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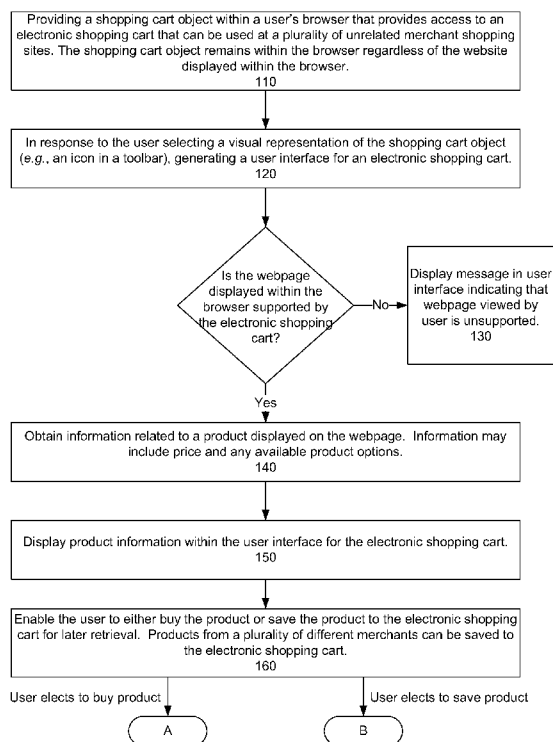
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(54) Title: SYSTEM, METHOD, AND COMPUTER PROGRAM FOR PROVIDING A MULTI-MERCHANT ELECTRONIC SHOPPING CART FOR A SHOPPING SERVICE



(57) Abstract: A system, method, and computer program are provided for providing a multi- merchant electronic shopping cart within a web browser. The shopping cart can be used at a plurality of unrelated merchant shopping sites and remains within the browser regardless of the displayed website. When a user selects the shopping cart, a user interface is displayed with information about a product on the website without navigating to a new webpage. If the product has options, the user is able to select for the options via the user interface. The user is also able to save products from a plurality of shopping sites to the shopping cart or purchase products from the shopping cart at one time. For each product to be purchased, a purchase transaction is conducted, on behalf of the user, with the merchant associated with the website from which the user added the product to the shopping cart.

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## **SYSTEM, METHOD, AND COMPUTER PROGRAM FOR PROVIDING A MULTI-MERCHANT ELECTRONIC SHOPPING CART FOR A SHOPPING SERVICE**

### **5           1. TECHNICAL FIELD**

This invention relates generally to an electronic commerce shopping service system and, more particularly, to a system and method for providing a multi-merchant electronic shopping cart for a shopping service.

### **2. BACKGROUND ART**

10           It is often desirable for a consumer to be able to purchase a product via an electronic commerce shopping service. By using an electronic commerce shopping service, not only is the consumer able to “visit” multiple unrelated merchant shopping sites without the time and expense of commuting, but also the shopping service is able to recommend merchant shopping sites to the consumer thus increasing consumer  
15           confidence and to provide a global reward system that can encompass many merchant shopping sites. Currently, in order for a consumer to use a shopping service, he or she must initiate the purchase process through a specific shopping service website. It would be desirable to have an electronic shopping cart for a shopping service that can be used at multiple merchant shopping sites and can be easily accessed while  
20           browsing the merchant website without having to navigate to another website. It would also be desirable to be able to save multiple products from various merchants to the electronic shopping cart and be able to purchase all of the products at one time.

### **DISCLOSURE OF INVENTION**

25           The present invention is directed to a system, method, and computer program for providing a multi-merchant electronic shopping cart (*i.e.*, a shopping cart object in the form of a bookmarklet, browser add-on, browser extension, browser widget, or toolbar) within a web browser for a shopping service. The shopping cart can be used at a plurality of unrelated merchant shopping sites and remains within the browser regardless of the website displayed in the browser. In response to a user selecting a  
30           visual representation of the shopping cart from within the browser, a user interface is displayed for the electronic shopping cart in a new window. A user is able to view the user interface for the electronic shopping cart without navigating the browser to a new webpage.

In response to the user selecting the visual representation while a webpage supported by the electronic shopping cart is displayed in the browser, information related to a product on the supported webpage is displayed in the user interface. In certain cases, displaying information may include extracting product information from the webpage, normalizing the extracted information, and displaying the normalized information in the user interface. In other cases, displaying information may include identifying an application programming interface (API) associated with the website, sending a request for product information on the webpage to the API, receiving the requested information, and displaying the requested information in the user interface for the electronic shopping cart. If the product has one or more options, the information includes the options and the user is able to enter selections for the options via the user interface.

The user is able to either commence a purchase transaction for one or more products via the electronic shopping cart or save products from a plurality of unrelated merchant shopping sites to the electronic shopping cart for retrieval at a later time. In certain cases, conducting a purchase transaction may include retrieving a user-saved address and payment information, providing the information to the merchant associated with the purchase transaction, receiving a purchase confirmation from the merchant, and communicating the purchase confirmation to the user.

The user may elect to purchase at one time a single product, multiple products from a single merchant shopping site, or multiple products from multiple unrelated merchants shopping sites that are saved to the electronic shopping cart. For each product to be purchased, a purchase transaction is conducted, on behalf of the user, with the merchant associated with the supported website from which the user added the product to the electronic shopping cart.

In certain cases, the electronic shopping cart is associated with a shopping service that provides a reward based on purchases through the shopping service. For example, the reward may include a cash back percentage, points, frequent flier miles, etc. In certain embodiments, a coupon may be applied in a purchase transaction to a product or to a corresponding merchant.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figures **1a-1b** are a flowchart that illustrates a general method for providing a multi-merchant electronic shopping cart for a shopping service.

Figures **2a-2b** are a flowchart that illustrates an example implementation for providing a multi-merchant electronic shopping cart for a shopping service according to one embodiment of the invention.

Figure **3** is a flowchart that illustrates an alternate implementation for providing a multi-merchant electronic shopping cart for a shopping service according to one embodiment of the invention.

Figure **4** is a flowchart that illustrates a method for conducting a purchase transaction according to one embodiment of the invention.

Figure **5** is a block diagram of a multi-merchant electronic shopping cart system according to one embodiment of the invention.

Figures **6a-6m** are screenshots of an exemplary user interface in a multi-merchant electronic shopping cart system according to one embodiment of the invention.

Figures **7a-7e** are screenshots of an exemplary user interface in a multi-merchant electronic shopping cart system according to one embodiment of the invention.

### **BEST MODES FOR CARRYING OUT THE INVENTION**

The present invention provides a system, method, and computer program for providing a multi-merchant electronic shopping cart for a shopping service. In the preferred embodiment as seen in Figures **1a-1b**, a shopping cart object is provided within a user's browser that provides access to an electronic shopping cart that can be used at a plurality of unrelated merchant shopping sites (step **110**). The shopping cart object is a software program embedded within the browser. Examples of shopping cart objects include, but are not limited to, a bookmarklet, a browser add-on, a browser extension, a browser widget, or a toolbar. The shopping cart object may provide access to a single electronic shopping cart or to a plurality of electronic shopping carts, where the user is able to save products (*e.g.*, goods or services) to any one of a plurality of electronic shopping carts. In certain embodiments, at least one of a plurality of electronic shopping carts represents a registry. The electronic shopping carts may be public or private and the user may be able to designate a privacy level for each of the electronic shopping carts. The shopping cart object remains within the browser regardless of the website displayed within the browser.

In response to the user selecting a visual representation of the shopping cart object (*e.g.*, an icon in a toolbar), a user interface is generated for the electronic

shopping cart (step **120**). The user interface for the electronic shopping cart may be displayed in a new window (*i.e.*, a window, popup, or overlay), where the user is able to view the user interface without navigating the browser to a new webpage.

A supported webpage is a webpage from which a user is able to view and purchase products via the electronic shopping cart. If the webpage displayed within the browser is not supported by the shopping cart object, a message is displayed in the user interface indicating that the webpage viewed by the user is unsupported (step **130**). But if the webpage is supported, then information is obtained related to a product displayed on the webpage for display on the user interface (step **140**). If there is more than one product on the webpage, the user may be requested to select a particular product. The product information is displayed within the user interface for the electronic shopping cart and may include, for example, the image of the product, product price, tax (if known), shipping (if known, or based on a default shipping method), total price, and any available product options (*e.g.*, size, color, quantity, etc.) (step **150**). The user is able to enter selections for the options via the user interface.

The user is able to either buy the product or save the product to the electronic shopping cart for later retrieval (step **160**). Products from a plurality of different merchants can be saved to the electronic shopping cart. If the user elects to buy the product, the shopping service conducts a purchase transaction on behalf of the user with the merchant associated with the supported webpage (step **170**). In conducting the purchase transaction, the user may be prompted for the shipping method, address, payment information, or such information may be retrieved from the user's profile. Once the shipping method and address are obtained, the price information is updated with shipping costs and tax, if applicable.

If the user elects to save the product, then the product is saved to the electronic shopping cart (step **180**). The user is able to view the products saved to the electronic shopping cart via, for example, a button or link on the user interface (step **185**). Alternately, the user can view the saved contents of the shopping cart from a separate website. The user is also able to purchase at one time, from a plurality of unrelated merchant sites, one or more products saved to the electronic shopping cart (step **190**). For each product purchased, a purchase transaction is conducted on behalf of the user, with each merchant associated with the website from which the user added a product to the electronic shopping cart. In one embodiment, a user can purchase multiple products from multiple merchants with a single action (*e.g.*, clicking a button).

In certain embodiments, the electronic shopping cart is associated with a shopping service that provides a reward based on purchases through the shopping service such that purchases made through the electronic shopping cart are credited towards the reward calculation. The information displayed in the user interface may include the rewards calculation. The reward may be in the form of a cash back percentage for each product purchased, points, frequent flier miles, etc. Different rewards map apply to different merchants and there may be separate rules for calculating rewards for each merchant. In certain embodiments, the electronic shopping cart alerts the user when a reward is available by, for example, changing the shopping cart icon color or flashing the shopping cart icon. The user may be required to take an action to apply the reward (*e.g.*, click a button) or the reward may be applied automatically. In the case where the shopping service provides a cash back reward for purchases, the cash back amount is determined for each product displayed in the user interface for the electronic shopping cart. The cash back amount is then displayed in the user interface for the electronic shopping cart. In response to a user purchasing a product via the electronic shopping cart, the user is credited with the cash back amount.

In certain embodiments, the multi-merchant electronic shopping cart automatically checks for coupons. For each product displayed in the user interface, the electronic shopping cart determines if any coupon applies to the product or the corresponding merchant. For example, the electronic shopping cart may check for any coupons for a particular store, then check whether any of those coupons are applicable to the product based on the product's description, validity period of the coupon, and terms of the coupon, etc. In response to identifying one or more coupons applicable to the product, the coupon information is displayed in the user interface. In response to the user purchasing the product, any identified coupons are applied to the purchase. Determining if the coupon applies may include identifying any potentially-applicable coupons and for each potentially-applicable coupon, initiating an online purchase transaction with the applicable merchant to identify any price savings related to the coupon, where the purchase transaction is terminated before completion of a purchase. In certain embodiments, determining if a coupon applies includes identifying any potentially-applicable coupons and sending an application programming interface (API) request to the merchant to determine whether any potentially-applicable coupons may be used in the purchase transaction.

In certain embodiments, displaying the information in the user interface includes extracting the product information from the webpage, normalizing the extracted information, and displaying the normalized information in the user interface. In other embodiments, displaying the information in the user interface includes  
5 identifying an API associated with the website, sending a request for product information on the webpage to the API, receiving the requested information, and displaying the request information in the user interface for the electronic shopping cart.

Figures **2a-2b** illustrate an example implementation of one method for  
10 providing a multi-merchant electronic shopping cart for a shopping service according to one embodiment. In this example, the shopping cart object is a bookmarklet, which detects that the user has clicked on its visual representation within the browser (step **210**). The shopping cart object passes the URL of the webpage displayed within the browser to a server for the shopping service (step **215a**). The shopping cart object  
15 generates a user interface for the electronic shopping cart on the user's device (step **215b**).

The server then determines whether the webpage displayed within the browser is supported by the shopping cart object (step **220**). If it is not, then a message is displayed in the user interface indicating that the webpage viewed by the user is  
20 unsupported (step **225**). If, however, the webpage is supported, then the server calls the URL of the webpage displayed within the user's browser (step **230**). The server then extracts product information from the webpage (*e.g.*, image, price, description, product options, etc.) (step **235**). In an alternate embodiment aimed at optimizing performance, the shopping cart object may extract (*e.g.*, "scrape") some or all of the  
25 product information from the webpage. For example, the shopping cart object may extract the image, price, and title of the product from the merchant shopping site. The remainder of the information, such as, for example, any product options may be extracted by the back-end server. In another alternate embodiment, the server may send an API request to the merchant for the product information. For example, the  
30 server may send an ISBN number of a book to a merchant or a product database.

The server also calculates a cash back amount or other reward, if applicable (step **240**). In certain cases, the cash back amount may be zero. The server then normalizes the product and cash back information and sends it back to the shopping cart object (step **245**). The shopping cart object displays the product and cash back



information in the user interface for the electronic shopping cart (step **250**). The shopping cart object prompts the user to select options, if applicable (step **255**). The shopping cart object enables the user to save the product to the electronic shopping cart or to buy the product (step **260**).

5           In response to the user electing to save the product, the product information is provided to the server (including any selected options), and the server saves the product information in the user's electronic shopping cart (step **270**). The electronic shopping cart may be manifested in the form of a database table or an entry in a database table, and the product information may be saved in the database table. Saved  
10       information includes the URL of the applicable webpage displaying the product. In response to the user electing to buy the product, the server purchases the product, on behalf of the user, from the applicable merchant (step **280**).

          Figure **3** illustrates another example implementation of one method for providing a multi-merchant electronic shopping cart for a shopping service according  
15       to one embodiment. In this example, the shopping cart object is a browser widget, which monitors websites displayed in the browser (step **310**). For each webpage displayed in the browser, the shopping cart object determines whether or not the webpage is supported by the electronic shopping cart (step **320**). The shopping cart object may check with a server for the shopping cart service to make this  
20       determination, and/or the shopping cart object may check a local list of supported webpages or domains previously downloaded to the shopping cart object. In response to determining that a website is a supported website, the shopping cart object provides a visual indication in the web browser that the website is a supported website (*e.g.*, an icon changes color or flashes) (step **330**). The shopping cart object detects that the  
25       user has clicked on the visual representation of the shopping cart object within the user's browser (step **340**). The shopping cart object passes the URL of the webpage displayed within the browser to a server for the shopping service (step **350a**). The shopping cart object also generates a user interface for the electronic shopping cart on the user's device (step **350b**). Steps **230** to **280** of Figure **2** are then repeated.

30           Figure **4** illustrates a method for conducting a purchase transaction according to one embodiment of the invention. A user places an order for one or more products in the shopping cart (step **410**). The server obtains payment information (*e.g.*, credit card, PayPal information, etc.), shipping method, and address for the order (step **420**). The user may be prompted to provide this information in the user interface, or the

server may retrieve this information from the user's profile, and display it as a default in the user interface (with the option to change the information). In certain embodiments, the server may send to the user an acknowledgement of the purchase order with or without the purchase transaction details via the user interface, an email, a text message, and/or an audio message. For each product ordered, the server retrieves the applicable URL at which the product should be purchased (step **430**). For each product ordered, the server opens up a browser with the applicable URL and purchases the product on behalf of the user by providing the user-saved address and payment information to each of the merchants associated with the purchase transaction in much the same way as the user would do (step **440**). Alternatively, the server may order from each of the merchants using an API. Either way, in the preferred embodiment, the purchase transaction is between the user and the merchant (*i.e.*, the server acts on behalf of the user). The server then credits the user with any cash back rewards earned from the purchase, if applicable (step **450**). The server receives a purchase confirmation from each of the merchants and communicates the purchase confirmation to the user (step **460**). The purchase confirmation may be communicated to the user immediately following the purchase order or at a later time when the purchase transaction has been completed. The purchase confirmation may be sent by means of displaying the confirmation in the user interface, sending an email to the user's email account, sending a text message to the user's mobile device, or sending an audio message to the user's telephone.

The methods described with respect to Figures **1a-4** are embodied in software and performed by a computer system (comprising one or more computing devices) executing the software. A person skilled in the art would understand that a computer system has a memory or other physical, computer-readable storage medium for storing software instructions and one or more processors for executing the software instructions.

Figure **5** illustrates an exemplary multi-merchant electronic shopping cart system **500** according to one embodiment of the invention. As a person skilled in the art would understand, the multi-merchant electronic shopping cart system **500** may be constructed in any number of ways within the scope of the present invention. The methods of Figures **1a-4** may be implemented in other systems, and the invention is not limited to system **500**.

The multi-merchant electronic shopping cart system **500** includes a shopping cart object **505** (e.g., a bookmarklet, a browser add-on, a browser extension, a browser widget, a toolbar, etc.) within a web browser **515** on a client computing device **510**. Examples of client computing devices may include a desktop, a laptop, or a mobile device, etc. A user employs the web browser **515** to view products from one or more merchant shopping sites. The web browser **515** sends a request for a webpage associated with a merchant shopping site to a merchant web server **530** and receives back the webpage associated with the request.

The shopping cart object **505**, which serves as a client software application in the shopping cart system **500**, then sends the URL of the displayed webpage to the shopping cart server **520**. The shopping cart server requests the webpage from the merchant web server **530** corresponding to the URL. The server extracts information about the product from the webpage (or sends an API request to the merchant web server for information about the product), which it then normalizes and returns to the shopping cart object **505** for display on a user interface window. Examples of information about the product include price, image, and any product options. In certain embodiments, the shopping cart object **505** may extract information from the webpage in lieu of, or in addition to, the shopping cart server **520** extracting information from the merchant website or web server **530**. In a preferred embodiment, the client device **510**, shopping cart server **520**, and merchant web server **530** communicate via the Internet.

In response to the user deciding to save a product from the user interface window to the shopping cart, the shopping cart object **505** sends the save request to the shopping cart server **520**, which saves the virtual shopping carts in a database **550**. The virtual shopping cart may contain products from multiple unrelated merchant sites. The user may, in certain embodiments, wish to view products saved in his or her shopping cart. In which case the shopping cart server **520** sends the shopping cart content information to the shopping cart object **505** for the user to view in the user interface window.

In response to the user deciding to purchase one or more products from the shopping cart, the shopping cart object **505** sends a purchase request to the shopping cart server **520**. The purchase request may be for one product in the shopping cart, multiple products from a single merchant shopping site, or multiple products from multiple unrelated merchant shopping sites. As such, the shopping cart server

completes the purchase order with each of the merchant shopping sites corresponding to each product on the purchase order, which may involve more than one merchant web server **530**.

If the user previously purchased other products, the user may have stored user  
5 information (*e.g.*, payment information, shipping method, and address) saved by the shopping cart server **520** in a database **550**. The shopping cart server **520** may complete the purchase order with the merchant web servers **530** using the user information saved in the database **550**. The merchant web servers **530** then process the purchase order and return product purchase confirmations to the shopping cart  
10 server **520**, which then sends a purchase confirmation to the user. The purchase confirmation may be sent to the user immediately after the user submits his or her purchase request or at a later time. The purchase confirmation may be sent to the user via the web browser as a confirmation page, to the user's email address, as a text message to the user's mobile device, or as an audio recording to the user's phone.

15 Figures **6a-7e** illustrate screenshots of an exemplary user interface according to the present invention. A person skilled in the art would understand that the present invention may be embodied on other user interfaces having more or less functionality within the scope of the present invention. As such, Figures **6a-7e** are intended to be illustrative and not limiting in any way.

20 Figures **6a-6m** illustrate screenshots of a user interface tracking a user who is purchasing a product using the multi-merchant shopping cart. In Figure **6a**, the user views women's dress shoes on a merchant site. In contrast to shopping cart **605**, which is linked to the particular merchant site, virtual shopping cart **610** is a shopping cart object that remains within the browser and provides shopping service for any  
25 number of unrelated merchant sites. In this particular example, the shopping cart **610** is a bookmarklet, but the shopping cart object may be designed as a browser add-on, browser extension, browser widget, toolbar, etc.

In Figure **6b**, the shopping cart **610** retrieves information about the product from the merchant website by sending the website's URL to the shopping cart server  
30 and receiving back normalized product information, as discussed more fully with regard to Figure **5**. As seen in Figure **6c**, the user interface displays information regarding the price **615** of the product and cash back information **620**. Shipping and tax information are dependent on the elected shipping method and the user's shipping address and may be provided at a later time.

If the product has options, these options would be displayed in the user interface. In this case, there are three options: color **625**, footwear width **630**, and size **635**. When the user selects the option for color **625**, he or she is presented in the user interface with choices for colors for the women's dress shoe, as seen in Figure **6d**.  
5 When the user selects the option for footwear width **630**, he or she is presented in the user interface with choices for shoe width, as seen in Figure **6e**. In this case, there is only one choice for shoe width. When the user selects the option for size **635**, the user is presented in the user interface with choices for shoe size, as seen in Figure **6f**. As seen in Figure **6g**, once the user has completed the selection of the product  
10 options, he or she may then elect to either save the product into his or her shopping cart **640** for retrieval at a later time or to purchase the product **645**.

If the user is purchasing a product using the multi-merchant shopping cart for the first time, he or she would then need to input and save his or her shipping information **650**, credit card information **655**, and billing information **660**, as seen in  
15 Figures **6h-6i**. Once the user's information is saved, the multi-merchant shopping cart calculates the applicable tax **665** based on the user's address information, as seen in Figure **6j**. If the user has previously purchased one or more products using the multi-merchant shopping chart, he or she need not reenter his or her information and the applicable tax would automatically be calculated. The user then selects the option for  
20 the shipping method **670** and is presented in the user interface with choices for shipping method, as seen in Figure **6k**. In this case, there is only one choice for shipping method.

The multi-merchant shopping cart then calculates the shipping cost **675** based on the user's elected shipping method, as seen in Figure **6l**. In this case, the elected  
25 shipping method is free to the user. Once the user reviews his or her purchase order and elects to complete his or her purchase **680**, the multi-merchant shopping cart sends the purchase request to the shopping cart server, as discussed more fully with regard to Figure **5**. The shopping cart server may send an immediate purchase confirmation **685**, as seen in the user interface of Figure **6m** or may simply  
30 acknowledge receiving the order and communicate the purchase confirmation at a later time after processing the purchase transaction.

Figures **7a-7e** illustrate screenshots of a user interface tracking a user who is saving a product to the multi-merchant shopping cart. Similar to Figure **6a**, a user views a webpage in Figure **7a** and selects the multi-merchant shopping cart **710**. As

seen in Figure **7b**, the shopping cart **710** retrieves information about the product from the merchant website by sending the website's URL to the shopping cart server and receiving back normalized product information, as discussed more fully with regard to Figure **5**. As seen in Figure **7c**, the user interface displays information regarding the price **715** of the product and cash back information **720**. The user may elect to either save the product into his or her shopping cart **740** for retrieval at a later time or to purchase the product **745**.

When the user elects to save the product into his or her shopping cart **740**, he or she is presented with choices, as seen in Figure **7d**. In this example, a product is saved to a wish list, which may serve as a saved shopping cart. The user may save the product to a default wish list **790** or another system-defined or user-defined wish list **795** (*e.g.*, a birthday wish list, a Christmas wish list, a registry *etc.*). A wish list may serve as a wedding registry or a baby registry that other users can view and from which other users can purchase products. In one embodiment, a user is able to create and name any number of wish lists. Once the user has elected a wish list to save the product, the multi-merchant shopping cart sends the save request to the shopping cart server, as discussed more fully with regard to Figure **5**. Figure **7e** illustrates the user interface of the multi-merchant shopping cart confirming to the user that his or her selected product has been saved into the shopping cart. The user may later purchase products saved to a wish list.

As will be understood by those familiar with the art, the invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. Accordingly, the above disclosure of the present invention is intended to be illustrative and not limiting of the invention.

## CLAIMS

1. A method performed by a computer system for providing a multi-merchant, electronic shopping cart for a shopping service, the method comprising:

5 providing a shopping cart object within a web browser that provides access to an electronic shopping cart for the shopping service, wherein the shopping cart can be used at a plurality of unrelated merchant shopping sites and wherein the shopping cart object remains within the browser regardless of the website displayed in the browser;

10 in response to a user selecting a visual representation of the shopping cart object from within the browser, displaying a user interface for the electronic shopping cart in a new window, wherein a user is able to view the user interface for the electronic shopping cart without navigating the browser to a new webpage;

15 in response to the user selecting the visual representation while a webpage supported by the electronic shopping cart is displayed in the browser, performing the following:

20 displaying information related to a product on the supported webpage in the user interface, wherein, if the product has one or more options, the information includes the options and the user is able to enter selections for the options via the user interface;

25 enabling the user to either commence a purchase transaction for the product via the electronic shopping cart or save the product in the electronic shopping cart for retrieval at a later time, wherein the user is able to save products from a plurality of unrelated merchant shopping sites to the electronic shopping cart; and

in response to the user electing to purchase the product, conducting a purchase transaction on behalf of the user with the merchant associated with the supported webpage; and

30 enabling the user to purchase at one time, from a plurality of unrelated merchant shopping sites, a plurality of products saved to the electronic shopping cart, wherein for each product to be purchased, a purchase transaction is conducted, on behalf of the user, with the merchant associated with the website from which the user added the product to the electronic shopping cart.

2. The method of claim 1, wherein the electronic shopping cart is associated with a shopping service that provides a reward based on purchases through the shopping service, and wherein the method further comprises:

5       crediting purchases made through the electronic shopping cart towards a reward calculation.

3. The method of claim 2, wherein the information displayed in the user interface includes a rewards calculation.

4. The method of claim 1, wherein the electronic shopping cart is associated with a shopping service that provides a cash back reward for purchases and wherein the  
10       method further comprises:

      determining a cash back amount, if any, for each product displayed in the user interface for the electronic shopping cart;  
      displaying the cash back amount in the user interface for the electronic shopping cart;  
15       in response to a user purchasing a product via the electronic shopping cart, crediting the user with the cash back amount.

5. The method of claim 1, further comprising:  
      for each product displayed in the user interface, determining if any coupon applies to the product or the corresponding merchant;  
20       in response to identifying one or more coupons applicable to the product, displaying coupon information in the user interface; and  
      in response to the user purchasing the product, applying any identified coupons to the purchase.

6. The method of claim 1, wherein determining if a coupon applies comprises:  
25       identifying any potentially-applicable coupons; and  
      for each potentially-applicable coupon, initiating an online purchase transaction with the applicable merchant to identify any price savings related to the coupon, wherein the purchase transaction is terminated before completion of a purchase.

30       7. The method of claim 1, wherein determining if a coupon applies comprises:  
      identifying any potentially-applicable coupons; and  
      sending an API request to a merchant to determine whether any potentially-applicable coupons may be used in the purchase transaction.



8. The method of claim 1, wherein the displaying information step comprises extracting product information from the webpage, normalizing the extracted information, and displaying the normalized information in the user interface.

9. The method of claim 1, wherein the displaying information step comprises  
5 identifying an application programming interface associated with the website, sending a request for product information on the webpage to the application programming interface, receiving the requested information, and displaying the requested information in the user interface for the electronic shopping cart.

10. The method of claim 1, wherein the shopping cart object is a software program  
10 embedded within the browser.

11. The method of claim 1, wherein the shopping cart object is one of a bookmarklet, browser add-on, browser extension, browser widget, or toolbar.

12. The method of claim 1, wherein the shopping cart object provides access to a plurality of electronic shopping carts and a user is able to save products to any one of  
15 a plurality of electronic shopping carts.

13. The method of claim 12, wherein one of a plurality of electronic shopping carts represents a registry.

14. The method of claim 12, wherein a user is able to designate a privacy level for each of the electronic shopping carts.

20 15. The method of claim 1, wherein conducting a purchase transaction comprises:  
retrieving a user-saved address and payment information;  
providing said information to the merchant associated with the purchase transaction;  
receiving a purchase confirmation from the merchant; and  
25 communicating the purchase confirmation to the user.

16. A system for providing a multi-merchant electronic shopping cart for a shopping service, the system comprising:

a client computing device that enables a user to access an electronic shopping cart  
for the shopping service by selecting a visual representation of the shopping  
30 cart object within a web browser, wherein, in response to the user selecting a visual representation of the shopping cart while a webpage supported by the electronic shopping cart is displayed in the web browser, a user interface with information on a product on the webpage is generated and a user is able to purchase the product or save the product to the electronic shopping cart; and

a server for providing the information to the client computing device, for saving product information to the electronic shopping cart in response to the user electing to save the product, and for conducting a purchase transaction on behalf of the user with an applicable merchant in response to the user electing to purchase the product.

17. A computer program embodied on one or more non-transitory computer-readable mediums and comprising code that when executed by a computer system, enables the computer system to perform the following method for providing a multi-merchant electronic shopping cart for a shopping service, the method comprising:
- 10 providing a shopping cart object within a user's web browser that provides access to an electronic shopping cart for the shopping service, wherein the shopping cart can be used at a plurality of unrelated merchant shopping sites and wherein the shopping cart object remains within the browser regardless of the website displayed in the browser;
  - 15 in response to the user selecting a visual representation of the shopping cart object from within the browser, displaying a user interface for the electronic shopping cart in a new window, wherein a user is able to view the user interface for the electronic shopping cart without navigating the browser to a new webpage;
  - 20 in response to the user selecting the visual representation while a webpage supported by the electronic shopping cart is displayed in the browser, performing the following:
    - displaying information related to a product on the supported webpage in the user interface, wherein, if the product has one or more options, the
    - 25 information includes the options and the user is able to enter selections for the options via the user interface;
    - enabling the user to either commence a purchase transaction for the product via the electronic shopping cart or save the product in the electronic shopping cart for retrieval at a later time, wherein the user is able to save
    - 30 products from a plurality of unrelated merchant shopping sites to the electronic shopping cart; and
    - in response to the user electing to purchase the product, conducting a purchase transaction on behalf of the user with the merchant associated with the supported webpage; and

enabling the user to purchase at one time, from a plurality of unrelated merchant shopping sites, a plurality of products saved to the electronic shopping cart, wherein for each product to be purchased, a purchase transaction is conducted, on behalf of the user, with the merchant associated with the website from which the user added the product to the electronic shopping cart.

18. The computer program of claim 17, wherein the electronic shopping cart is associated with a shopping service that provides a reward based on purchases through the shopping service, and wherein the method further comprises:

crediting purchases made through the electronic shopping cart towards a reward calculation.

19. The computer program of claim 18, wherein the information displayed in the user interface includes a rewards calculation.

20. The computer program of claim 17, wherein the electronic shopping cart is associated with a shopping service that provides a cash back reward for purchases and wherein the method further comprises:

determining a cash back amount, if any, for each product displayed in the user interface for the electronic shopping cart;

displaying the cash back amount in the user interface for the electronic shopping cart;

in response to a user purchasing a product via the electronic shopping cart, crediting the user with the cash back amount.

21. The computer program of claim 17, further comprising:

for each product displayed in the user interface, determining if any coupon applies to the product or the corresponding merchant;

in response to identifying one or more coupons applicable to the product, displaying coupon information in the user interface; and

in response to the user purchasing the product, applying any identified coupons to the purchase.

22. The computer program of claim 17, wherein determining if a coupon applies comprises:

identifying any potentially-applicable coupons; and

for each potentially-applicable coupon, initiating an online purchase transaction with the applicable merchant to identify any price savings related to the

coupon, wherein the purchase transaction is terminated before completion of a purchase.

23. The computer program of claim 17, wherein determining if a coupon applies comprises:

- 5 identifying any potentially-applicable coupons; and  
sending an API request to a merchant to determine whether any potentially-applicable coupons may be used in the purchase transaction.

24. The computer program of claim 17, wherein the displaying information step comprises extracting product information from the webpage, normalizing the  
10 extracted information, and displaying the normalized information in the user interface.

25. The computer program of claim 17, wherein the displaying information step comprises identifying an application programming interface associated with the website, sending a request for product information on the webpage to the application programming interface, receiving the requested information, and displaying the  
15 requested information in the user interface for the electronic shopping cart.

26. The computer program of claim 17, wherein the shopping cart object is a software program embedded within the browser.

27. The computer program of claim 17, wherein the shopping cart object is one of a bookmarklet, browser add-on, browser extension, browser widget, or toolbar.

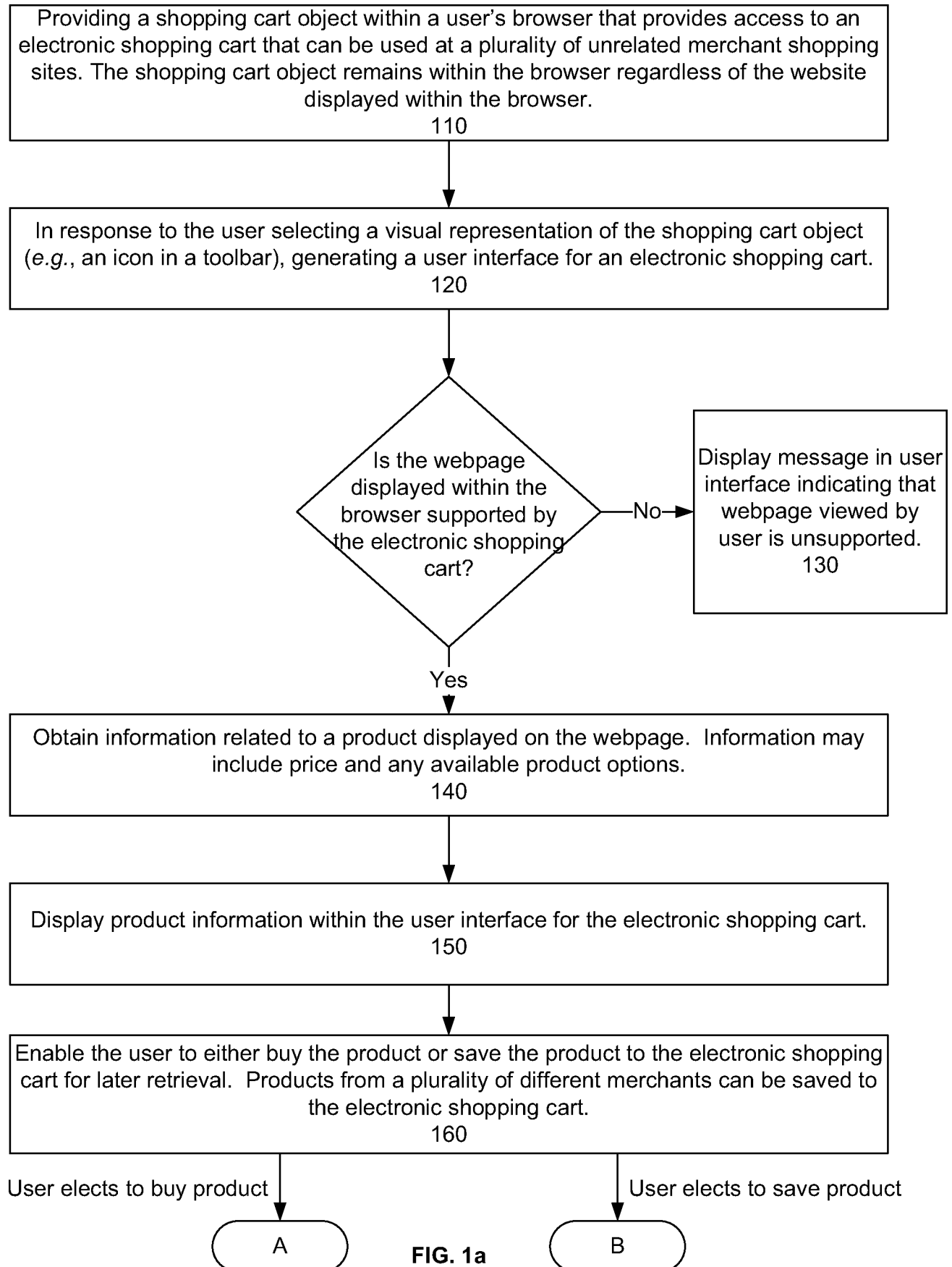
20 28. The computer program of claim 17, wherein the shopping cart object provides access to a plurality of electronic shopping carts and a user is able to save products to any one of a plurality of electronic shopping carts.

29. The computer program of claim 28, wherein one of a plurality of electronic shopping carts represents a registry.

25 30. The computer program of claim 28, wherein a user is able to designate a privacy level for each of the electronic shopping carts.

31. The computer program of claim 17, wherein conducting a purchase transaction comprises:

- retrieving a user-saved address and payment information;  
30 providing said information to the merchant associated with the purchase transaction;  
receiving a purchase confirmation from the merchant; and  
communicating the purchase confirmation to the user.



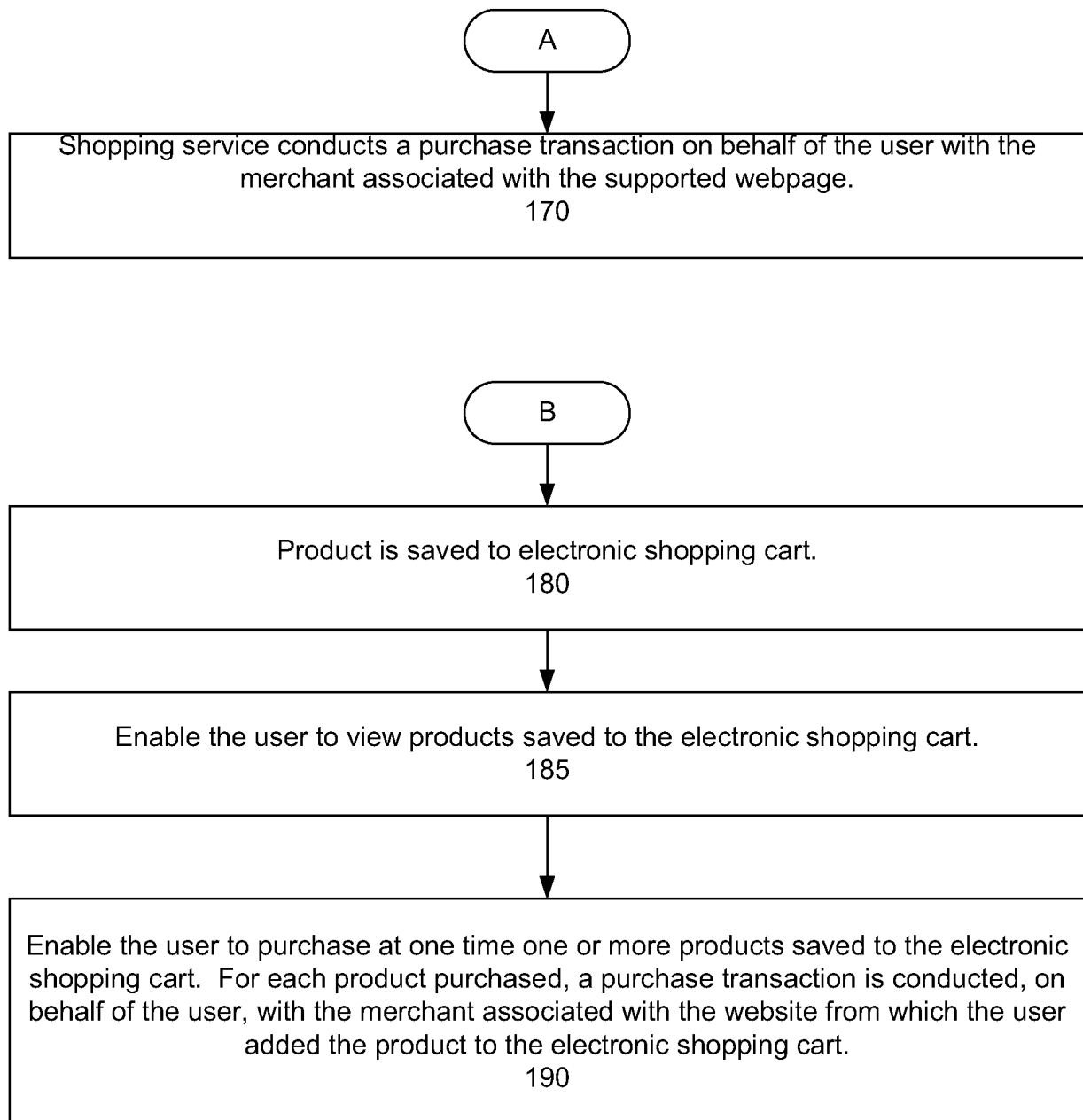


FIG. 1b

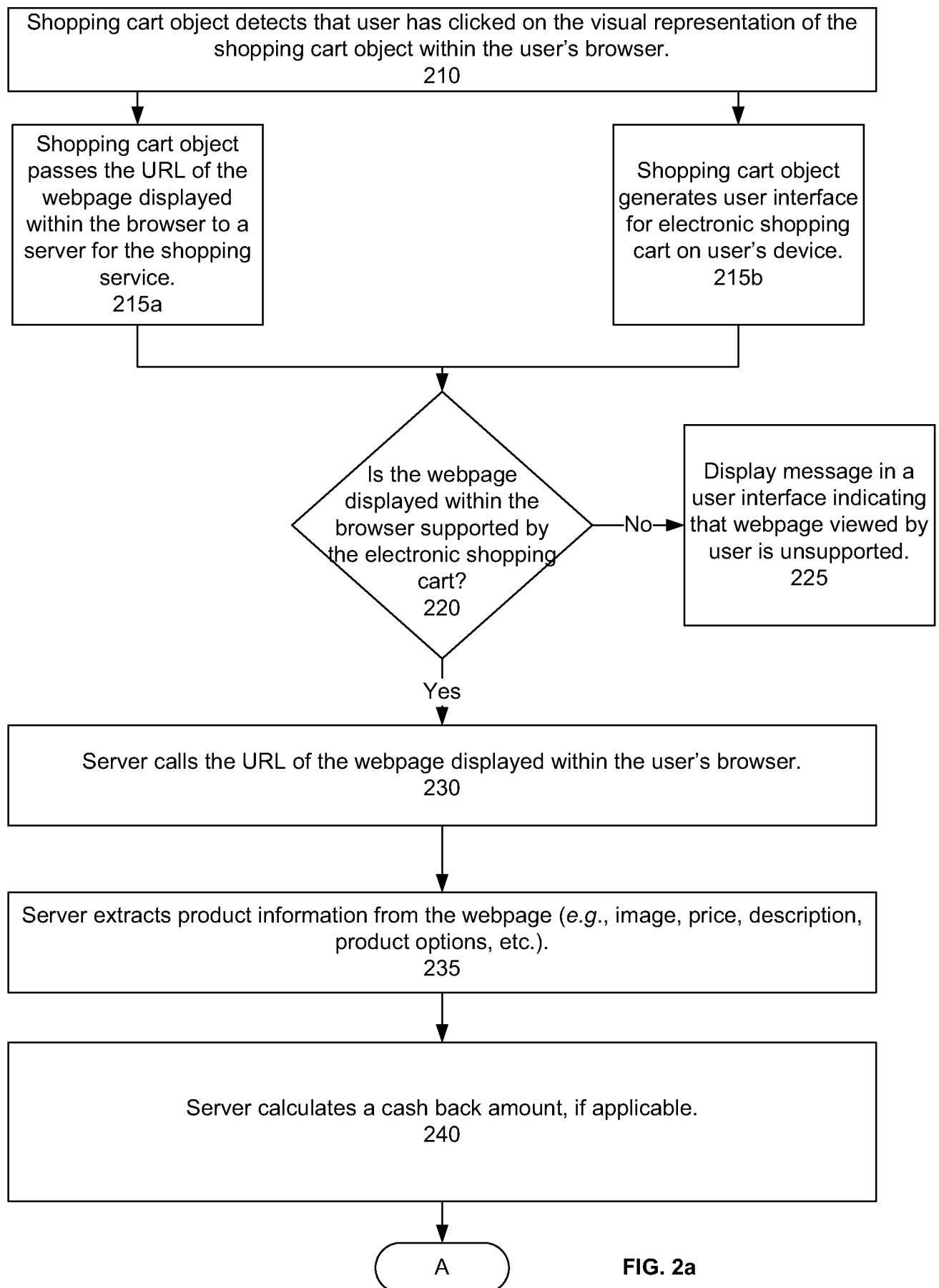


FIG. 2a

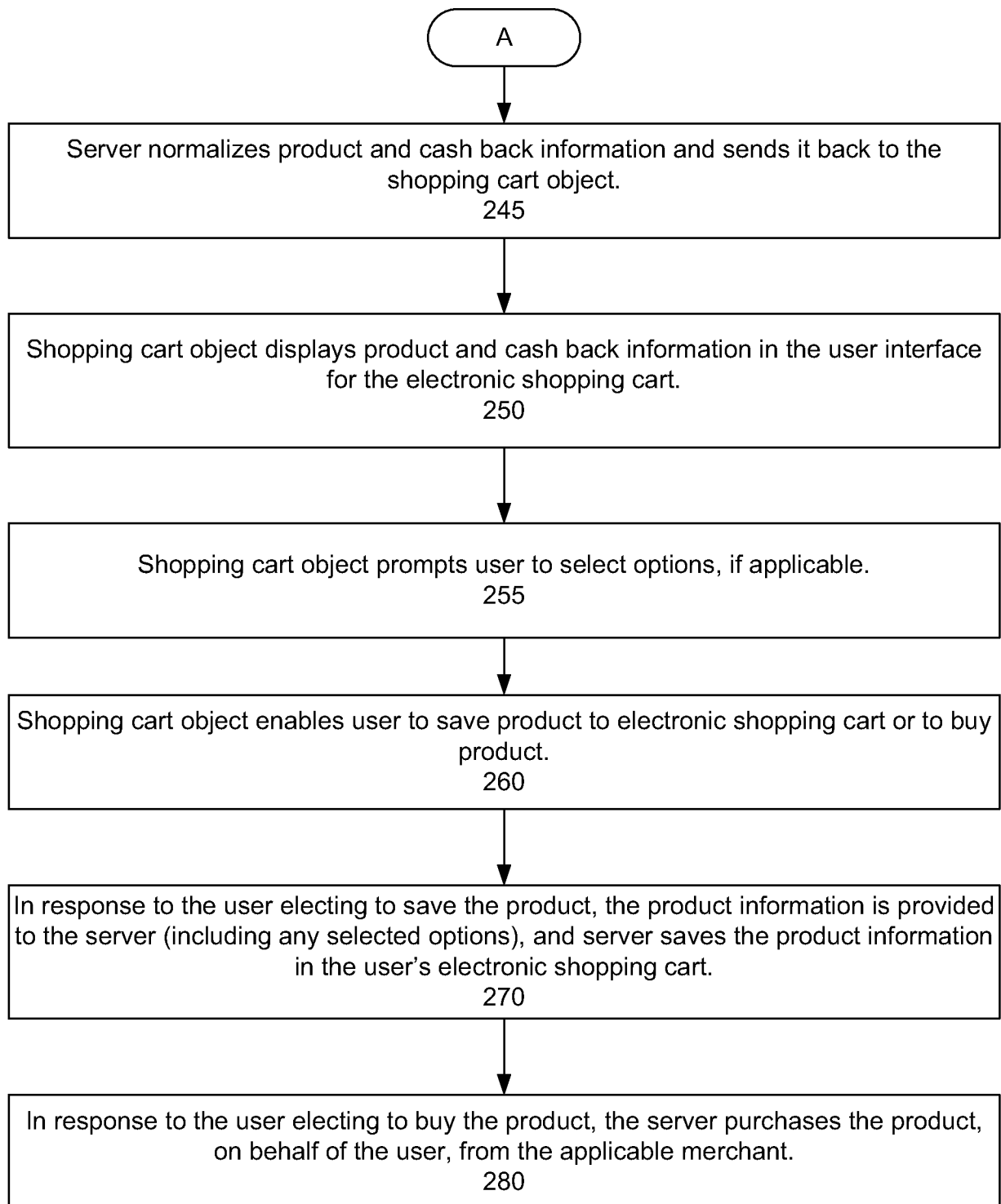


Fig. 2b



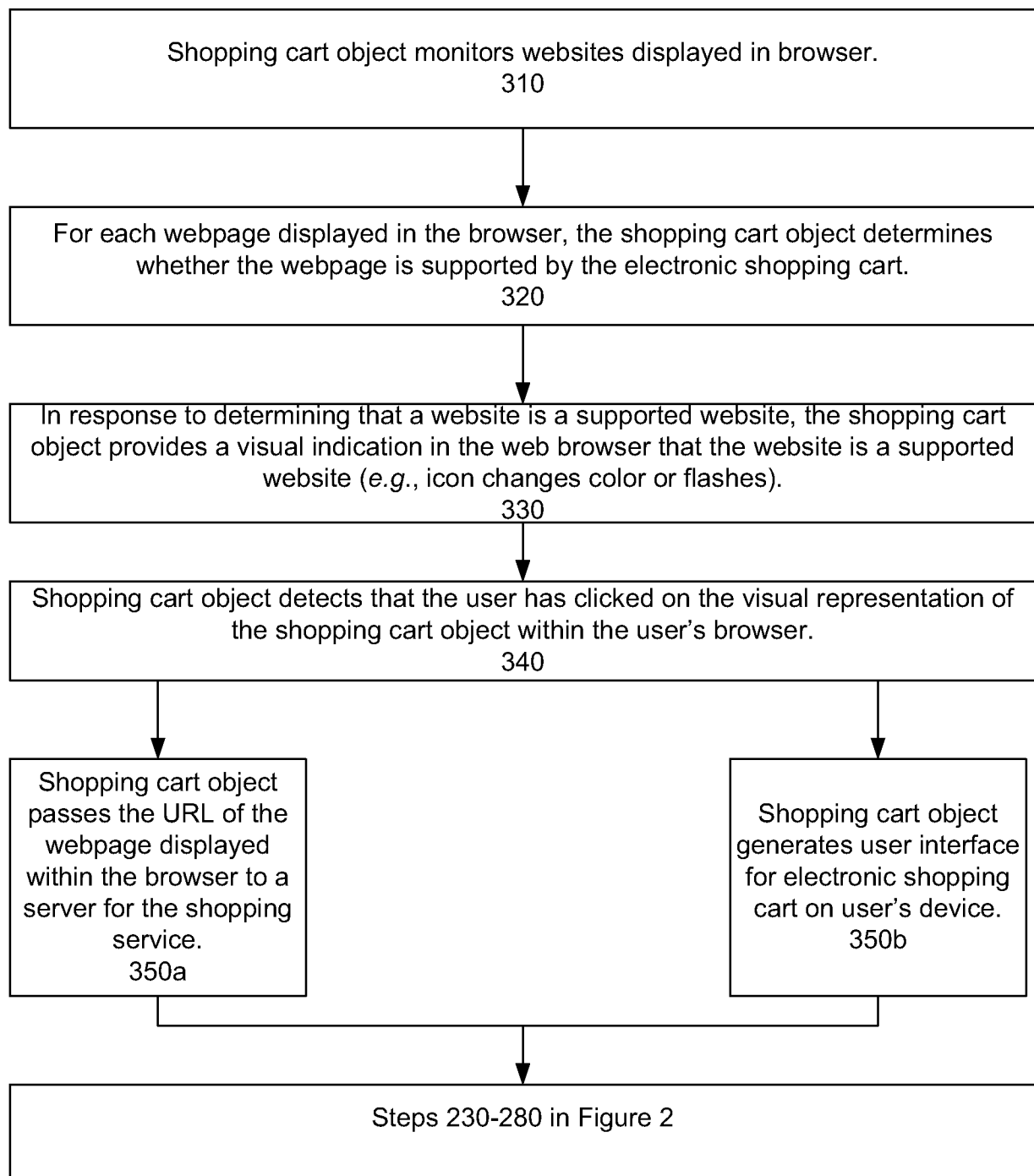


FIG. 3

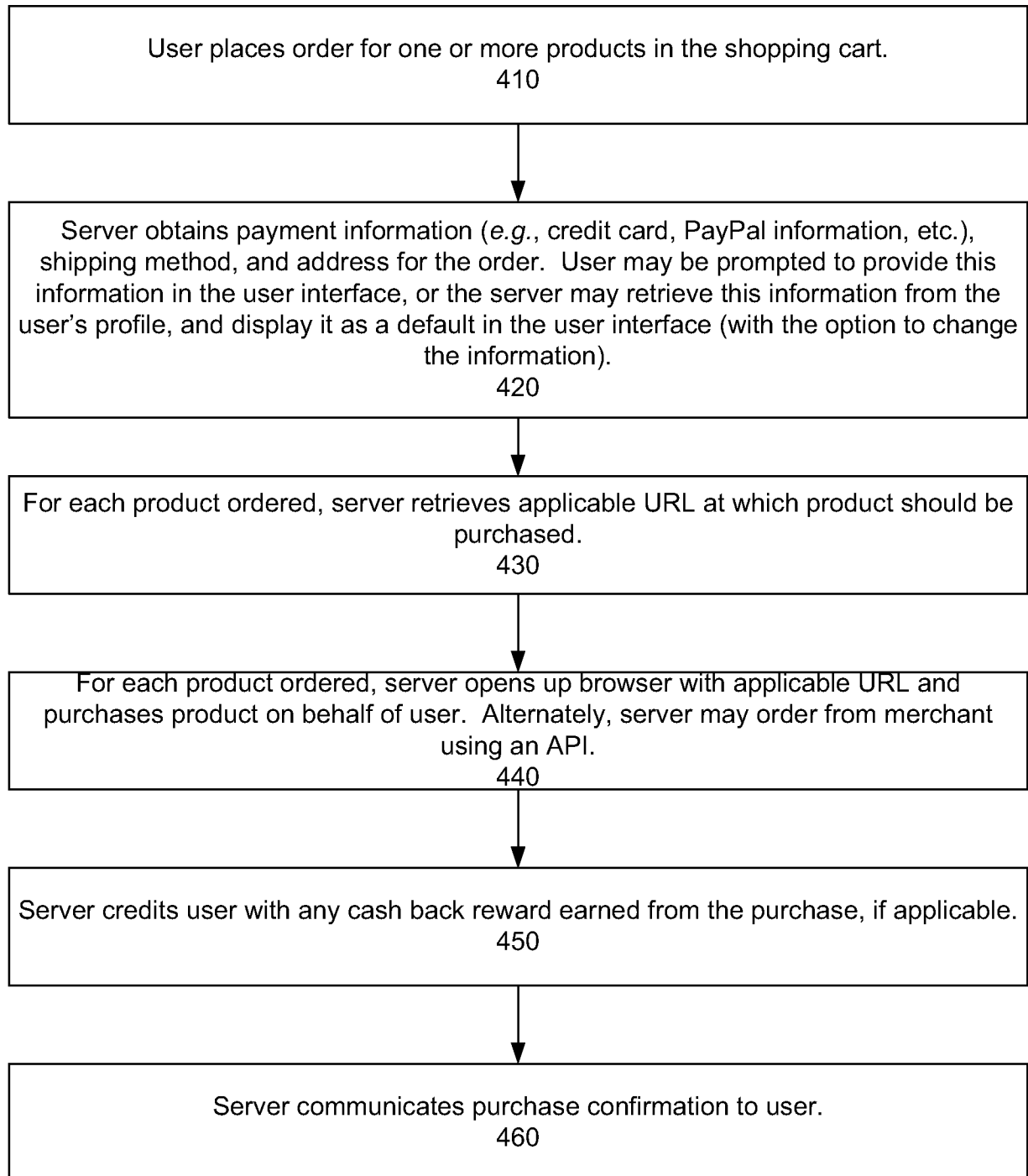


Fig. 4

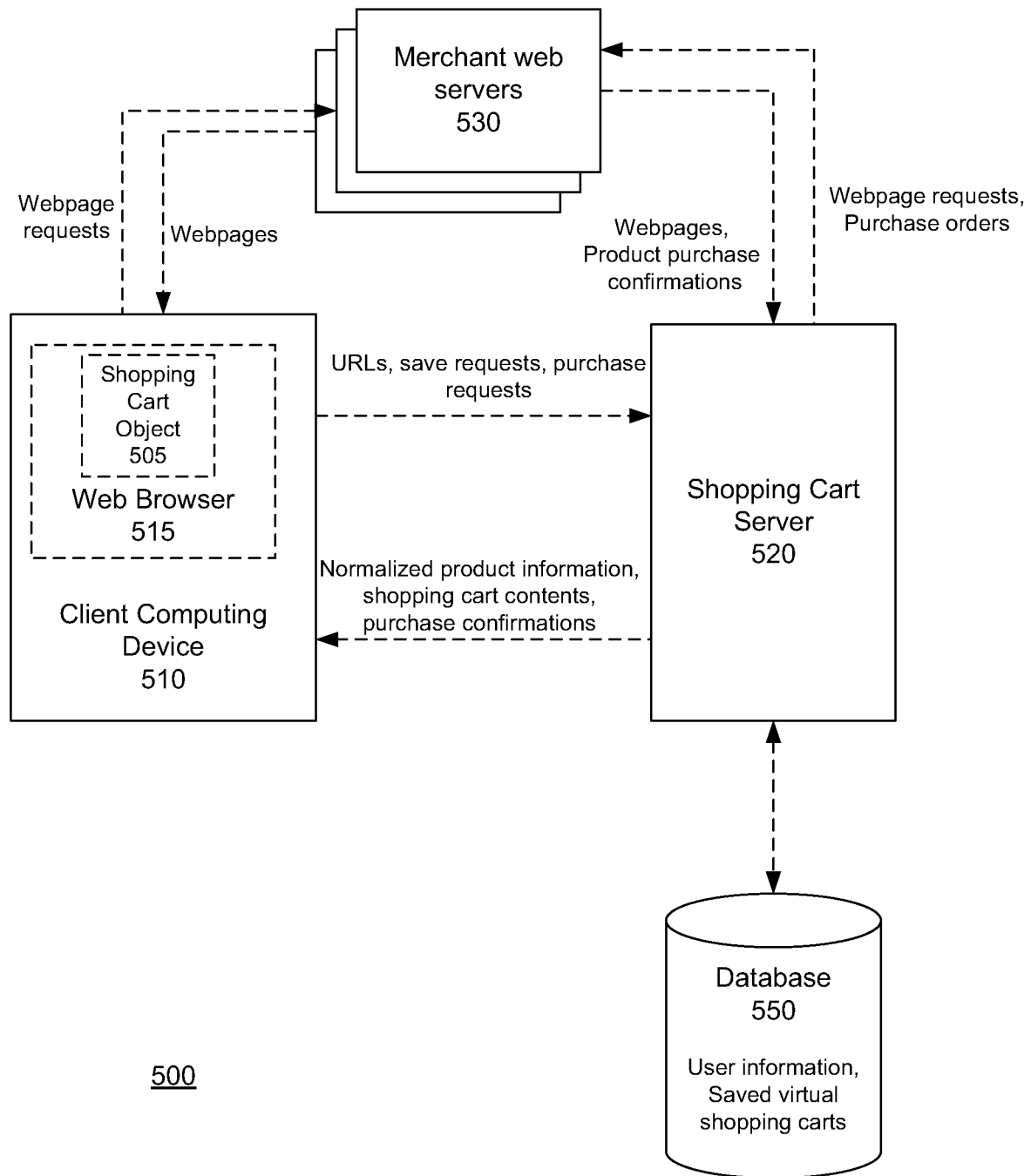
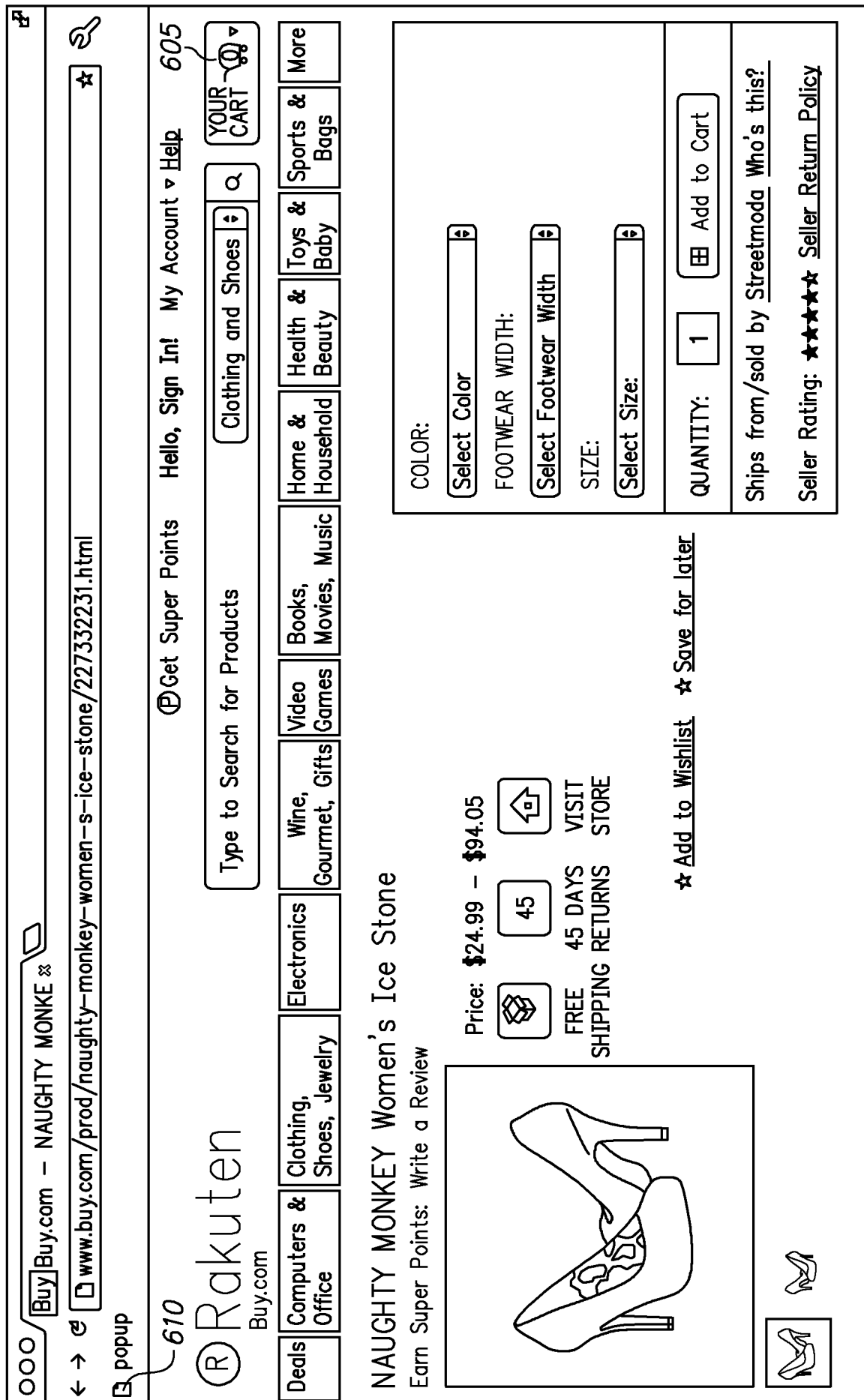
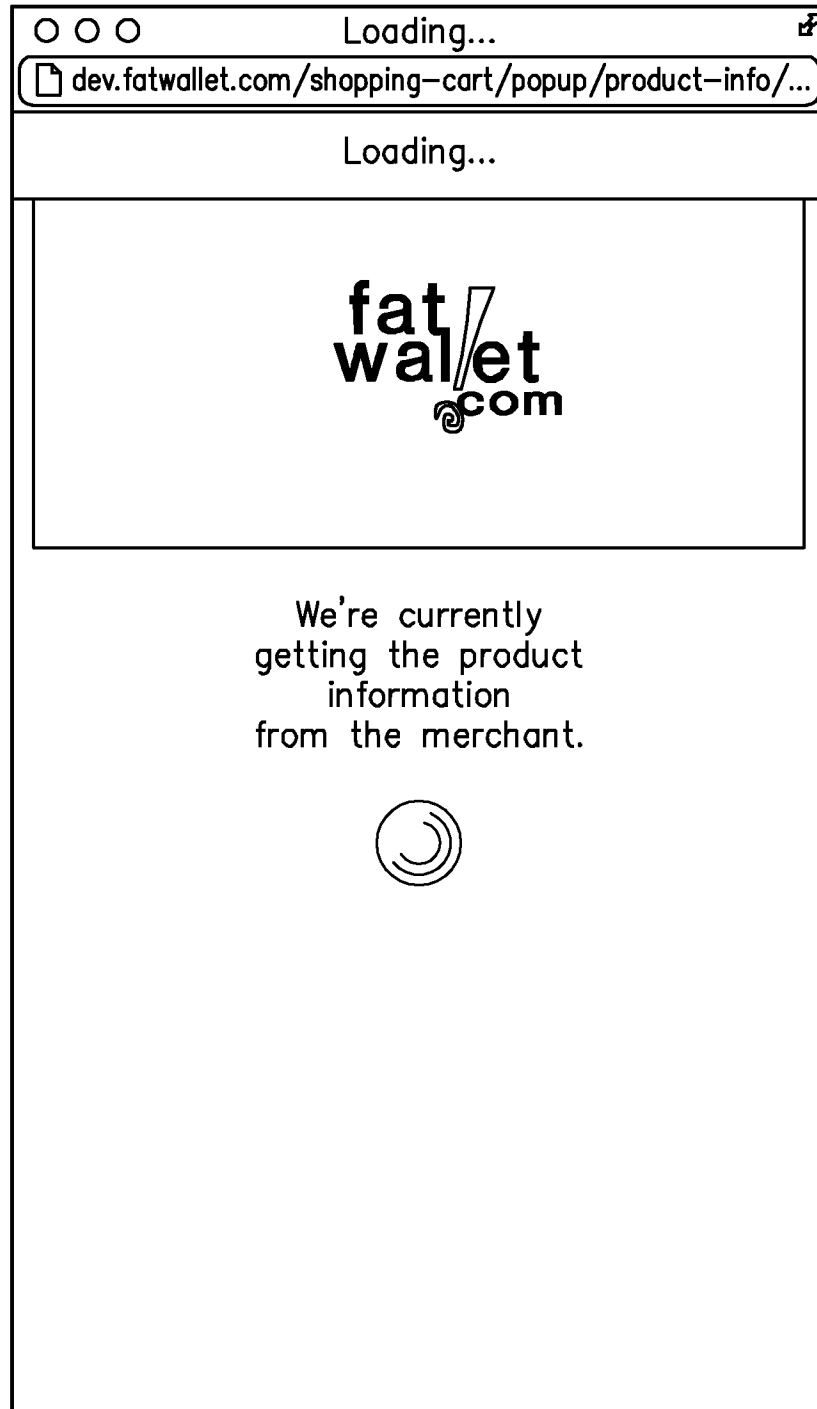


FIG. 5



**FIG. 6A**


**FIG. 6B**

Buy.com – Details

dev.fatwallet.com/shopping-cart/popup/product-info/...

Buy.com – Details

NAUGHTY MONKEY Women's Ice Stone



Retail Price\$24.99

Shipping:---

Tax:---

Total Price:---  
(Charged to Your Credit Card)

Up to 6.0% Cash Back\$1.50  
(Based on Retail Price of \$24.99)

ColorSelect Color >

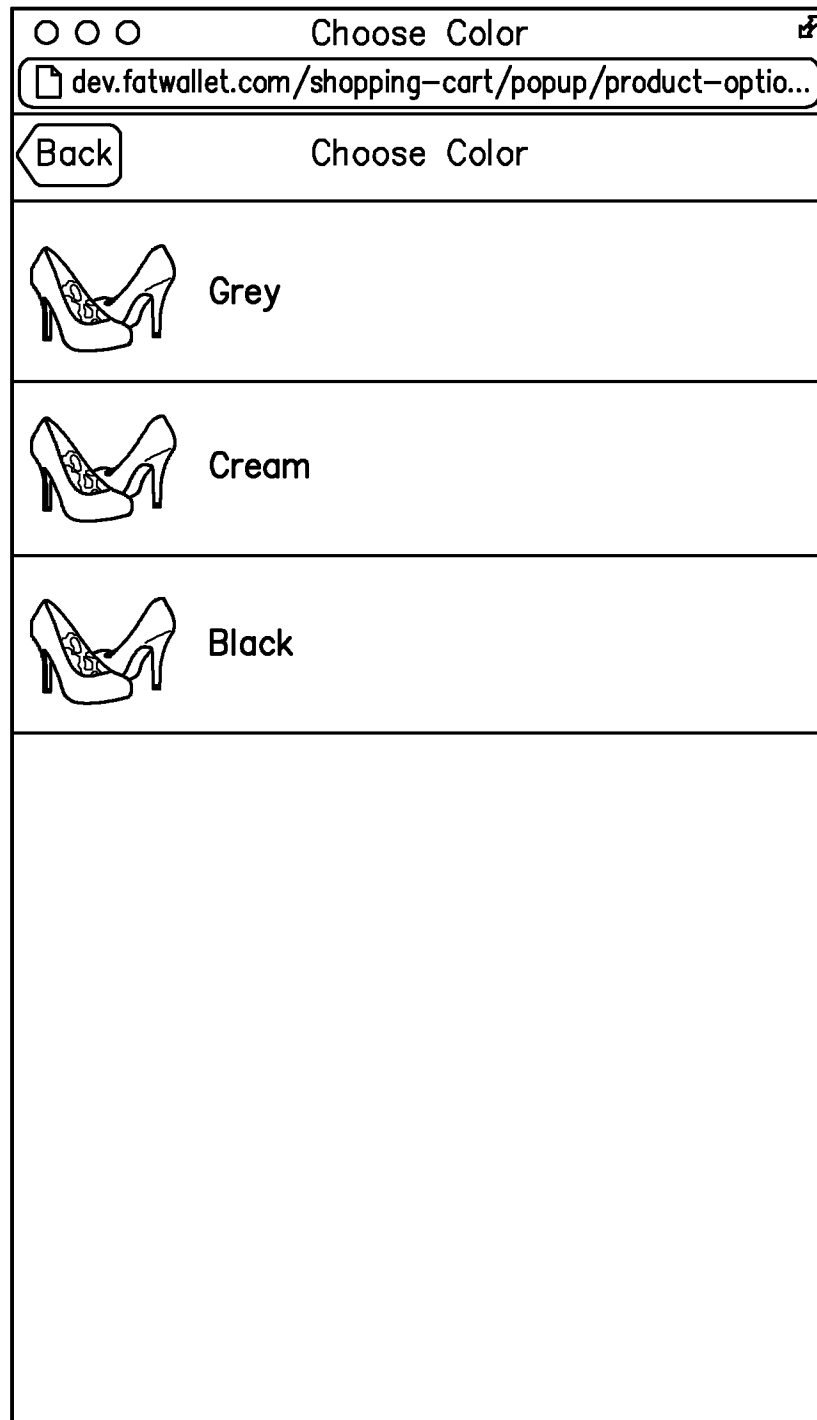
Footwear WidthSelect Footwear W... >

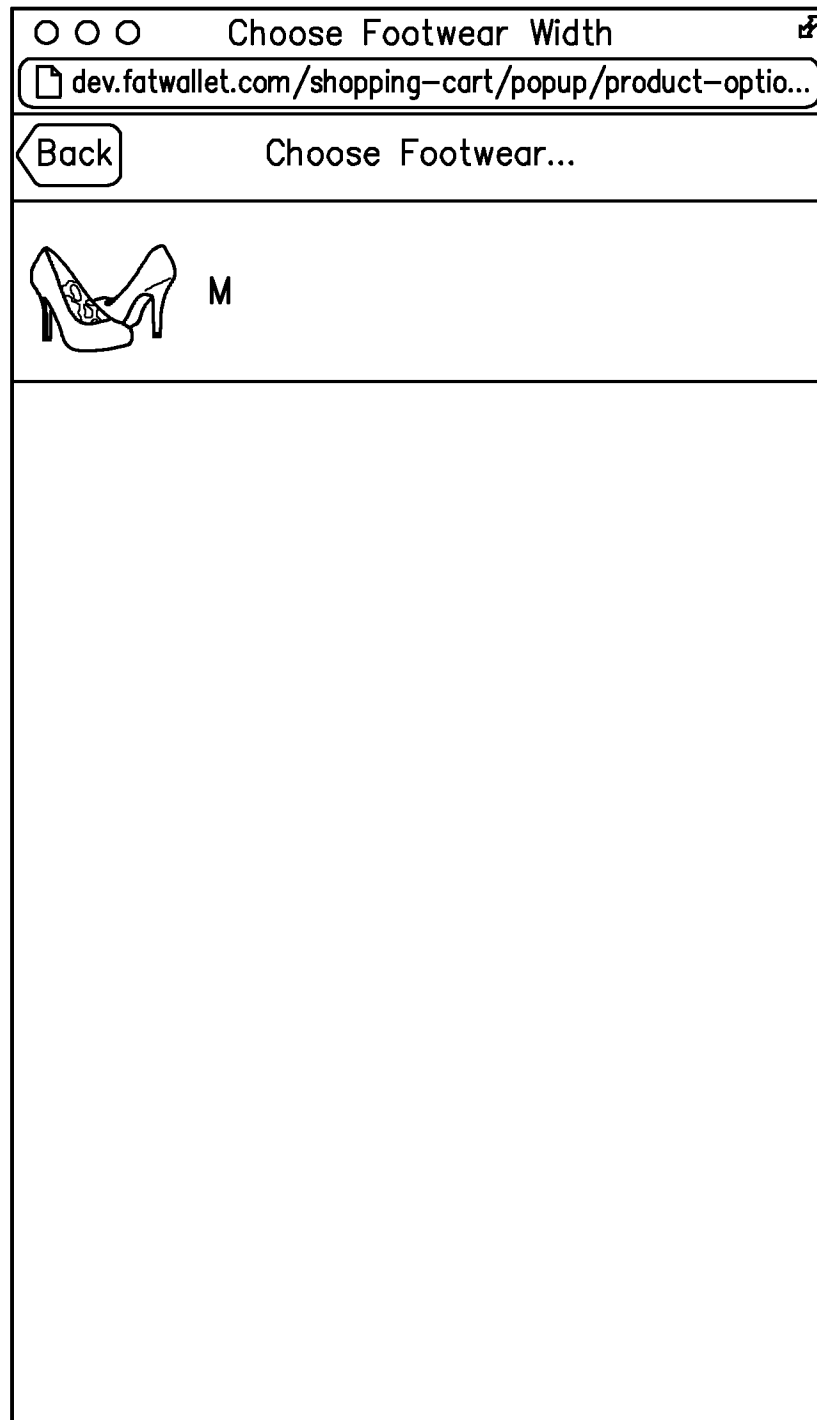
SizeSelect Size >

Save








Buy

**FIG. 6C**

**FIG. 6D**

**FIG. 6E**



Choose Size	
<a href="#">dev.fatwallet.com/shopping-cart/popup/product-optio...</a>	
Back	Choose Size
	9.5(Female US)
	9(Female US)
	8.5(Female US)
	8(Female US)
	7.5(Female US)
	6.5(Female US)
	6(Female US)

**FIG. 6F**

**FIG. 6G**

650

○ ○ ○ Add Shipping Address

dev-ryan.fatwallet.com/shopping-cart/popup/product...

Add Shipping Ad...

**\* Required**

Shipping Address Nickname: \*

My Address

First Name: \*

John

Last Name: \*

Doe

Company:

Address 1: \*

123 Main Street

Address 2:

City: \*

Beloit

State: \*

Wisconsin

Zip: \*

53511

Cancel

Save

**FIG. 6H**

655

○ ○ ○ Add Credit Card

dev-ryan.fatwallet.com/shopping-cart/popup/manage...

Add Credit Card

Card Information

*\* Required*

Credit Card Nickname: \*

My Credit Card

Number: \*

4111111111111111

Expiration Date: \*

Jan ▼ 2015 ▼

Type:

VISA ▼

CVV: \*

123

660

Billing Information

First Name: \*

John

Last Name: \*

Doe

Company:

Cancel

Save

**FIG. 6I**

○○○


Check Out

dev.fatwallet.com/shopping-cart/popup/place-order/v...

Back

Check Out

NAUGHTY MONKEY Women's Ice Stone



Retail Price: \$94.05

Shipping: \$0.00

Tax: \$5.17

Total Price: \$99.22

(Charging to Your Credit Card)

\$ Up to 6.0% Cash Back \$5.64

(Based on Retail Price of \$94.05)

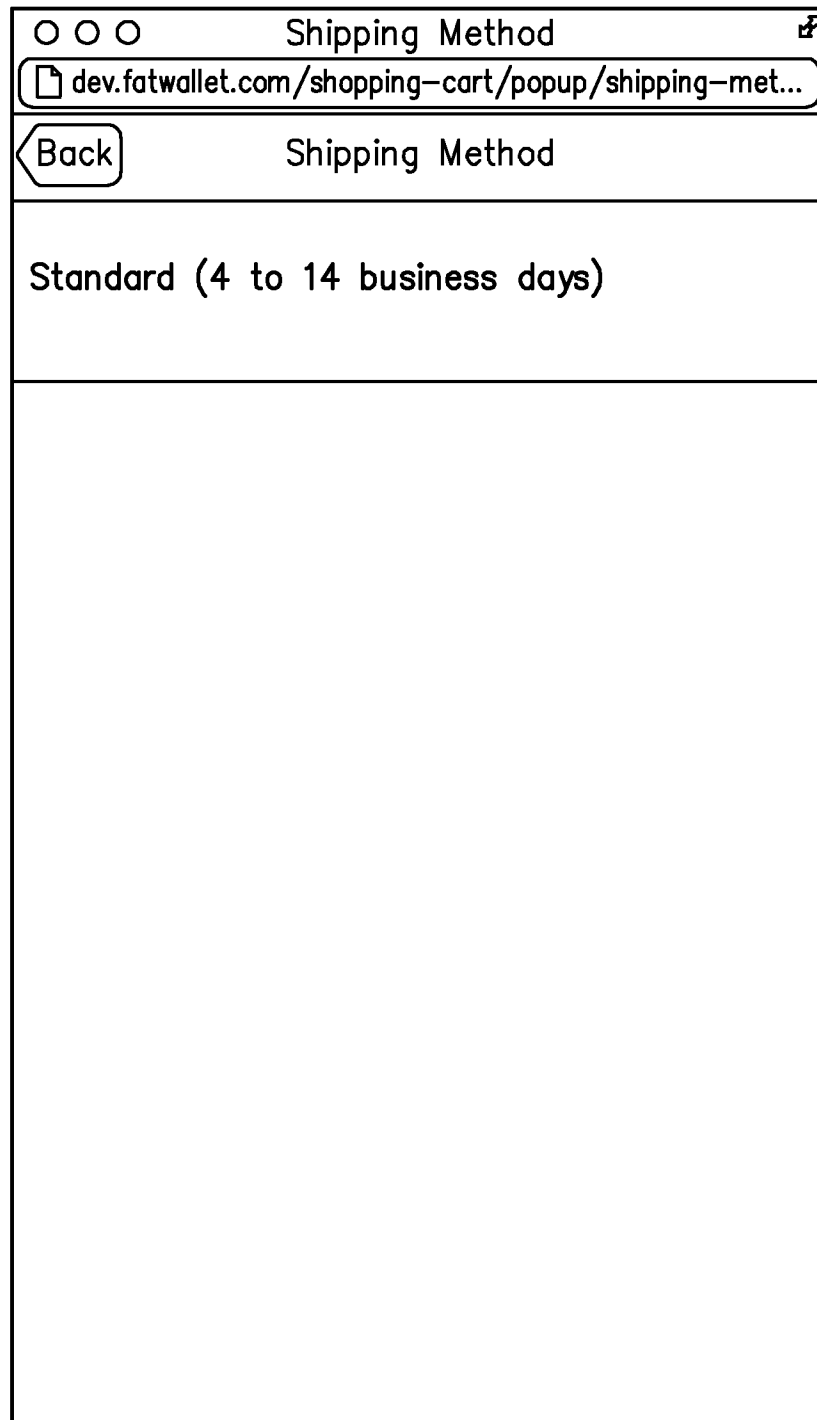
Payment VISA-\*\*\*\*-1111 >

Shipping Method select >

Shipping Address My Address >

123 Main Street

**FIG. 6J**

**FIG. 6K**

○○○

Check Out

dev.fatwallet.com/shopping-cart/popup/place-order/v...

Back

Check Out

NAUGHTY MONKEY Women's Ice Stone



Retail Price: \$94.05

Shipping: \$0.00

Tax: \$5.17

Total Price: \$99.22

(Charged to Your Credit Card)

\$ Up to 6.0% Cash Back

(Based on Retail Price of \$94.05)

\$5.64

Payment

VISA-\*\*\*\*-1111 >

Shipping Method

Standard (4 to 14 b... >

Shipping Address

My Address >

123 Main Street

Complete Purchase

675

680

**FIG. 6L**

Order Confirmation

dev.fatwallet.com/shopping-cart/popup/order-confirm...

Back Order Confirmation 685

Merchant Name	Order Number:	Order Date:
Buy.com	67336799	09/04/12

---

Product	Grey, M, 7.5(Female US), NAUGHTY MONKEY Women's Ice Stone
Subtotal	\$94.05
Shipping	\$0.00
Tax	\$5.17
Total	\$99.22

---

Cash Back	\$5.64
-----------	--------

---

Bill To	Jon Doe 123 Main Street Beloit, WI 53511 8156547272 VISA****-1111
---------	---

Ship To	John Doe 123 Main Street Beloit, WI 53511
---------	---

**FIG. 6M**



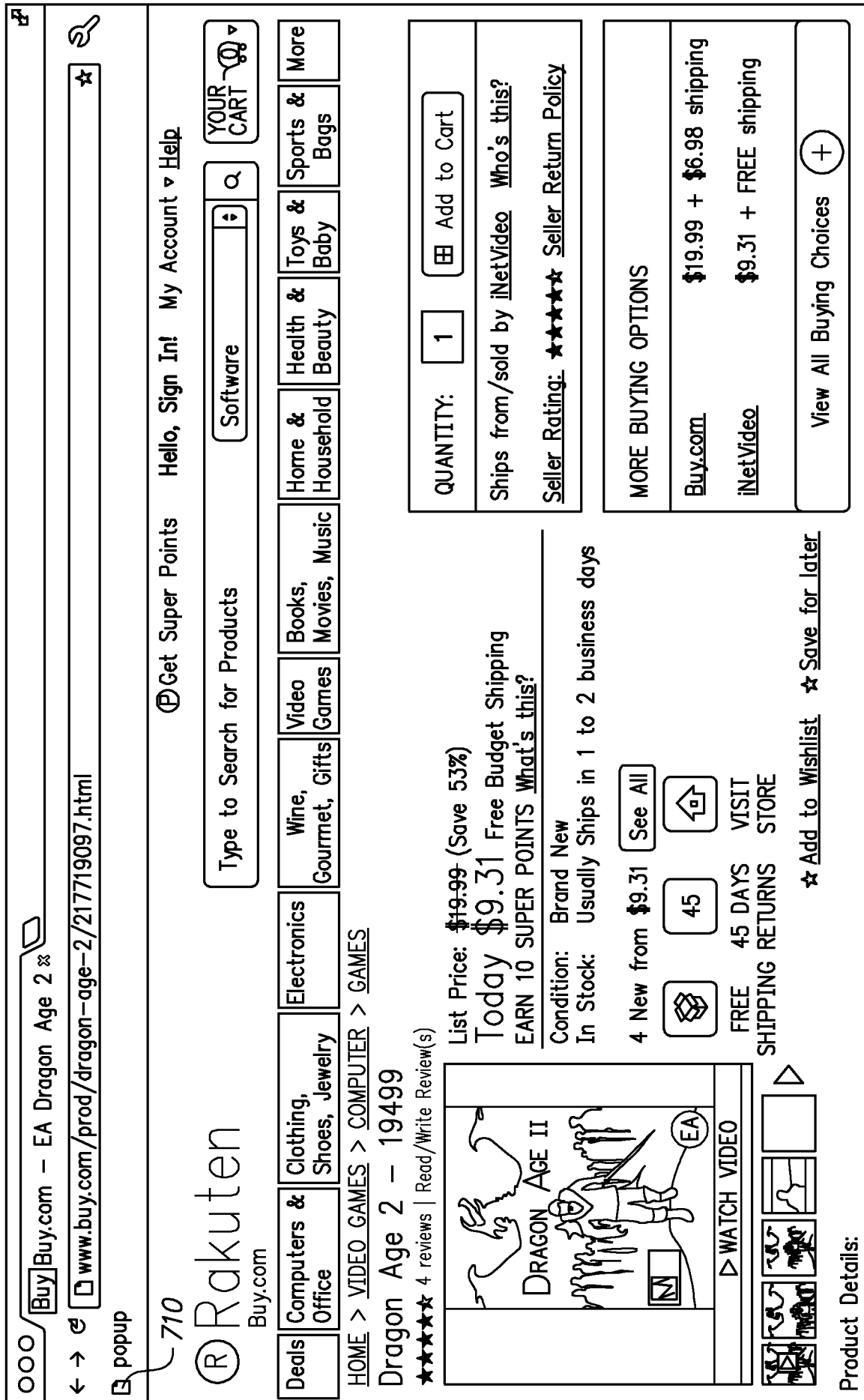
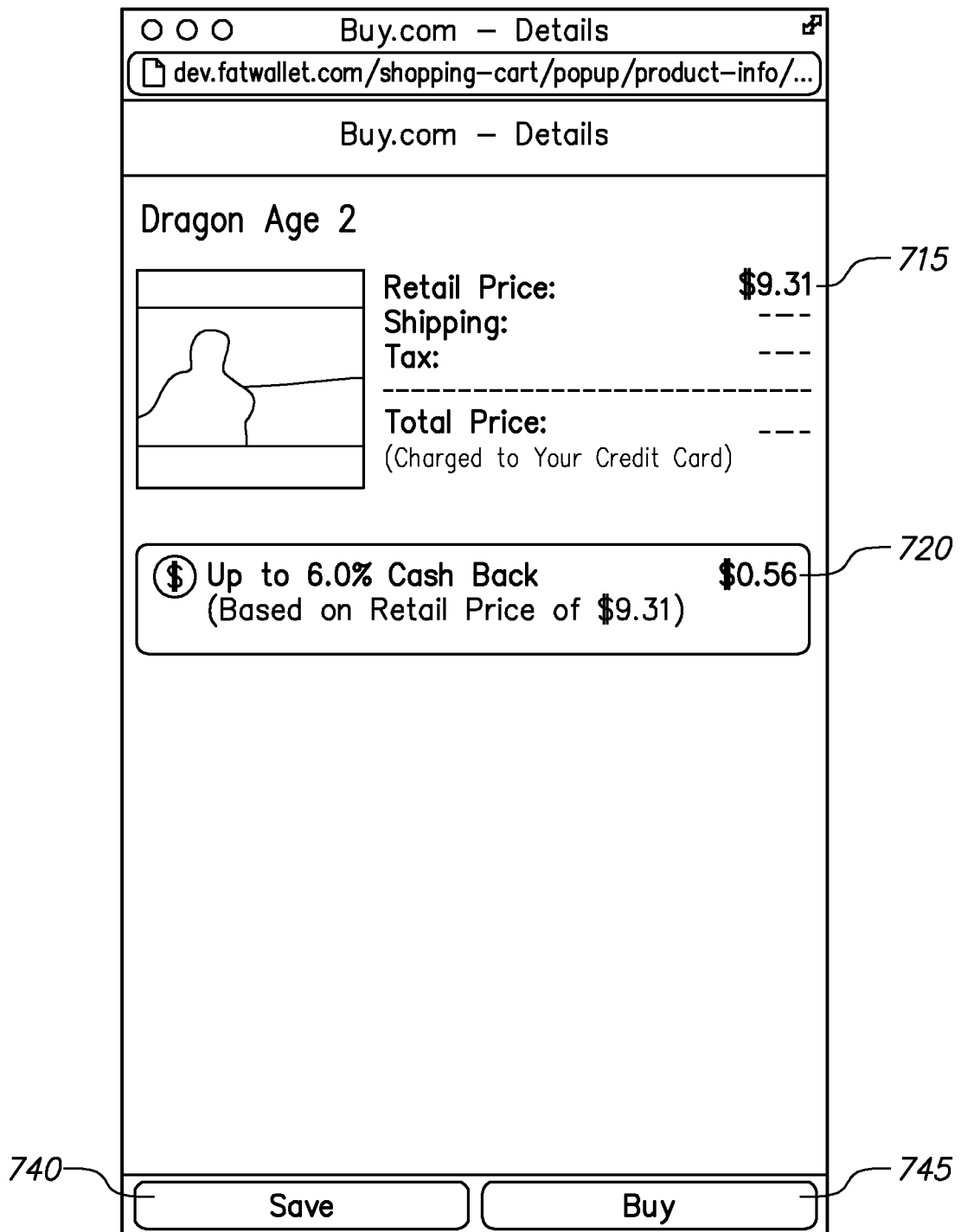
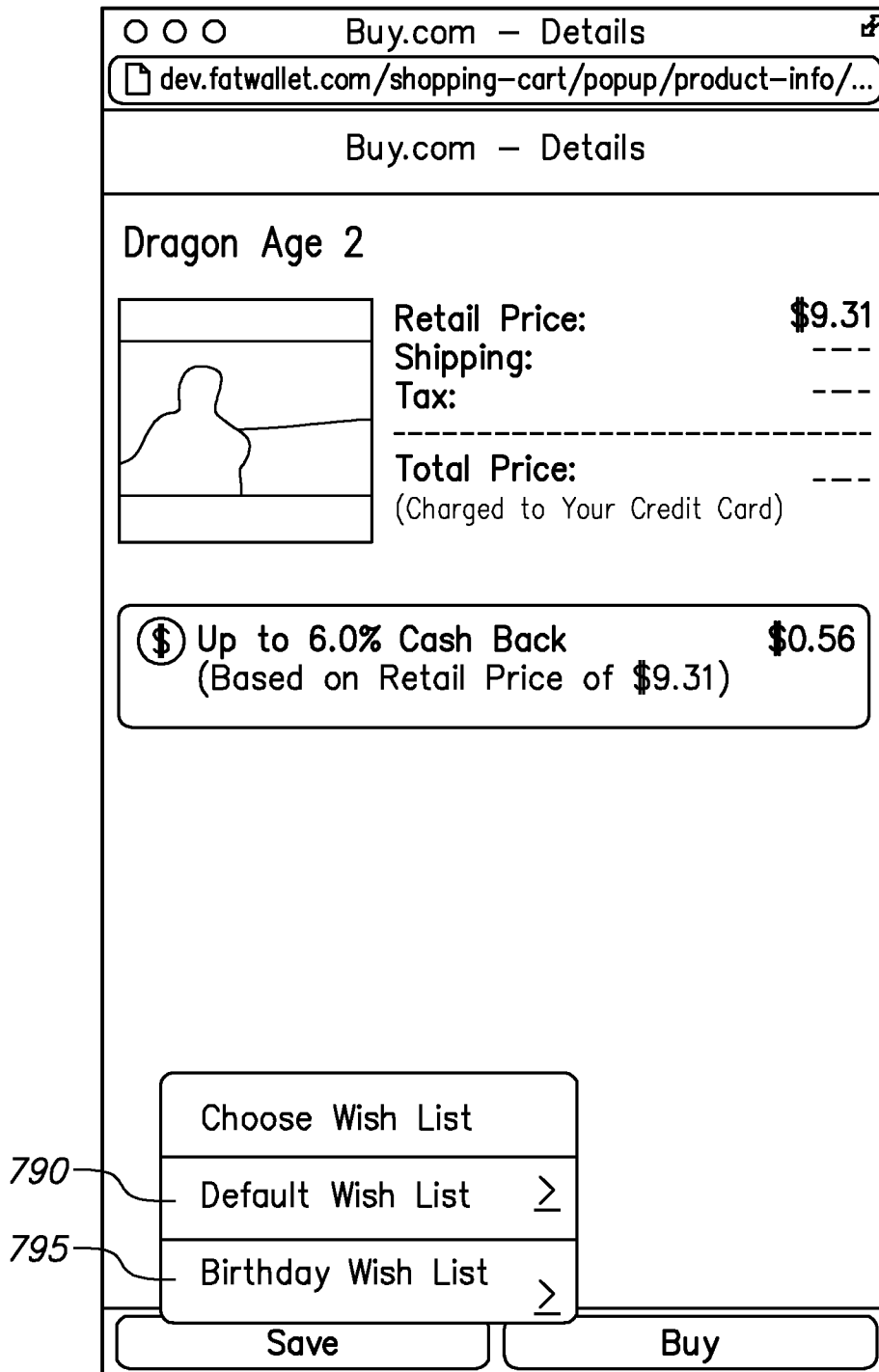


FIG. 7A

**FIG. 7B**

**FIG. 7C**

**FIG. 7D**

Buy.com – Details

dev.fatwallet.com/shopping-cart/popup/product-info/...

Buy.com – Details

Dragon Age 2



Retail Price: \$9.31

Shipping: ---

Tax: ---

Total Price: ---

(Charged to Your Credit Card)

\$ Up to 6.0% Cash Back \$0.56

(Based on Retail Price of \$9.31)

You saved the item to your wish lists!

Save

Buy

**FIG. 7E**

## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2013/066691****A. CLASSIFICATION OF SUBJECT MATTER****G06Q 30/06(2012.01)i**

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)

G06Q 30/06; G06F 3/048; G06Q 30/00; G06Q 50/28

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) &amp; keywords: electronic shopping cart, multi-merchant, reward and transaction

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 7512548 B1 (JEFFREY P. BEZOS et al.) 31 March 2009 See abstract, column 5, line 40-53, column 12 line 65 - column 13 line 15, claims 1-8 and figures 1-10c.	1-31
Y	US 2010-0042515 A1 (ARTURO CRESPO et al.) 18 February 2010 See abstract, claims 1, 12-13, 22-24, 30-33 and figures 1, 5, 6.	1-31
A	US 2010-0205068 A1 (DAVID HODSON et al.) 12 August 2010 See abstract, claims 11-15, 91-93 and figures 7-13.	1-31
A	KR 10-2010-0099843 A (SK TELECOM CO., LTD.) 15 September 2010 See abstract, claims 1, 2, 16-24 and figures 3-7.	1-31
A	KR 10-2001-0077123 A (SONG, YONG UK) 17 August 2001 See abstract, claims 1, 2 and figures 1-5c.	1-31



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 application or patent but 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

"&amp;" document member of the same patent family

Date of the actual completion of the international search

13 March 2014 (13.03.2014)

Date of mailing of the international search report

**14 March 2014 (14.03.2014)**

Name and mailing address of the ISA/KR

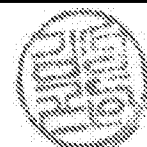
International Application Division  
Korean Intellectual Property Office  
189 Cheongsu-ro, Seo-gu, Daejeon Metropolitan City, 302-701,  
Republic of Korea

Facsimile No. +82-42-472-7140

Authorized officer

KIM, Sung Gon

Telephone No. +82-42-481-8746



**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2013/066691**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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KR 10-2001-0077123 A	17/08/2001	None	