

**(12) STANDARD PATENT**  
**(19) AUSTRALIAN PATENT OFFICE**

**(11) Application No. AU 2013338291 B2**

(54) Title  
**System, method, and computer program for providing a multi-merchant electronic shopping cart for a shopping service**

(51) International Patent Classification(s)  
**G06Q 30/06** (2012.01)

(21) Application No: **2013338291** (22) Date of Filing: **2013.10.24**

(87) WIPO No: **WO14/070591**

(30) Priority Data

(31) Number **13/666,134** (32) Date **2012.11.01** (33) Country **US**

(43) Publication Date: **2014.05.08**  
(44) Accepted Journal Date: **2017.02.16**

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(56) Related Art  
**US 2010/0042515**  
**US 7512548**



(51) International Patent Classification: **G06Q 30/06** (2012.01)

(21) International Application Number: **PCT/US2013/066691**

(22) International Filing Date: 24 October 2013 (24.10.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 13/666,134 1 November 2012 (01.11.2012) US

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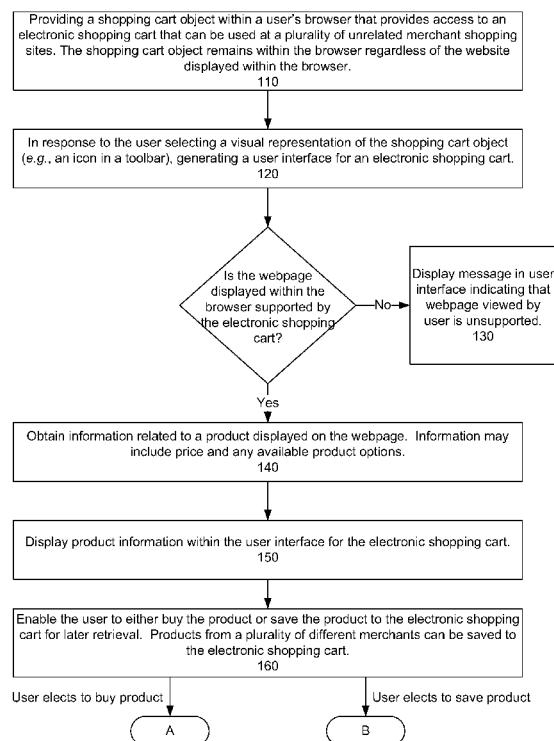
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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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.



**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

**Published:**

- *with international search report (Art. 21(3))*

## 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.

10        **2. BACKGROUND ART**

Any discussion of the prior art throughout the specification should in no way be considered as an admission that such prior art is widely known or forms part of common general knowledge in the field.

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 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 though 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 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

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 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.

According to a first aspect of the present invention there is provided a method performed by a computer system for providing a multi-merchant, electronic shopping cart for a shopping service, the method comprising:

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;

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;

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:

automatically extracting information related to a product on the supported webpage and automatically displaying the extracted information in the user interface for the electronic shopping cart prior to the product being added to the electronic shopping cart, 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;

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

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.

According to a second aspect of the present invention there is provided a system for providing a multi-merchant electronic shopping cart for a shopping service, the system comprising:

5 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 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, information related to a product on the supported webpage is automatically extracted and a user interface for the electronic shopping cart is automatically generated with the extracted information prior to the product being added to the electronic shopping cart and wherein a user is able to purchase the product or save the product to the electronic shopping cart; and

10 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.

15 According to a third aspect of the present invention there is provided 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:

20 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;

25 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;

5 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:

10 automatically extracting information related to a product on the supported webpage and automatically displaying the extracted information in the user interface for the electronic shopping cart prior to the product being added to the electronic shopping cart, 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;

15 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

20 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

25 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.

It is an object of the present invention to overcome or ameliorate at least one of the disadvantages of the prior art, or to provide a useful alternative.

30 Unless the context clearly requires otherwise, throughout the description and the claims, the words “comprise”, “comprising”, and the like are to be construed in an inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in the sense of “including, but not limited to”.

#### **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.

5 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.

10 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.

15 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 20 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 25 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 30 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 5 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 10 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 15 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, 20 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 25 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 30 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 25 performance, the shopping cart object may extract (e.g., "scrape") some or all of the 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, 5 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 10 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 15 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 20 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 25 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 30 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 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 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.

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.

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 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 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 5 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 10 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 15 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 20 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 automatically extracting information related to a product on the supported webpage and automatically displaying the extracted information in the user interface for the electronic shopping cart prior to the product being added to the electronic shopping cart, 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

30 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.

5 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:

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

10 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 method further comprises:

15 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;

20 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;

25 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 5, 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.
7. The method of claim 5, 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 automatically extracting information related to a product on the supported webpage and automatically displaying the extracted information step comprises extracting product information from the supported webpage, normalizing the extracted information, and displaying the normalized information in the user interface.
9. The method of claim 1, wherein the automatically extracting information related to a product on the supported webpage and automatically displaying the extracted 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 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 embedded within the browser.
- 25 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 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.

15. The method of claim 1, wherein conducting a purchase transaction comprises:

retrieving a user-saved address and payment information;

10 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.

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

20 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 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, information related to a product on the supported webpage is automatically extracted and a user interface for the electronic shopping cart is automatically generated with the extracted information prior to the product being added to the electronic shopping cart and wherein a user is able to purchase the product or save the product to the electronic shopping cart; and

25 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, 5 enables the computer system to perform the following method for providing a multi-merchant electronic shopping cart for a shopping service, the method comprising:

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 10 wherein the shopping cart object remains within the browser regardless of the website displayed in the browser;

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 15 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, performing the following:

20 automatically extracting information related to a product on the supported webpage and automatically displaying the extracted information in the user interface for the electronic shopping cart prior to the product being added to the electronic shopping cart, wherein, if the product has one or more options, the information includes the options and the user is able to 25 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 products from a plurality of unrelated merchant shopping sites to the 30 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

5 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.

10 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.

15 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:

20 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;

25 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.

5 22. The computer program of claim 21, 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 10 coupon, wherein the purchase transaction is terminated before completion of a purchase.

23. The computer program of claim 21, wherein determining if a coupon applies comprises:

identifying any potentially-applicable coupons; and

15 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 automatically extracting information related to a product on the supported webpage and automatically displaying the extracted information step comprises extracting product information from the supported webpage, normalizing the extracted information, and displaying 20 the normalized information in the user interface.

25. The computer program of claim 17, wherein the automatically extracting information related to a product on the supported webpage and automatically displaying the extracted 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 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.

5 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.

10 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;

15 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.

Providing a shopping cart object 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. The shopping cart object remains within the browser regardless of the website displayed within the browser.

110

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

120

Is the webpage displayed within the browser supported by the electronic shopping cart?

No

Display message in user interface indicating that webpage viewed by user is unsupported.

130

Yes

Obtain information related to a product displayed on the webpage. Information may include price and any available product options.

140

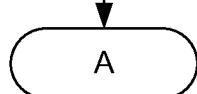
Display product information within the user interface for the electronic shopping cart.

150

Enable the user to either buy the product or save the product to the electronic shopping cart for later retrieval. Products from a plurality of different merchants can be saved to the electronic shopping cart.

160

User elects to buy product



User elects to save product

FIG. 1a

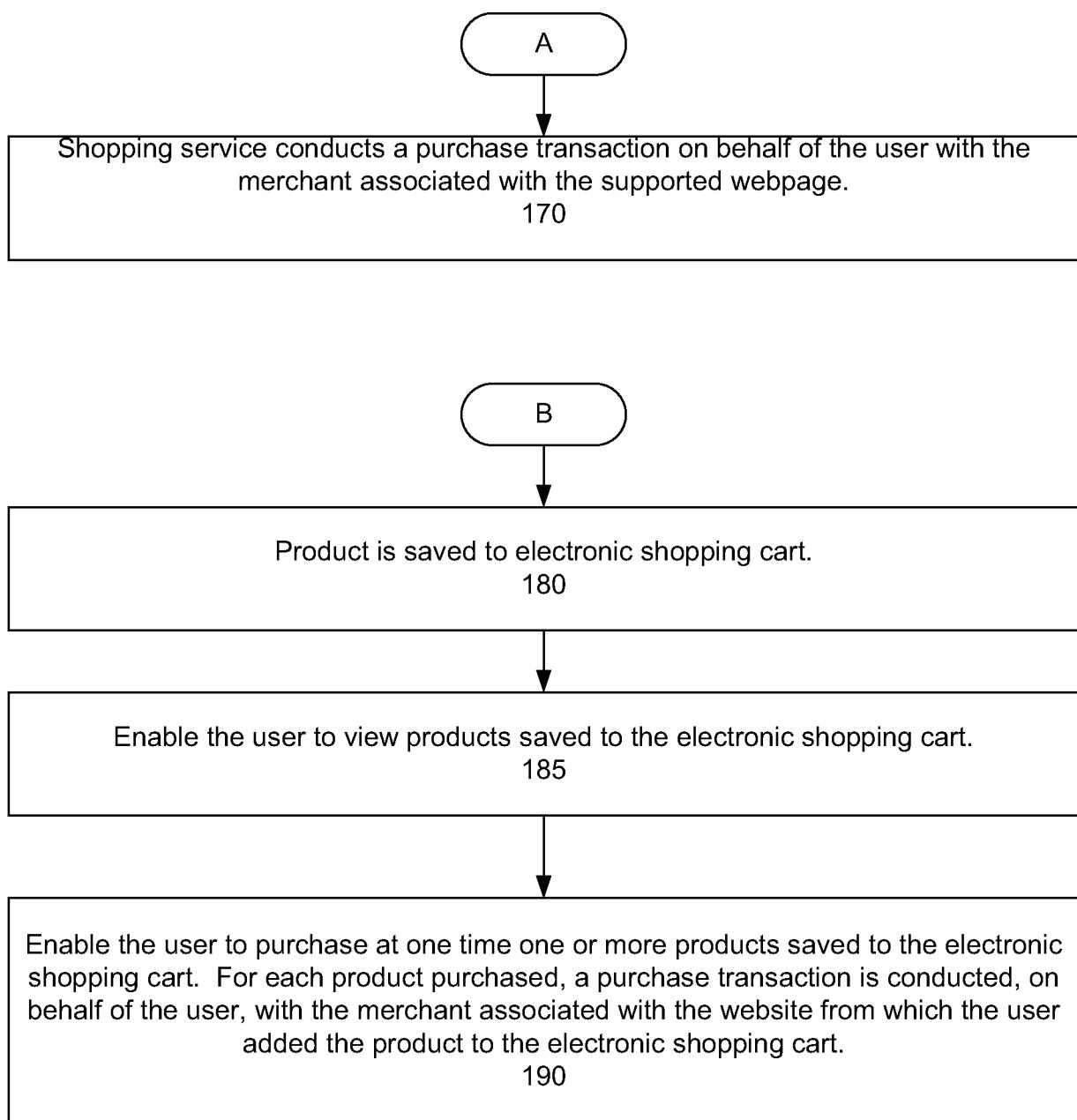


FIG. 1b

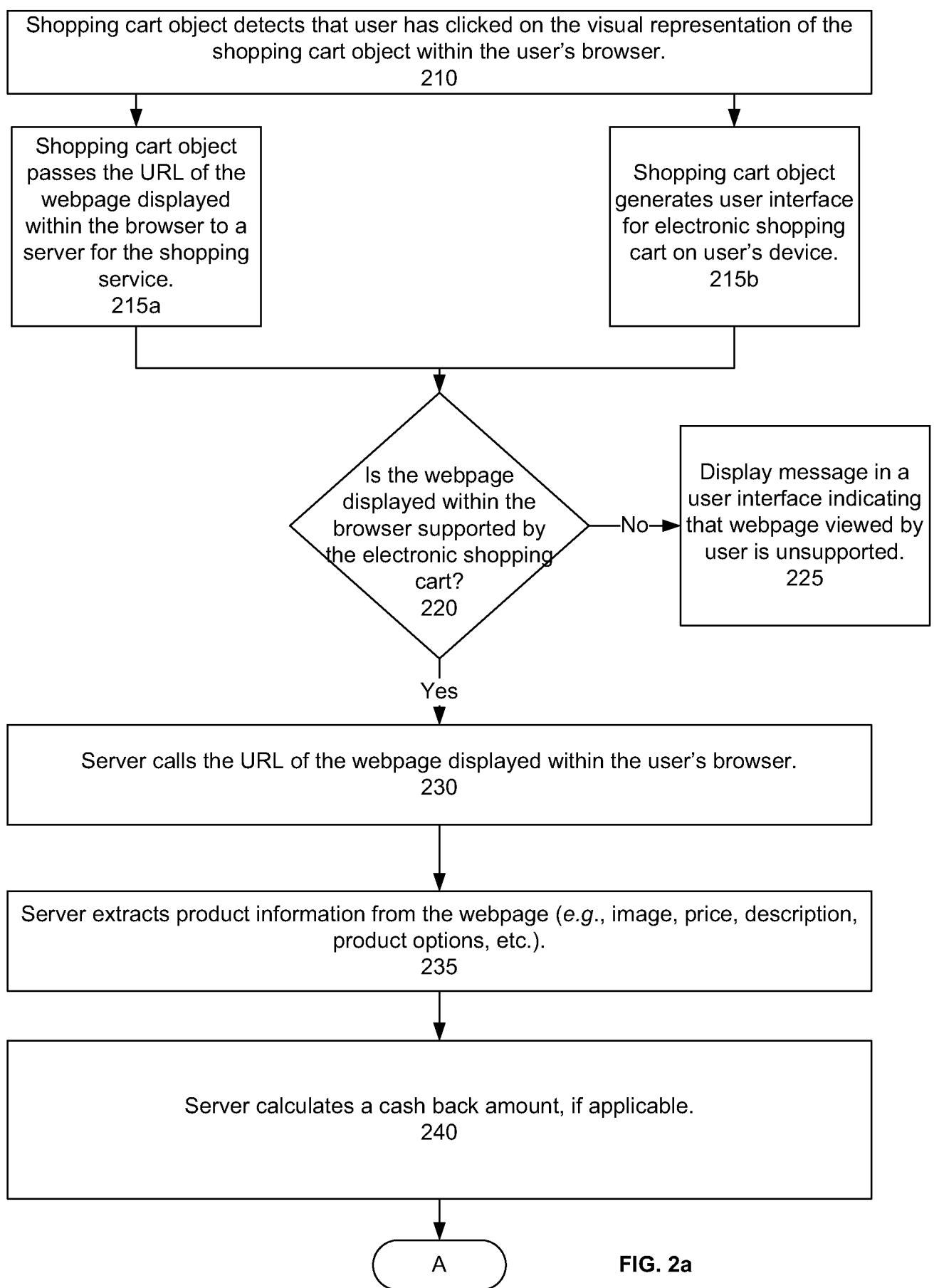


FIG. 2a

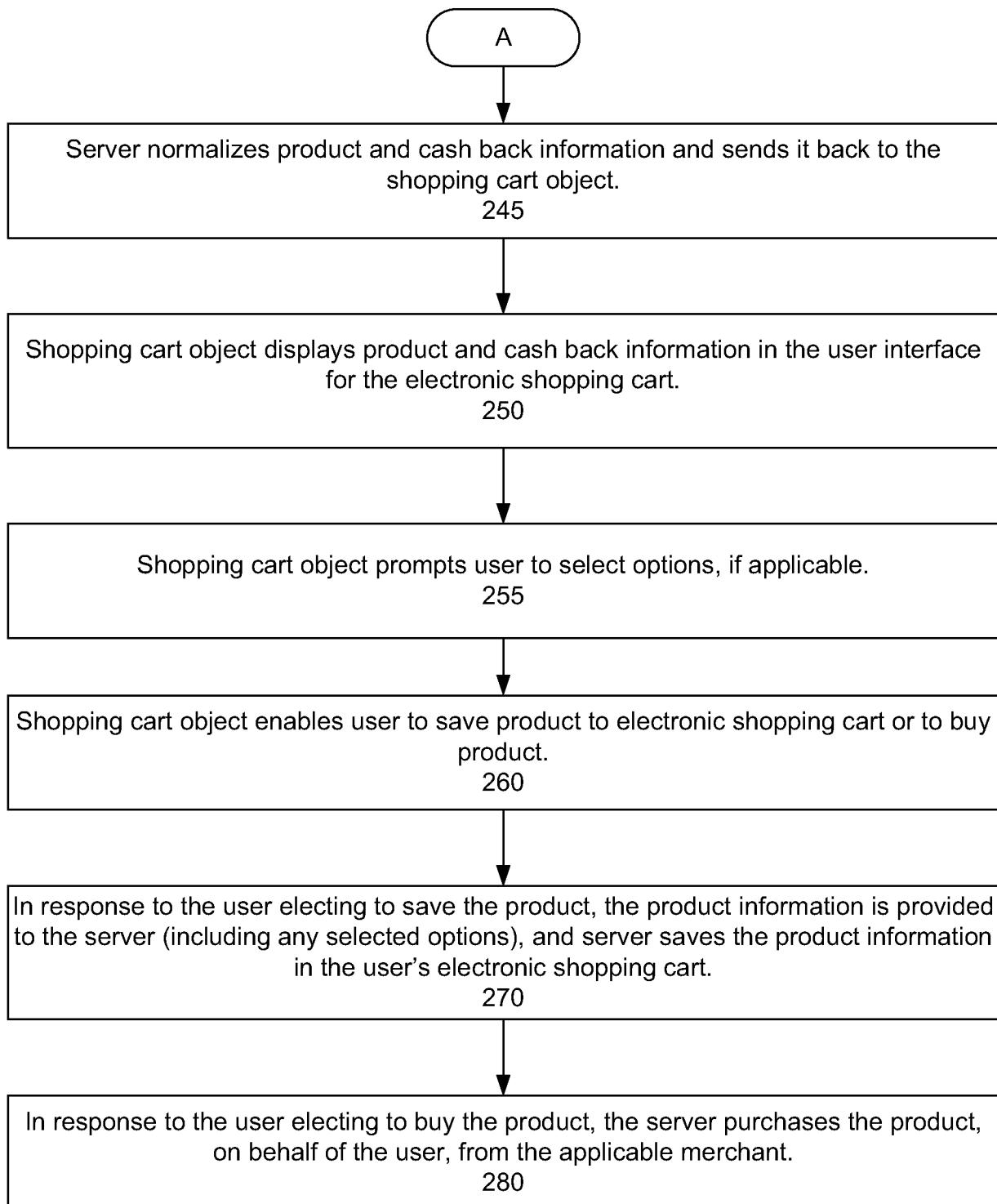


Fig. 2b

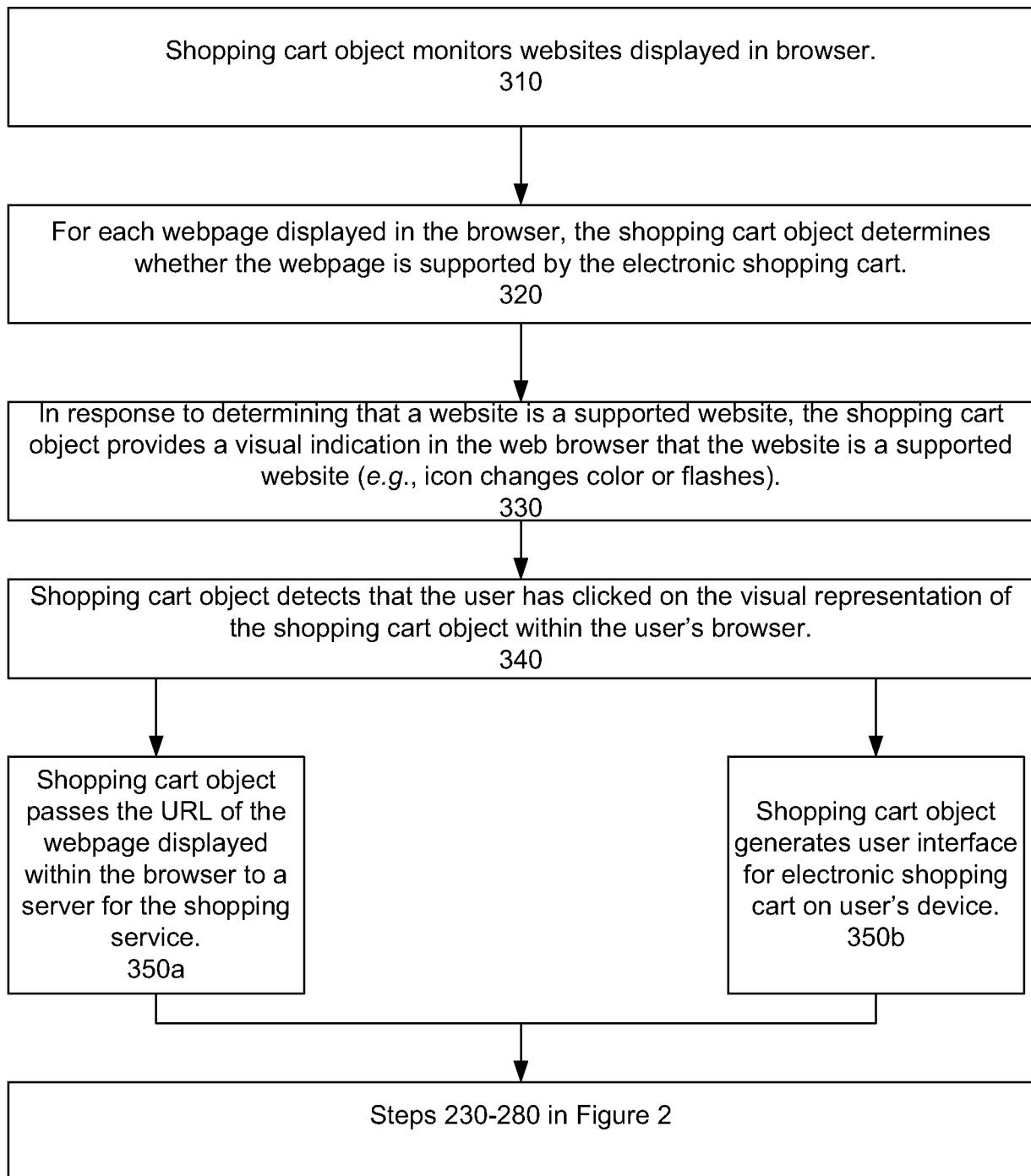


FIG. 3

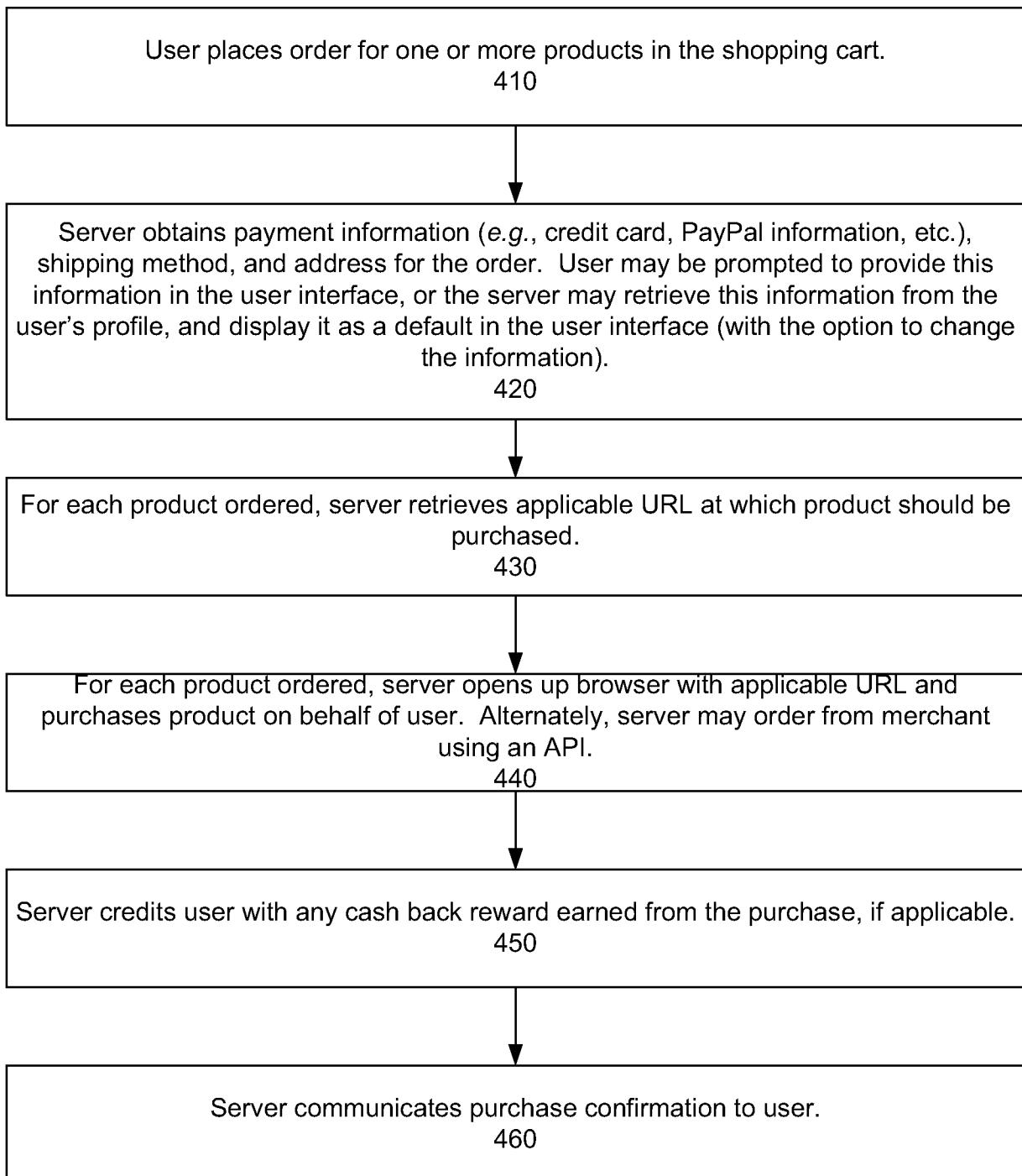


Fig. 4

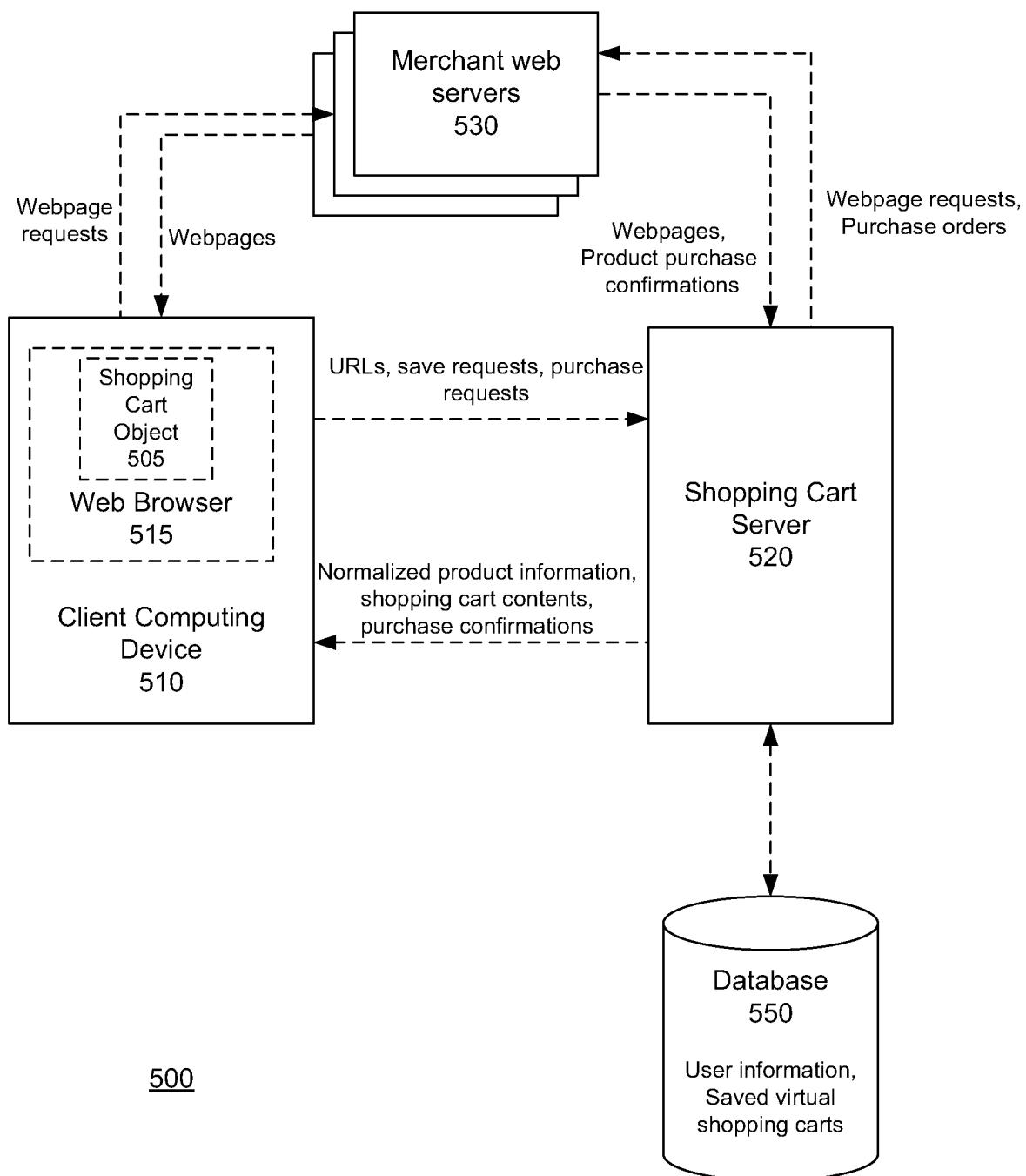


FIG. 5

FIG. 6A



**FIG. 6B**

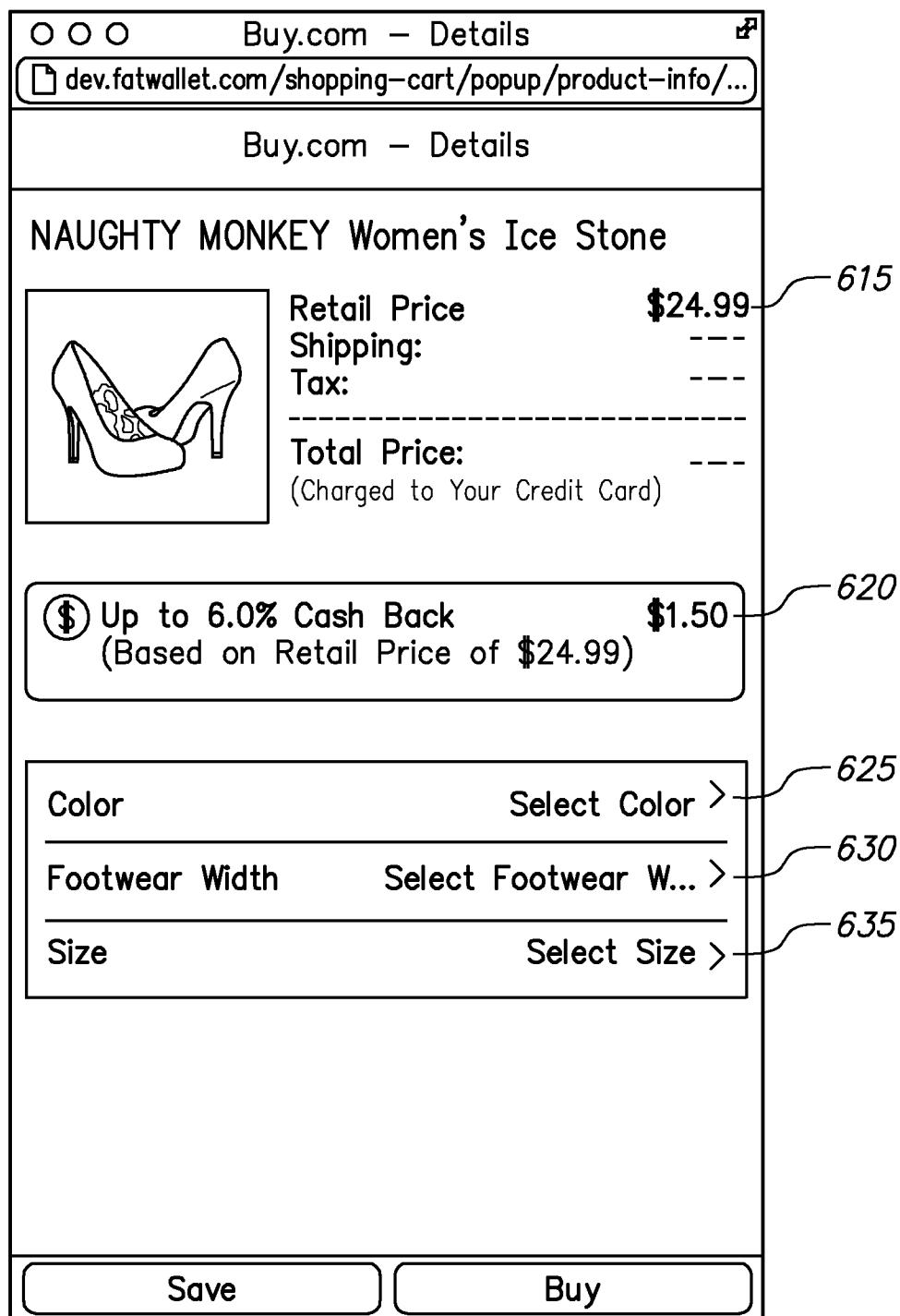
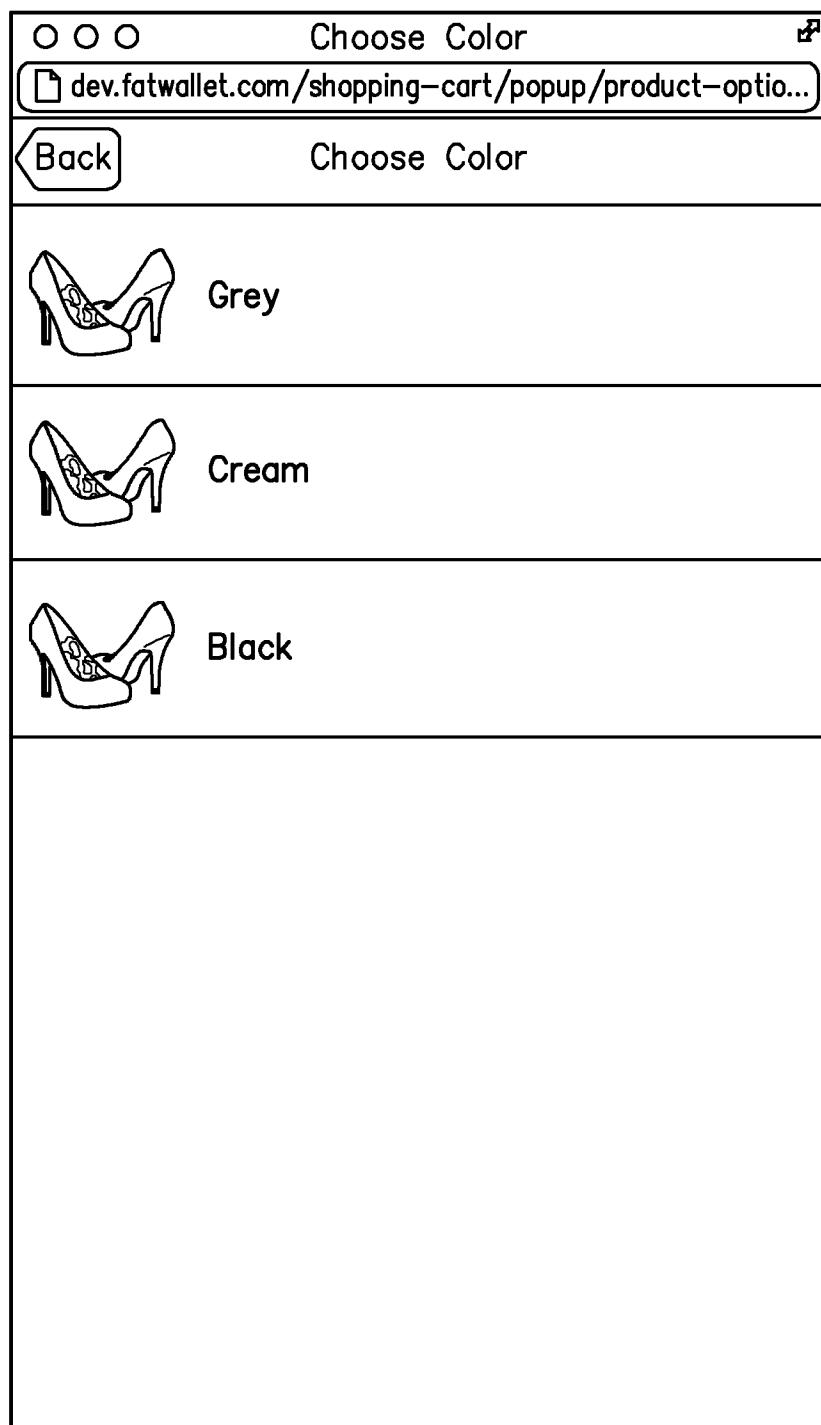
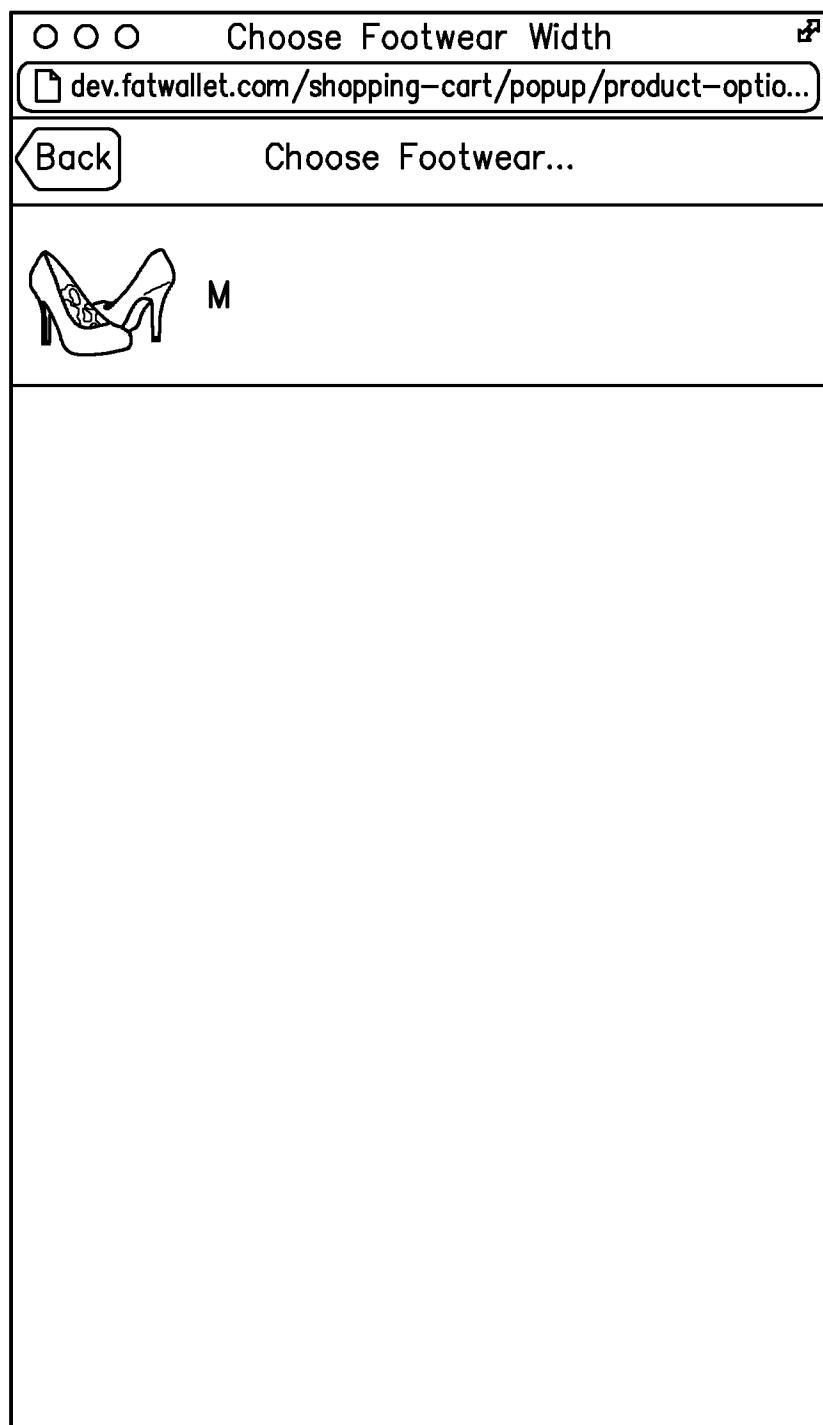


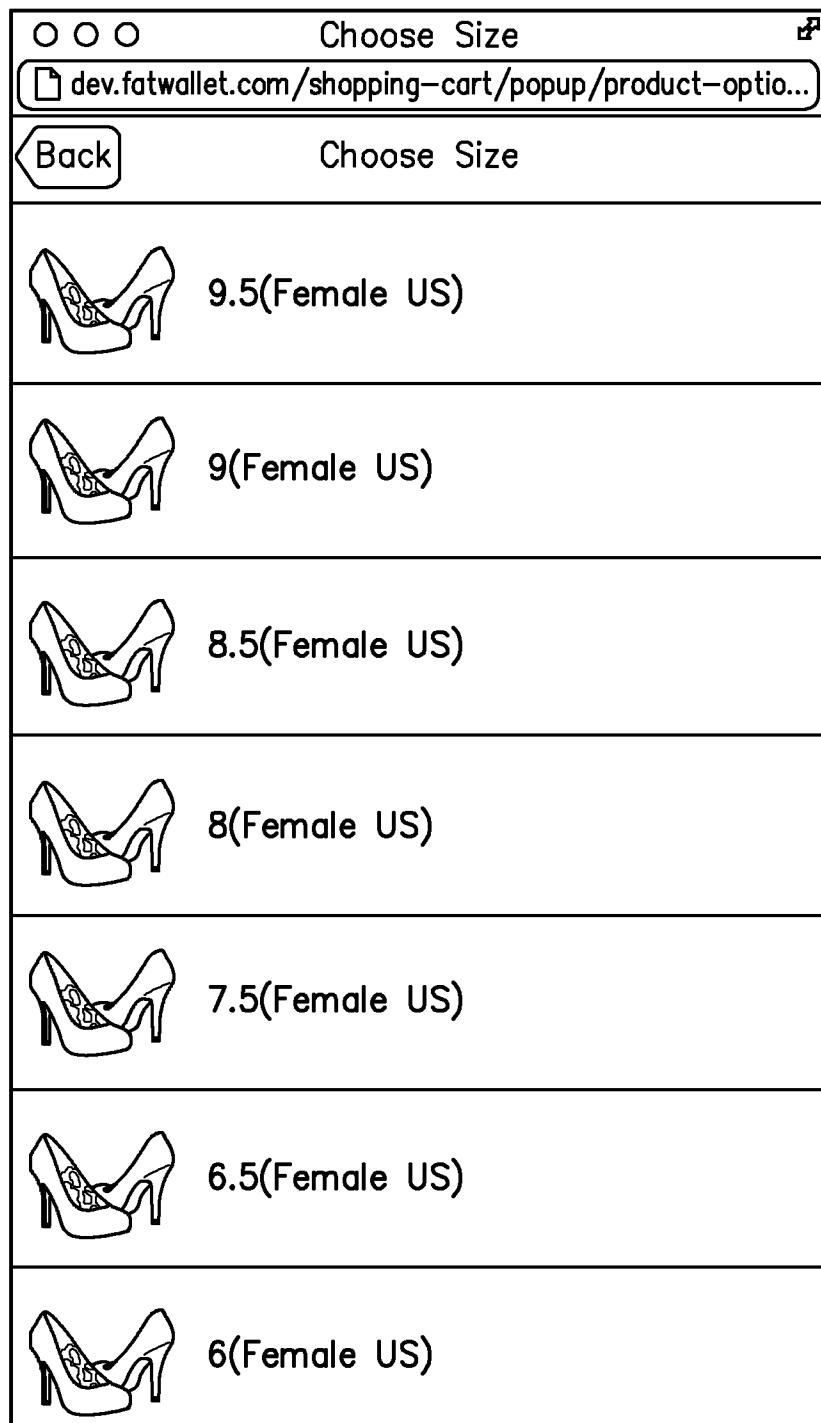
FIG. 6C



**FIG. 6D**



***FIG. 6E***



**FIG. 6F**



FIG. 6G

650

OOO Add Shipping Address

Add Shipping Ad...

**\* Required**

Shipping Address Nickname: \*

First Name: \*

Last Name: \*

Company:

Address 1: \*

Address 2:

City: \*

State: \*

Zip: \*

**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

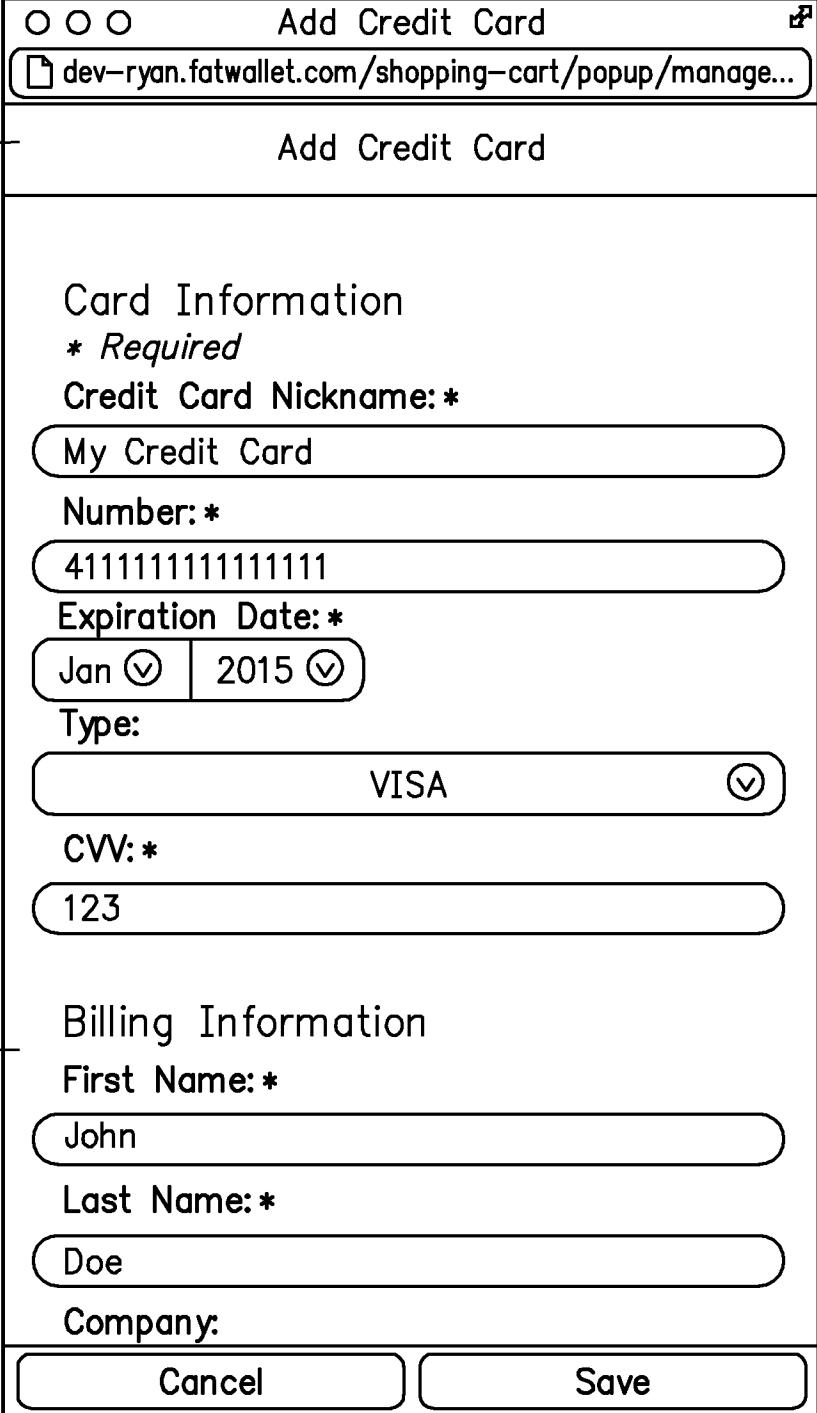


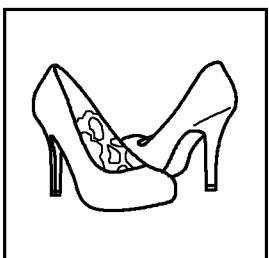
FIG. 6I

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 >

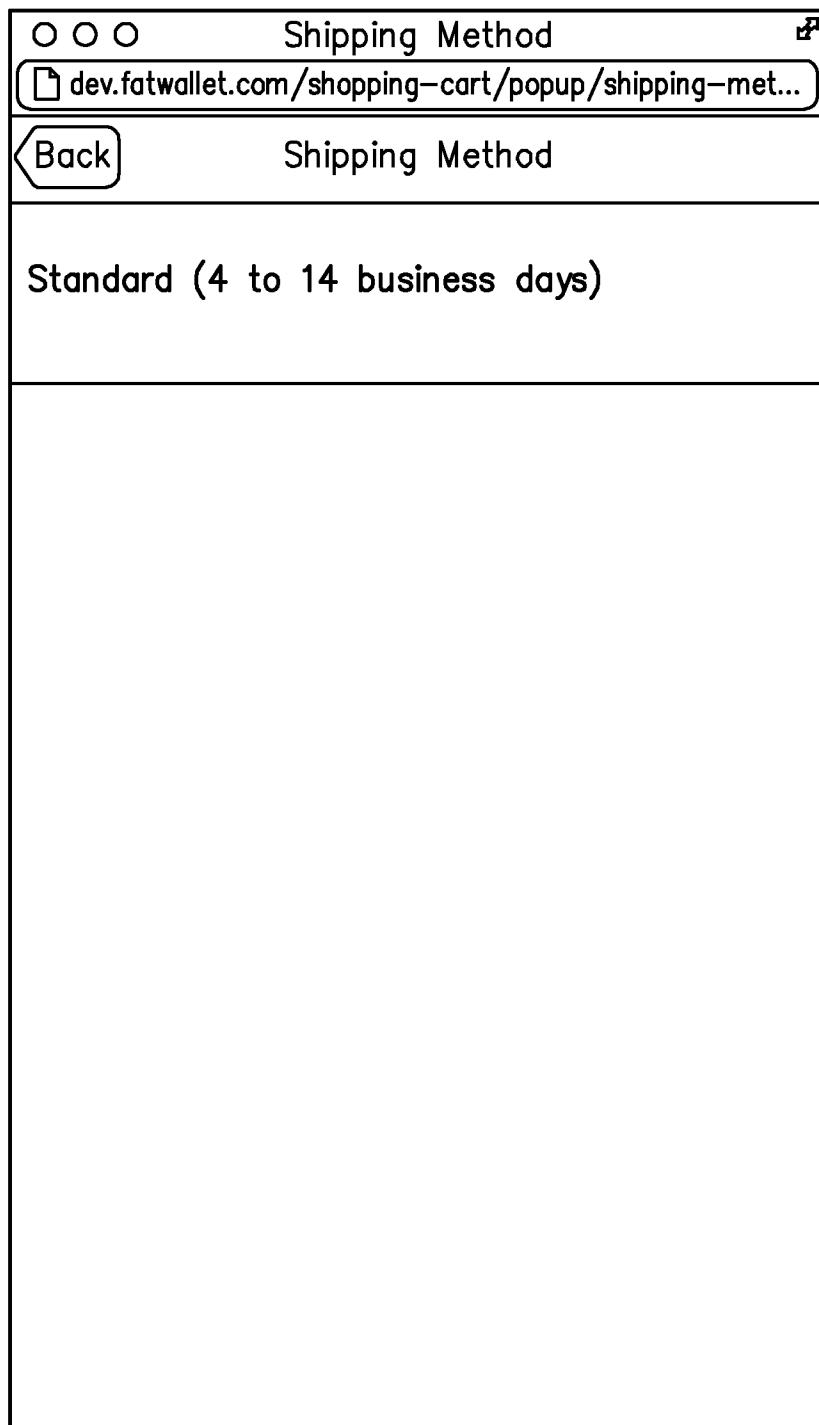
Shipping Method select >

Shipping Address My Address  
123 Main Street >

665

670

**FIG. 6J**



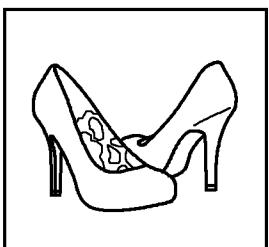
***FIG. 6K***

Check Out 

[dev.fatwallet.com/shopping-cart/popup/place-order/v...](http://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
<hr/>	
<b>Total Price:</b>	<b>\$99.22</b>
(Charged to Your Credit Card)	

 Up to 6.0% Cash Back \$5.64  
(Based on Retail Price of \$94.05)

675

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

Shipping Method Standard (4 to 14 b... >

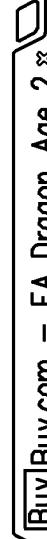
Shipping Address My Address  
123 Main Street >

680

Complete Purchase

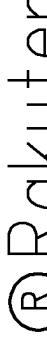
**FIG. 6L**

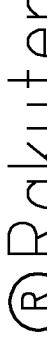
**FIG. 6M**

ooo  Buy.com – EA Dragon Age 2 

← → ↗  www.buy.com/prod/dragon-age-2/217719097.html 

 **popup**

 **Rakuten**  
Buy.com

710                              

⑤ Get Super Points  Hello, Sign In!  My Account  Help 

Type to Search for Products  Software                              

Deals  Computers & Office  Clothing, Shoes, Jewelry  Electronics  Gourmet, Gifts  Video Games  Books, Movies, Music  Home & Household  Health & Beauty  Household  Toys & Baby  Sports & Bags  More 

⑥ Type to Search for Products  Software                              

⑦ Type to Search for Products  Software                              

⑧ Type to Search for Products  Software                              

⑨ Type to Search for Products  Software                              

⑩ Type to Search for Products  Software                              

⑪ Type to Search for Products  Software                              

⑫ Type to Search for Products  Software                              

⑬ Type to Search for Products  Software                              

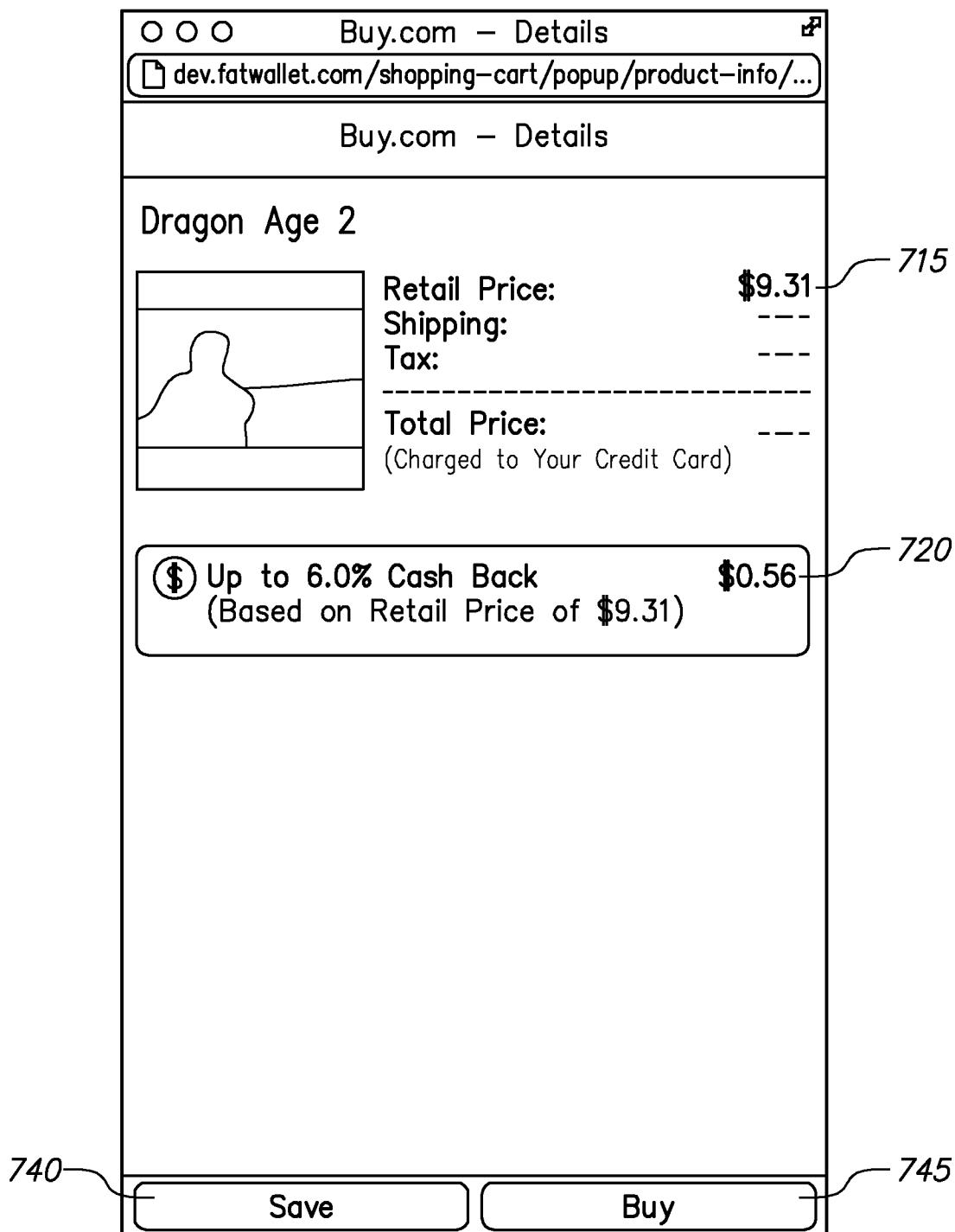
⑭ Type to Search for Products  Software                              

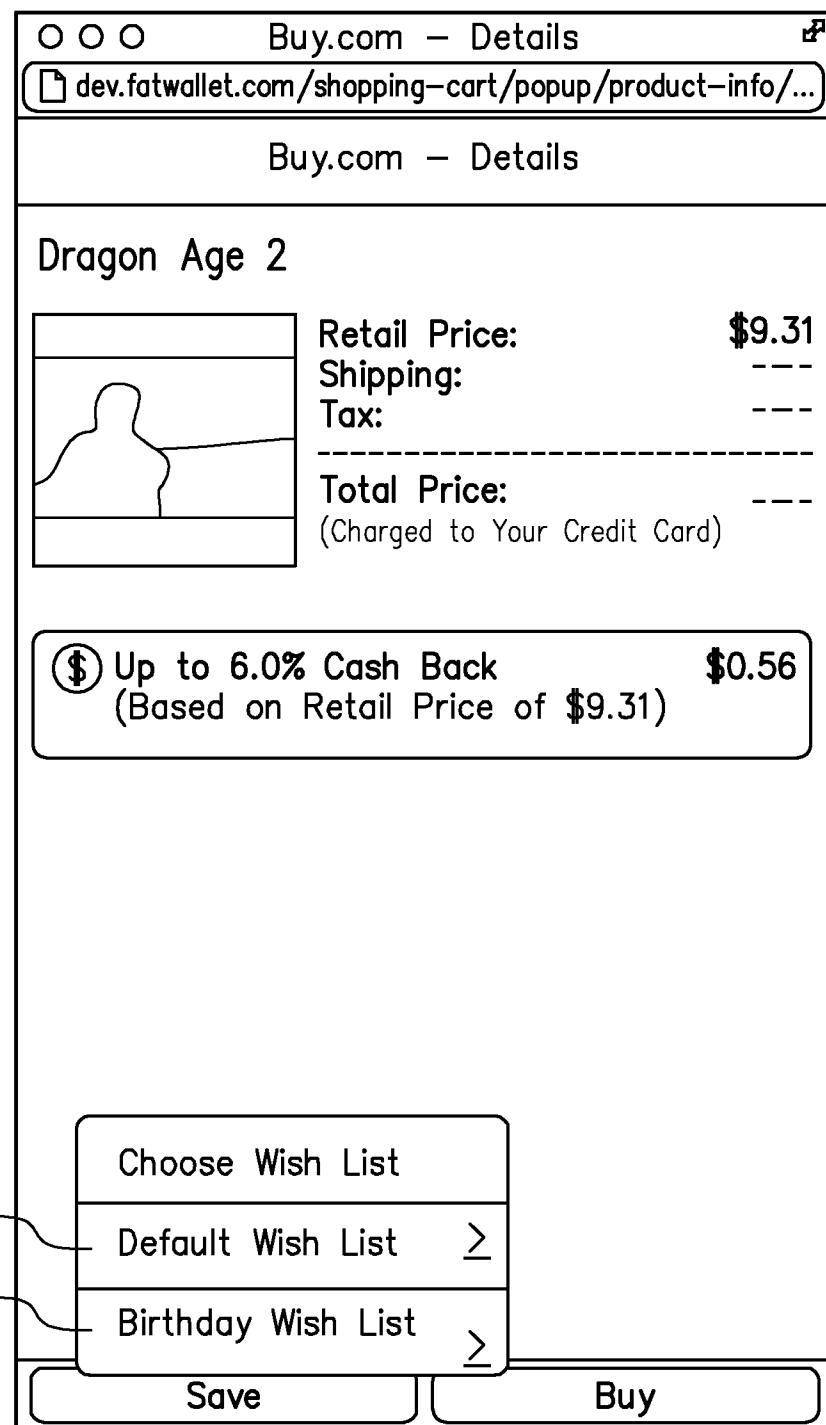
⑮ Type to Search for Products  Software                              

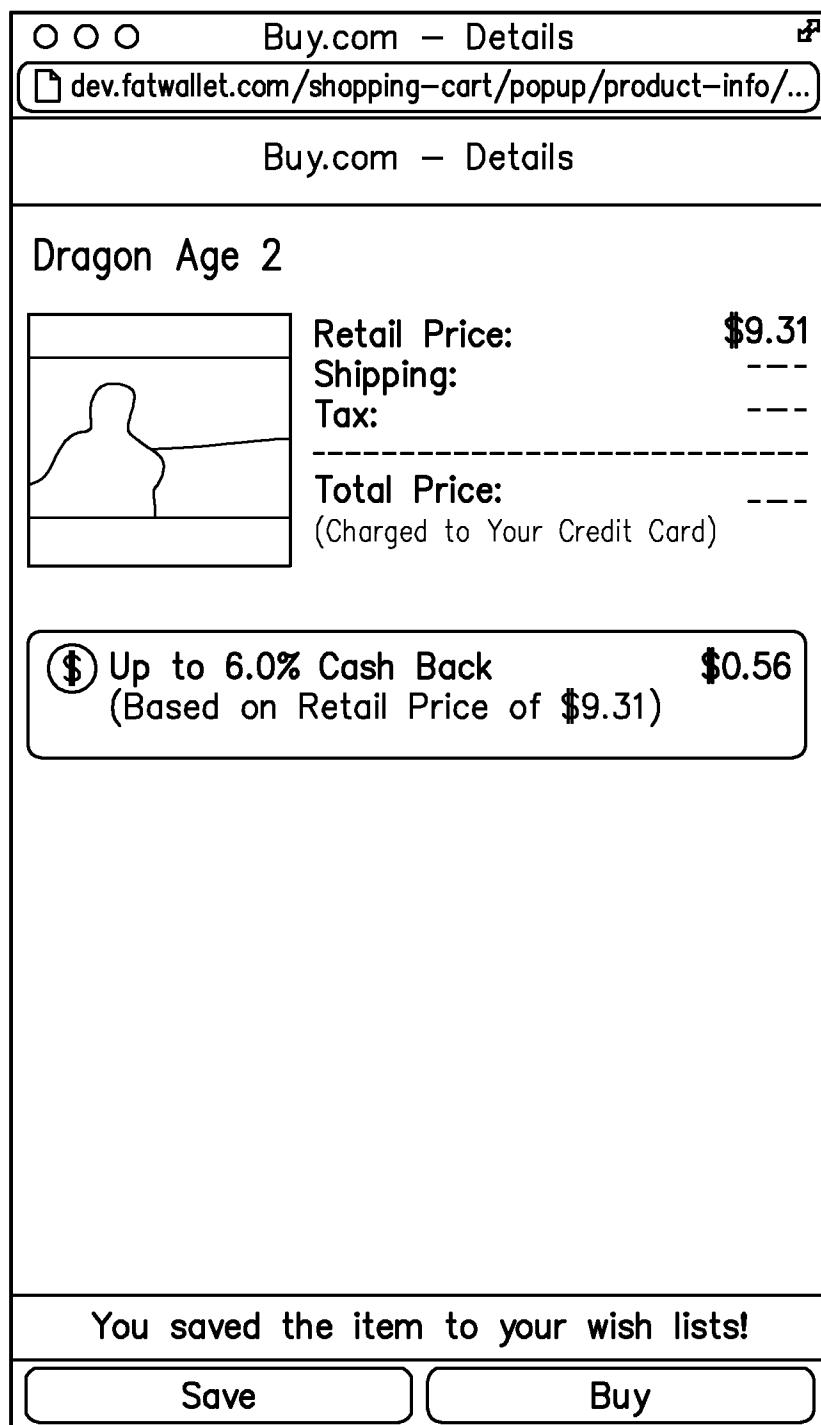
⑯ Type to Search for Products  Software    <img



**FIG. 7B**

**FIG. 7C**

**FIG. 7D**

**FIG. 7E**