

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 November 2001 (15.11.2001)

PCT

(10) International Publication Number
WO 01/86562 A1

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

(74) Agent: **LO, Jack**; 617 Viewridge Drive, Pacifica, CA 94044 (US).

(21) International Application Number: PCT/US01/15187

(22) International Filing Date: 9 May 2001 (09.05.2001)

(81) Designated State (*national*): JP.

(25) Filing Language: English

(84) Designated States (*regional*): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

(26) Publication Language: English

(30) Priority Data:
09/568,010 10 May 2000 (10.05.2000) US

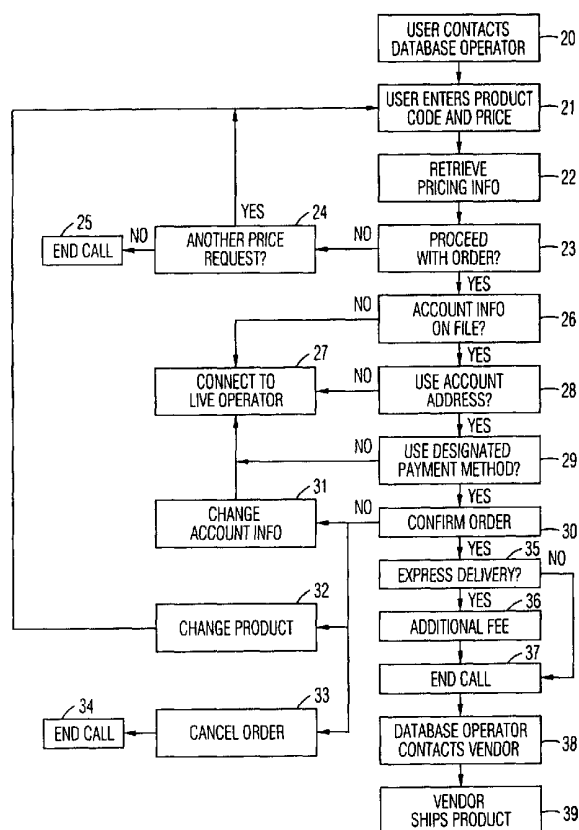
Published:
— with international search report

(71) Applicant and

(72) Inventor: **POMERANTZ, David** [US/US]; Apartment 504, 251 174th Street, Miami Beach, FL 33160 (US).

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.

(54) Title: PRICE COMPARISON AND SHOPPING METHOD



(57) Abstract: In the present price comparison and shopping method disclosed in Fig. 2, products are respectively assigned unique product codes in a database. The operator of the database is an intermediary between mail order vendors and consumers. Participating vendors are assigned respective unique vendor numbers by the database operator. The vendors upload pricing information to the database for the products they offer according to the codes. The prices include shipping, handling, and any applicable tax to eliminate hidden costs. Consumers contact the database operator by telephone (20), so that access is available virtually anywhere. A consumer seeking the lowest price for a product enters the product code into the telephone (21), and the lowest price in the database is given to the consumer (22). Identifying the product with the unique product code eliminates the possibility that a query is answered with the price of an unrelated product. After the consumer confirms an order for the product, the database operator contacts the vendor, who ships the product (38). The database operator is responsible for guaranteeing delivery and handling refunds, so that consumers do not have to be concerned with the reliability of individual vendors.



WO 01/86562 A1

TITLE OF THE INVENTION

Price Comparison and Shopping Method

BACKGROUND OF THE INVENTION

1. Field of the Invention:

This invention relates generally to price comparison and shopping methods.

2. Prior Art:

The consumer shopping process begins with identifying a need. Consumers often go to stores to see a selection of products that might be suitable for fulfilling the need. After deciding on a specific model from a specific manufacturer, consumers are often unsure if the store they are in is offering the product at the lowest price. They have to expend a great deal of time and energy to visit other stores to seek out the best price. When the lowest price is found, there is no problem with buying from the retailer because the merchandise and money are exchanged simultaneously.

Consumers can search for the best prices for specific products on the Internet with specialized search engines known as "shopping bots". U.S. patents 5,950,173 and 5,918,214 to Perkowski, and 5,794,207 to Walker et al. disclose Internet-related product searching methods. In a typical search, a specific product model name or number is entered to begin a query. The consumer is provided with a list of mail order vendors and their prices for the product. There are many problems associated with this method. For example, searches often return results with numerous wrong products because different products from different manufacturers often have similar names or model numbers. Some vendors post misleading

low prices to attract consumers, but charge hidden costs such as high shipping fees to make up the difference. Different vendors have different policies regarding exchange and returns, wherein some charge a restocking fee, and others do not accept returns at all. Further, when buying through mail order, the money is paid before the merchandise is shipped. Many consumers are afraid of possible delivery and service problems with mail order vendors with unknown service and reputation. They are also afraid of providing credit card information to such vendors. These fears drive many consumers to buy from mail order vendors with known reputations but usually higher prices. Also, most consumers have no access to the Internet to check prices when they are browsing in stores.

OBJECTIVES OF THE INVENTION

Accordingly, the objectives of the present method are:

- to help consumers search for the lowest prices for desired products;
- to prevent quoting the prices of unrelated products with similar names or model numbers;
- to quote the total price of a desired product to eliminate hidden costs;
- to guarantee delivery of orders;
- to present a standard policy to consumers regardless of the vendor;
- to eliminate the need for consumers to research the reliability of individual vendors; and
- to be accessible virtually anywhere by anyone, without the need for special hardware, software, or Internet access.

Further objectives of the present invention will become apparent from a consideration of the drawings and ensuing description.

BRIEF SUMMARY OF THE INVENTION

In the present price comparison and shopping method, products are respectively assigned unique product codes in a database. The operator of the database is an intermediary between mail order vendors and consumers. Participating vendors are assigned respective unique vendor numbers by the database operator. The vendors upload pricing information to the

1 database for the products they offer according to the codes. The prices include shipping,
2 handling, and any applicable tax to eliminate hidden costs. Consumers contact the database
3 operator by telephone, so that access is available virtually anywhere. A consumer seeking the
4 lowest price for a product enters the product code into the telephone, and the lowest price in
5 the database is given to the consumer. Identifying the product with the unique product code
6 eliminates the possibility that a query is answered with the price of an unrelated product.
7 After the consumer confirms an order for the product, the database operator contacts the
8 vendor, who ships the product. The database operator is responsible for guaranteeing delivery
9 and handling refunds, so that consumers do not have to be concerned with the reliability of
10 individual vendors.

11 BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

12 Fig. 1 is a flowchart of the process for a vendor to upload pricing information to a database
13 operator.

14 Fig. 2 is a flowchart of the process for a consumer to query for the lowest price and place an
15 order.

16 Fig. 3 is a flowchart of an alternative process for a consumer to query for the lowest price and
17 place an order.

18 DETAILED DESCRIPTION OF THE INVENTION

19 Fig. 1:

20 In a preferred embodiment of the present method, products are respectively assigned unique
21 product codes that are recognized and used by many manufacturers and retailers. UPC
22 (Universal Product Code) or bar codes are preferred since they are already in widespread use,
23 but another type of code may be used. A database of available products is maintained by a

1 database operator who is an intermediary between mail order vendors who sell the products,
2 and consumers who buy the products. The process is preferably embodied in software.

3 In the flowchart in Fig. 1, a vendor wishing to participate in the database contacts the
4 database operator at block 10. The vendor is assigned a unique vendor number by the
5 database operator at block 11. The vendor uploads pricing information to the database for the
6 products being offered according to the product codes at block 12. The database operator
7 preferably requires the price for each product to include shipping, handling, and any
8 applicable tax to eliminate hidden costs. The vendor specifies the available quantity of each
9 product at block 13. The database operator organizes the pricing and availability information
10 by vendor at block 14.

11 The database operator preferably qualifies the vendors and select only those who are reliable.
12 Therefore, consumers no longer have to investigate the reliability of individual vendors.

13 Fig. 2:

14 The purchasing process is illustrated in the flowchart in Fig. 2. A consumer seeking the
15 lowest price for a product contacts the database operator by telephone or cellular phone at
16 block 20, so that access is available virtually anywhere with telephone service. No Internet
17 access, special hardware, or software is required. For example, the consumer can easily
18 contact the database operator while in a store to see if the store is offering a good price.

19 The call is answered by a computer running software of the present method. The consumer
20 enters the corresponding product code into a keypad on a touch tone telephone at block 21.
21 Since the product code may be the bar code which is displayed on the packaging of virtually
22 every product, the consumer can easily obtain the code. The process may also be arranged to
23 enable the consumer to enter a low price found elsewhere to see if the database operator can
24 match or beat it. The lowest price in the database for the product is retrieved and announced
25 with a voice to the consumer at block 22. The price preferably includes shipping, handling,
26 and any applicable tax, so that it represents the total price to the customer. Hidden costs are

1 thus eliminated. The vendors are preferably anonymous to the consumer to further standardize
2 the process. If the consumer has entered a low price, the database operator may choose to
3 match or beat it on a case-by-case basis. Before approving the sale at the low price entered by
4 the consumer, the database operator may choose to verify the low price by requesting vendor
5 information from the consumer.

6 The query is always answered with the price of the correct product because the product is
7 identified with the unique product code, not a product name or model number which might be
8 confused with unrelated products with similar names and numbers. If the consumer does not
9 wish to proceed with the order at block 23, and does not wish to make a price request for
10 another product at block 24, the call is ended at block 25. If the consumer wishes to make
11 another price request at block 24, the process is returned to block 21.

12 If the consumer wishes to proceed with the order at block 23, but his or her account
13 information is not on file with the database operator at block 26, the consumer is connected
14 with a live operator at block 27. If the consumer's account information is on file at block 26,
15 but the consumer wishes to use a different mailing or billing address at block 28, the
16 consumer is connected with a live operator at block 27. If the consumer wishes to use the
17 mailing or billing address on file at block 28, but does not wish to use the payment method on
18 file at block 29, the consumer is connected with a live operator at block 27. If the consumer
19 wishes to use the payment method on file at block 29, but does not wish to confirm the order
20 at block 30, the consumer may choose between changing account information at block 31,
21 changing the product at block 32, or canceling the order at block 33. If the consumer chooses
22 to change the account information at block 31, he or she is connected with a live operator at
23 block 27. If the consumer chooses to change the product at block 32, the process is returned
24 to block 21. If the consumer chooses to cancel the order at block 33, the call is ended at block
25 34.

26 If the order is confirmed at block 30, and the consumer also confirms the use of express
27 delivery at block 35, an additional fee is indicated at block 36, and the consumer's call is
28 ended at block 37. If the consumer does not wish to use express delivery at block 35, the call

1 is ended at block 37. After the call is ended, the database operator notifies the vendor of the
2 sale at block 38, preferably via automated and computerized communication, and the vendor
3 ships the product to the consumer at block 39. Once the available number of a particular
4 product by the vendor is depleted, no backorders are possible. The vendor is responsible for
5 continuously updating the database with the current number of available products.

6 Payment is made by the consumer to the database operator, who in turn pays the vendor.
7 Paying the database operator helps ease the consumer's concern of paying or providing credit
8 card information to an unknown vendor. The database operator is responsible for
9 guaranteeing delivery and handling refunds, so that the consumer does not have to be
10 concerned with the reliability of individual vendors. For example, if the vendor fails to
11 deliver the product, the database operator will refund the purchase price to the consumer and
12 seek reimbursement from the vendor. The database operator also presents the consumer with
13 a single, consistent policy regarding exchanges, returns, and refunds to avoid confusing the
14 consumer with the different policies of different vendors.

15 Fig. 3:

16 An alternative purchasing process is shown in the flowchart in Fig. 3. It is similar to that in
17 Fig. 2, but instead of verifying consumer account information at block 26 (Fig. 2), the account
18 information is verified at block 40 immediately after the call is established at block 20. The
19 account information can be verified by prompting the consumer to enter a username and
20 password through a touch tone phone, or it can be done automatically by identifying the caller
21 with caller ID (identification) if such a service is available at the originating phone number. If
22 the account information is verified, the process proceeds to block 21. Otherwise, the
23 consumer is connected to a live operator at block 41.

24 SUMMARY AND SCOPE

25 Accordingly, the present method helps consumers search for the lowest prices for products. It
26 avoids quoting prices for unrelated products with similar names or model numbers. It quotes

1 the total price for each product to eliminate hidden costs. It guarantees delivery of an order. It
2 presents a standard policy to consumers, regardless of the vendors' individual policies. It
3 eliminates the need for consumers to investigate the reliability of individual vendors. It is
4 accessible virtually anywhere by anyone with access to a telephone, without the need for
5 special hardware, software, or Internet access.

6 Although the above description is specific, it should not be considered as a limitation on the
7 scope of the invention, but only as an example of the preferred embodiment. Many variations
8 are possible within the teachings of the invention. For example:

- 9 • The method may be arranged to also enable the consumer to contact the database operator
10 through the Internet.
- 11 • Prices may vary according to the delivery area to account for differing shipping costs.
- 12 • A purchase may be automatically approved when the best price in the database beats the
13 low price supplied by the consumer by a predetermined percentage.
- 14 • A portable scanner may be made available to consumers for easily capturing bar codes.
- 15 • The desired product may be shown on a display, such as when the method is implemented
16 through the Internet, to confirm that the correct product is being quoted.
- 17 • Product information may be outputted on a printer at the consumer's location when the
18 method is implemented through the Internet.
- 19 • A catalog of products and their corresponding codes may be available in either online or
20 other form to allow consumers to search for the correct code by manufacturer or product
21 type.
- 22 • One or more price quotes for a consumer may be stored in the database to allow the
23 consumer thinking time prior to approving a purchase.
- 24 • The quote may be delayed to obtain updated pricing information from vendors, so that the
25 consumer must call back to obtain the quote, or the database operator may call the
26 consumer to give the quote.
- 27 • The consumer may be given the option of gift wrapping at additional cost.
- 28 • The consumer may be given the option of shipping to an address other than the billing
29 address.

- 1 • The account verification may be done with a credit card number instead of a password.
- 2 • The database operator may be a credit card company, which may allow consumers to
- 3 access the shopping service by selecting an option on a call menu.
- 4 • Consumers may request that they be called at designated phone numbers to confirm
- 5 purchases so as to deter fraudulent transactions.
- 6 • Substitute and/or complementary products may be suggested to the consumer.
- 7 • The sale rules of each vendor may be disclosed to the consumer prior to approving the
- 8 purchase. For example, prices may be dependent on the day of the week, or the quantity of
- 9 the product being purchased.
- 10 • The vendors may specify if they are willing to match or beat the low price by a certain
- 11 percentage.
- 12 • The prices of products may be subsidized by manufacturers, for example, with a
- 13 manufacturer's rebate to the consumer. The quoted price can take the rebate into
- 14 consideration, but the actual charge to the consumer does not include the rebate.
- 15 Alternatively, the quoted price is before the rebate, but the consumer is informed of the
- 16 rebate when given the price quote.
- 17 • The prices of products may be subsidized by manufacturers, for example, with a
- 18 manufacturer's rebate to the database operator. The price quoted and charged to the
- 19 consumer is after the rebate. The price paid by the database operator to the vendor is
- 20 before the rebate, and the database operator is responsible for collecting the rebate from
- 21 the manufacturer.

22 Therefore, the scope of the invention should be determined by the appended claims and their
23 legal equivalents, not by the examples given.

CLAIMS

I claim:

1. A price comparison and shopping method, comprising:
maintaining a database of available products;
receiving a plurality of different pricing information from different vendors corresponding to
said available products, said pricing information each including shipping, handling, and
any applicable tax to eliminate hidden costs;
organizing said pricing information by vendor in said database;
receiving a price query from a consumer through a touch tone telephone, so that access to said
database for said consumer is available anywhere with telephone service;
receiving an identification of a desired product entered by said consumer through said
telephone;
retrieving a lowest price in said pricing information from said different vendors
corresponding to said desired product;
quoting said lowest price to said consumer with a voice through said telephone;
confirming an order for said desired product with said consumer;
arranging to receive payment from said consumer;
notifying a corresponding vendor associated with said lowest price to ship said order to said
consumer; and
paying said vendor for said order.
2. The price comparison and shopping method of claim 1, further including guaranteeing
delivery and handling refunds to said consumer.
3. The price comparison and shopping method of claim 1, further including verifying
consumer account information by prompting said consumer to enter a username and
password through said touch tone phone.

4. The price comparison and shopping method of claim 1, further including verifying consumer account information with caller ID.
5. The price comparison and shopping method of claim 1, further including receiving a low price entered through said telephone by said consumer, requesting vendor information associated with said low price from said consumer, and deciding whether to provide a competitive price relative to said low price.
6. The price comparison and shopping method of claim 1, further including connecting said consumer to a live operator when no account information for said consumer is on file.
7. The price comparison and shopping method of claim 1, further including connecting said consumer to a live operator when said consumer wishes to use a different payment method than a payment method on file.
8. The price comparison and shopping method of claim 1, further including connecting said consumer to a live operator when said consumer wishes to use a different shipping address than a shipping address on file.
9. The price comparison and shopping method of claim 1, further including asking said consumer to confirm using express delivery, and indicating an additional fee when said express delivery is confirmed by said consumer.
10. The price comparison and shopping method of claim 1, further including adjusting said pricing information according to different delivery areas to account for different shipping costs to said areas.
11. The price comparison and shopping method of claim 1, further including automatically approving said order when a low price supplied by said consumer is beaten by said lowest price in said database by a predetermined percentage.

12. The price comparison and shopping method of claim 1, further including displaying said desired product on a display available to said consumer to confirm that a correct product is being quoted.
13. The price comparison and shopping method of claim 1, further including printing information on said desired product on a printer available to said consumer.
14. The price comparison and shopping method of claim 1, further including storing in said database at least one price quote to allow said consumer thinking time prior to approving said order.
15. The price comparison and shopping method of claim 1, further including delaying quoting said lowest price to obtain updated pricing information from said corresponding vendor, and quoting said lowest price on a separate telephone call.
16. The price comparison and shopping method of claim 1, further including providing an option of gift wrapping at additional cost.
17. The price comparison and shopping method of claim 1, further including performing account verification with a credit card number.
18. The price comparison and shopping method of claim 1, further including enabling said consumer to request being called at a designated telephone number to confirm said order so as to deter fraudulent transactions.
19. The price comparison and shopping method of claim 1, further including suggesting to said consumer substitute and complementary products for said desired product.

20. The price comparison and shopping method of claim 1, further including disclosing sale rules of said corresponding vendor to said consumer prior to approving said order.
21. The price comparison and shopping method of claim 1, further including enabling each of said vendors to beat a low price provided by said consumer by a predetermined percentage.
22. The price comparison and shopping method of claim 1, further including quoting said lowest price after including a rebate from a manufacturer in said lowest price, charging said consumer a price without said rebate, and allowing said consumer to collect said rebate from said manufacturer.
23. The price comparison and shopping method of claim 1, further including quoting said lowest price after including a rebate from a manufacturer in said lowest price, charging said consumer said lowest price, and collecting said rebate from said manufacturer.
24. A price comparison and shopping method, comprising:
 - maintaining a database of available products identified by respective unique product codes;
 - receiving a plurality of different pricing information from different vendors corresponding to respective product codes, said pricing information each including shipping, handling, and any applicable tax to eliminate hidden costs;
 - organizing said pricing information by vendor in said database;
 - receiving a price query from a consumer through a touch tone telephone, so that access to said database for said consumer is available anywhere with telephone service;
 - receiving a selected product code entered by said consumer through said keypad on said telephone;
 - retrieving a lowest price in said pricing information from said different vendors corresponding to said selected product code;

quoting said lowest price to said consumer with a voice through said telephone, wherein said price query is always answered with a correct one of said pricing information because said desired product is identified by said consumer with said unique product code instead of a product name or model number which might be confused with unrelated products with similar names or model numbers.

25. The price comparison and shopping method of claim 24, further including verifying consumer account information by prompting said consumer to enter a username and password through said touch tone phone.
26. The price comparison and shopping method of claim 24, further including verifying consumer account information with caller ID.
27. The price comparison and shopping method of claim 24, further including receiving a low price entered through said telephone by said consumer, requesting vendor information associated with said low price from said consumer, and deciding whether to provide a competitive price relative to said low price.
28. The price comparison and shopping method of claim 24, further including connecting said consumer to a live operator when no account information for said consumer is on file.
29. The price comparison and shopping method of claim 24, further including adjusting said pricing information according to different delivery areas to account for different shipping costs to said areas.
30. The price comparison and shopping method of claim 24, further including providing a scanner to said consumer for scanning said product codes on respective products.

31. The price comparison and shopping method of claim 24, further including displaying said desired product on a display available to said consumer to confirm that a correct product is being quoted.
32. The price comparison and shopping method of claim 24, further including printing information on said desired product on a printer available to said consumer.
33. The price comparison and shopping method of claim 24, further including providing a catalog of said available products and respective product codes to said consumer for searching for said selected product code.
34. The price comparison and shopping method of claim 24, further including delaying quoting said lowest price to obtain updated pricing information from said corresponding vendor, and quoting said lowest price on a separate telephone call.
35. The price comparison and shopping method of claim 24, further including performing account verification with a credit card number.
36. The price comparison and shopping method of claim 24, further including suggesting to said consumer substitute and complementary products for said desired product.
37. The price comparison and shopping method of claim 24, further including enabling each of said vendors to beat a low price provided by said consumer by a predetermined percentage.
38. A price comparison and shopping method, comprising:
maintaining a database of available products identified by respective unique product codes;
receiving a plurality of different pricing information from different vendors corresponding to respective product codes, said pricing information each including shipping, handling, and any applicable tax to eliminate hidden costs;
organizing said pricing information by vendor in said database;

receiving a price query from a consumer through a touch tone telephone, so that access to said database for said consumer is available anywhere with telephone service;
receiving a selected product code for a desired product entered by said consumer through said keypad on said telephone;
retrieving a lowest price in said pricing information from said different vendors corresponding to said selected product code;
quoting said lowest price to said consumer with a voice through said telephone, wherein said price query is always answered with a correct one of said pricing information because said desired product is identified by said consumer with said unique product code instead of a product name or model number which might be confused with unrelated products with similar names or model numbers;
confirming an order for said desired product with said consumer;
arranging to receive payment from said consumer;
notifying a corresponding vendor associated with said lowest price to ship said order to said consumer; and
paying said vendor for said order.

39. The price comparison and shopping method of claim 38, further including guaranteeing delivery and handling refunds.

40. The price comparison and shopping method of claim 38, further including verifying consumer account information by prompting said consumer to enter a username and password through said touch tone phone.

41. The price comparison and shopping method of claim 38, further including verifying consumer account information with caller ID.

42. The price comparison and shopping method of claim 38, further including receiving a low price entered through said telephone by said consumer, requesting vendor information associated with said low price from said consumer, and deciding whether to provide a competitive price relative to said low price.

43. The price comparison and shopping method of claim 38, further including connecting said consumer to a live operator when no account information for said consumer is on file.
44. The price comparison and shopping method of claim 38, further including connecting said consumer to a live operator when said consumer wishes to use a different payment method than a payment method on file.
45. The price comparison and shopping method of claim 38, further including connecting said consumer to a live operator when said consumer wishes to use a different shipping address than a shipping address on file.
46. The price comparison and shopping method of claim 38, further including asking said consumer to confirm using express delivery, and indicating an additional fee when said express delivery is confirmed by said consumer.
47. The price comparison and shopping method of claim 38, further including adjusting said pricing information according to different delivery areas to account for different shipping costs to said areas.
48. The price comparison and shopping method of claim 38, further including automatically approving said order when a low price supplied by said consumer is beaten by said lowest price in said database by a predetermined percentage.
49. The price comparison and shopping method of claim 38, further including providing a scanner to said consumer for scanning said product codes on respective products.
50. The price comparison and shopping method of claim 38, further including displaying said desired product on a display available to said consumer to confirm that a correct product is being quoted.

51. The price comparison and shopping method of claim 38, further including printing information on said desired product on a printer available to said consumer.
52. The price comparison and shopping method of claim 38, further including providing a catalog of said available products and respective product codes to said consumer for searching for said selected product code.
53. The price comparison and shopping method of claim 38, further including storing in said database at least one price quote to allow said consumer thinking time prior to approving said order.
54. The price comparison and shopping method of claim 38, further including delaying a price quote to obtain updated pricing information from said corresponding vendor, and providing said price quote on a separate telephone call.
55. The price comparison and shopping method of claim 38, further including providing an option of gift wrapping at additional cost.
56. The price comparison and shopping method of claim 38, further including performing account verification with a credit card number.
57. The price comparison and shopping method of claim 38, further including enabling said consumer to request being called at a designated telephone number to confirm said purchase so as to deter fraudulent transactions.
58. The price comparison and shopping method of claim 38, further including suggesting to said consumer substitute and complementary products for said desired product.

59. The price comparison and shopping method of claim 38, further including disclosing sale rules of said corresponding vendor to said consumer prior to approving said order.
60. The price comparison and shopping method of claim 38, further including enabling each of said vendors to beat a low price provided by said consumer by a predetermined percentage.
61. The price comparison and shopping method of claim 38, further including quoting said lowest price after including a rebate from a manufacturer in said lowest price, charging said consumer a price without said rebate, and allowing said consumer to collect said rebate from said manufacturer.
62. The price comparison and shopping method of claim 38, further including quoting said lowest price after including a rebate from a manufacturer in said lowest price, charging said consumer said lowest price, and collecting said rebate from said manufacturer.

1/3

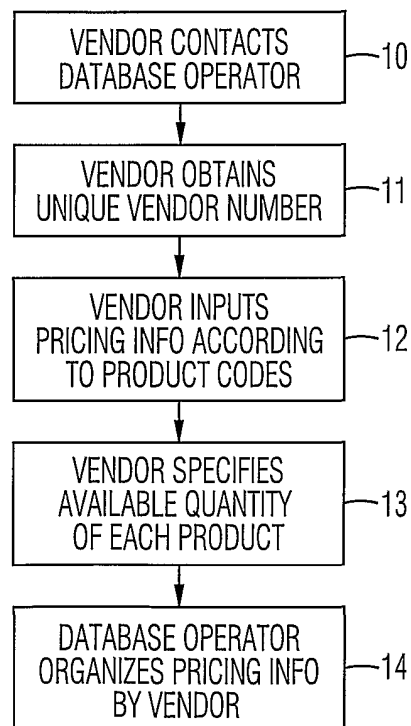


Fig. 1

2/3

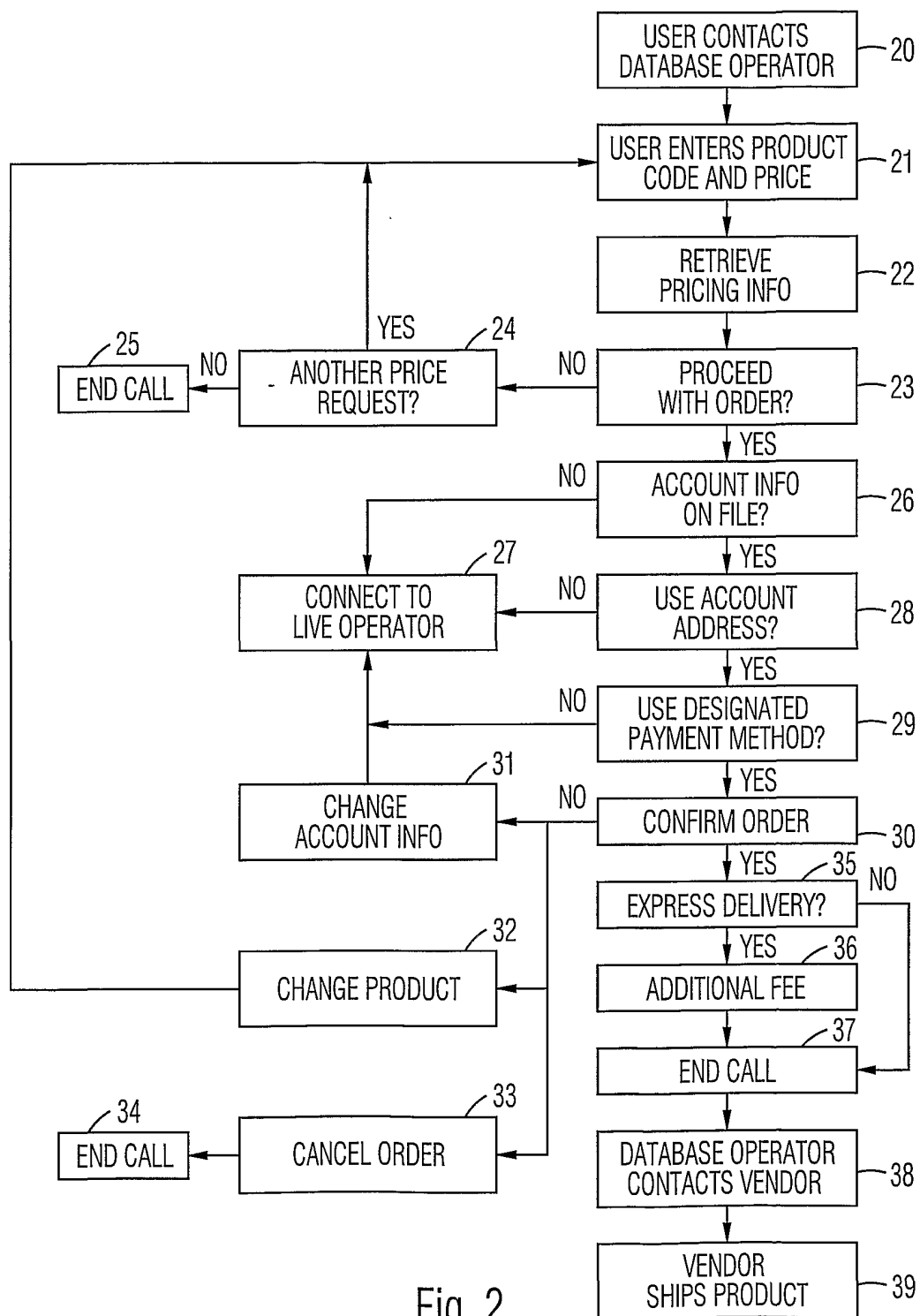


Fig. 2

3/3

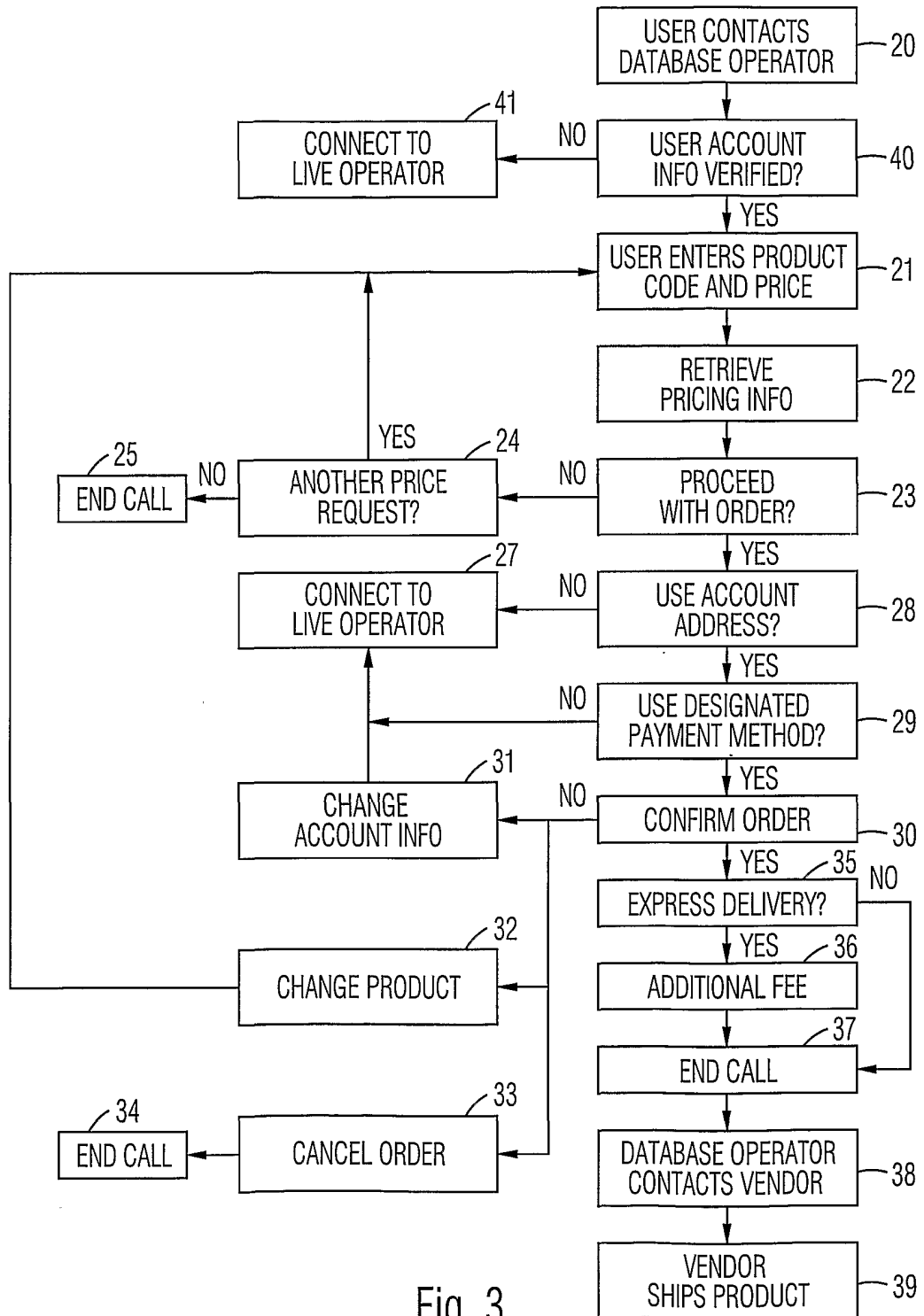


Fig. 3