pager, fax, etc.

2. Preferred Rules. In a preferred embodiment, the RFB application 110 acts only as a facilitator and not as the agent of either the buyer 120 or the vendor 140. For example, the RFB application 110 does not guarantee fitness of purpose or quality of any item or service purchased with the aid of this RFB application 110. Nor does the RFB application 110 guarantee the ability of the vendor 140 to provide the required product. The RFB application 110 does not guarantee the quality of any buyer quotation 165. Similarly, the RFB application 110 does not guarantee creditworthiness of any buyer 120, or that the buyer 120 will purchase the product or service which is the subject of a sales lead 150. Nor does the RFB application 110 guarantee the quality of any sales lead 150. In other words, preferably the RFB application 110 does not recommend or otherwise vouch for any vendor 140 or buyer 120. It is to be expressly understood that in other embodiments, any one of the above could be performed by the RFB application.

Also in a preferred embodiment and to help ensure the continued integrity of the RFB application 110, the buyer 120 must provide a valid email address and is asked to fill out a short survey explaining the results and satisfaction of each prior use. Preferably, the survey asks whether the buyer 120 purchased the product from a
referred vendor 140, or a different vendor 140, or did not purchase the product at all. If the buyer 120 purchased the product from a referred vendor 140, the buyer 120 is asked to rate the vendor 140 on responsiveness, knowledge, and the overall buying experience. A buyer 120 is also able to make other comments about the vendor 140 or the RFB application 110.

For security, preferably the buyer 120 name and other information is not sold or otherwise provided by the RFB application 110 to any third party. Similarly, the vendor 140 name and other information is not sold or otherwise provided by the RFB application 110 to any third party. Since the buyer 120 controls whether a vendor 140 ever learns the buyer 120 identity, the buyer 120 is protected from fraud since any specific vendor 140 can be checked out before the buyer 120 reveals its identity to that vendor 140.

3. **Accessing the RFB Application.** Figure 3 illustrates a method for a user to access 300 the RFB application 110 as a buyer 120 or as a vendor 140. This operation can be performed by the user directly or by a call center operator 60 when phoned by the user. It is possible to be both a buyer 120 and a vendor 140 under the teachings of the present invention. Both the buyer 120 and the vendor 140 can log onto the RFB application 110 and, from the first screen, be directed 300 to information on how the RFB application 110 functions and gain access to frequently asked questions, instructions, buyer 120 and vendor 140 and product category reviews, and an explanation of the rules discussed above.

In step 310, the RFB application 110 requests the user to register if he or she has not already done so. Once the user registers 312, he or she can create any number of profiles (i.e., buyer profiles, vendor profiles, or both) in steps 314, 316, 318, 320, and 325. In step
314, the user is queried whether to register in stage 318 as a buyer 120 or in stage 316 as a vendor 140. In addition to providing billing information, shipping location, etc., these buyer profiles 318 can be used, for example, to track a buyer's purchases to determine whether the buyer is a serious buyer, and if so, to target the buyer for special promotions or offers. Likewise, the vendor profile 316 can be used to assure buyers that the vendor delivers on time, accepts no-hassle returns, etc. For buyer profiles, information collected preferably includes the name and address, a valid email address, valid credit card information (to screen out some fraudulent, non-creditworthy, or underage buyers 120), and whether the buyer 120 is typically shopping for consumer needs or business needs or both. Consumer buyers 120 are further prompted to select the household income from a list of ranges. Business buyers, on the other hand, are prompted to select the number of employees and gross sales of the business, from a list of ranges, and are also asked to provide a SIC code number and/or a brief one-line generic description of the business which does not contain any specific identifying features such as the name of the business. Once the buyer 120 has submitted this information, an acknowledgment of this profile entry is emailed to the address entered during profile registration in step 320 and the buyer 120 is required to reply to this acknowledgment before the profile is activated. Once the response is received, the credit card number is verified, the account is activated, and the buyer 120 receives a second email notifying him or her that the account is available to be used and the buyer 120 can then log on in step 330. The user can also create another profile in step 325 which repeats the above.

As mentioned, the user can also create vendor profiles in stage 316. Information collected includes the vendor 140 name and
address, a valid email address, DUNS number if applicable, and valid credit card or billing information. The vendor 140 can be charged a small fee for registering with the RFB application 110. Once the vendor 140 has submitted this information, an acknowledgment of this profile entry is emailed to the vendor 140 in step 320. The vendor 140 is required to reply to this acknowledgment before the account is activated. Once the response is received, the credit card number is verified and charged, the account is activated, and the vendor 140 receives a second email notifying him or her that the account is available to be used and is logged on in step 330.

Once a user is logged in in stage 330, he or she is presented with a survey request in step 340 for each previous RFQ 130 which is closed and for which the buyer 120 has not yet submitted the survey. If the user is in a hurry, he or she is given some flexibility to temporarily bypass 336 any or all surveys 340. The user can also create after log in and at any time in the future additional buyer or vendor profiles in steps 350, 352, 354, 356, and 358. The user can edit any of his or her profiles in steps 360, 362, and 364. The user can also provide feedback to the administrator of the RFB application 110 described in steps 370 and 372. In steps 380 and 382, the user can choose which profile, buyer B (Figure 5) or vendor V (Figure 8), he or she wishes to use for the current session. Figure 4 shows an example logon of a user having three profiles (two are buyers and one is a vendor) page 400 displayed by the RFB application 110 in step 330 allowing the user to perform the functions described above.

It is to be expressly understood that any logon procedure can be used under the teachings of the present invention. The above method has been described as illustrative of an exemplary method for logging on buyers 120 and vendors 140 to the RFB application 110 of
the present invention. However, the method of the present invention is not to be limited by the exact method of logging on a buyer 120 or a vendor 140. Indeed, in one embodiment where the RFB application 110 is paid for entirely by advertisements and not through fees to either the buyer 120 or the vendor 140, the buyer 120 and vendor 140 need not be logged on at all, and information contained in the RFQ 130 and the vendor's response will be sufficient to route the RFQ 130, the sales lead 150 and the quotation 160.

4. Submitting an RFQ. In Figure 5, a buyer B enters stage 500 with the buyer page displayed 600 in Figure 6. This operation can be performed by the user directly or by a call center operator when phoned by the user. The buyer 120 is able to develop an RFQ 130 (e.g., see the sample RFQ selection page 600 in Figure 6) in steps 530 and 532 (Figure 5), in addition to editing or reviewing existing RFQ's 130 (e.g., see area 620 in Figure 6), the buyer 120 can use the RFB application 110 search engine to search 532 (and area 610 in Figure 6) for a defined category of goods or service that matches what he or she wants (see the search results page 700 in Figure 7 for the search string "refrigerator"). This is the preferred method, as the system then prompts (area 710 in Figure 7) the buyer 120 to enter the specific information which is usually required by a vendor 140 in order for the vendor 140 to provide a high quality quotation (Figure 2) as the first communication between the parties. The buyer 120 enters text in area 610 of the RFQ page 600 (see Figure 6) to search for the best category in step 532. For instance, "bike" may be broken down as "bikes, mountain", "bikes, city" "bike rack", etc., with each having their own associated RFQ 130.

All RFQs 130 based on a specific category include an RFQ ID 622 (such as the Category, Date, Time, and a three-digit number
counting the number of RFQ 130 for that minute, i.e., AUTO1 99909271230001 for category “auto,” year “1999,” month “09,” day “27,” time “12:30,” and three digit number “001.”); number of days the RFQ 130 is open; the date the product is required or if this RFQ 130 is for budgeting purposes only; the local buying preference 210 (Strong, Medium, or Not an Important Factor); the buyer 120 expected price range 220; whether the product requested is to be new or used, or whether the RFQ 130 is a request for service; and whether the product is whole goods or parts.

Once the RFQ 130 is submitted in step 533 (Figure 5), the buyer 120 is sent (e.g., by email) an acknowledgment with the RFQ data. The RFQ 130 is then converted 534 to a sales lead 150 by calculating and adding the price for the sales lead, category information regarding the number of RFQ 130 that usually results in a purchase for that category, information about how often the buyer 120 actually makes a purchase through the RFB application 110, the average number of vendors 140 who quote this category, and the buyer 120 income if it is a consumer buyer 120 or the buyer 120 sales size and number of employees if it is a business buyer 120. The resulting sales lead 150 is posted in a mailbox for processing in step 534 to ultimately be sent to each registered or prospective vendor 140 whose RFQ 130 selection profile matches the RFQ 130. Preferably, the vendor 140 is never provided with enough information about the buyer 120 to contact the buyer 120 directly. The buyer has a choice in step 536 to view relevant advertising and, if yes, then step 538 is entered to which displays the advertising.

A buyer 120 entering an RFQ 130 on the RFB application 110 has the option to make the RFQ 130 very specific. For instance, a consumer buyer 120 can specify a clothes washing machine to be
"almond color, 36" x 48" x 34", Sears model 865425T or equal". Or an industrial buyer 120 can specify an electric motor to be "50 hp, Baldor high efficiency Gold Series, frame #324T, 3600 rpm, TEFC enclosure". In the alternative, the buyer 120 can leave some specificity out of the RFQ 130, and submit a generic request such as "cost to replace thirty windows in my house with triple pane glass" or "cost to repair 1970 model Wilcox 200 hp boiler, horizontal tube type", to see what the various vendors 140 propose.

The RFQ 130 preferably gets results within the buyer-specified timeframe and price range, and within the buyer-specified preferences for wanting a local supplier and local service.

The buyer 120 from stage 500 in Figure 5 can also request a new category with the method shown by steps 520 and 522.

The buyer 120 from stage 500 in Figure 5 can also update 540 an existing RFQ 130. This page is similar to the page where the RFQ 130 was originally entered (see Figure 2). The RFQ 130 is processed the same way except the sales lead 150 sent to the group of vendors 140 is tagged as revised and can be re-quoted at no charge by all vendors 140 who had already purchased the original sales lead 150.

Once the buyer 120 receives quotations 165 from vendors 140, the buyer 120 can look up vendor information in step 512 by vendor ID. The vendor information listed includes the name, city, state, country along with any information submitted by other buyer 120. The buyer 120 also has the option to add information about the buyer’s experience with the vendor 140 on this page.

5. Repeleying to an RFQ. This operation can be performed by the user directly or by a call center operator when phoned by the user. Figure 8 is a flow diagram showing vendor profile functions. The vendor 140 is able to obtain a list in steps 810 and 812 of any sales lead 150 the
vendor 140 has purchased. The list also shows the corresponding buyer 120 survey results when available, and any comments the buyer 120 entered regarding a specific sales lead 150 or RFQ 130 via the buyer comments page.

The vendor 140 can also purchase credit online in step 820 via a conventional SSL (Secure Socket Layer) page 822. The vendor 140 must have enough credit on account with the RFB application 110 to cover the price of a sales lead 150 being purchased or else the RFB application 110 does not forward the quotation 160 to the buyer 120. An acknowledgment of each purchase is sent in step 824 to the vendor 140, along with a statement of the credit remaining on the vendor’s 140 account.

One of the vendor 140 functions is to enter criteria in step 830 for the RFB application 110 to use in determining which sales lead 150 should be forwarded to the vendor 140 (e.g., using vendor page 900 in Figure 9). The vendor 140 can receive sales leads 150 where the buyer 120 has submitted an RFQ 130 for a category of products or services which the vendor 140 is interested in. To accomplish this, the vendor 140 can search (field 930 in Figure 9) the category database in steps 832, 834, in the same manner as the buyer 120 does in building that type of RFQ 130, to determine which categories exist and to select which categories the vendor 140 wants to receive sales leads 150 for in step 834. If a desired category is not found, the vendor 140 is given the option to request one in step 836. The request is emailed to the RFB application administrator. For each category selected by the vendor 140 as one which the vendor 140 wants to receive sales lead 150 for, the vendor 140 is prompted in screen 1000 to enter keywords (e.g., under the functions INCLUDE
1010a and EXCLUDE 1010b) to further define the vendor's selection in step 840 (as shown in Figure 10).

For example, an industrial pump parts vendor 140 can receive sales leads 150 for all RFQ's 130 for the category PUMP with the words "pump" and "parts", but not if the buyer 120 was looking for parts for a water pump used on a car engine. Therefore that vendor would enter "pump" and "parts" into the INCLUDE keyword field 1010a (Figure 10) and "auto" and "car" into the EXCLUDE keyword field 1010b of page 1000. This causes the vendor 140 to receive a sales lead 150 when the RFQ 130 contains the words "pump" and "parts", but not if the RFQ 130 also contains either the word "auto" or "car". In step 842 the vendor can select in page 1000 the geographical area 210 desired for that category. This geographical selection can be done by state 210a, city and state 210b, by the first 3 digits of the zip code 210c or any other suitable method in fields 210(a), 210(b), and 210(c) of Figure 10. The vendor can opt to receive sales leads from any location by checking field 1020. The system then displays 838 the list of open RFQ 130 which match the selected categories. If the result is not what the vendor 140 expects, the vendor 140 can edit in stage 850 keyword and geographic entries until a satisfactory result is achieved in step 850. After the vendor 140 has completed the task of selecting categories, the system searches all the open RFQs 130 and generates sales leads 150 for the vendor 140 based on the new criteria in step 852. The vendor has the option of viewing relevant advertising in step 860 for display in step 862.

Other embodiments can be practiced under the teachings of the present invention and the method of the present invention is not to be limited by the precise steps or order of steps discussed above.
6. Distributing Sales Leads to Vendors. Figures 11(a) and 11(b) are flow charts illustrating the method the RFB application uses to distribute the sales leads to vendors 140. The selection of registered vendors 140 to receive the sales lead 150 is described by step 1110 of Figure 11(a) and detailed by Figure 11(b). All vendors 140 which have requested to receive the sales leads 150 for this category are selected. Each vendor's keyword selection data is in turn compared to the sales lead in steps 1135, 1138, 1140, and 1142. If the sales lead 150 is a match for the vendor's keyword selection the sales lead 150 is compared to the vendor's geographic selection data in steps 1150, 1160, 1162, 1170, 1172, 1180, and 1182. If the vendor's geographic selection data also matches the sales lead 150, the vendor is sent the lead in step 1190 and the RFB application 110 keeps track of the number of matching vendors. If any of the keyword or geographic selection data specifically rejects the sales lead 150, the vendor is not sent the lead and the RFB application 110 considers the next vendor 140 in step 1194 for the category. This process continues until all the registered vendors for the category have been considered.

Once this has completed, the RFB application 110 compares the number of distributed sales leads with a predetermined number required for the category in step 1112. If the sales lead 150 has not been distributed to enough vendors 140, then the RFB application 110 selects enough prospective (non-registered) vendors in step 1114 to meet the requirement starting with the closest prospective vendor geographically. Prospective vendors are selected from a stored and presorted database of virtually all vendors in the country or the world as will be discussed more fully herein.
Prospective vendors include manufacturers of the item, wholesalers, distributors, and service providers. It is anticipated that a sales lead which is sent to the manufacturer of the item will, as a matter of good business practice, typically re-send the sales lead to several dealers so they may offer a quotation for the sales lead. Thus almost all sales leads are expected to receive vendor quotations. If there are not enough vendors (prospective or registered) to send a sales lead to, or if their are no vendor quotations being submitted for a open sales lead in step 1116, the RFB application 110 notifies the administrator in step 1118. Otherwise the sales lead is tagged as being processed in step 1120.

With each sales lead 150 sent to a prospective non-registered vendor 140, there is a risk that the vendor receiving the sales lead 150 is not a good match for that sales lead. But the cost of sending the sales lead 150 is still a good investment for the system owner, in that the sales lead 150 can include verbiage to encourage the vendor 140 to register with the system in order to receive the exact sales leads it really does wish to receive, and the verbiage can encourage the vendor to use the system as a buyer as well as a vendor. Thus, each sales lead 150 sent out has a strong marketing message for the system owner, even if the sales lead 150 goes to a non-appropriate vendor 140. For example, if no vendors are registered and the first sales lead is sent to forty prospective vendors, perhaps 5% of them (i.e., two vendors), will end up using the system themselves as a buyer within 30 days of receiving the initial sales lead. If the sales leads they create as buyers 120 are also each sent to forty vendors 140, and so on, that initial single sales lead 150 will result in 2048 sales leads 150 being generated in the twelfth month. It is anticipated that this method of implementing and marketing the system, (i.e., to
send out sales leads 150 to vendors 140 (including dealers, distributors, wholesalers, retailers, etc.) that have not pre-registered, will be much more cost effective than spending tens of millions of dollars in advertising to get vendors 140 to pre-register.

7. Handling Vendor Quotations. Figure 12 is a flow chart illustrating an embodiment of the method of the present invention for handling vendor quotations 160. When the RFB application 110 receives a quotation from a vendor 140 in step 1200, it checks 1220 whether the associated RFQ 130 is still open. If it is not, the vendor 140 is notified of closure in step 1225. If the RFQ 130 is still open, the RFB application 110 checks 1230 if the quotation file size is greater than 10k or whatever limit is established at the RFB application 110. If the file size is too large, the vendor 140 is notified in step 1235 that it is too large. If the quotation file size is within the allowable limit, the RFB application 110 checks 1240 if the vendor 140 has previously purchased this sales lead 150. If the vendor 140 has, but the Buyer has since updated the RFQ, the RFB application 110 forwards the quotation to the buyer 120 in step 1244. An acknowledgement is sent in step 1244 back to the vendor. If the buyer 120 has revised the RFQ 130, it is also forwarded. If the vendor 140 has not already purchased this sales lead 150, the RFB application 110 checks 1250 if the vendor 140 has enough credit to cover the price of the sales lead 150. If not, the RFB application 110 sends the vendor 140 a note on how to buy credit and resubmit the quotation in step 1252. If the vendor 140 has enough credit to cover the price of the sales lead 150, the RFB application 110 charges 1254 the vendor 140 account for the sales lead 150, attaches the vendor ID, forwards the quotation to the buyer 120 in step 1256, and sends an acknowledgment of these actions to the vendor 140 in step 1258.
8. **Closing an RFQ.** Figure 13 illustrates a method for closing an RFQ 130. The procedure to close RFQ 130 starts at a predetermined time (e.g., every morning at 12:00 am) in step 1300. The RFB application 110 selects 1310 all RFQs 130 with closing dates less than the current system date. All the selected RFQs 130 are marked 1320 as closed and the associated functions are terminated. An acknowledgment is emailed to the affected buyer 120 in step 1330.

9. **Vendor Considerations.** The RFB application 110 offers vendors 140 a way to secure a good qualified sales lead 150 at little if any cost and the vendor 140 can simply discard any unwanted sales lead 150.

   The vendor 140 can make intelligent decisions about which sales leads 150 to buy and how to handle them. The first screening occurs by the manner in which the vendor 140 has gone to the RFB application 110 and chosen which sales lead 150 to receive based on geography, buyer profile, and product categories. Then, when the individual sales lead 150 arrives, it also contains a wealth of information as described above to further help the vendor 140 determine whether the sales lead 150 should be purchased. And with each sales lead 150 that arrives, since the urgency of the sales lead 150 is indicated, the vendor 140 can assess and adjust its sales resources as necessary to handle the sales lead 150 in the order which is apt to result in the most profit being generated.

   To purchase a promising sales lead 150, the vendor 140 simply sends to the RFB application 110, by reply email or fax for example, a "quotation" for that particular sales lead 150. There are no other communications required. The quotation 160 can include price, terms, delivery time, the vendor 140 RFB application 110 address, a sales pitch, and any other information the vendor 140 wants to
convey to the buyer 120. Or, in the alternative, the vendor 140 can simply send a general response to the buyer 120 asking the buyer 120 to contact the vendor 140 to discuss the project, etc. The possibilities are endless on how the vendor 140 can attempt to secure the sale from the buyer 120.

The vendor 140 also has the option to buy the same sales lead 150 twice. For instance if, on October 5, a buyer 120 has submitted an RFQ 130 to buy a used 4x4 truck in the $20,000 price range, and the RFQ 130 is open until October 15, the vendor 140 can, on October 8 buy the sales lead 150 and submit a quotation to the buyer 120. But if, on October 12, the vendor 140 receives a truck into inventory which matches the buyer 120 needs better, the vendor 140 can then buy the sales lead 150 again on October 12 by submitting another quotation to the same buyer 120. Alternatively, if the Buyer makes updates to an RFQ, the vendor 140 is able to update a quotation at no additional charge.

The vendor 140 can gain a long-term repeat customer by buying a sales lead 150 one time and getting the sale and serving the customer so well that the customer never looks anywhere else for that type of product.

A vendor 140 can use several methods to obtain business with the RFB application 110. For instance, if there is a vendor 140 which sells window awnings, it can buy a sales lead 150 where the buyer 120 is asking for steel siding for a house, because the best time to install window awnings is when the house is being re-sided. Or, a company which sells insurance for sports cars can purchase a sales lead 150 where the buyer 120 is looking for a Corvette.

A vendor 140 can start out by requesting more sales leads 150, and buying more sales leads 150 than they can realistically hope
to get orders for. But, over time, each vendor 140 finds its own niche using the present invention, focuses their efforts on what they do best and purchases only the sales leads 150 they can reasonably hope to generate profits from. Preferably, vendor 140 can cut their Yellow Page advertising, Internet advertising, and all other media advertising, while still increasing their sales and profits. Also, importantly, this system allows all vendors 140 to compete on a fairly level playing field; even a small local hardware store with a simple computer for receiving email, and no web page or a fax or phone, is able to bid on all sorts of projects, and get the orders in the areas it serves well.

10. Consumer to Consumer Sales. In one embodiment, consumer to consumer sales can be made under the teachings of the method of the present invention. Today, if a consumer has for sale, for example, a used RV, the consumer has the option to advertise it in various media or to place it into an auction, which can be an expensive process in terms of time and commissions, etc. That same person, using the RFB application 110 as a vendor 140, could, for free or nearly free, ask to receive sales leads 150 on all buyers 120 looking for a used RV. Then the vendor 140 could market the RV to individual prospects, one at a time, until it was sold. Based on the simplicity of selling an item by this method, the RFB application 110 is used by many consumer vendors 140 instead of the other methods now available to them, such as web auctions.

11. Costs and Profits. The cost which the RFB application 110 charges a vendor 140 for a sales lead 150 can be easily computed without human intervention based on the price range specified by the buyer 120 in the RFQ 130. For instance, the sales lead 150 cost can
be calculated as the average price of the high and low range, divided by one thousand. Then, for example, an RFQ 130 for a refrigerator with a price range of $300 to $700 yields a cost of $0.50 for the sales lead 150. Furthermore, the buyer 120 can be expected to put realistic values into the price range, so that vendors 140 are encouraged to purchase the sales lead 150 and give the buyer 120 a quotation.

For each RFQ 130 that a buyer 120 generates, the RFB application 110 can expect to sell the corresponding sales lead 150 to possibly twenty different vendors 140. So on the refrigerator example given above, the RFB application 110 could expect to make about $10 gross profit (twenty sales of the sales lead 150 x $0.50 each). It is quickly seen that $10 is 2% of the $500 midpoint of the RFQ 130 price range.

It is to be expressly understood that any method can be used to generate revenue from use of the RFB application 110 including, but not limited to, external advertisements (banner advertisements), or buyer 120 fees (e.g., similar to a classified ad), etc. The method of the present invention is not to be limited by the method used to generate revenues.

The RFB application 110 is a simple, neat and focused business. There are no warranty problems relating to goods and services, no shipping problems, no credit risks, and no brick and mortar requirements. The RFB application 110 is not in competition with, or causes a conflict of interest with, any vendor 140 or buyer 120.

Furthermore, consulting services can be offered to assist vendors 140 in deciding which sales lead 150 to buy, showing vendors 140 how to formulate effective Boolean expressions, showing vendors 140 how to improve their quotations, etc.
12. **Exemplary Methods.** Figures 14, 15, and 16 are described below and set forth exemplary methods of implementing the present invention. It is to be expressly understood that the scope of the present invention is not to be limited to these examples.

(a) **First Example**

In Figure 14, a buyer (i.e., at a buyer platform 120) requests a quote in step 1400 by assembling (i.e., entering quote data 215 and optionally a geographic preference 210) a request for quote (RFQ) 130 using form 220 in step 1410 and transmitting the request for quote 130 over the communications network 100 to the host 10 in step 1420. The host 10 processes the received request for quote 130 by searching a vendor database 1450 (i.e., stored in memory 20) for matching quote data 215 and geographic preference 210 and selecting at least one vendor platform 140 based on the closest match in step 1430. In step 1440, the host 10 generates a sales lead 150 using the quote data 215 and geographic preference 210 while retaining the buyer identity in confidence which is delivered to the vendor platform 140 identified as a match by the host 10 in step 1430. The vendor (i.e., at vendor platform 140), generates a vendor quotation 160 in step 1460 in response to the sales lead 150, which is returned to the host 10 in step 1470. The host 10 processes the vendor quotation 160 by assembling a buyer quotation 165 (e.g., by adding the buyer identity and routing information such as an email address or fax number) in step 1480 and returns the buyer quotation 165 to the buyer platform 120 in step 1490.

It is to be expressly understood that the terms buyer platform, host, and vendor platform refer to any suitable platform that can communicate over the communications network 100, such as, but not
limited to, a computer, an Internet appliance, a telephone or wireless phone, facsimile machine, etc. Likewise, the host can be fully automated or a live person interacting with a computer. The communications network 100 can be any suitable network such as, but not limited to, satellite, radio transmissions, telephone networks, Internet and Intranet networks, etc. It is to be expressly understood that the vendor database 1450 can include both registered vendors and prospective vendors, as explained above. It is also to be understood that the buyer platform 120 can take different forms at different steps. For instance, the request for quote 130 can be assembled using a computer connected to the host 10 over the internet, the sales lead 150 can then be delivered to the vendor via facsimile, the vendor can return the vendor quotation 160 to the host 10 via email, and the buyer quotation 165 can be sent via courier to the buyer.

Also, as explained above in more detail with reference to Figure 2, the request for quote form 200 further includes additional text fields (e.g., 205 and 207) within at least one of a plurality of predetermined categories 202 (e.g., "Refrigerator") that the user can use to further specify quote data 215.

(b) Second Example

Figure 15 illustrates a method to generate a sales lead at the host 10 based on a request for quote 130 received from the buyer platform 120. The host 10 begins in step 1500 by accessing the memory 20 in which the vendor database 1450 is stored. In step 1510, the host 10 first searches a registered vendor database 1450(a) containing vendors that have pre-registered with the RFB Application 110. In step 1520, the host 10 selects at least one vendor from the
registered vendor database 1450(a) with at least one sales lead category 1010 that matches the request for quote category 202. In step 1525, if the predetermined number of vendors were selected from the registered vendor database 1450(a), the host 10 proceeds 1527 to step 1570 to send sales leads 150 to the selected vendors. However, when less than a predetermined number of matching vendors (e.g., no vendors, or less than 10, etc.) are identified and selected from the registered vendor database 1450(a), the host 10 then proceeds 1522 to access the vendor prospect database 1450(b) in step 1530. In step 1540 the host 10 selects vendors from the vendor prospect database 1450(b) with at least one vendor category 1010 that matches the request for quote category 202 provided by the buyer in the request for quote 200. In step 1550 the host 10 checks whether a predetermined number of vendors were selected and if not 1552, the administrator platform (e.g., the RFB Application administrator's computer, cell phone, pager, etc.) is notified so that appropriate action can be taken (e.g., manual selection, a “Try Again” message sent to the buyer, etc.). Alternatively, in step 1560, a “Try Again” message can be automatically generated by the host and sent to the buyer platform 120. Otherwise, where the predetermined number of vendors were selected from the vendor database 1450 1554, the host generates sales leads 150 and sends the sales leads 150 to the selected vendor platform in step 1570.

It is to be expressly understood that the vendor database 1450 can be a single database or multiple databases, and is preferably divided into vendors that have pre-registered with the host 10 to receive sales leads 150 and prospective vendors who have not yet registered (e.g., a business directory, a service provider directory, etc.). Furthermore, the database 1450 can be edited and maintained
in any suitable manner so that the host 10 can access registered
and/or prospective vendors that can (or potentially can) provide the
product or service specified in the request for quote form 200.

(c) Third Example

Figure 16 illustrates a method to match a request for quote
submitted from a buyer platform 120 to the host 10 with at least one
vendor platform 140. The vendor begins to request a sales lead 150
from the host 10 in step 1600 by first selecting from one of a plurality
of predefined categories (e.g., "Refrigerators") that the vendor wishes
to receive sales leads 150 in step 1610. The vendor can then narrow
the predefined vendor category by submitting restrictive and
expansive text 1010 in step 1620 and a geographic preference in step
1630 in the sales lead request form 1000 shown in Figure 10. For
example, the vendor may choose to include "household" refrigerators
and exclude "industrial" refrigerators to buyers in South Dakota by
entering or selecting these terms in the respective form blocks. The
vendor then submits or transmits the request for sales lead 1000 to
the host 10 (e.g., over the communications network) in step 1640. In
step 1650, the host matches the submitted request for sales lead
1000 with request for quotes 130 contained in an RFQ database 1655
corresponding to the selected and narrowed vendor category and
selected geographic preference 210(a) and (b). The host generates a
sales lead 150 corresponding to the submitted request for sales lead
1000 in step 1660 and transmits the generated sales lead 150 to the
vendor platform 140 in step 1670.

13. Prospective Vendors. With respect to providing buyers
and providing vendors, if the source of "buyers" and the source of
“vendors” is limited, then the success of matching a buyer and a vendor together is greatly reduced. This is particularly critical when a buyer seeks a vendor. This "critical mass" problem conventionally exists in the marketplace. Hence, in a preferred embodiment of the present invention, it is important to provide a buyer with a supply of vendors. Hence, as discussed above, when a registered vendor is not present in a particular geographic locality, then a list of prospective vendors is searched to provide prospective vendors.

One conventional database of retailers, wholesalers, and factories is available from Dunn and Bradstreet which contains approximately eleven million businesses classified 17,000 different ways based upon the Standard Industrial Classification (SIC) numbering system (or any future numbering system). Such conventionally available databases are commonly sold to companies which desire to market to specific types of businesses. Under the teachings of the present invention, such a conventional database is used in a novel fashion to buy from specific types of businesses. In a first aspect, the buyer can be a buyer at the retail level, a buyer at the wholesale level, or a buyer at the factory level. A buyer's "buying power" needs to be evaluated to determine which level is to be accessed.

For example, consumers access the retail level and are not permitted to access the wholesale or factory level as their buying power is limited only to the retail level. A contractor building, for example, a house, would buy from wholesalers as well as from the retailer marketplace. The buying power of the contractor, however, opens the door to wholesale pricing.
**Table I - Retailers**

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>57220000</td>
<td></td>
<td>From home appliance retailer: various Household appliances</td>
<td></td>
</tr>
<tr>
<td>57220000</td>
<td>57220100</td>
<td>From home appliance retailer: various Gas household appliances</td>
<td></td>
</tr>
<tr>
<td>57220000</td>
<td>57220100</td>
<td>57220101</td>
<td>From home appliance retailer: Gas ranges</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>From home appliance retailer: various Electric household appliances</td>
<td></td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220201</td>
<td>From home appliance retailer: Air conditioning room units, self-contained</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220202</td>
<td>From home appliance retailer: Electric household appliances, major</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220203</td>
<td>From home appliance retailer: Electric household appliances, small</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220204</td>
<td>From home appliance retailer: Electric ranges</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220205</td>
<td>From home appliance retailer: Fans, electric</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220206</td>
<td>From home appliance retailer: Garbage disposals</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220207</td>
<td>From home appliance retailer: Microwave ovens</td>
</tr>
<tr>
<td>57220000</td>
<td>57220200</td>
<td>57220208</td>
<td>From home appliance retailer: Vacuum cleaners</td>
</tr>
<tr>
<td>57220000</td>
<td>57229901</td>
<td>From home appliance retailer: Appliance parts</td>
<td></td>
</tr>
<tr>
<td>57220000</td>
<td>57229902</td>
<td>From home appliance retailer: Kitchens, complete (sinks, cabinets, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

In Table I, above, the buying power of a buyer seeking a refrigerator for his or her kitchen, under the teachings of the present invention, would be directed towards the D&B SIC classifications for "retailers." In Table I, this is SIC number 57220202 ("electric household appliances, major"). Hence, in the matching stage, the
retailers listed in this D&B category would be searched as prospective vendors. However, when the buyer has specified a local vendor and the request for bid application 110 at host 10 determines that no retailer meets this geographic request from the buyer, then the request for bid application 110 searches a higher level SIC number. In the example of Table I, this would be 57220200 of which SIC number 57220202 is a subset. Again, if a vendor retailer meeting the geographic requirement of the buyer is not found, the search is again expanded to the highest level SIC number 57220000 for a geographic match. This is a novel three-level search and match algorithm of the present invention starting with the most specific to the next higher level and then to the highest and broadest SIC number level. The goal is to ascertain a retail vendor meeting the geographic requirement.

The method of the present invention pertaining to a vendor level search set forth above in Table I is shown in Figure 17. Here, when a vendor level search is desired, stage 1700 is entered. The host then searches the desired database such as one based upon SIC classifications at a first level (i.e., level 1 in Table I) in stage 1710. In step 1720, those prospective vendors located geographically closest to the buyer are selected first. If a predetermined number of prospective vendors (e.g., 5) are obtained in stage 1730, then step 1740 is entered to ascertain if the last level has been searched. If not, then the next level (i.e., level 2 in Table I) is entered 1750 and steps 1710, 1720, 1730, and 1740 are repeated until all levels are searched. Each level has its own predetermined number. For example, the predetermined number for levels 1, 2, and 3 in Table I could be 5, 2, and 1 prospective vendor respectively. Hence, five prospective vendors from the most specific level (level 1
in Table I) would be selected, two prospective vendors from the next more general level (level 2, in Table I) would be selected, and finally one prospective vendor in the most general level (level 3 in Table I) would be selected. In each level, the geographically closest vendors to the buyer are selected first.

It is to be expressly understood that depending upon the database used any number of levels could exist for the prospective vendors, the operator of the host 140 can also select any suitable number for the predetermined number at each level and the number at each level could be different or the same. It is also to be expressly understood that in a variation of the present invention that once a predetermined number is achieved in the first level, only those prospective vendors are delivered to the buyer and searching does not continue in the upper levels in which case steps 1740 and 1750 would be eliminated. In another variation, it is to be expressly understood that if a predetermined number of vendors are not obtained in the first level, then the search can continue into the upper levels until the overall predetermined number is obtained.

Returning to Figure 17, in the event at any given level the predetermined level is not obtained, then stage 1760 is entered which sends an alert to the host 140 for an administrator to intervene. At this point, the administrator can modify the search process such as, for example, accepting the lower number (i.e., a number lower than the predetermined number in stage 1730) and increasing the predetermined number for the upper level searches. This would ensure that the buyer receive the same number of prospective vendors.

Once the last level has been searched, stage 1770 is entered and any registered vendors from the process discussed hereto before
are added to the list of prospective vendors and the list of prospective and registered vendors are sent to the vendor platforms. It is to be expressly understood, that in a variation of the present invention, there may be no registered vendors and only prospective vendors are delivered to vendor platforms. In the preferred embodiment, duplications cannot occur between registered and prospective vendors since when vendors become registered under the teachings of the present invention, they are eliminated from the prospective vendor database.

In stage 1770 the sales leads are delivered to the selected vendors as discussed before. At an individual vendor platform, in stage 1780, the vendor can accept or deny the sales lead request and, if denied, stage 1790 is entered and the process is over for that vendor. However, if the sales lead is accepted, a vendor quotation is filled out and returned in stage 1792 and the vendor is charged in 1794.

This process module 1700 can be selectively inputted into the various embodiments previously discussed in whole or in part. The key is that in the event a predetermined number is not obtained in stage 1720, stage 1770 is entered to go to the next level which, in Table I above, would be to entry level 2 to continue the search in stage 1710 to once again make a determination of a predetermined number of vendors in 1720 and, if not reached, then in stage 1770 level 3 would be entered. Of course, the predetermined number can be any suitable value.
Table II - Wholesalers

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>50640000</td>
<td>50640100</td>
<td></td>
<td>From household appliance wholesaler: various Electrical appliances, television and radio</td>
</tr>
<tr>
<td>50640000</td>
<td>50640100</td>
<td>50640101</td>
<td>From household appliance wholesaler: Clothes dryers, electric and gas</td>
</tr>
<tr>
<td>50640000</td>
<td>50640100</td>
<td>50640102</td>
<td>From household appliance wholesaler: Dishwashers</td>
</tr>
<tr>
<td>50640000</td>
<td>50640100</td>
<td>50640103</td>
<td>From household appliance wholesaler: Garbage disposals</td>
</tr>
<tr>
<td>50640000</td>
<td>50640100</td>
<td>50640104</td>
<td>From household appliance wholesaler: Ranges</td>
</tr>
<tr>
<td>50640000</td>
<td>50640100</td>
<td>50640105</td>
<td>From household appliance wholesaler: Refrigerators and freezers</td>
</tr>
<tr>
<td>50640000</td>
<td>50640100</td>
<td>50640106</td>
<td>From household appliance wholesaler: Washing machines</td>
</tr>
<tr>
<td>50640000</td>
<td>50640100</td>
<td>50640107</td>
<td>From household appliance wholesaler: Water heaters, electric</td>
</tr>
<tr>
<td>50640000</td>
<td>50640200</td>
<td></td>
<td>From household appliance wholesaler: Electrical entertainment</td>
</tr>
<tr>
<td>50640000</td>
<td>50640200</td>
<td>50640201</td>
<td>From household appliance wholesaler: High fidelity equipment</td>
</tr>
<tr>
<td>50640000</td>
<td>50640200</td>
<td>50640202</td>
<td>From household appliance wholesaler: Radios, motor vehicle</td>
</tr>
<tr>
<td>50640000</td>
<td>50640200</td>
<td>50640203</td>
<td>From household appliance wholesaler: Radios</td>
</tr>
</tbody>
</table>

In Table II, above, the request for bid application 110 of the present invention operates in the same fashion by searching the three SIC hierarchy levels. For example, and in Table II, a retailer
seeking a wholesaler for refrigerators in a particular geographic area, would be provided a list of wholesaler vendors based upon the application 110 for searching SIC number 50640105 for a geographic match, then 50640100 for a geographic match, and then 50640000 for a geographic match. The search always stops when a predetermined number of prospective vendors is found.

Finally, based upon the buyer's "buying power" the wholesaler may, in turn, seek a factory.

**Table III - Factories**

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>36310000</td>
<td>36310100</td>
<td>36310101</td>
<td>Bulk from kitchen appliance factory: various Indoor cooking equipment</td>
</tr>
<tr>
<td>36310000</td>
<td>36310100</td>
<td>36310102</td>
<td>Bulk from kitchen appliance factory: Convection ovens, including portable: household</td>
</tr>
<tr>
<td>36310000</td>
<td>36310100</td>
<td>36310103</td>
<td>Bulk from kitchen appliance factory: Gas ranges, domestic</td>
</tr>
<tr>
<td>36310000</td>
<td>36310100</td>
<td>36310104</td>
<td>Bulk from kitchen appliance factory: Microwave ovens, including portable: household</td>
</tr>
<tr>
<td>36310000</td>
<td>36310100</td>
<td>36310105</td>
<td>Bulk from kitchen appliance factory: Stoves, disk</td>
</tr>
<tr>
<td>36310000</td>
<td>36319901</td>
<td></td>
<td>Bulk from kitchen appliance factory: Barbecues, grills, and braziers (outdoor cooking)</td>
</tr>
<tr>
<td>36320000</td>
<td></td>
<td></td>
<td>Bulk from kitchen appliance factory: various Household refrigerators and freezers</td>
</tr>
<tr>
<td>SIC Code 1</td>
<td>SIC Code 2</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>36320000</td>
<td>36329901</td>
<td>Bulk from kitchen appliance factory: Freezers, home and farm</td>
<td></td>
</tr>
<tr>
<td>36320000</td>
<td>36329902</td>
<td>Bulk from kitchen appliance factory: Ice boxes, household: metal or wood</td>
<td></td>
</tr>
<tr>
<td>36320000</td>
<td>36329903</td>
<td>Bulk from kitchen appliance factory: Refrigerator cabinets, household: metal and wood</td>
<td></td>
</tr>
<tr>
<td>36320000</td>
<td>36329904</td>
<td>Bulk from kitchen appliance factory: Refrigerators, mechanical and absorption: household</td>
<td></td>
</tr>
<tr>
<td>36330000</td>
<td>36330100</td>
<td>Bulk from laundry appliance factory: various Household laundry equipment</td>
<td></td>
</tr>
</tbody>
</table>

In Table III, above, the same three-level hierarchical search of SIC number is performed. In the example of refrigerators, this is only a two-level search wherein the application 110 first searches SIC number 36329903 for a geographical match and then SIC number 36320000 for a match.

In addition to the SIC database discussed above, the present invention could also select lists of vendors from databases compiled from Yellow Pages classifications or Yellow Page classifications combined with SIC codes.

Tables I, II, and III illustrate a feature of the present invention relating to "buying power" which method of the present invention is illustrated in Figure 18. In the buying power search 1800, the buyer had inputted a "buying power" selection (e.g., selecting "retailer," "wholesaler," or "factory" on an input screen such as in Figure 2. The host platform responds to the buying power selection of the buyer in stage 1810. The buying power response in stage 1810 in the case of the consumer would be directed towards 1820 and only the retailers (Table I) would be searched 1830. In stage 1810 when the buying
power response is not a consumer, but a person seeking wholesalers, the buyer is directed 1840 to stage 1830 wherein a search of the wholesalers database (Table II) would occur. As shown in Figure 18, in variations on the present invention, the search could optionally (as shown by dotted lines) be directed to retailers in stage 1820. Finally, if the buying power response is to factories, the search is directed to stage 1850 wherein factories (Table III) are searched. Again, optionally, this type of buying power could also be directed towards wholesalers in stage 1840 or optionally to retailers in stage 1820 although the later is unlikely but possible.

The foregoing discussion of the invention has been presented for purposes of illustration and description. Further, the description is not intended to limit the invention to the form disclosed herein. Consequently, variation and modification commensurate with the above teachings, within the skill and knowledge of the relevant art, are within the scope of the present invention. The embodiment described herein and above is further intended to explain the best mode presently Known of practicing the invention and to enable others skilled in the art to utilize the invention as such, or in other embodiments, and with the various modifications required by their particular application or uses of the invention. It is intended that the appended claims be construed to include alternate embodiments to the extent permitted by the prior art.
WE CLAIM:

1. A request for bid method implemented over a communications network between a buyer platform, a host, and a vendor platform, said method comprising the steps of:

   assembling a request for quote at said buyer platform for a buyer, said request for quote having at least a geographic preference and quote data corresponding to at least one of a plurality of predetermined categories;

   transmitting said generated request for quote from said buyer platform over said communications network to said host;

   matching said transmitted request for quote with at least one vendor platform in a vendor database at said host based at least on said quote data and said geographic preference;

   delivering a sales lead from said host over said communications network to said matched at least one vendor platform, said sales lead having request data corresponding to said geographic preference and said quote data indicated in said request for quote;

   generating a vendor quotation at said at least one vendor platform for a vendor based on said transmitted sales lead;

   returning said generated vendor quotation from said at least one vendor platform over said communication network to said host;

   assembling a buyer quotation at said host based on said returned vendor quotation and said request for quote;

   delivering said assembled buyer quotation to said buyer platform from said host over said communications platform.
2. The method of claim 1 wherein said request for quote further includes a text field within at least one of said plurality of predetermined categories to further specify quote data.

3. The method of claim 1 wherein said buyer platform, host, and vendor platform are selected from the group consisting of facsimile, telephone, and Internet.

4. The method of claim 1 wherein said vendor database includes registered vendors.

5. The method of claim 1 wherein said vendor database includes a list of prospective vendors.

6. The method of claim 5 wherein the list is based on the Standard Industrial Classification numbers.

7. The method of claim 5 wherein the list is based on the Yellow Page classifications.

8. The method of claim 5 wherein said request for quote further includes a buying power qualifier wherein said vendor database contains said buying power qualifiers and wherein said step of matching further matches the buying power qualifier in the request for quote to the vendor platforms having the same buying power qualifier.
9. The method of claim 8 wherein the buying power qualifiers selected from the group consisting essentially of retailers, wholesalers and factories.

10. The method of claim 1 further having the step of charging the at least one said vendor platform a price in response to the step of returning.

11. The method of claim 10 wherein the request for quote further has a price range and wherein the step of assembling a buyer quotation includes the step of calculating a cost based on said price range.

12. The method of claim 11 wherein said step of calculating is a percentage of the average value for the price range.

13. The method of claim 10 wherein the price is a fixed fee.

14. The method of claim 1 wherein the identity of the buyer at the buyer platform is excluded in the sales lead.

15. A method to generate sales leads at a host based on a request for quote received from a buyer platform over a communications network, said method comprising the steps of:

   searching a registered vendor database at said host;

selecting at said host at least one vendor platform from said registered vendor database having at least one sales lead category that matches said request for quote;
searching a vendor prospect database at said host when less than a predetermined number of matching vendor platforms are selected from said registered vendor database;

selecting at said host vendor platforms from said vendor prospect database having at least one vendor category that matches said request for quote;

sending a sales lead to each of said selected registered and prospect vendor platforms over said communications network from said host;

notifying an administrator platform at said host when less than a predetermined number of vendor platforms are selected from said registered vendor database and from said vendor prospect database.

16. The method of claim 15 wherein the list is selected from the group consisting essentially of Standard Industrial Classification numbers and Yellow Page classifications.

17. The method of claim 15 wherein the steps of searching a registered vendor database and a vendor prospect database includes a buying power response from the buyer platform and conducting the aforesaid searches only in databases of vendors corresponding to the buying power.

18. A method to generate sales leads at a host based on a request for quote received from a buyer platform over a communications network, said method comprising the steps of:

(a) searching a first level in vendor database at said host, the first level corresponding to a specific classification;
(b) selecting at said host a predetermined number of vendor platforms from the first level geographically located closest to the buyer platform and matching said request for quote;

(c) sending a sales lead to each of said selected predetermined number of vendor platforms over said communications network from said host.

19. The method of claim 18 further comprising the step of:
when the predetermined number of vendor platforms is not obtained in response to step (b) returning to step (a) and searching a higher, more general level until the predetermined number is reached.

20. The method of claim 18 further comprising the step of:
when the predetermined number of vendor platforms is obtained in response to step (b) returning to step (a) and searching a higher, more general level for a next predetermined number,
continuing the aforesaid step for all higher levels and their respective predetermined numbers.

21. The method of claim 18 wherein the list is selected from the group consisting essentially of Standard Industrial Classification numbers and Yellow Page classifications.

22. The method of claim 18 wherein the steps of searching includes a buying power response from the buyer platform and conducting the aforesaid searches only in databases of vendors corresponding to the buying power response.
23. The method of claim 18 wherein the request for quote has a price range and wherein the step of sending a sales lead includes the step of calculating a cost based on said price range.

24. The method of claim 23 wherein the step of calculating is a percentage of the average value for the price range.

25. A method to generate sales leads at a host based on a request for quote received from a buyer platform over a communications network, said method comprising the steps of:

   5 responding to the buying power input associated with the request for quote;
   searching a vendor database at said host corresponding in response to the buying power;
   selecting at said host at least one vendor platform from said vendor database having at least one sales lead category that matches said request for quote and the buying power;
   sending a sales lead to at least one selected vendor platform over said communications network from said host.

26. The method of claim 25 wherein the request for quote has a price range and wherein the step of sending a sales lead includes the step of calculating a cost based on said price range.

27. The method of claim 26 wherein the step of calculating is a percentage of the average value for the price range.
28. A method to generate sales leads at a host based on a request for quote received from a buyer platform over a communications network, said method comprising the steps of:

searching a vendor database at said host, said vendor database selected from the group consisting essentially of an SIC database and a Yellow Page database;

selecting at said host at least one vendor platform from said vendor database having at least one sales lead category that matches said request for quote;

sending a sales lead to each of said selected vendor platforms over said communications network from said host.

29. The method of claim 28 wherein the request for quote has a price range and wherein the step of sending a sales lead includes the step of calculating a cost based on said price range.

30. The method of claim 29 wherein the step of calculating is a percentage of the average value for the price range.

31. A method to charge for sales leads at a host based on a request for quote received from a buyer platform over a communications network, said method comprising the steps of:

providing at the buyer platform a price range in the request for quote,

searching a vendor database at said host;

selecting at said host at least one vendor platform from said vendor database having at least one sales lead category that matches said request for quote;
10 sending a sales lead to each of said selected vendor platforms over said communications network from said host;

calculating a cost based on said price range to be charged each of said selected vendor platforms for the sales lead.

32. The method of claim 31 wherein the step of calculating is a percentage of the average value for the price range.
Request for Quotation: Refrigerator

☐ I want a quotation on a complete unit.

☐ New and/or ☐ Used I want a price ☐ Installed ☐ Shipped to me

Size I need or space I have available: Height [ ] Width [ ] Depth [ ]

Style
☐ Side by Side
☐ Freezer on the Top
☐ Freezer on the Bottom
☐ Ice Maker
☐ Ice and Water in the Door

Color

Preferred Brand

Voltage [ ] 120 V ☐ 240 V

Additional Comments: Indicate here whether multiple quantities are required and zipcode where goods/services are needed.

I want a quotation on repair parts only for my existing unit.

☐ I want a quotation on service and repair parts for my existing unit.

If parts only: ☐ New and/or Used ☐ 240 ☐ I can send it to your location

If service and parts: I want a price ☐ Shipped ☐ I want it repaired at my location

Manufacturer [ ] Model [ ]

Serial Number [ ]

Describe the problem or list the repair parts and quantities required.

Expected total project price range: Low $☐ High $☐

The last date I will accept a quotation: MM/DD/YY

This item is needed: ☐ 1 Day ☐ 1 Week ☐ 2 Weeks ☐ 1 Month ☐ 6 Months

☐ Budget Quote Only

Strength of local buying preference:
☐ Strong ☐ Medium ☐ Not Important

Submit RFQ Form
Reset

Fig. 2
<table>
<thead>
<tr>
<th>Profile Type</th>
<th>User Profiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUYER</td>
<td>JR WORK</td>
</tr>
<tr>
<td>VENDOR</td>
<td>JR WORK SELL</td>
</tr>
<tr>
<td>BUYER</td>
<td>JR HOME</td>
</tr>
</tbody>
</table>

Click on the profile you wish to use.

Fig. 4
B  From Fig. 3

Display Buyer Page for Profile

View and Add Buyer Comments for a Vendor Page

Request New Category Page

Search/Select Category

Enter RFQ Data into Category Form

Create Mailbox, Convert to Sales Lead, and Post the Lead

Update RFQ Page

Yes

View Advertising Links?

No

Display Advertising

Fig. 5
Enter a Request For Quotation

Search for RFQ Category: [__]  [Search]
Enter search words to find the category you need. [Help]

View and add to comments other buyers have made about a vendor.
Vendor ID: [__]  [List]

Your Open FRQ's

<table>
<thead>
<tr>
<th>RFQ ID</th>
<th>Closing Date</th>
<th>Category/Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFRIGERATOR199909271430055</td>
<td>10/06/99</td>
<td>REFRIGERATOR</td>
</tr>
<tr>
<td>STOVE/RANGE199909271435134</td>
<td>10/06/99</td>
<td>STOVE/RANGE</td>
</tr>
<tr>
<td>KITCHENCABINETS199909271442075</td>
<td>10/06/99</td>
<td>KITCHEN CABINETS</td>
</tr>
</tbody>
</table>

Click on the RFQ ID of the RFQ you wish to view/edit.

**Fig. 6**
Fig. 7

Did you find what you were looking for? Request a new category or go to the Generic RFQ Form.
Sign Up to Receive RFQ's for a Category

Search for RFQ Category:
Enter search words to find the category you need. Help.

Request a New Category
Purchase Credit
Purchased Leads

Current Category List

<table>
<thead>
<tr>
<th>Category</th>
<th>DELETE CATEGORY</th>
<th>DELETE CATEGORY</th>
<th>DELETE CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFRIGERATOR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STOVE/RANGE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KITCHEN CABINETS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Click on the category you wish to view/edit.
You have requested to receive sales leads for the category: **REFRIGERATOR**
You can refine the sales leads you receive below:

Keywords or phrases of which ONE must be INCLUDED in the sales lead for it to be sent.

Keywords or phrases which will EXCLUDE the sales lead if it contains ANY of them.

Leave both fields blank to receive all the sales leads for this category. Enter each keyword or phrase on a new line. The INCLUDED keyword list will over ride the EXCLUDE list.

☐ I want to receive sales leads from any location.

List the:

<table>
<thead>
<tr>
<th>States</th>
<th>AND/OR</th>
<th>Cities and States</th>
<th>AND/OR</th>
<th>3 Digit Zip Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>210(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>210(b)</td>
<td></td>
<td>Example: Denver CO</td>
<td></td>
<td>Example: 802</td>
</tr>
</tbody>
</table>

Of the sales leads you want to receive. You can fill out any or all of the above. Enter each item on a new line.

Submit RFQ Form  Reset

Fig. 10
Fig. 11a

1100
Sales Lead Posted for Processing?

1110
Search for Vendors Matching Sales Lead Category, Vendor Entered Keyword and Geographic Selection Criteria.

1112
Enough Vendors to Satisfy the Category?

1114
Find All the Prospective Vendors Which Match. Sort by the Absolute Value of the Difference Between the Buyer's and Prospective Vendor's 5 Digit Zip Codes. Select Prospective Vendors required to Satisfy the Category and Send the Lead to Those Prospective Vendors.

1116
Were Enough Prospective Vendor's Found?

1118
No
Tag the Sales Lead with intervention Required and Notify the Administrator.

1120
Tag the Sales Lead as Processed
Fig. 12

1200

Receives Email Quotation

1220

Associated RFQ Still Open?

No

Notify that the RFQ is Closed

Yes

1230

Quotation Less Than the Specified Size?

No

Notify that the RFQ is too Large

Yes

1240

Previously Purchased the Sales Lead and Has the Buyer Updated Since Purchase?

No

How to Purchase Credit and Resubmit the Quotation

Yes

1252

Available Credit on Account?

No

1250

Yes

1254

Charge the Vendor for the Sales Lead

Email, Fax, or Mail Quotation to the Buyer

Send Acknowledgement

1242

1244

1256

1258
Procedure Starts Every Day at 12:00 am

Select All RFQs With Closing Dates Less Than Today's Date

Mark All Selected RFQs Closed and Delete the Associated Mailboxes

Email Acknowledgment to Each Buyer That the RFQ Has Been Closed

Fig. 13
Fig. 14
Fig. 15

1. Begin Generate Sales Lead 1500

2. Search for Registered Vendors 1510
   - Registered Vendor Database 1450a

3. Select Vendor platform(s) 1520

4. Predicted Number? 1525
   - No 1522
     - Search for Prospective Vendors
       - Vendor Prospect Database 1450b

5. Select Prospective Vendors 1530

6. Predicted Number? 1540
   - No 1560
     - Notify Admin. Platform
   - Yes 1550

7. Send Sales Lead 1570
Fig. 16

1. Begin Request Sales Lead
   - 1600

2. Select Predefined Category
   - 1610

3. Narrow Selection
   - 1620

4. Specify Geographic Preference
   - 1630

5. Transmit Request
   - 1640

6. Match RFQ
   - 1650
   - RFQ database

7. Generate Sales Lead
   - 1660

8. Return Sales Lead
   - 1670

Vendor Platform

Host 16
Fig. 18
# INTERNATIONAL SEARCH REPORT

**International application No.**

PCT/US00/28075

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC(7)** : G06F 17/60  
**US CL** : 705/26, 27, 37  
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, 37

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

NONE

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

WEST, DIALOG

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
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<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>US 5,758,328 A (GIOVANNOLI) 26 May 1998, col. 3, line 55 thru col. 8, line 20.</td>
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<tr>
<td>X</td>
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</tr>
</tbody>
</table>

[X] 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  
  **E** - earlier document published on or after the international filing date  
  **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)  
  **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

  **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  
  **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  
  **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  
  **&** - document member of the same patent family

**Date of the actual completion of the international search**

31 DECEMBER 2000

**Date of mailing of the international search report**

25 JAN 2001

**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**

VINCENT MILLER

**Telephone No.**  (703) 308-1065

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

**International application No.**
PCT/US00/28075

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

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<th>Relevant to claim No.</th>
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Form PCT/ISA/210 (continuation of second sheet) (July 1998)