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(72) Inventors; and
(71) Applicants : **MUHIRE, Augustin** [CA/CA]; 2-96 rue Chatelle, Lasalle, Québec H8R 2K6 (CA). **OPARA, Darlina** [CA/CA]; 2-96 rue Chatelle, Lasalle, Québec H8R 2K6 (CA).

(74) Agent: **GOUDREAU GAGE DUBUC**; 2000 McGill College, Suite 2200, Montréal, Québec H3A 3H3 (CA).

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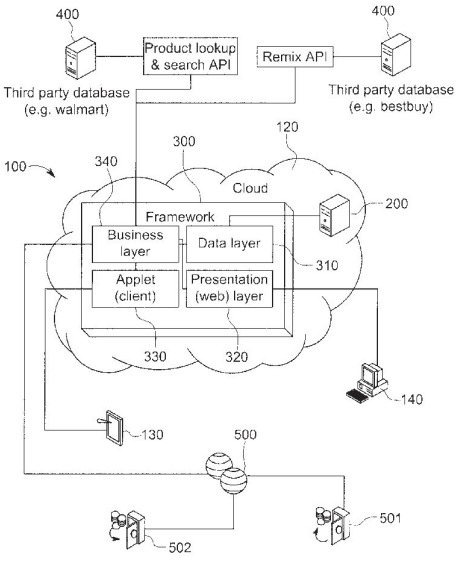


FIG. 1

(57) Abstract: System and method allowing a user to save, manage time and budget over an application when said user makes a request through said application, including: a cloud computing server, said cloud computing server configured to store and operate a framework in communication with a portable electronic display device, said framework comprising a data layer having a connection with a business layer and a presentation layer, said business layer having a connection with a web service.

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TITLE OF THE INVENTION

SYSTEM AND METHOD FOR OFFERING AUTOMATED PROMOTIONS AND SPECIAL OFFERS IN REAL-TIME

FIELD OF THE INVENTION

[0001] The present invention relates to systems and methods that allow a user to save, manage time and budget via electronic means.

BACKGROUND OF THE INVENTION

[0002] Today there exists a few techniques for helping consumers save, manage their time and maintain a healthy budget. Opportunities for saving and maintaining a healthy budget are currently communicated through print, email, websites, or applications downloaded to portable multifunctional devices, or smart phones. For example, print ads such as flyers, help consumers stay aware of promotions; certain websites and mobile apps help shoppers compare prices and find discounts; print channels, such as the Sunday newspaper, mail delivery, or websites like coupons.com offer consumers coupons that provide discounts on products and services.

[0003] Maximizing savings means combining the use of the different saving and budgeting tools available on the market, and utilizing them on a constant regular basis. However, those tools are offered through so many different channels that it makes saving and budgeting time-consuming, difficult, and tedious. Thus, consumers either have to dedicate too much of their valuable time to budgeting and keeping track of saving opportunities, or resume to using fewer to no saving and budgeting methods.

[0004] There is therefore a need for an improved system and method of delivering the tools necessary to maximizing savings and maintaining a healthy budget. There is a need for a method that allows consumers to save, manage their time and budget in an easy, user-friendly and time-saving manner.

[0005] Known in the art, there are the following documents: US 6,532,444 (Weber); US 2005/0159974 (Moss et al.); US Pat. No. 7,240,843 (Paul et al.); US 2011/0276388 (Deng); US 8,650,072 (Mason et al.); and US 2014/0156392. However, these documents do not disclose relatively easy and user-friendly systems and methods for managing consumers time and budget.

SUMMARY OF THE INVENTION

[0006] In an embodiment, there is provided a system allowing a user to save, manage time and budget over an application when said user makes a request through said application, comprising: a cloud computing server, said cloud computing server configured to store and operate a framework on a device, said framework comprising a data layer having a connection with a business layer and a presentation layer, said business layer having a connection with a web service for sending data to the application.

[0007] In an embodiment, there is provided a method allowing a user to save, manage time and budget over an application and a cloud computing server, said cloud computing server comprising a data layer receiving information from a database, wherein said method comprises: sending from said database data to a data layer, said data layer having a connection with a business layer and a presentation layer; and sending data to the application, wherein said business layer has a connection with a web service and said business layer.

[0008] In an embodiment, there is provided an electronic touchscreen device attachable by magnet or other methods, and/or integrated to a refrigerator or other surfaces, which purpose is to display and provide automated or non-automated media in form of picture, video and/or audio for commercial or non-commercial purposes. The main purpose of the present invention is to combine all the saving and budgeting tools that are utilized on a regular basis to help consumers save, manage their time and maintain a healthy budget in the easiest and quickest manner possible.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Figure 1 is a block diagram of a system, in accordance with an embodiment of the present invention.

[0010] Figure 2 is a block diagram of a system, in accordance with another embodiment of the present invention.

[0011] Figure 3 is a perspective view of an electronic display device according to a preferred embodiment of the present invention, which is mounted on a refrigerator, and showing a “Front-page slideshow” feature thereon.

[0012] Figure 4 is front view of the device shown in Figure 3 and illustrating another example of a deal that could be displayed on the front page thereon

[0013] Figure 5 illustrates an example of one of the offers that could be displayed on the “home” feature.

[0014] Figure 6 illustrates an example of the “Daily Deals” feature, and some of the options the “Daily Deals” feature provides to the consumer.

[0015] Figure 7 illustrates an example of the “Grocery Pro” feature, and some of the options the “Grocery Pro” feature provides to the consumer.

[0016] Figure 8 illustrates the 2 shopping options — “I’m in a Hurry” and “I’ve got Time” — the consumer is provided with, once they have completed their grocery list and selected the “tell me where to shop” option.

[0017] Figure 9 illustrates an example of a "smart list" generated by the system of the invention, after the "I'm in a Hurry" shopping option was selected by the consumer.

[0018] Figure 10 illustrates an example of the "Stores" feature, and some of the options the "Stores" feature provides to the consumer.

[0019] Figure 11 Illustrates an example of the listing of different flyers the consumer gets when they access the "Flyers" section of the "Stores" feature. The consumer is shown a list of the flyers available from their favorite stores, and a list of the flyers available from stores near their location.

[0020] Figure 12 Illustrates an example of a listing of results established following the consumer's search for a specific product.

[0021] Figure 13 illustrates an example of the information and options offered to the consumer after a product provided in a listing of search results was selected by the consumer.

[0022] Figure 14 illustrates an example of the listing of results established following the consumer's search for a specific service.

[0023] Figure 15 illustrates an example of the "Coupons" feature, and some of the options the "Coupons" feature provides to the consumer.

[0024] Figure 16 illustrates the details of a coupon selected by the consumer.

[0025] Figure 17 illustrates an example of "Classifieds" feature, and some of the options the "Classifieds" feature provides to the consumer.

[0026] Figure 18 illustrates the details of a classified ad selected by the consumer.

[0027] Figure 19 illustrates an example of the "Calendar" feature and some of the options it provides to the consumer. An example of a weekly view of the "Calendar" feature is also shown.

[0028] Figure 20 illustrates an example of the consumer's savings details.

[0029] Figure 21 illustrates an example of the consumer's expense details.

[0030] Figure 22 illustrates an example of the consumer's income and expense details.

DESCRIPTION OF ILLUSTRATIVE EMBODIMENTS

[0031] The present invention is illustrated in further details by the following non-limiting examples.

[0032] Example embodiments include a system for offering promotions and special offers from sellers in real time to a user's portable multifunctional device. In one example embodiment, an application is transmitted or downloaded to a portable multifunctional device (e.g. IPad, notebook, etc.) to allow the device to display the current local discount offers.

[0033] In another example embodiment, a "**Front-page slideshow**" displays, by advertising contents, local deals and special offers, competitive prices and promotions from different kind of merchants. When consumers click on an offer, it allows them to view the products and services that are being advertised, add the items displayed to a favorite items or brands list, view other consumers reviews by ratings and recommendations, purchase the item, set a price alert and/or deal expiration alert, share the deal with friends through social media, text message and email, share the offer with other users of a preferred system of the invention and finally save items for future shopping plans.

[0034] In another example embodiment, the feature "**Front-page slideshow**" provides, to merchants, extensive exposure to selected products and services, by displaying their ads on the front-page slideshow according to the time at which their audience is most likely to view them. The merchants select a specific schedule and choose the frequency at which their ad should display.

[0035] In another example embodiment, a page entitled "**Daily Deals**" allows consumers to experience the city and its offerings at a lower cost (e.g. spa packages, cosmetic procedures, restaurant deals, weekend getaways, trips, etc.), and get daily deals offers on featured products. When the consumer clicks on a daily deal, it allows the consumer to view the details of the offer, view how many times the offer was purchased by others, view when the offer is set to expire, set a deal expiration alert, view the original and discounted price, share with friends by email, text message and/or social media, share with other consumers who use the preferred system of the invention and finally allow them to buy the offer for themselves or for a friend.

[0036] In another example embodiment, a feature called "**Grocery pro**" helps the consumer to get the best deal on his grocery purchase. Consumers prepare their grocery list, and once done select the "Tell me where to shop" option to get suggestions on where to shop their groceries at the most competitive price. Consumers are given 2 shopping options: I'm in a Hurry or I've got time. When selecting "I'm in a Hurry", the system suggests one store that will offer the best overall price for the items on their grocery list. When selecting the "I've got time" option, the system suggests multiple stores the consumer should visit to get each and every item on their grocery list at the lowest price possible. Once the consumer has selected a shopping option, a "smart list" is created. The items are automatically sorted in different categories (e.g. dairy, fruits, and vegetables, meat and substitutes etc.), the price and aisle number appear next to the item, along with an editable quantity widget, and the option to immediately purchase the item through the platform of the preferred system of the invention, if applicable. Items are automatically matched with available coupons, to help the consumer maximize their savings. The coupons are automatically saved onto the consumer's universal coupon card. The "Grocery Pro" provides different options to the consumer. The consumer can create new grocery lists or access

archived grocery lists, add items to their favorite items lists, view a history of the items that were used in previous grocery lists, save their list for later use, make their list private and passcode protected, view the coupons saved to their universal coupon card etc.

[0037] In another example embodiment, a feature named "**Stores**" allows the consumer to have access to content such as a business categories listing, local merchant listings, merchant flyers etc., and a search bar tool that allows to search specific products, services, brands and stores. When the consumer uses the search bar tool a listing of result is established to show where the consumer can purchase the specific product or service at the most competitive price. If the price of the product or service is higher than expected for the consumer and therefore doesn't reflect their budget, a "price alert" option is available to allow the consumer to set a low price target, and receive a notification whenever the price of the product or service reaches the low price target. The consumer can also set a "deal expiration alert" to request to receive a notification before the offers on the product or service expire. Consumers can purchase the product or service directly from the preferred system of the invention, set up a pickup order if applicable, or find merchant outlets that offer the selected product or service and complete their purchase in-store, add the product or service to a shopping list, and share the product or service and related offers with friends and users of the preferred system of the invention. The "Stores" feature provides different other options to the consumer. The consumer can, for example, access the information saved onto their universal club card and loyalty cards, view and edit their favorite items, brands, and stores list, view archived shopping lists and create new shopping lists, view and edit their "price alert" and "deal expiration alert" list etc.

[0038] In another example embodiment, the "**Stores**" feature allows merchants to easily get discovered whenever users of the preferred system of the invention search their business, their business category/industry, and the products and services they offer. The "Stores" feature allows merchants to list and store information such as their inventory of products and services, price points, promotions, discounts and special offers, flyers, contact information, operating hours and location, website, ads etc.

[0039] In another example embodiment, a feature called "**Coupons**" provides coupons for different products and services (e.g. baby and toddler, health and beauty, fruits and vegetables, electronics etc.) The consumer will be able to add coupons to their universal club card, or the loyalty cards linked to their user account, when applicable, and use applicable coupons to purchase products and services through the preferred system of the invention.

[0040] In another example embodiment, the preferred system of the invention can accept, distribute and validate eCoupon in a merchant store without having an existing loyalty program in place. Said distribution is made through a specific platform and said validation is for the entire coupon code instead

of only validating manufacture code or only manufacturer and family codes. The user presents his card to POS and the POS system communicates with a database for complete validation of user's coupon.

[0041] In another example embodiment, a feature called "**Classifieds**" gives access to local classified ads, and/or classified ads for a location specified by the consumer. The consumer can browse different classified ads categories, or use the search bar tool to search for specific ads (e.g. bicycles for sale, apartments for rent, pet grooming services etc.) and ad categories (e.g. jobs, antiques, automobile etc.). The "Classifieds" feature also allows the consumer to post their own ads directly from the preferred system of the invention. The consumer will have the ability to include details about the content they want to advertise, include existing pictures of the content they want to advertise and take and upload pictures of the content using the camera tool the system may be equipped with.

[0042] In another example embodiment, a feature called "Calendar" allows the consumer to, for example, manage their time, schedule, appointments, events etc. The "Calendar" feature provides the consumer with options such as creating and/or adding a new event; viewing details of a scheduled event; editing the details of a scheduled event; using different calendar view options (e.g. today, daily, weekly, monthly, yearly etc.)

[0043] In another example embodiment, the "Profile" feature allows the consumer to, for example, view information (e.g. order history and status, alerts, total saved with help of the preferred system of the invention, contacts, messages, number of friends etc.), and edit personal information (e.g. billing and shipping details, payment methods, interests and preferences, contacts, bank accounts linked with their user account etc.), get updates and information on their friends, merchants, the administration of the preferred system of the invention and the community formed by the users of the preferred system of the invention, communicate with their friends, merchants, the community formed by the users of the preferred system of the invention and the administration of the preferred system of the invention, share information such as deals, purchases, tips and content etc. The "Profile" feature also provides the consumer with a budget feature that allows the consumer to, for example, track their savings and expenses, and compare their income with their expenses.

[0044] In another example embodiment, an additional feature includes a voice interaction system between the user and the present system. For example, the consumer can ask to the system to find the best deal on a certain item by saying orally "Mr. Magik, where can I find a 42 inch TV for $400.00" and the system will provide the user with an answer, list the store where the item is available, allow the user to purchase online, set up a pick up order or buy in-store etc. The voice interaction system could also, for example, notify the user of the next appointment scheduled on the **"Calendar**" feature.

[0045] In another example embodiment, the system helps to keep track the merchant's advertisings

efficiency with complete reports (e.g. amount of clicks their ads generated, number of orders processed through the platform, number of low-price alert requested for the merchant products and services, type and quantity of coupons used etc.).

[0046] In another example embodiment, the system tracks consumer data, provides valuable market insights and creates efficient marketing campaigns by knowing: generally what type of consumers purchase which type of products, when, at which frequency, how and at what price; the type of customers the merchant's products and services appeal to, which products and services sell more or less among the products and services they offer, to whom, at what price and when (e.g. day of the week, time of the month, time of the year etc.), when the merchant's ads generate the most and least "clicks" , when the merchant experiences the highest and lowest conversion rate and why; what type of coupons are mostly redeemed, by whom and how often; and what kind of products and services are purchased through the system of the invention versus in-store.

[0047] Reference will now be made in detail to various example embodiments. These example embodiments are illustrated in the accompanying drawings. While the invention will be described in conjunction with these embodiments, it will be understood that it is intended to cover alternatives, modifications, and equivalents. In the following description, numerous specific details are set forth in order to provide a thorough understanding of the various embodiments. However, the example embodiments may be practiced without some or all of these specific details. In other instances, well known process operations have not been described in detail in order not to unnecessarily obscure the present invention. Further, each appearance of the phrase "an example embodiment" at various places in the specification does not necessarily refer to the same example embodiment. Note, nothing described or referenced in this document is admitted as prior art to this application unless explicitly so stated.

[0048] Embodiments of applications are executed by portable multifunctional devices with a user interfaces for such devices, and associated process for using such devices are described in detail.

[0049] CLOUD COMPUTING SERVER

[0050] Referring to Figure 1, there is shown a block diagram of an exemplary embodiment of a system 100 in accordance with the present invention. Preferably, the core of the system 100 architecture is based on MVC (Model View Controller) model. The preferred system 100 incorporates a cloud computing server 120 that hosts a system application. The cloud computing server 120 includes a database 200 and a framework 300. The framework 300 may be embodied as a multi-tier architecture including four layers/components: a data layer 310, a Web presentation layer 320, a client applet (small application) layer 330 and a business layer 340. The client applet layer 330 may be a Java™ applet that

may connect an Android™ application (or Apple™ application or any other similar operating system application) to the other components of the framework 300. The Web presentation layer 320 provides an interface to business users via a business interface 140, such as general purpose computer, so that the business users can interact with the system 100. This allows the business users to perform various business related activities such as adding deals, coupons, etc. The business layer 340 is preferably where all the business logic resides and interconnects all the components of the framework 300. The business layer 340 is also responsible for the interaction between third party components and APIs, such as vendor database systems 400 and payment gateways systems 500. The data layer 310 is responsible to interact with the database 200. Due to scalability, performance and security reasons, the database 200 is preferably only accessible to the data layer 310. All the CRUD (Create, Read, Update, Delete) operations on the database 200 may preferably only be performed via the data layer 310 and stored procedures. The data layer 310 is preferably not accessible to any other component or third party systems except to the framework's 300 business layer 340, which handles all the business work flow of the system 100.

[0051] PUBLIC AND BUSINESS INTERACTION THROUGH PRESENT SYSTEM

[0052] Referring back to Figure 1, a customer app may come installed on the system 100. This app works on top of the framework 300. Preferably, all the communications between the client app (such as Android™ application or Apple™ application) and a backend system are done through the client applet layer 330. The client app may have a small engine which interacts with the cloud computing server 120 via the client applet layer 330 to perform different operations such as retrieving the deals, coupons, making purchases, uploading coupons to a client card, etc. The client applet layer 330 is in communication with a user application on an electronic display device 130, such as a tablet computer device.

[0053] Through the Web presentation layer 320, the system 100 provides a web based interface to different business. This allows business user to perform all their complicated business related operations on the system 100 such as managing products, inventory, managing accounts, adding deals, etc.

[0054] INTERACTION BETWEEN THIRD PARTY BUSINESSES AND PRESENT SYSTEM

[0055] Referring back to Figure 1, in order to interact with third party businesses, such as big stores like Walmart and BestBuy, the present system 100 preferably uses APIs (Application Programming Interfaces) provided by these third party businesses. The business layer 340 obtains data and information using these APIs such as BestBuy's Remix API and Walmart's Search API, which provides this information to the present system 100 users.

[0056] PAYMENT GATEWAY

[0057] Referring back to Figure 1, the framework's 300 business layer 340 preferably interacts with payment gateways 500 and takes care of all the payments and transactions that go through the present system 100. The business layer 340 may be flexible enough and have sufficient logic to handle all the transactions between customers, businesses and bank accounts 501, 502 that may be linked to the system 100 along with the help of the payment gateway systems 500. The preferred system 100 uses third party gateway processors to process all the payments.

[0058] USE OF CLIENT CARDS WITH THE PRESENT SYSTEM

[0059] Referring to Figure 2, there is shown a block diagram of another exemplary embodiment of a system 100 similar to the one shown in Figure 1. The framework 300 includes the data layer 310 which is connected to the database 200. The data layer 310 is also connected to the business layer 340 and the presentation Web layer 320. The business layer 340 communicates with the client applet layer 330 and the Web service 350. The Web service 350 responds back to a client card interface 600 with product name, Barcode/serial number/identifier that uniquely identifies the product and a status ok/not ok is sent if, for example, a coupon has been redeemed. The Web service 350 also transmits all the data over HTTP using Restful Web services to the client card interface 600. The client card interface 600 sends a response back to a vendor POS (Point of Sale) 700 and vendor POS 700 transmits a client card's 600 information and product list such as customer identifier, product name, barcode/serial number/identifier that uniquely identifies the product price. The process begins by scanning a product 900 with a vendor scanner 800 and the vendor scanner 800 sends product information e.g. the product barcode and a customer presents his card 602 which is scanned with a card scanner 604 and the card scanner 604 sends the card information of the customer to the vendor POS 700.

[0060] PORTABLE ELECTRONIC DISPLAY DEVICE

[0061] Referring to Figure 3, there is shown a portable electronic display device 130 that may be in communication with the preferred system 100 shown in Figures 1 and 2. The portable electronic display device 130 may be a computer tablet that is attachable to a refrigerator surface via magnets or other means. The electronic display device 130 shows advertising contents or a local deal from a merchant.

[0062] Referring to Figure 4, there is shown an exemplary embodiment of a display 170 of the portable device 130 of Figure 3. The display 170 shows advertising contents and a local deal from a merchant. The display 170 also shows some preferred features of the interface of the portable device 130 such as the "Daily Deals" 161, the "Grocery Pro" 162, The "Stores" 163, The "Coupons" 164, the "Classifieds" 165 and the "Profile" feature 166.

[0063] In another example embodiment, a **"Home"** feature displays by advertising contents, local deals, special offers, competitive prices and discounts from different kind of merchants **{Fig. 5}**. When consumers click on a slide, it allows them to view the products and/or services displayed; view details about the products and/or services displayed; view other consumers' ratings and reviews; rate and review the product or service; add the item to a favorite items or brands list; save the product or service for future shopping plans; set a price alert and/or deal expiration alert; share the product or service, competitive price or special offer with friends and other users of the invention; and finally purchase the product or service via the system of the invention and/or find a merchant outlet that offers the selected product or service.

[0064] In another example embodiment, a page entitled "**Daily Deals**" allows consumers to experience the city and its offerings at a lower cost (e.g. spa packages, cosmetic procedures, restaurant deals, weekend getaways, trips, etc.), and get daily deals offers on featured products **{Fig. 6}**. A search bar allows consumers to search a specific deal, deal category and/or merchant near their location or another location.

[0065] The "**Daily Deals**" page comprises, among others, a "Recommended for you" slideshow or non-slideshow section that displays deals that are relevant to the consumer's needs and preferences; a "What's new?" section that features the most recent deals; and a "Popular Deals" section that features deals popular among users of the invention who share the needs and preferences of the consumer. When the consumer clicks on a deal, it allows them to view the details of the offer; reviews and ratings; how many consumers purchased the deal; when the offer is set to expire; view the merchant's location and get directions to their location if applicable; view the merchant's business schedule and contact information; share the deal with friends and other users of the invention; view the merchant's website; set a deal expiration alert and view other suggested deals.

[0066] In another example embodiment, a feature called **"Grocery Pro"** helps consumers get the best deal on their grocery purchase, by notifying the consumer where to shop to get the best deal on their groceries **{Fig. 7}**. The consumer can add items to their grocery list by typing the name of the items they want to include, or by scanning the barcode of the items they want to add. When utilizing the search bar to add items to their grocery list, consumers are given the option to select item specifics such as brand, quantity, size etc. Consumers can also add items to their grocery list by selecting items from their "favorite items" and/or "history" list.

[0067] Once consumers are done preparing their grocery list, they select the "Tell me where to shop" option to get suggestions on where to go to shop for less. Consumers are given 2 shopping options: I'm in a Hurry and I've got Time **{Fig. 8}**. When selecting "I'm in a Hurry", the system suggests one store

that will offer the consumer the best overall price for the items on their grocery list, and allows the consumer to compare the suggested store with other stores that offer second, third, fourth etc. best overall price. When selecting "I've got Time", the system suggests multiple stores the consumer should visit to get each and every item on their grocery list at the lowest price possible.

[0068] The consumer's grocery list is offered in a "smart list" format **{Fig. 9}**. The items are sorted in different categories (e.g. dairy items, beverages items, frozen foods items etc.), the price and aisle number appear next to the item, along with an editable quantity widget, and the option to immediately purchase the item through the platform of the invention, if applicable. The "smart list" provides different options to the consumer. The consumer can, for example, use generic equivalents to maximize their savings — when applicable — for one, multiple or all the items present on the grocery list; add an item to their list; sort their list by aisle number, purchased items or unpurchased items; view savings details, and the total number of items present on their list.

[0069] With the "**Grocery Pro**" consumers can create new grocery lists, or access previously created grocery lists; add items to their favorite items list; view their items history; save their list for later use; make their list private and passcode protected to prevent other users from accessing it; and view the coupons saved to their universal club card, or loyalty cards.

[0070] In another example embodiment, a feature named **"Stores" {Fig. 10}** allows the consumer to have access to, among others, a business categories listing; a merchant listing; merchants' flyers **{Fig. 11}**; the information saved to their universal club card and/or loyalty cards; their favorite items, brands, and/or stores list; previously created and/or newly created shopping lists; and a list of the price alerts and/or deal expiration alerts created.

[0071] The "**Stores**" feature also provides access to a search bar that allows the consumer to search content such as products, services, brands and/or stores that are relevant, or not, to a specific category. For example, when the consumer uses the search bar to look for a certain product, a listing of results is established **{Fig. 12}**. The listing of results includes, among others, pictures of one or multiple products relevant to the consumer's search query; consumer ratings; the number of merchants that offer the products present in the listing of results; and a price range at which the products are offered.

[0072] Once the consumer has selected one of the products present in the listing of results, a variety of information and features are put to the consumer's disposition **{Fig. 13}**. Pictures, if applicable, and information such as product ratings; consumer reviews; how many consumers purchased the product; a list of merchants that offer the selected product — classified from most to least price competitive — along with the amount saved at each of the merchants listed are provided to the consumer. Features such as the option to view product details; add the product to their favorite items and/or brands list; add

the product to an existing and/or new shopping list; share the product and price with friends and/or other users of the preferred system of the invention are provided to the consumer. Once the users have created a shopping list, they may use the preferred system to request that items in the shopping list be delivered to them.

[0073] If the price of the selected product is higher than expected for the consumer, a "price alert" option is available to allow the consumer to set a target price goal, and receive a notification whenever the price of the selected product reaches the target price goal. Consumers can also set a "deal expiration alert" to request to receive a notification before the offers listed expire.

[0074] When the consumer uses the search bar to search a specific service, a listing of results is established **{Fig. 14}**. The listing of results includes a list of merchants that offer the service relevant to the consumer's search query, classified from most to least price competitive. A merchant listing includes, for example, a picture selected by the merchant (e.g. picture of the merchants location, picture of the merchant's office, picture of merchant's equipment etc.), information such as the name of the merchant; the distance from the merchant's location to the consumer's location; the price range of the service provided; the current price of the service; a description of the services offered; the merchant's contact information, and business schedule. The consumer can get directions to the merchant's location, and add the merchant to their favorite stores list. The consumer can also access the merchant's website, by selecting their listing.

[0075] The "**Stores**" feature also allows the consumer to purchase products and/or services directly from the system of the invention, or find merchant outlets that offer the products and/or services they want and complete their purchase in-store.

[0076] In another example embodiment, a feature called **"Coupons"** provides coupons for different products and services (e.g. baby and toddler, health and beauty, fruits and vegetables, electronics, etc.). The **"Coupons"** feature comprises, among others, a "Recommended for you" coupons slideshow section that suggests coupons according to the consumer's needs and preference and/or the coupon category being viewed by the consumer; a "What's new?" section that provides the newest coupons; and an "All coupons" section that provides a variety of coupons of different categories (e.g. loyalty card coupons, groceries, electronics etc.) **{Fig. 15}**. The **"Coupons"** feature provides the consumer with access to different options such as viewing the coupons saved to their universal club card, and/or loyalty card(s); browsing different coupons categories; filtering coupons by categories, and/or expiry dates; browsing coupons compatible with the loyalty cards linked to their user account; and linking new loyalty cards to their user account.

[0077] The consumer has access to a search bar that allows them to search coupons for specific

items, brands, stores, categories, and/or services relevant or non-relevant to a specific category.

[0078] When the consumer selects a coupon, they have access to options such as viewing the selected coupon's details (e.g. item and/or service the coupon applies to, face value, eligibility and conditions of use, expiry date etc.) **{Fig. 16}**; adding the selected coupon to their universal club card and/or loyalty cards; sharing the selected coupon's with friends and/or other users of the invention; and immediately purchasing the product and/ or service for which the selected coupon applies to, if applicable.

[0079] In another example embodiment, a feature called **"Classifieds"** gives access to local classified ads, and/or classified ads for a location selected by the consumer **{Fig. 17}**. The **"Classifieds"** feature comprises, among others, a "Recommended for you" slideshow section that suggests content (e.g. items, products, services, brands, stores, jobs etc.) relevant to the consumer's needs and preferences, and/or classified ads category that is being viewed by the consumer; a "What's hot this week" section that puts in evidence ads of other users of the invention who might have requested for their ad to be featured in the "What's hot this week" section; a "Browse categories" section that allows the consumer to browse classified ads relevant to different classified ads categories and/or sub-categories (e.g. sports and outdoors, real estate, antiques etc.), and a "Recently viewed" section that allows the consumer to refer to classified ads they previously viewed.

[0080] The "**Classifieds**" feature provides the consumer with access to a search bar that allows them to, for example, search for items, services, jobs etc. When the consumer uses the search bar to search for specific content, a listing of results is established. The listing of results includes a list of ads that are relevant to the consumer's search query. A classified ad listing includes information such as the title of the ad; one or multiple pictures of the content of the ad, if applicable; a description of the content of the ad; the location of the advertiser; how long ago the ad was posted on the system of the invention; and the price of the content advertised, if applicable.

[0081] When the consumer selects an ad, they have access to options such as, viewing a picture of the advertiser, if applicable; viewing how long ago the classified ad was posted on the system of the invention; one or multiple pictures of the content advertised; a description of the content advertised; the price of the content advertised, if applicable; viewing the location of the advertiser; viewing the location of the advertiser on a map; sharing the ad with friends and/or other users of the invention; and contacting the advertiser **{Fig. 18}**.

[0082] The "**Classifieds**" feature also provides the consumer with access to other options such as filtering classified ads (e.g. filter price range, sub-categories etc.), and/or posting a classified ad on the system of the invention. The consumer can include a variety of information in the ad want to post. The

consumer can, for example, include existing pictures, and/or take pictures of the content they want to advertise using the camera tool the invention is equipped with; and include details about the content they want to advertise such as title of the ad, type of content, classified ads and/or sub-category the content is relevant to, the price of the content if applicable, their location, contact information, website etc.

[0083] In another embodiment, a feature called "**Calendar**" allows the consumer to, for example, manage their time, schedule, appointments, events etc. **{Fig. 19}** The "Calendar" feature provides the consumer with options such as creating and/or adding a new event; viewing details of a scheduled event; editing the details of a scheduled event; using different calendar view options (e.g. today, daily, weekly, monthly, yearly etc.).

[0084] When viewing a scheduled event, the consumer has access to information such as the name of the event and the event category it is relevant to (e.g. home, work, bills, urgent, soccer etc.); the location of the event; the date of the event; the time of the event, if applicable; the single and/or multiple type of notification methods selected by the consumer; the parties invited to participate to the event; the parties that will participate to the event in some way etc.

[0085] The consumer can create and/or add an event to their calendar using methods such as selecting the "Add event" option or clicking and/or tapping on the calendar itself. A variety of information can be included in the event details. The consumer can, for example, include the name of the event; the event category the event is relevant to; the location of the event if applicable; the date of the event; the time of the event, if applicable; parties invited to participate to the event in some way; details on how often they want for the event to repeat, if applicable (e.g. once a day, once a week, twice a week, bi-weekly, monthly, yearly etc.); and notes. The consumer can also, for example, choose to be shown as available or busy at the time of the event, allow the event to be viewed publicly, or set the event as private to prevent others from having access to the event and/or its details.

[0086] The "**Calendar**" also allows the consumer to edit a scheduled event. The consumer can edit an event using methods such as selecting the "Edit" option, and/or selecting a section of the event they want to edit. The consumer can choose to change details of the event such as; the name of the event; the event category the event is relevant to; change the location of the event, if applicable; the date of the event; the time of the event, if applicable; parties invited to participate to the event; details on how often they want for the event to repeat, if applicable; notes; whether they want to be shown as busy or available at the time of the event; and/or whether they want for the event to be set as private or public.

[0087] In another example embodiment, the "**Profile**" feature allows the consumer to, for example, view and/or edit their personal information; get updates and/or information on their friends, merchants,

the administration of the invention and/or the community formed by the users of the invention; view information shared by friends, users of the invention, merchants, and/or the administration of the invention; communicate with their friends, merchants, the community formed by the users of the invention and/or the administration of the invention etc.

[0088] The "**Profile**" feature allows the consumer to have access to personal information such as the coupons saved to their "universal coupons card" and/or loyalty cards linked with their user account; their favorite items, brands, and/or stores list; their contacts (e.g. personal contacts, merchants contacts, etc.); the messages they have received and/or sent from and/or to parties such as the administration of the invention, friends, users of the invention, merchants etc. ; the number of ads, such as classified ads, they have posted; the number of friends and /or followers they have among the community formed by the users of the invention; information on the orders, regardless of their status, handled with the help of the invention; alerts (e.g. price alert, deal expiration alert, alerts communicated by the administration of the invention, merchants etc.); reviews such as product reviews and service reviews; billing and shipping information; payment methods; details on their personal interests (e.g. food and drinks, health and beauty, fitness etc.); details about their preferences (e.g. type of products and/or types of services for which they would like to receive promotions for etc.); details on their personal information (e.g. household income, age, number of household occupants, marital status, employment, insurance provider etc.); privacy and settings details.

[0089] The consumer has access to a variety of options such as sending messages to parties such as friends, users of the invention, the administration of the invention, merchants; replying to messages received by parties such as friends, users of the invention, the administration of the invention, merchants; linking loyalty cards to their user account; removing loyalty cards from their user account; sharing information such as deals, purchases, tips, recipes and/or content such as pictures, videos, audios and links with, for example, one or multiple friends, groups of friends, users of the invention, and the community formed by users of the invention; viewing the accounts parties such as friends, users of the inventions, merchants, the administration of the invention created on the system of the invention; rating information shared on the system of the invention; commenting on information shared on the system of the invention; and sharing information the system of the invention.

[0090] The "**Profile**" section provides the consumer with access to a search bar that allows the consumer to search content such as people, information, recipes, deals etc.

[0091] A budget feature is provided in the "**Profile**" feature. The budget feature allows the consumer to, for example, track their savings in order to get details such as the total saved over a certain period (e.g. today, this week, current and/or previous month, current and/or previous years) for one or multiple

categories of expense (e.g. entertainment, beauty and fragrance, kids, groceries and food services etc.) **{Fig. 20}**; track their expenses to get details such as total spent over a certain period (e.g. today, this week, current and/or previous month, current and/or previous years) for one or multiple categories and/or subcategories of expense (e.g. shelter, utilities, groceries, general merchandise, entertainment, loans etc.), the total expense ratio one or multiple expense categories and/or subcategories represents; and the amount spent for one, multiple and/or all expense categories and/or subcategories **{Fig. 21}**. The consumer can also sort expenses in ascendant and/or descendant order; compare income with expenses **{Fig. 22}**; view bank accounts and/or financial information associated with their user account; link and/or remove bank accounts and/or financial information with their user account.

[0092] The "**Profile**" feature also allows the consumer to edit a variety of information. The consumer can, for example, edit their billing and shipping information; payment methods associated with their user account; information about their interests and/or preferences; personal information; privacy details; settings; favorite items, brands and/or stores; contacts; loyalty cards linked with their user account; bank accounts and/ or financial information linked with their user account, etc.

[0093] The preferred system of the invention may include a "**Recipe**" feature, where the user can browse recipes, see if deals and/or coupons are available for ingredients corresponding to those recipes, add the ingredients to a shopping list and have them delivered to the user.

[0094] In a preferred embodiment, the system includes a dedicated device for receiving a client request that is associated with an item in a shopping list that is selected by the client user so as to deliver the item to a location selected by the client user. The dedicated device may be linked to the business layer 340 shown in Figure 1.

[0095] The scope of the claims should not be limited by the preferred embodiments set forth in the examples, but should be given the broadest interpretation consistent with the description as a whole.

CLAIMS

1. A system (100) for real-time management of promotions associated with products or services from merchants to clients, the system comprising:

an electronic display device (130) adapted to run a client application for allowing a client user to make a client request through said client application;

a business interface (140) adapted to run a business application for allowing a business user to make a business request through said business application; and

a cloud computing server (120), said cloud computing server (120) configured to store and operate a framework (300) connected to a database (200), the framework (300) being adapted to communicate with the electronic display device (130) and the business interface (140), said framework (300) comprising:

a data layer (310) for communicating with the database (200) and performing create, read, update and delete operations;

a client applet layer (330) for receiving said client request from said client application running on said electronic display device (130);

a presentation layer (320) for receiving said business request from said business application running on said business interface (140); and

a business layer (340) for connection to the data layer (310), the presentation layer (320) and client applet layer (330).

2. The system of claim 1, wherein the business layer (340) is adapted to be connected to at least one third party database (400).

3. The system of claim 1 or 2, wherein the business layer (340) is adapted to be connected to at least one payment gateway (500).

4. The system of any one of claims 1 to 3, wherein the client request is associated to a merchant offer displayed on the electronic display device (130).

5. The system of any one of claims 1 to 4, wherein the business request is associated to a modified merchant offer displayed on the business interface (140).

6. The system of any one of claims 1 to 5, wherein the business layer (340) is adapted to communicate via a web service module (350) for interacting with a client card interface (600).

7. The system of claim 6, wherein the client card interface (600) is adapted to communicate with vendor point of sale module (700).

8. The system of claim 7, wherein the vendor point of sale module (700) is adapted to communicated with card scanner (604) for scanning a client card (602).

9. The system of claim 8, wherein the vendor point of sale module (700) is adapted to communicate with a vendor scanner (800) for scanning a product (900).

10. The system of any one of claims 1 to 9, comprising a dedicated device linked to the business layer (340) for receiving said client request that is associated with an item in a shopping list selected by the client user and delivering the item to a location selected by the client user.

11. A method of operating the system (100) of any one of claims 1 to 10, said method comprising:

(a) sending from said database (200) a discount information to the data layer (310), said data layer (310) having a connection with the business layer (340) and the presentation layer (320); and

(b) sending data associated with the discount information to the application layer (330).

12. A method of operating the system (100) of claim 10, said method comprising:

a) sending from said database (200) a discount information to the data layer (310), said data layer (310) having a connection with the business layer (340) and the presentation layer (320);

(b) sending data associated with the discount information to the application layer (330); and

(c) delivering the item in the shopping list that is selected by the client user to the location selected by the client user.

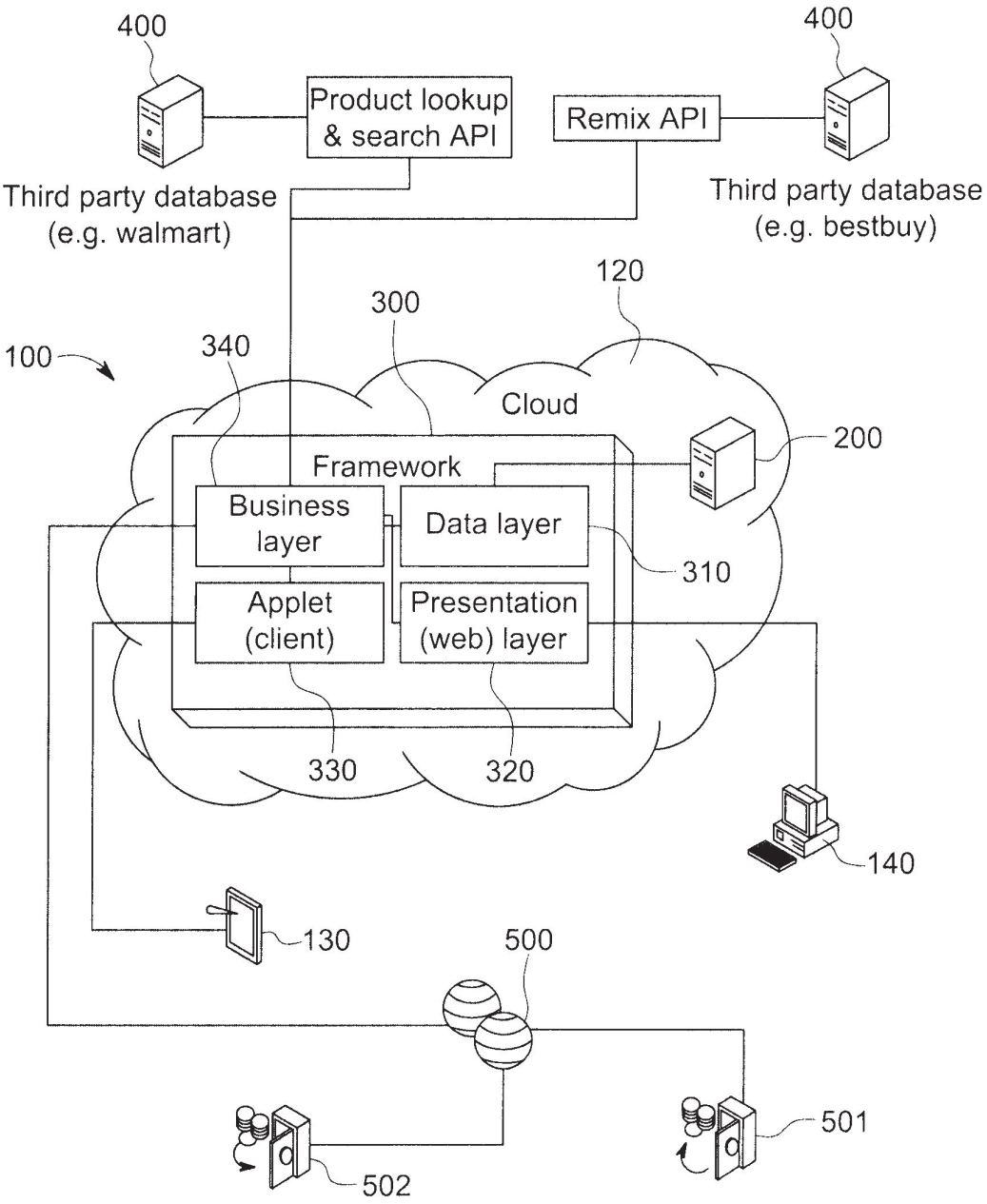


FIG. 1

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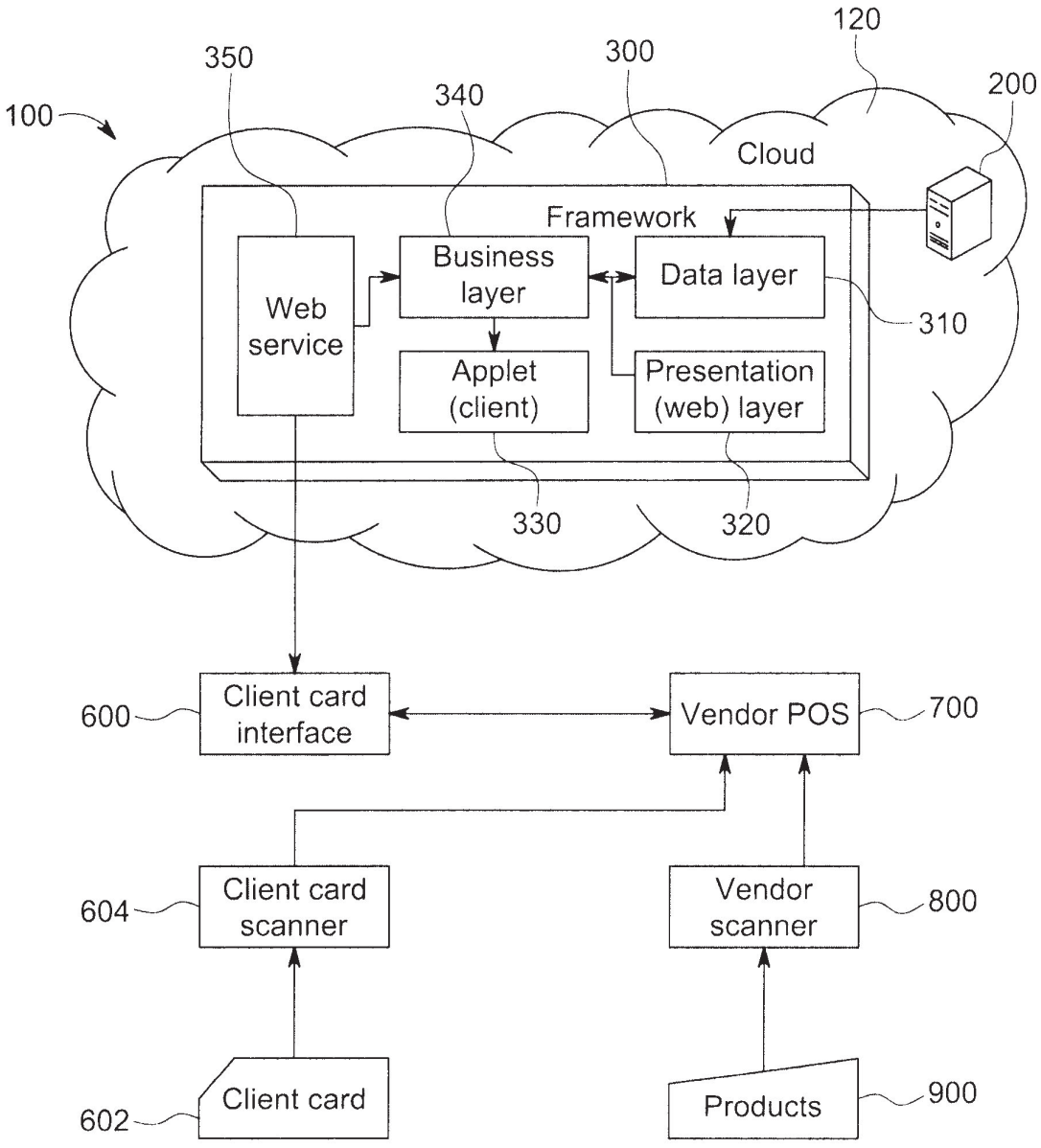


FIG. 2

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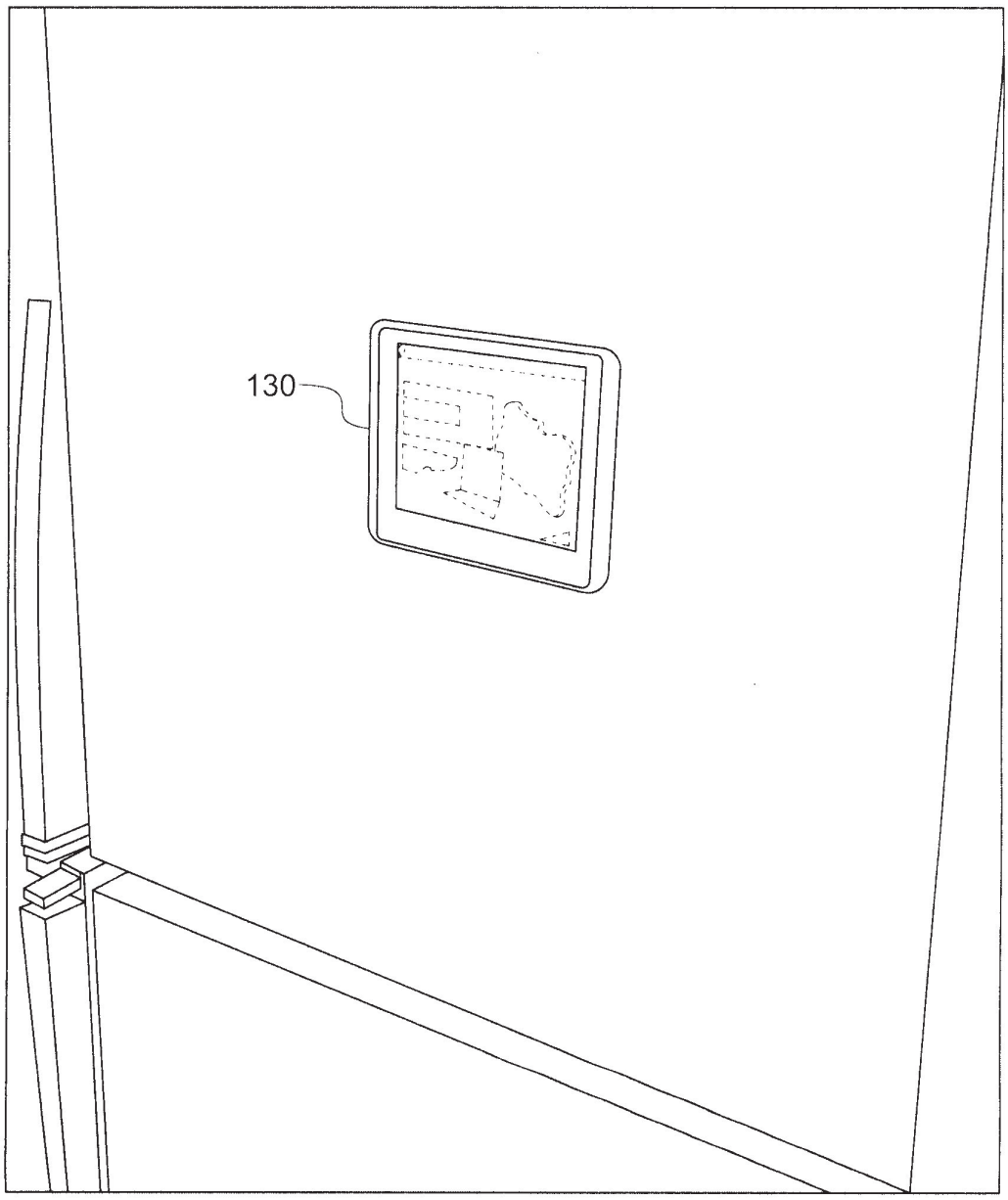


FIG. 3

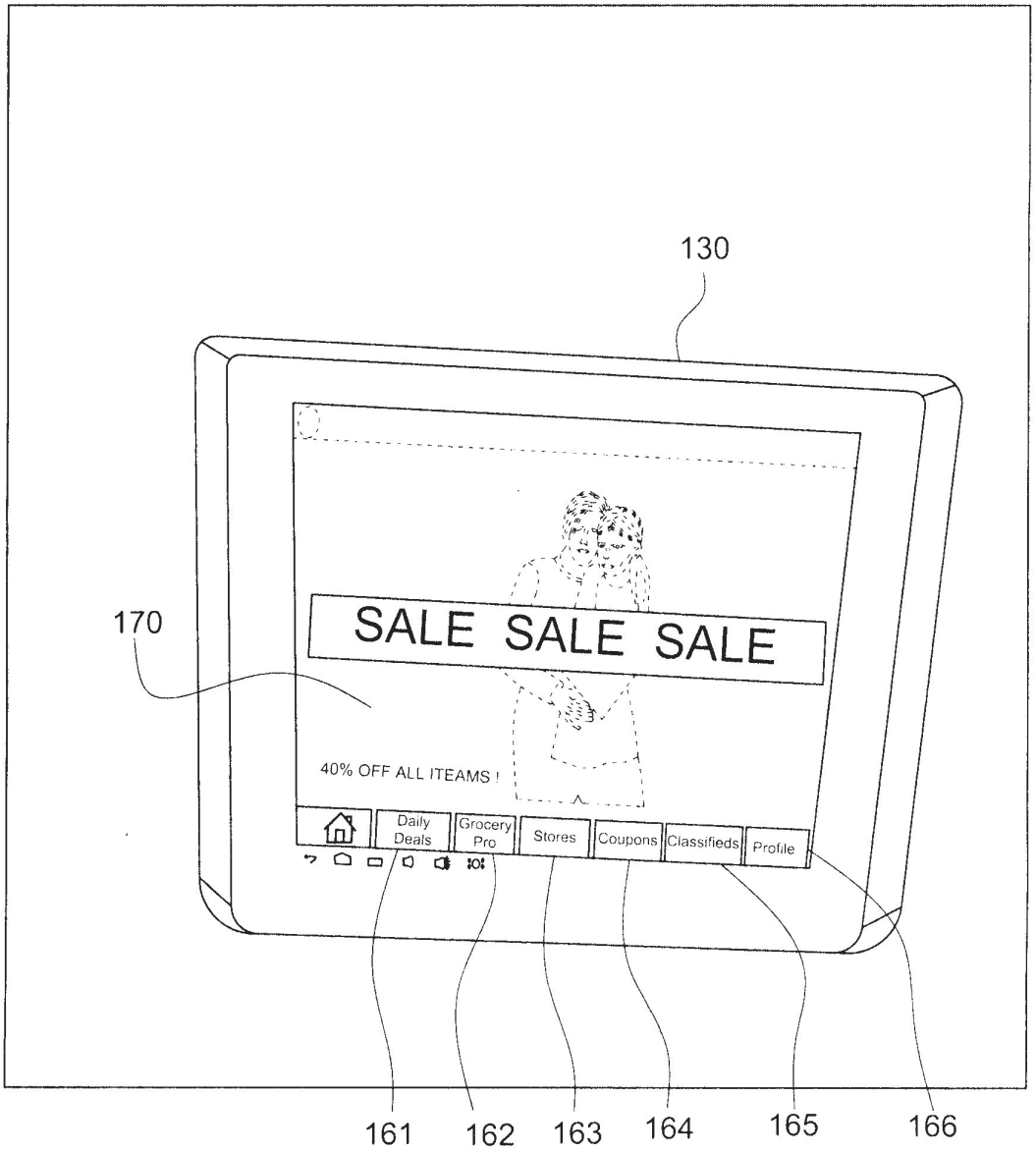


FIG. 4

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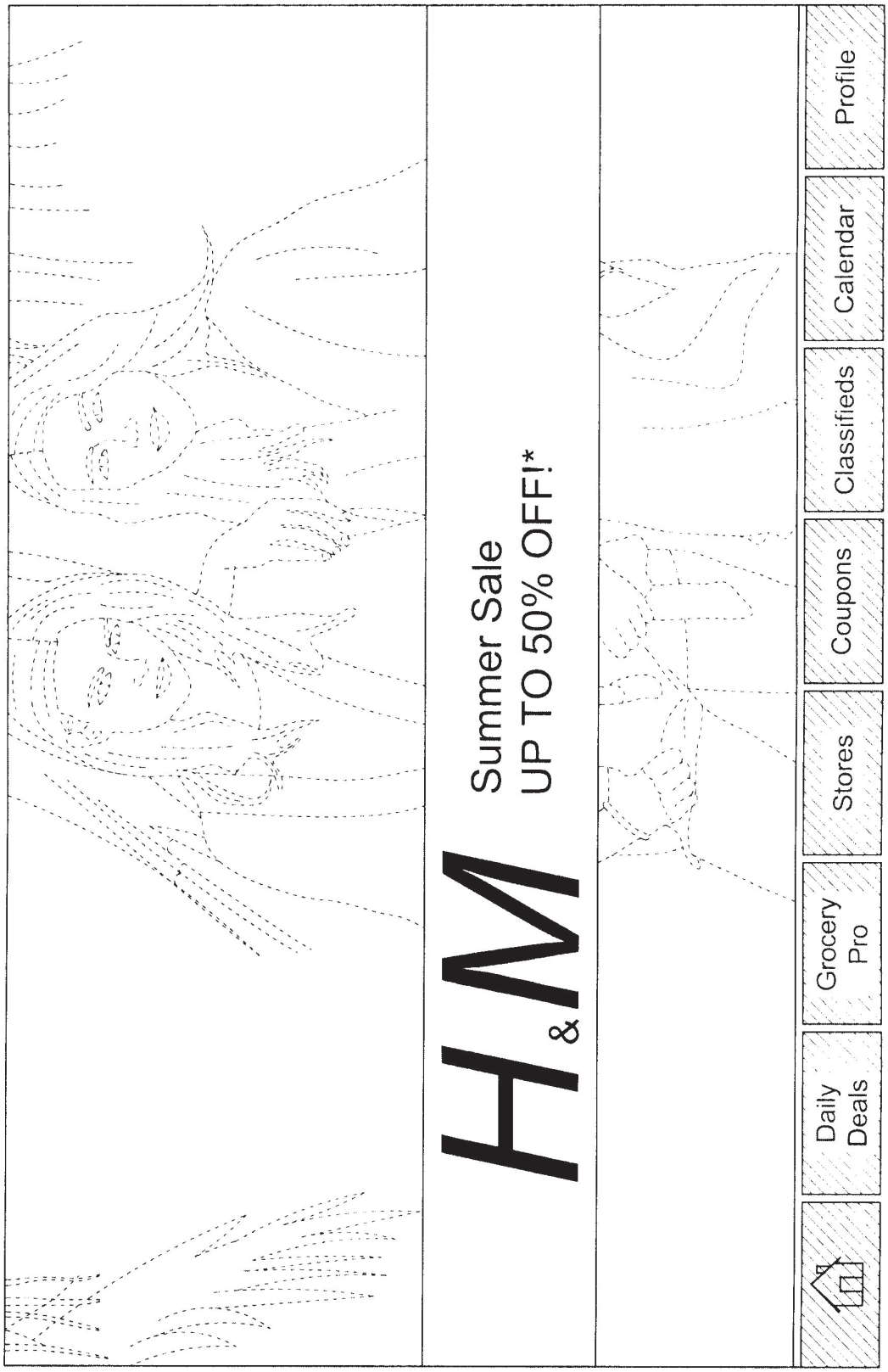

H&M
Summer Sale
UP TO 50% OFF!*
Daily Deals
Grocery Pro
Stores
Coupons
Classifieds
Calendar
Profile

FIG. 5

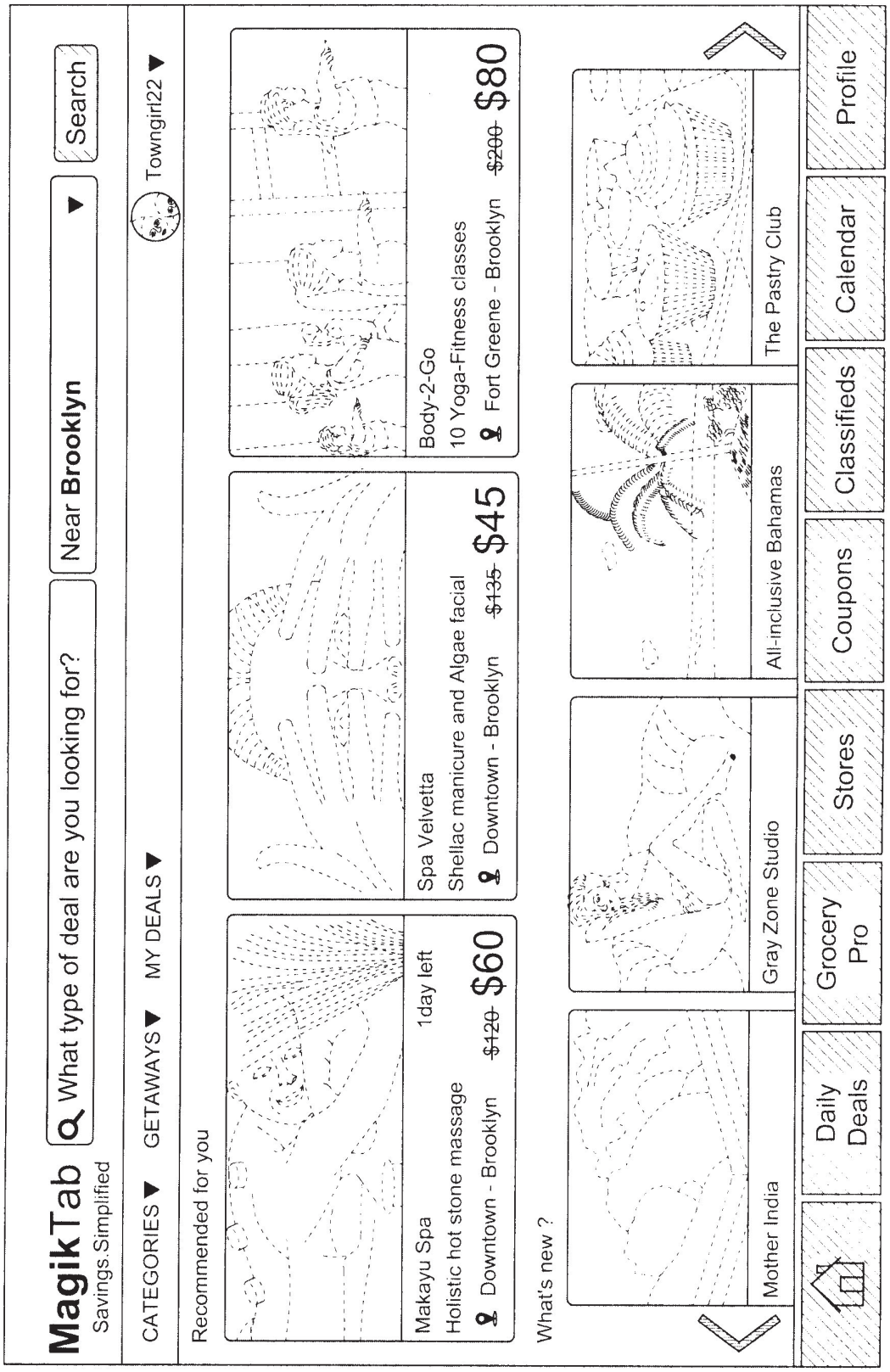


FIG. 6

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FIG. 7

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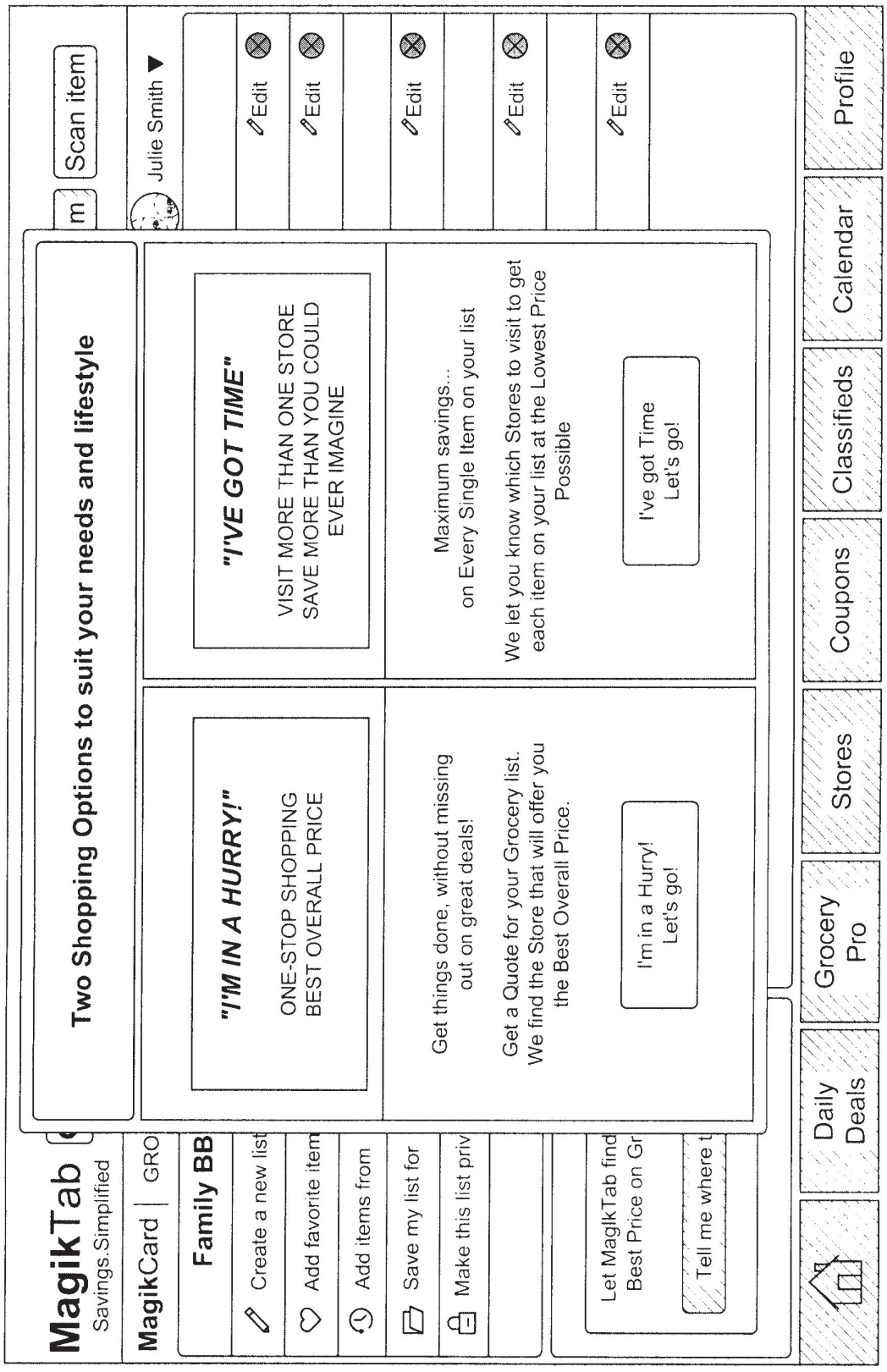


FIG. 8

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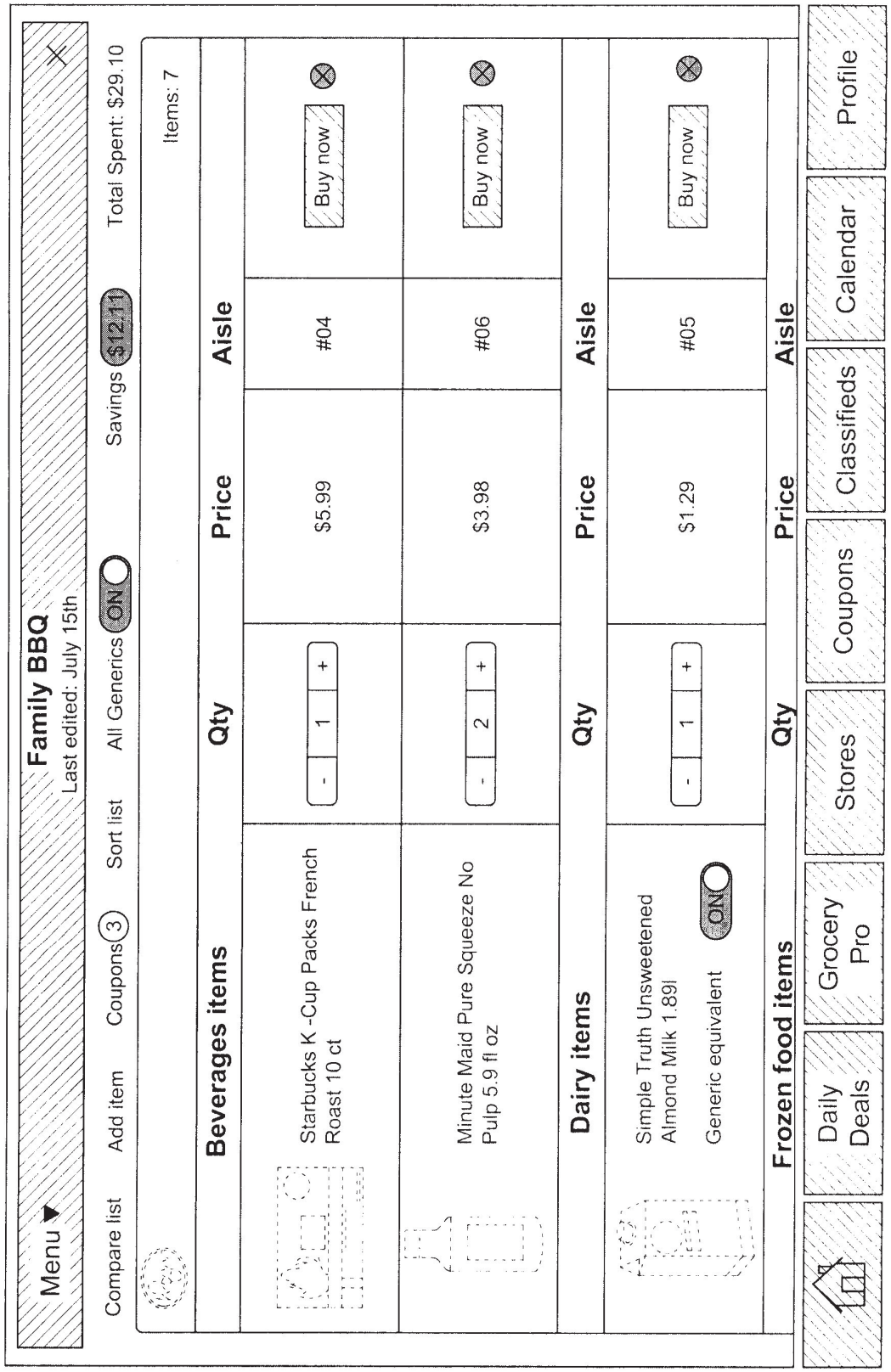


FIG. 9

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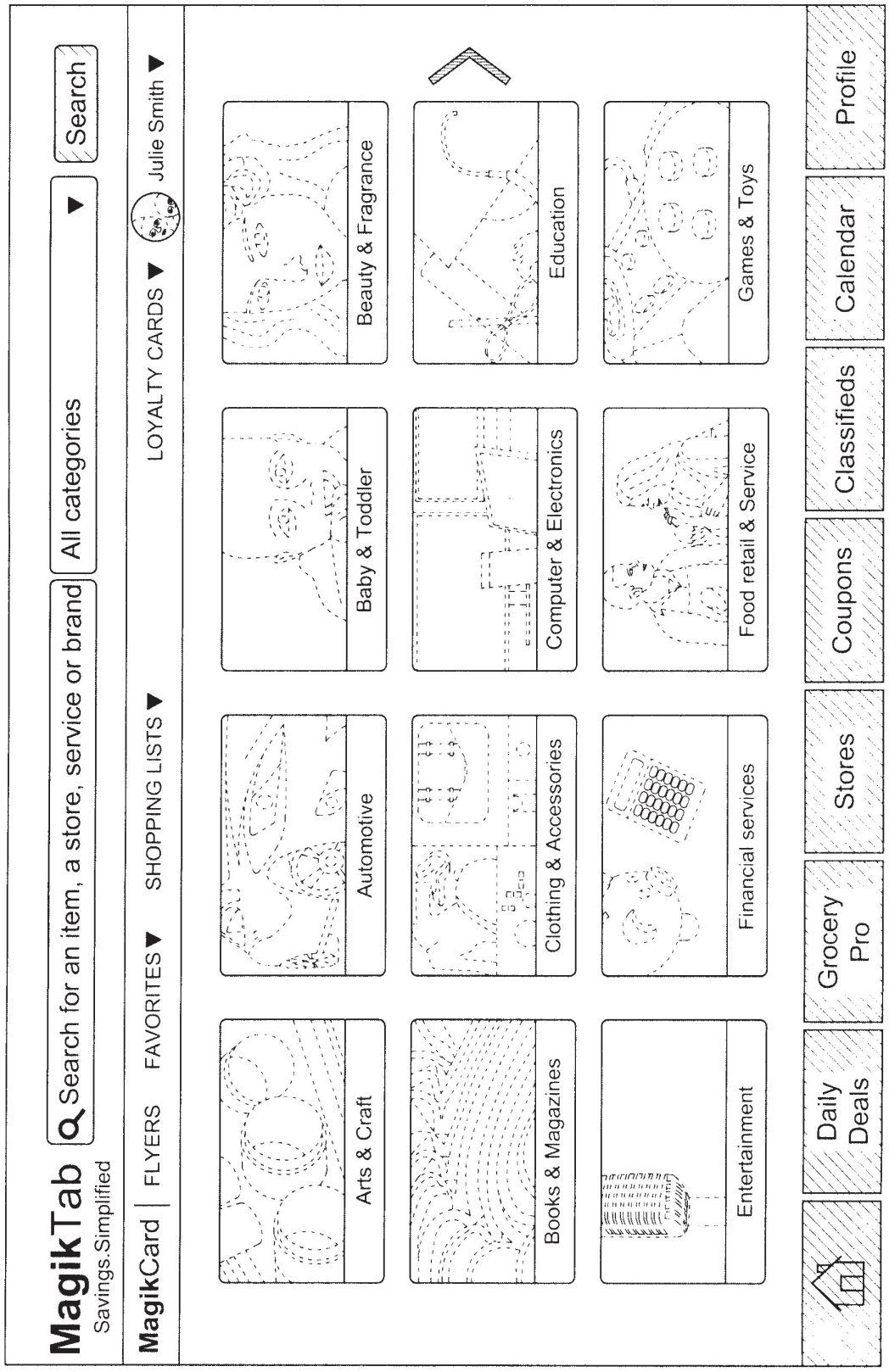


FIG. 10

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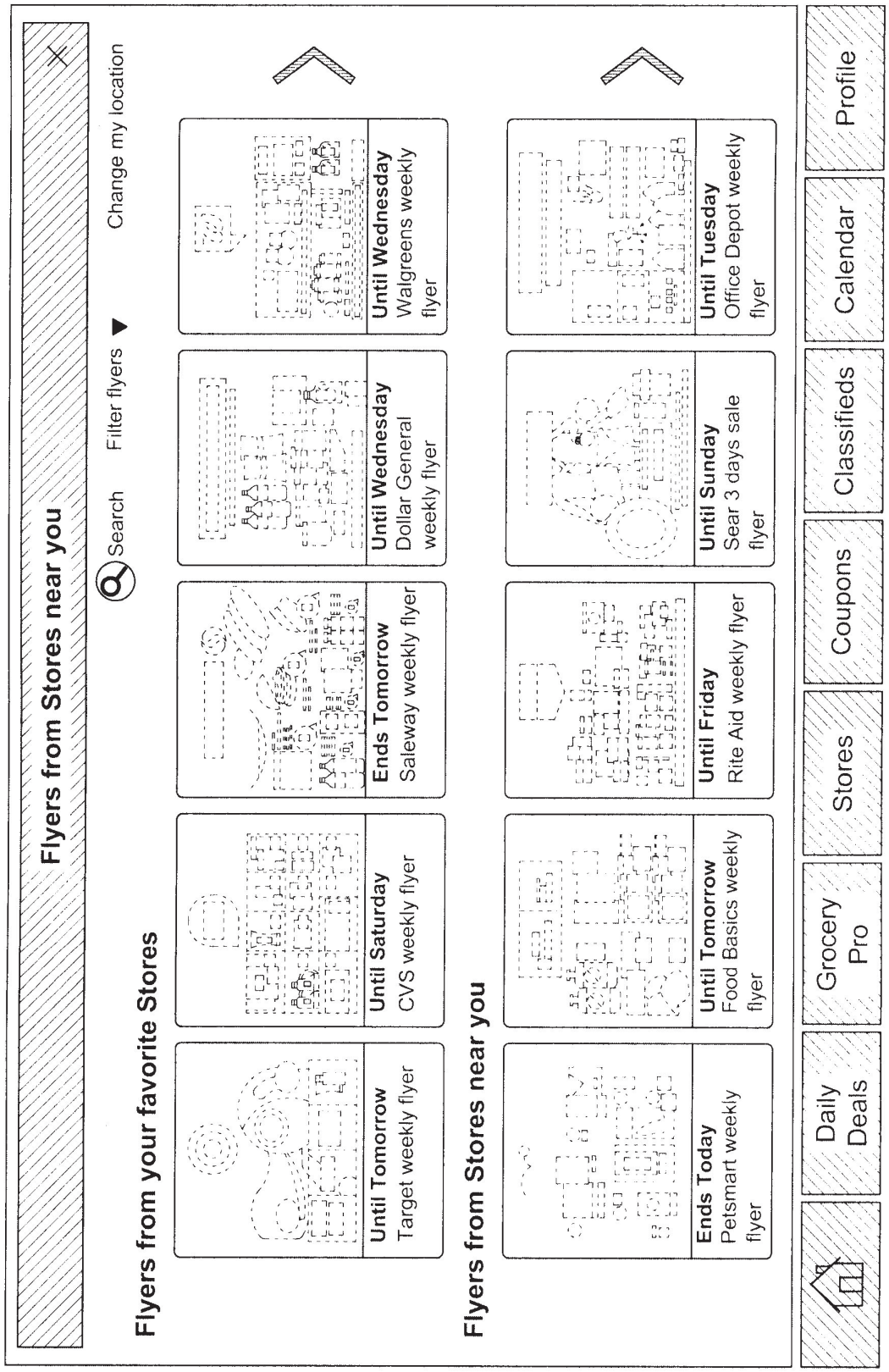

Flyers from Stores near you
Search
Filter flyers
Change my location
Flyers from your favorite Stores
Until Tomorrow
Target weekly flyer
Until Saturday
CVS weekly flyer
Ends Tomorrow
Saleway weekly flyer
Until Wednesday
Dollar General weekly flyer
Until Wednesday
Walgreens weekly flyer
Flyers from Stores near you
Ends Today
Petsmart weekly flyer
Until Tomorrow
Food Basics weekly flyer
Until Friday
Rite Aid weekly flyer
Until Sunday
Sear 3 days sale flyer
Until Tuesday
Office Depot weekly flyer
Daily Deals
Grocery Pro
Stores
Coupons
Classifieds
Calendar
Profile

FIG. 11

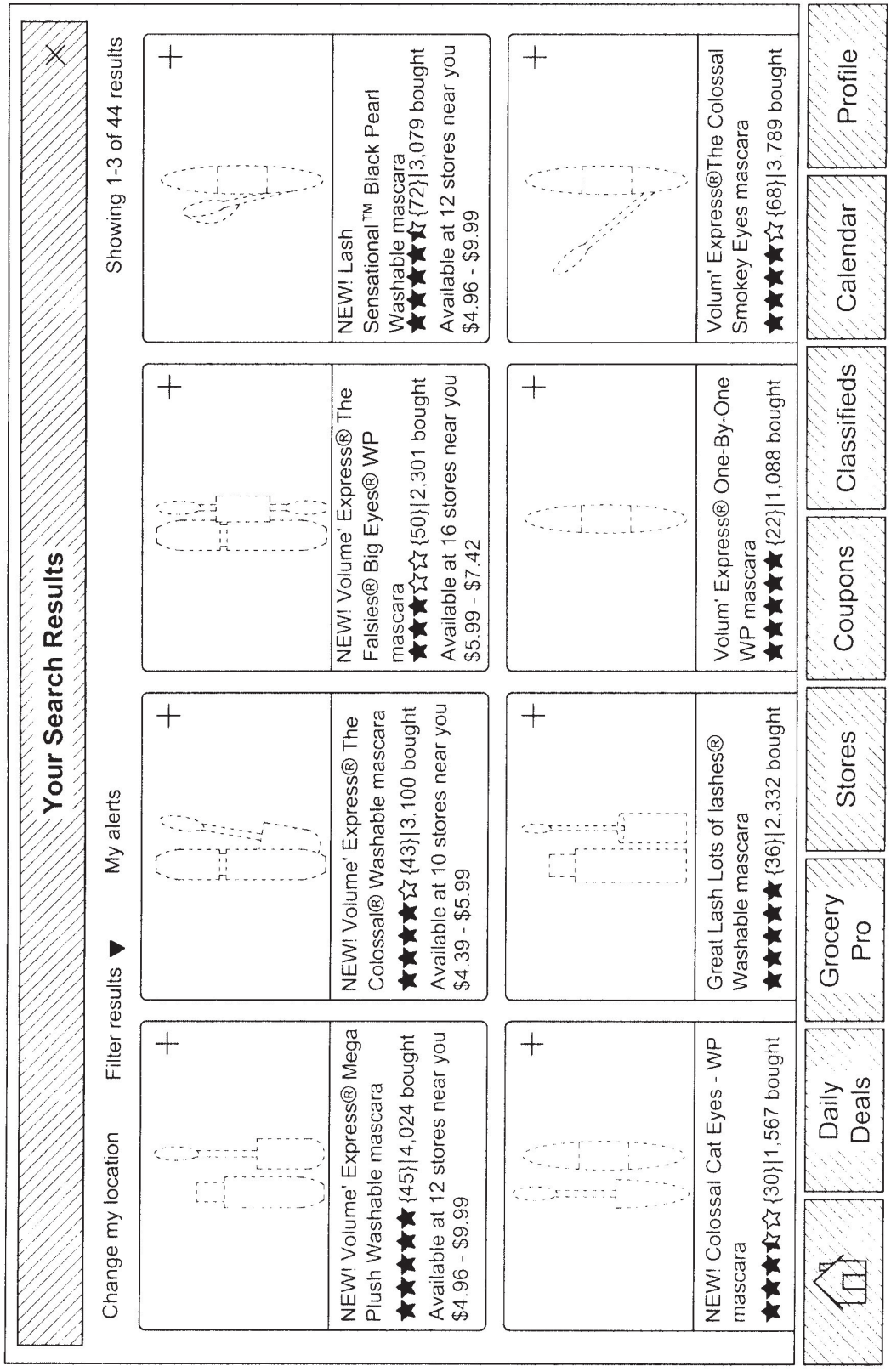


FIG. 12

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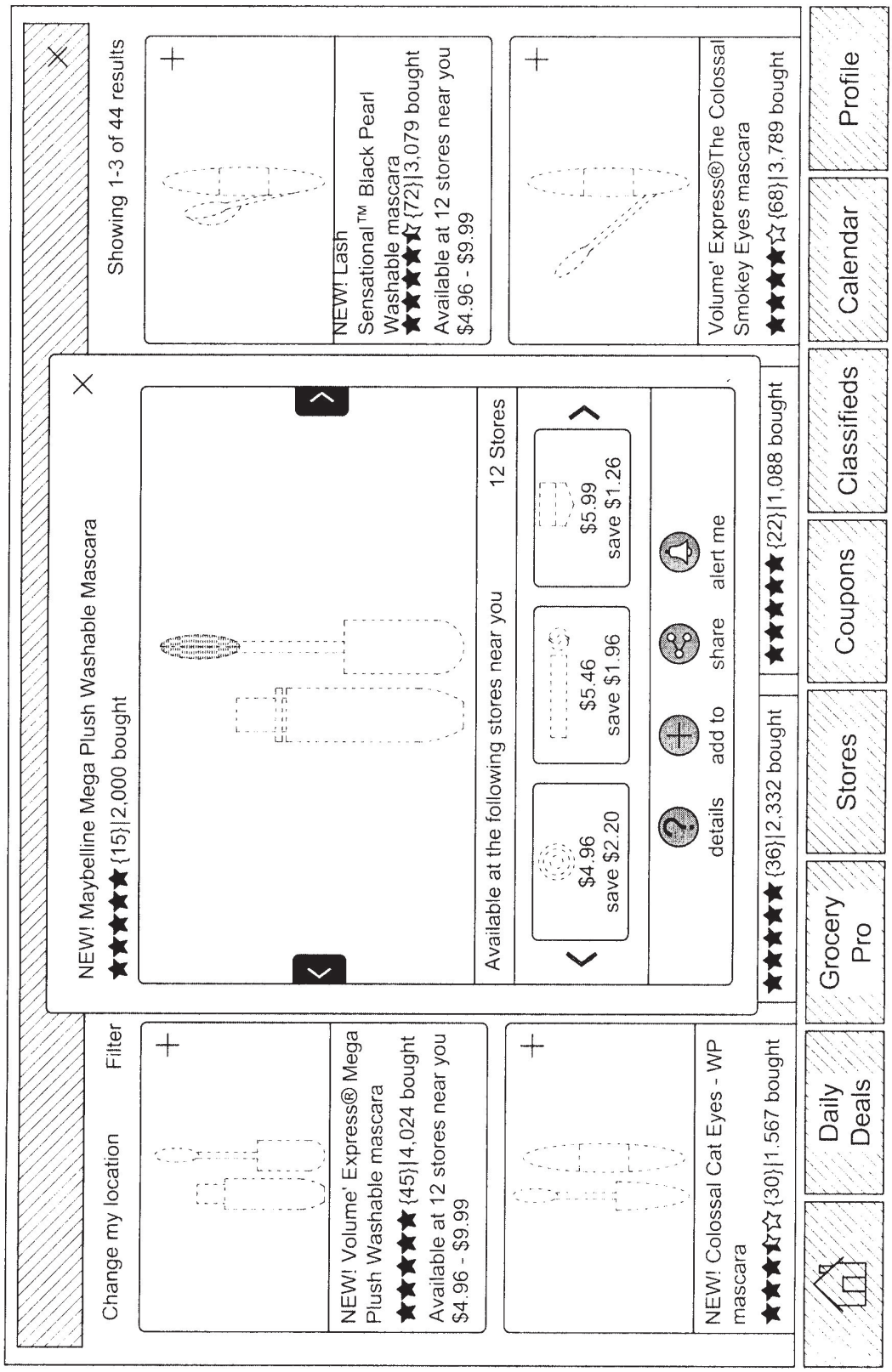


FIG. 13

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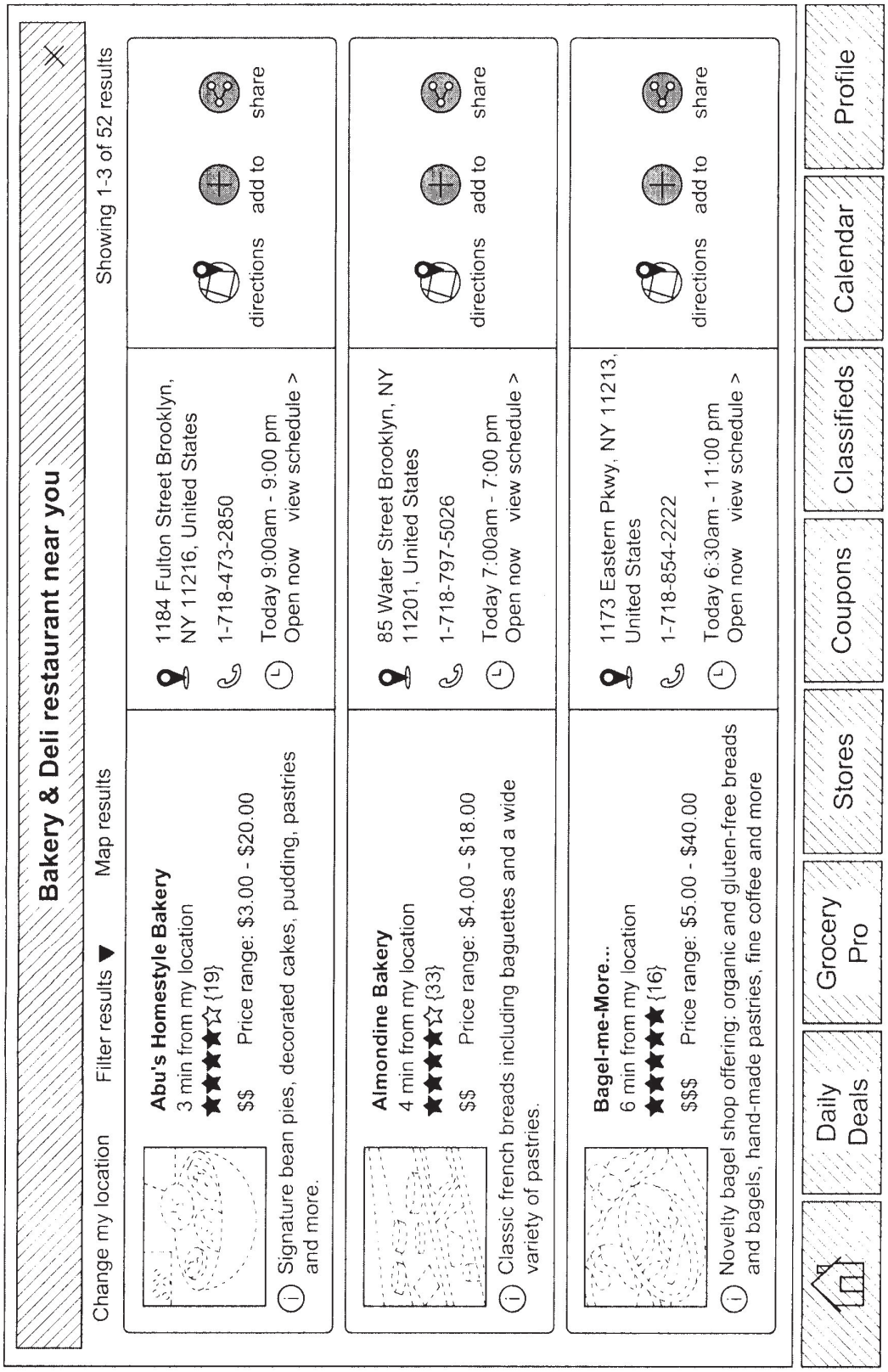


FIG. 14

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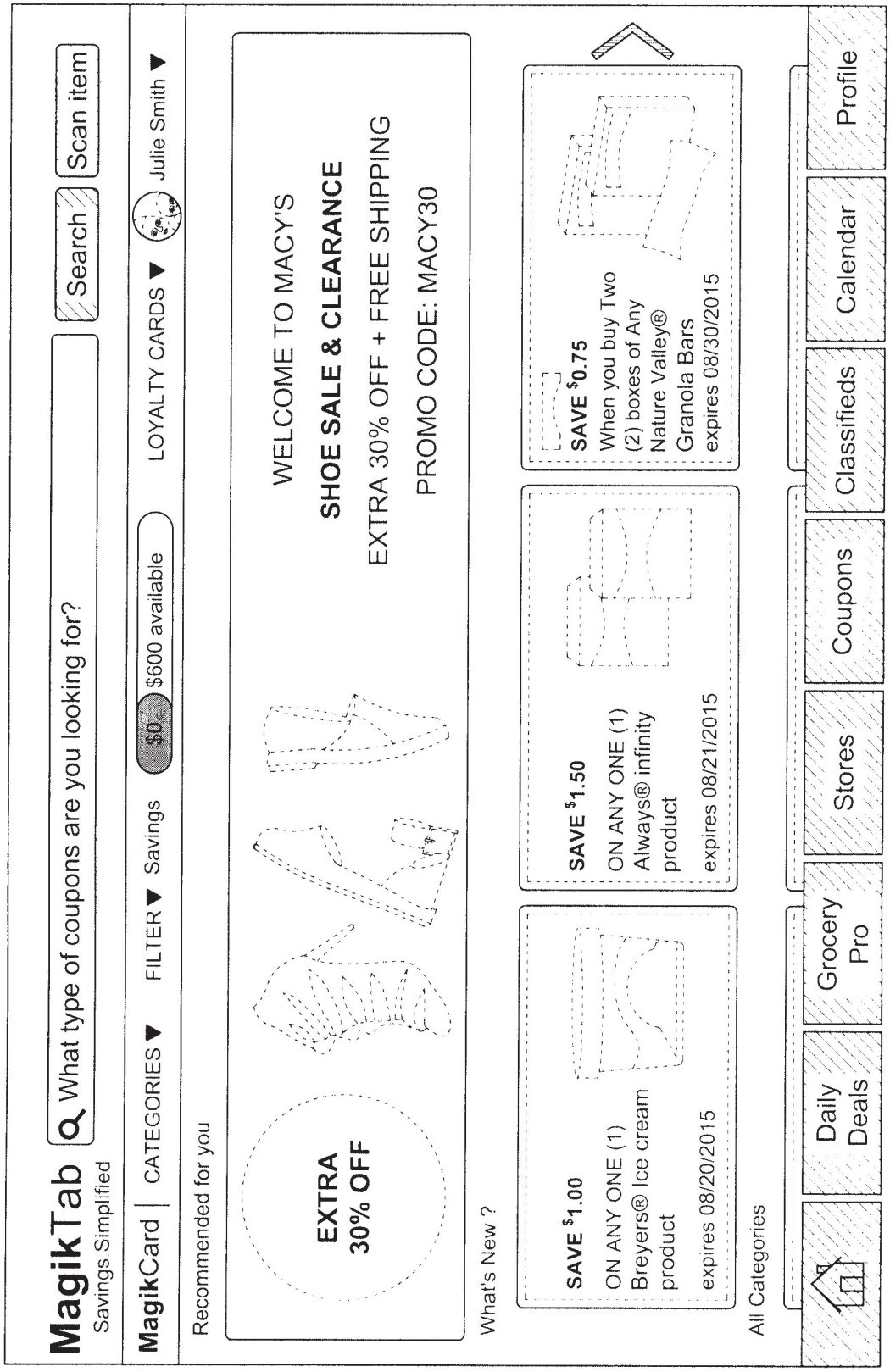


FIG. 15

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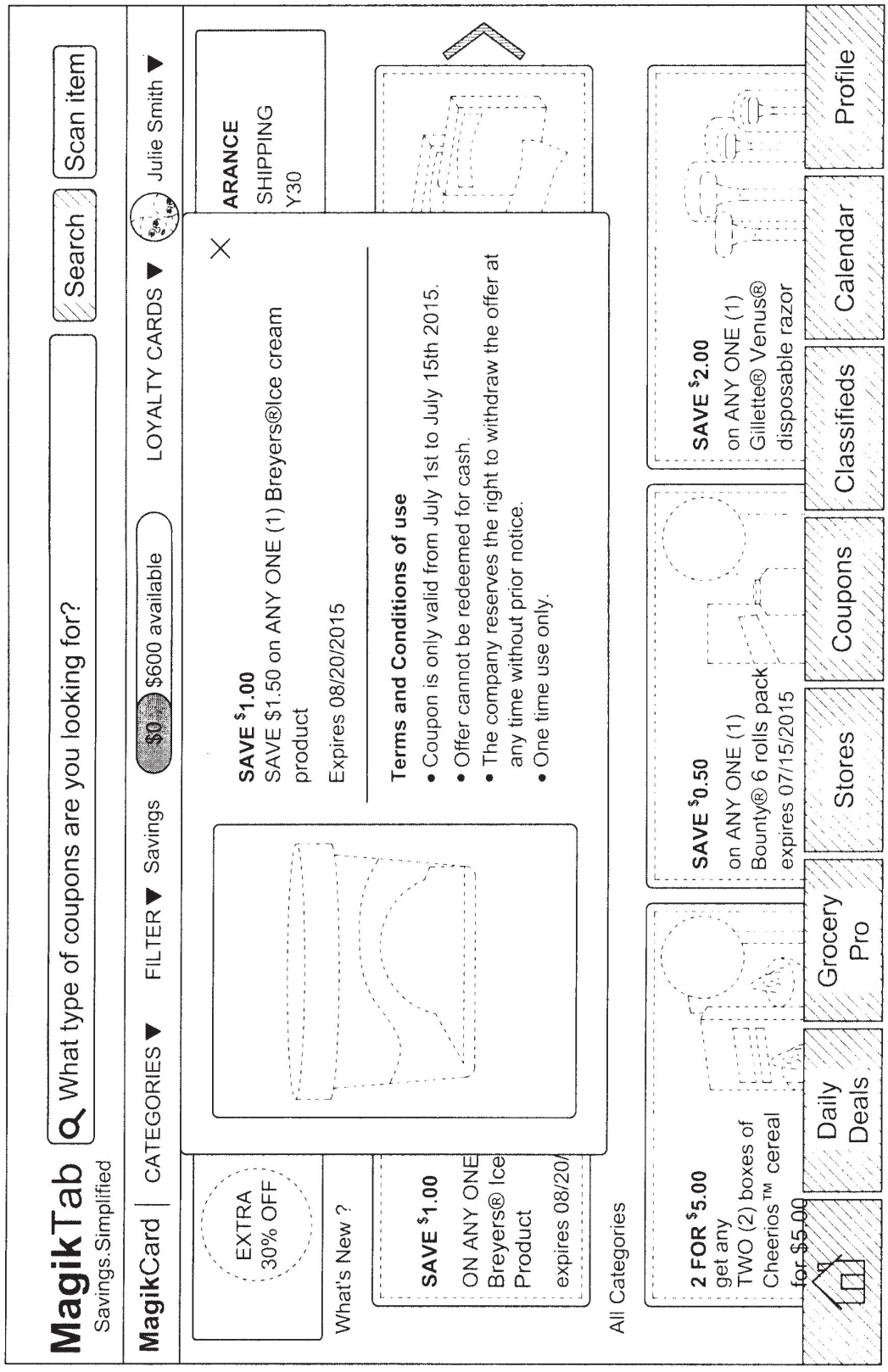


FIG. 16

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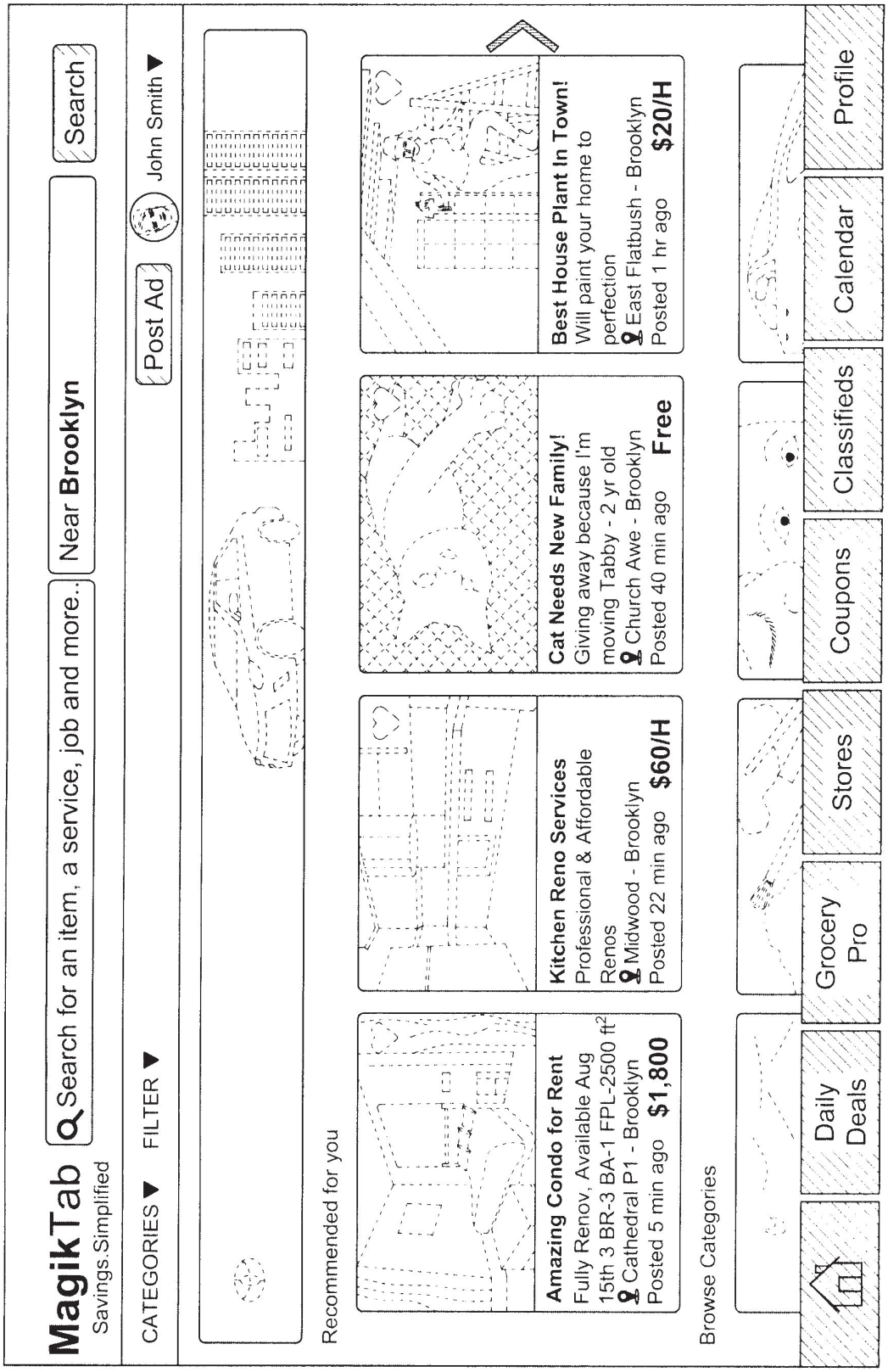


FIG. 17

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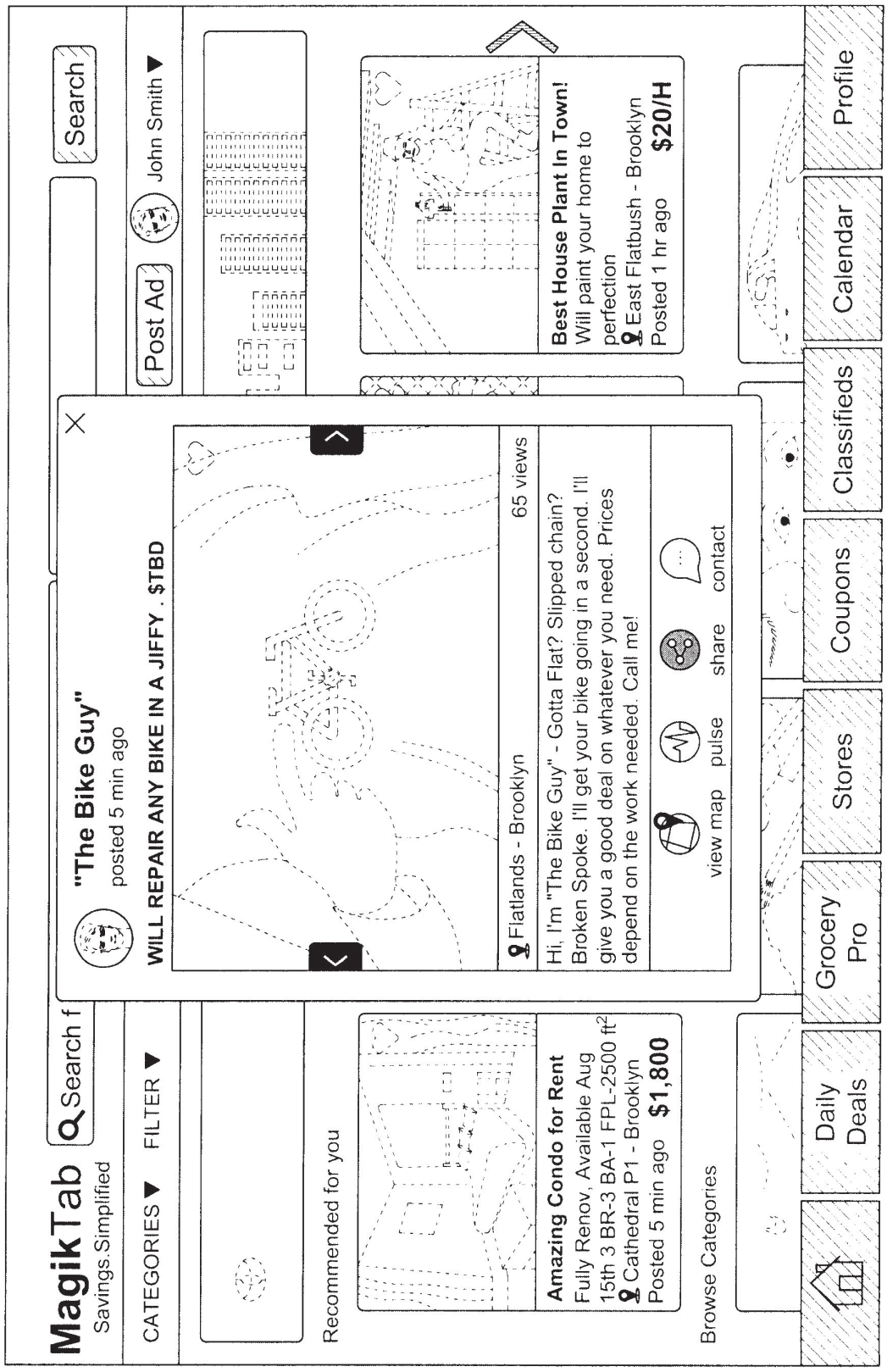


FIG. 18

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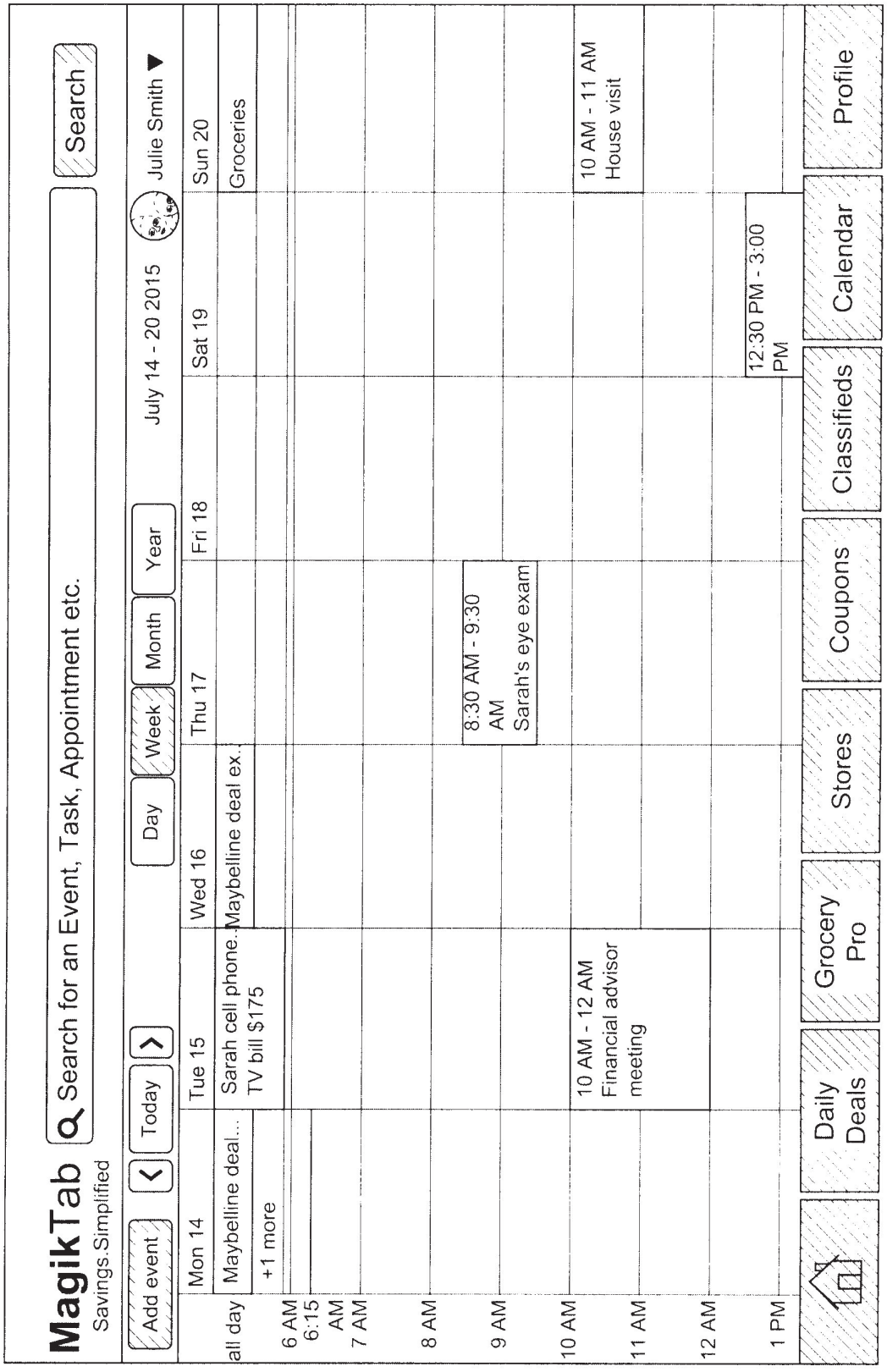


FIG. 19

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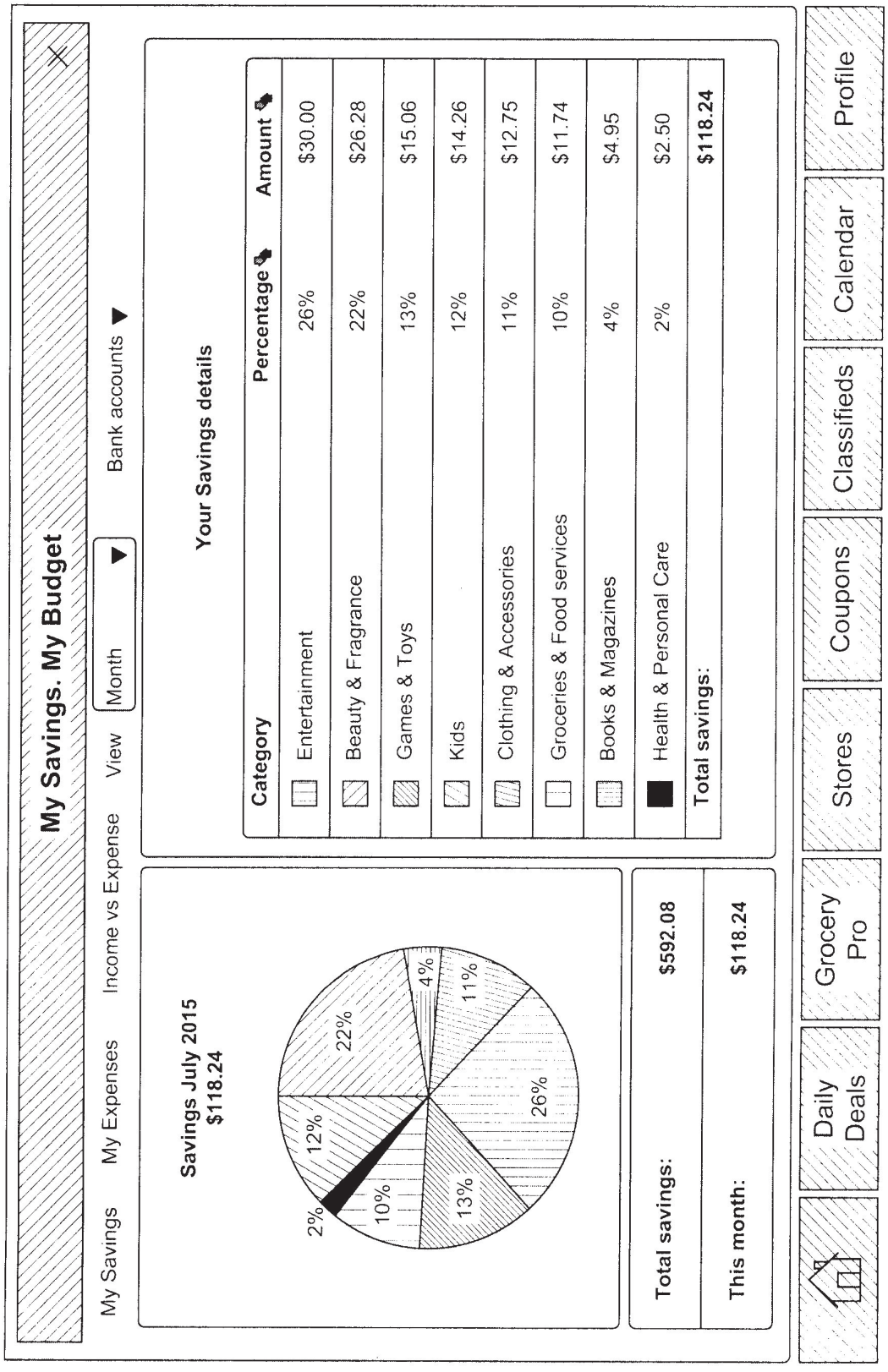


FIG. 20

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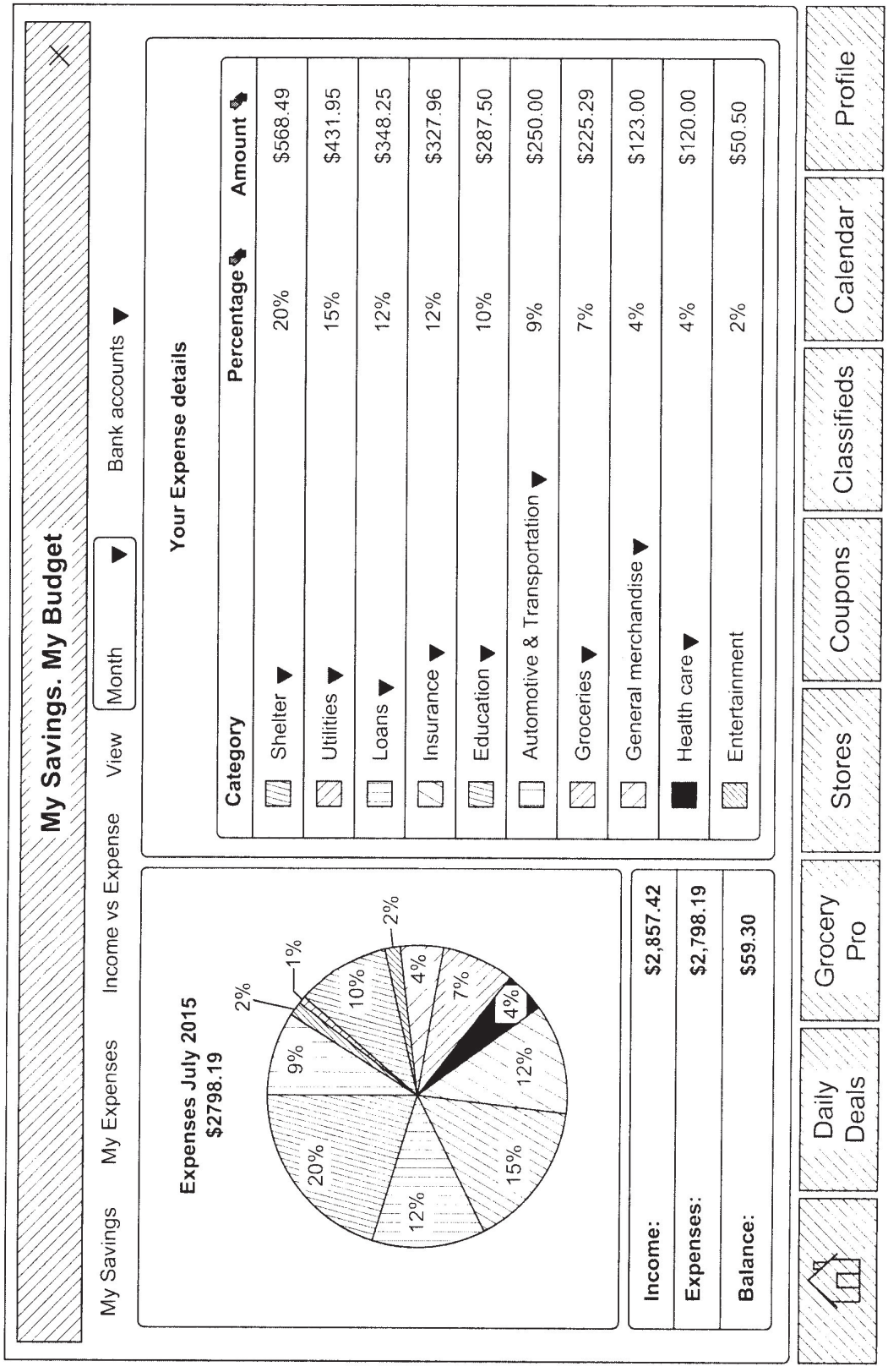


FIG. 21

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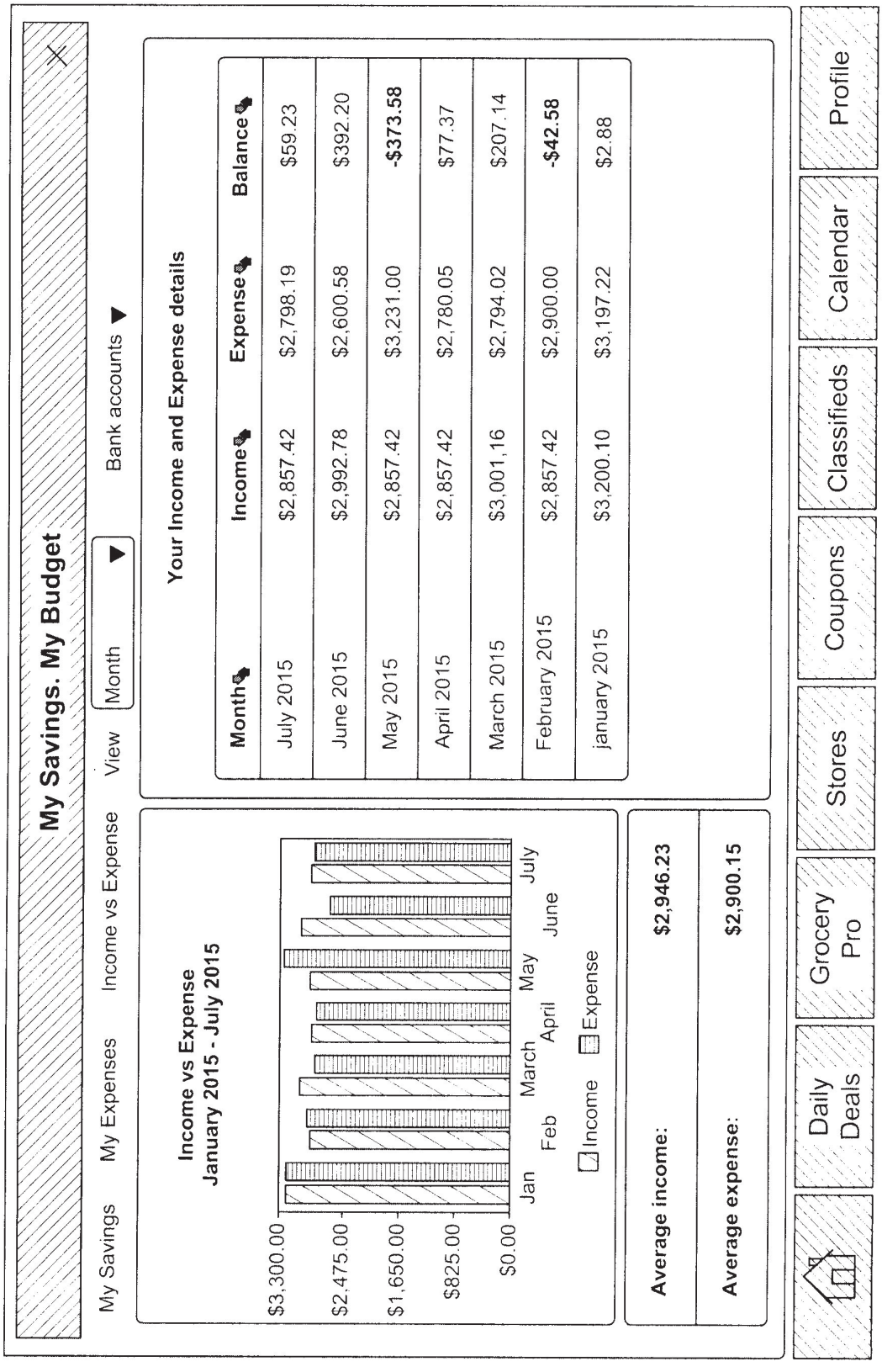


FIG. 22

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2016/051308

A. CLASSIFICATION OF SUBJECT MATTER
IPC: ***G06Q 30/02*** (2012.01) , ***G06Q 20/00*** (2012.01) , ***G06Q 30/06*** (2012.01)

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 30/02 (2012.01) , G06Q 20/00 (2012.01) , G06Q 30/06 (2012.01)

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

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)
Intellect, Questel KW: commerce, client, retail, business, payment, budget, promotions, shopping, list, card, point of sale, and pos

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 2014/0156392 A1 (Ouimet et al.) 5 June 2014 (05-06-2014) *Abstract, figs. 3, 5, 8, 13, 17, and 25, paras. 0046-0093, 0144-0171*	1 and 4-12 2 and 3
Y	CA 2 659698 (Siddique et al.) 21 September 2009 (21-09-2009) *Para. 00203*	2 and 3
A	US 2012/0221393 A1 (Ouimet et al.) 30 August 2012 (30-08-2012)	1-12
A	US 2013/0048723 A1 (King) 28 February 2013 (28-02-2013)	1-12

☐ Further documents are listed in the continuation of Box C.

☑ See patent family annex.

*	Special categories of cited documents:	"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
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent but published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"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		

Date of the actual completion of the international search 23 January 2017 (23-01-2017)	Date of mailing of the international search report 22 February 2017 (22-02-2017)
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 819-953-2476	Authorized officer Nenad Jevtic (819) 639-3759

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