US 20130218328A1

(19) United States

(12) Patent Application Publication

(10) Pub. No.: US 2013/0218328 A1

(43) Pub. Date: Aug. 22, 2013

Rothschild

(54) **SYSTEM AND METHOD FOR CREATING A PERSONLIZED CONSUMER PRODUCT**

(71) Applicant: **Reagan Inventions, LLC**, (US)

(72) Inventor: **Leigh M. Rothschild**, Sunny Isles Beach, FL (US)

(73) Assignee: **Reagan Inventions, LLC**, Sunny Isles Beach, FL (US)

(21) Appl. No.: **13/848,984**

(22) Filed: **Mar. 22, 2013**

**Related U.S. Application Data**

(63) Continuation of application No. 12/854,451, filed on Aug. 11, 2010, now Pat. No. 8,417,377, which is a continuation of application No. 11/471,323, filed on Jun. 20, 2006, now Pat. No. 7,899,713.

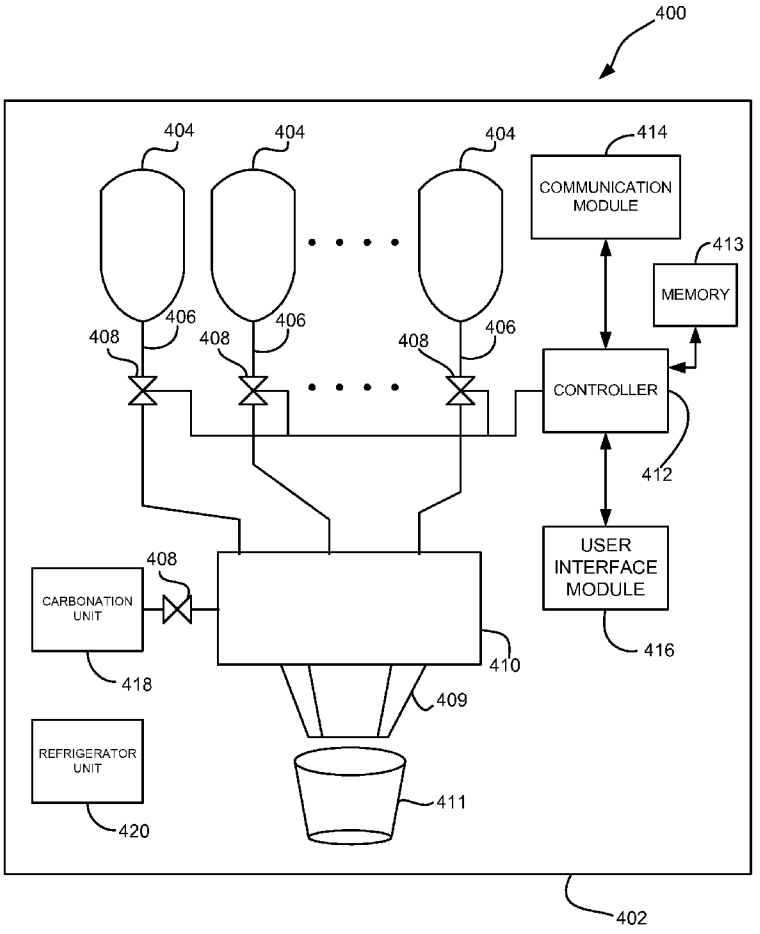
**Publication Classification**

(51) **Int. Cl.**
*G06Q 30/06* (2012.01)

(52) **U.S. Cl.**
CPC ..... ***G06Q 30/0621*** (2013.01)
USPC ..... **700/233**; 705/26.5

(57) **ABSTRACT**

A system and method for creating a personalized consumer product are provided. The system and method of the present disclosure enables a user, e.g., a consumer, to customize products containing solids and/or fluids by allowing a server communicating over the global computer network, e.g., the Internet, to provide product preferences of a user to a product or a mixing device, e.g., a product or beverage dispenser. The method for creating a product according to a user's preferences over a network includes the steps identifying a product to a server over the network; identifying a user to the server over the network; retrieving the user's product preferences from a database at the server based on the product's identity and user's identity; transmitting the user's product preferences to the product over the network; and mixing at least one element contained within the product based on the user's product preferences.



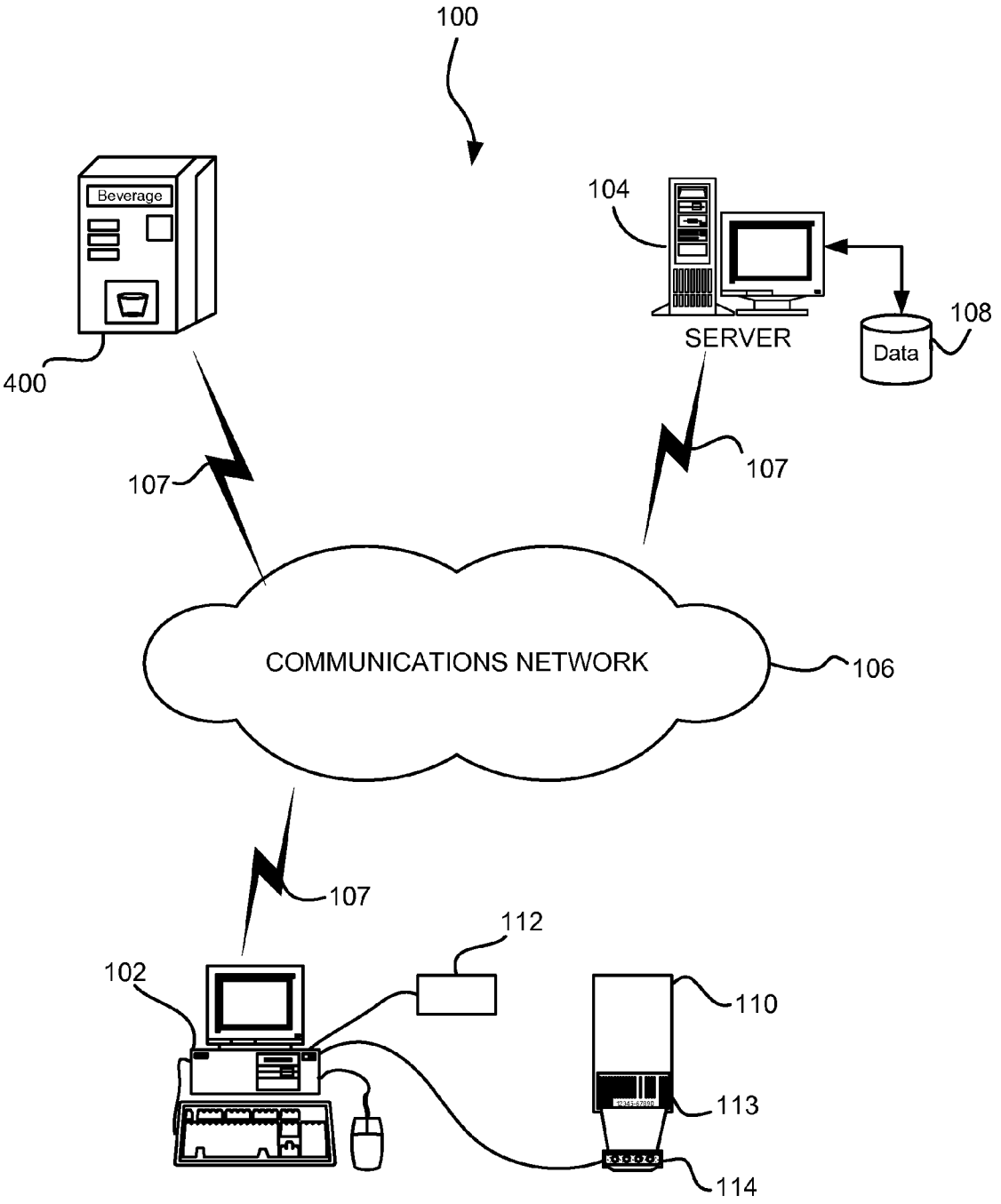

100
Beverage
400
104
SERVER
108
Data
107
107
COMMUNICATIONS NETWORK
106
107
112
102
110
113
114

FIG. 1

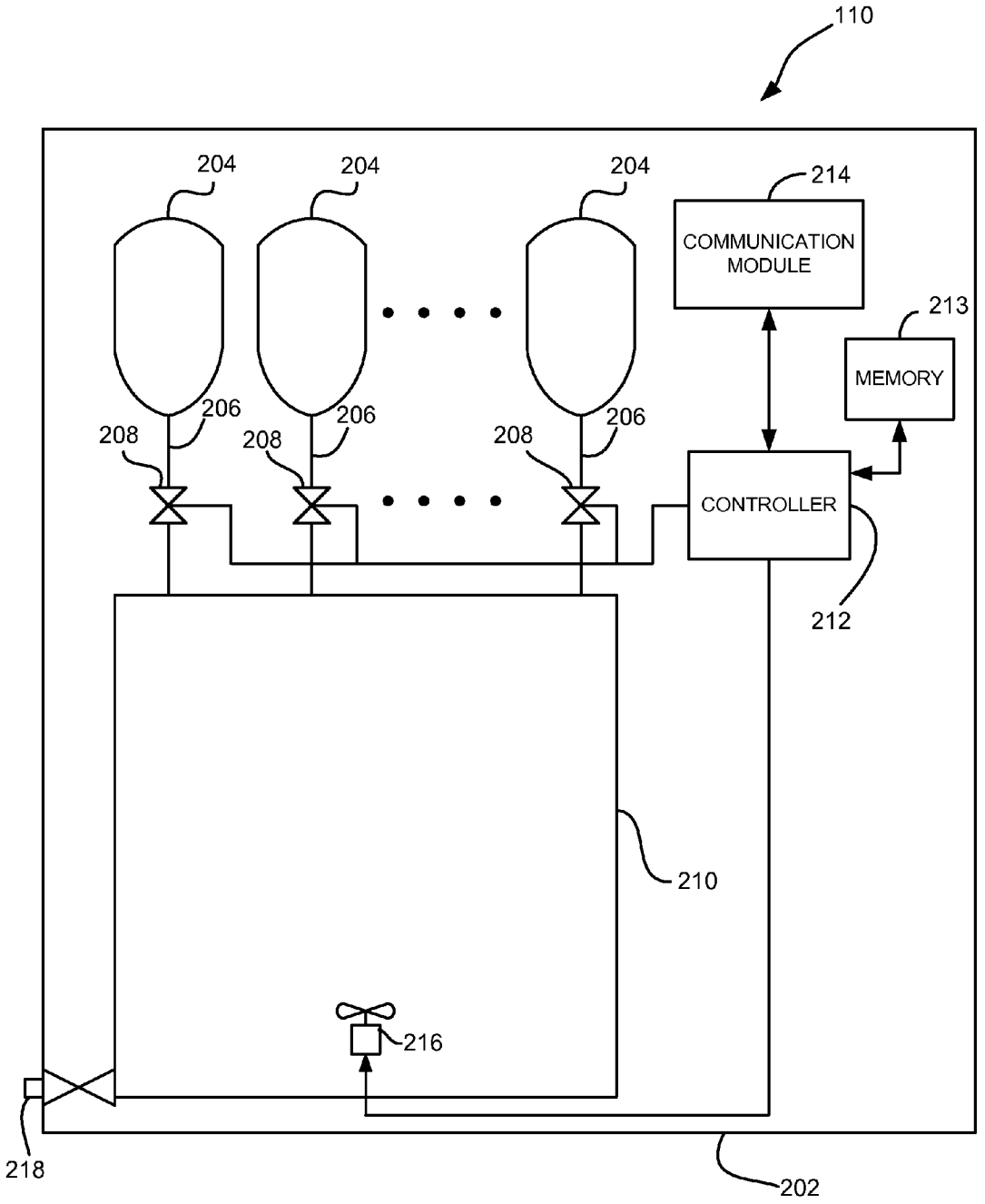

110
204
204
204
214
COMMUNICATION MODULE
213
MEMORY
206
206
206
208
208
208
CONTROLLER
212
210
216
218
202

FIG. 2

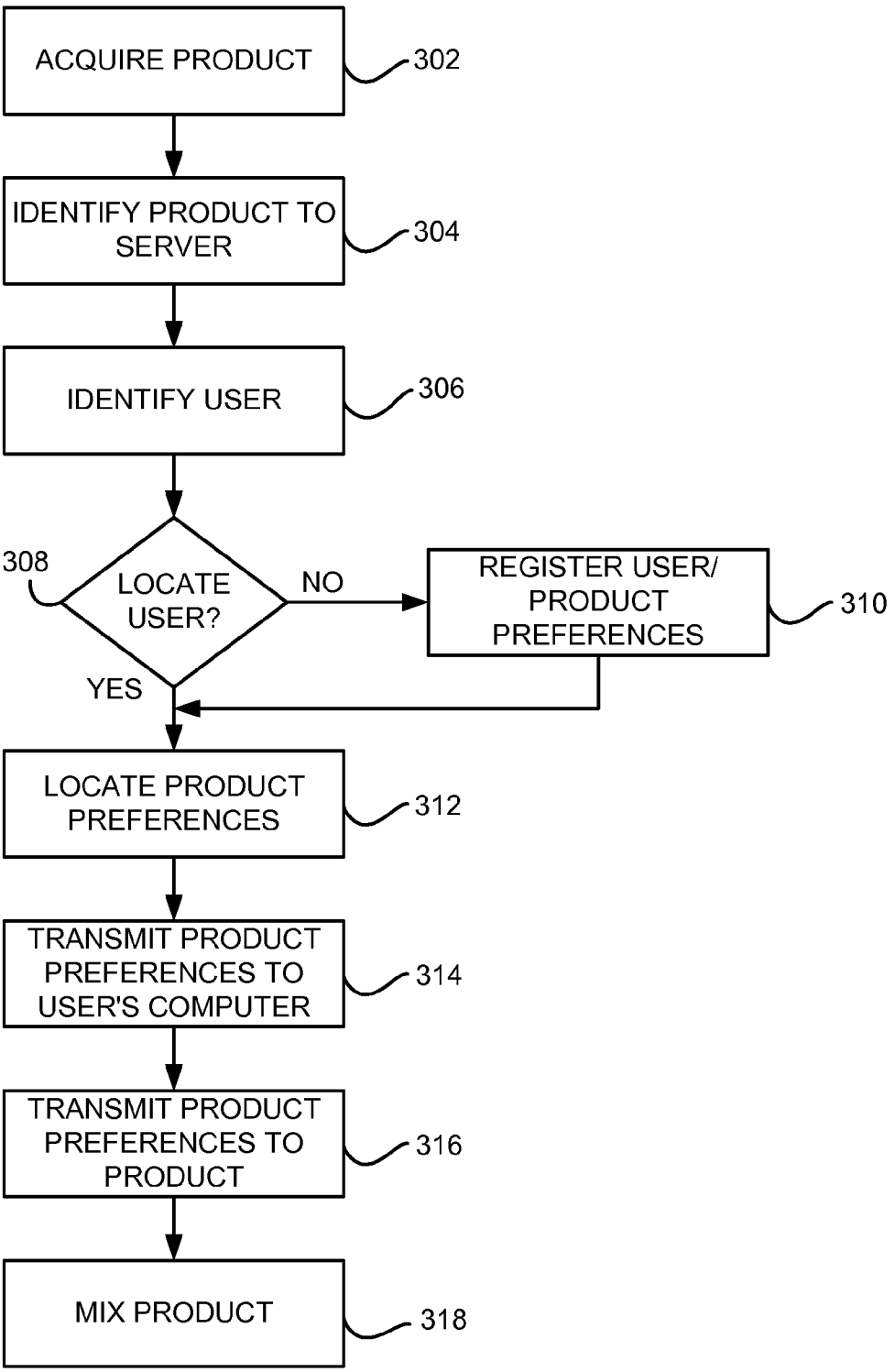

ACQUIRE PRODUCT
302
IDENTIFY PRODUCT TO SERVER
304
IDENTIFY USER
306
308
LOCATE USER?
NO
REGISTER USER/ PRODUCT PREFERENCES
310
YES
LOCATE PRODUCT PREFERENCES
312
TRANSMIT PRODUCT PREFERENCES TO USER'S COMPUTER
314
TRANSMIT PRODUCT PREFERENCES TO PRODUCT
316
MIX PRODUCT
318

FIG. 3

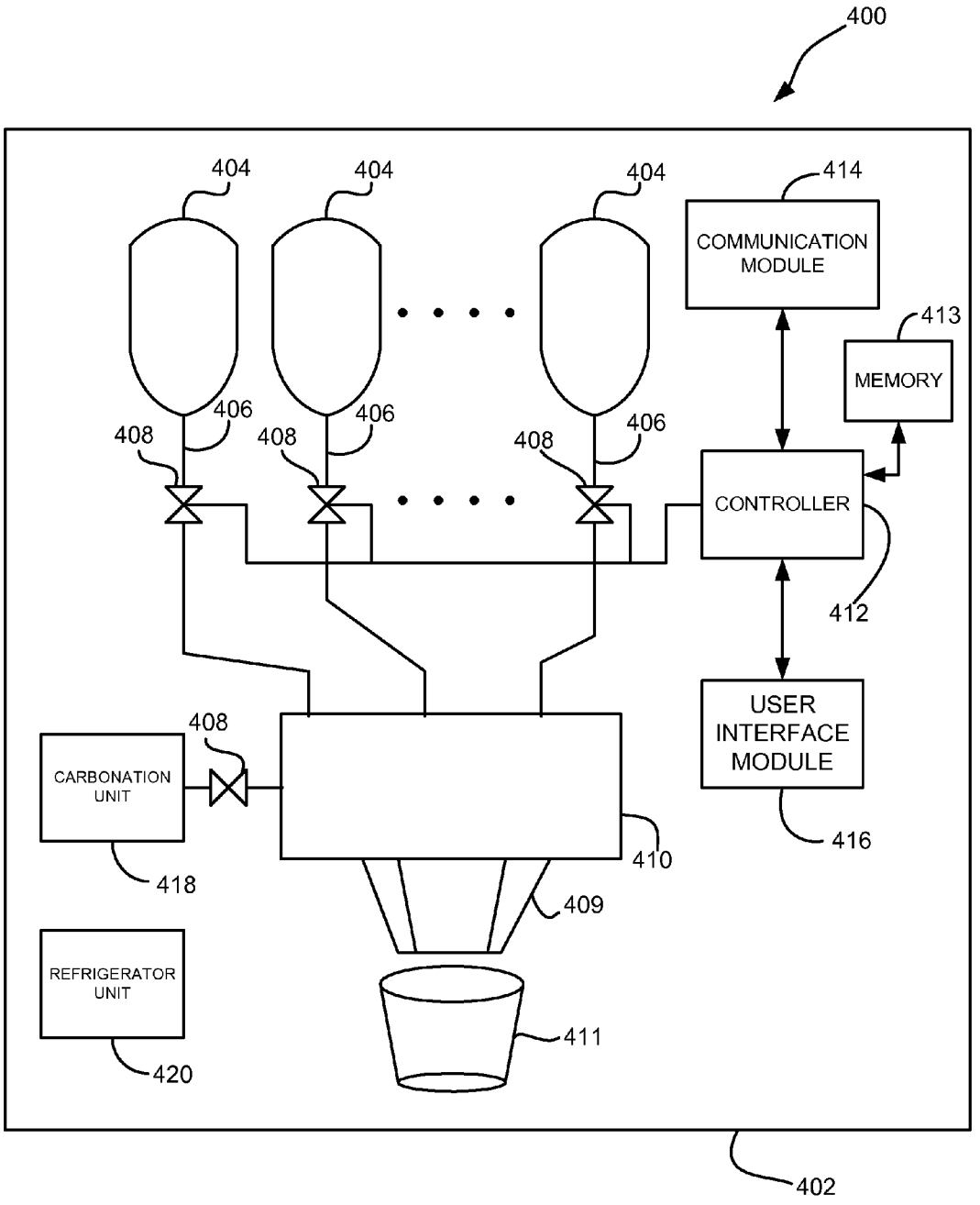

400
404
404
404
414
COMMUNICATION MODULE
413
MEMORY
406
406
406
408
408
408
CONTROLLER
412
USER INTERFACE MODULE
416
408
CARBONATION UNIT
418
410
409
REFRIGERATOR UNIT
420
411
402

FIG. 4

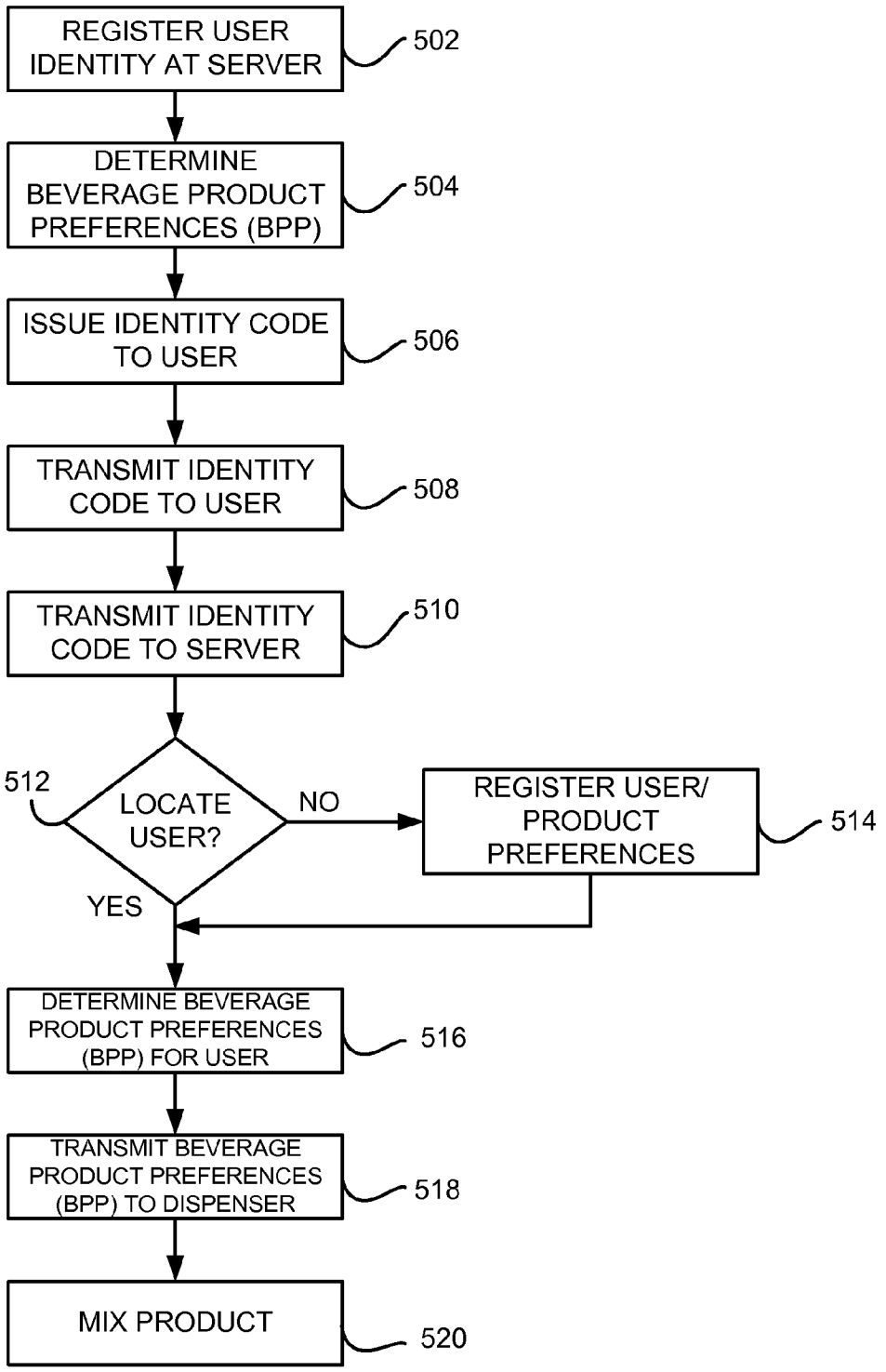

REGISTER USER IDENTITY AT SERVER
502
DETERMINE BEVERAGE PRODUCT PREFERENCES (BPP)
504
ISSUE IDENTITY CODE TO USER
506
TRANSMIT IDENTITY CODE TO USER
508
TRANSMIT IDENTITY CODE TO SERVER
510
512
LOCATE USER?
NO
REGISTER USER/ PRODUCT PREFERENCES
514
YES
DETERMINE BEVERAGE PRODUCT PREFERENCES (BPP) FOR USER
516
TRANSMIT BEVERAGE PRODUCT PREFERENCES (BPP) TO DISPENSER
518
MIX PRODUCT
520

FIG. 5

# SYSTEM AND METHOD FOR CREATING A PERSONLIZED CONSUMER PRODUCT

## PRIORITY

**[0001]** The present application is a continuation application of U.S. patent application Ser. No. 12/854,451, filed Aug. 11, 2010, which is a continuation application of U.S. patent application Ser. No. 11/471,323, filed Jun. 20, 2006, now U.S. Pat. No. 7,899,713, the contents of which are hereby incorporated by reference in their entirety.

## BACKGROUND

**[0002]** 1. Field

**[0003]** The present disclosure relates generally to data processing systems and consumer products, and more particularly, to a system and method for creating a personalized consumer product.

**[0004]** 2. Description of the Related Art

**[0005]** The sale of consumer products such as beverage products, health products and perfumes to name a few is a multibillion-dollar worldwide business. Increasingly, the consumer is given a wider choice of different types of the same product. For instance, in soda beverages, the consumer can now purchase not only a cola beverage (e.g., a regular flavor), but vanilla cola, diet cola, lemon cola, and cherry cola. Similarly, and also in the beverage industry, with vitamin water, the consumer can purchase the water beverage in lemon, berry, kiwi, strawberry, melon, peach, black cherry and grape, e.g., Propel™ brand water.

**[0006]** The trend of allowing the user to choose from various types of differentiated products of the same brand also exists in shampoos and other health products. For instance, with Head and Shoulders™ brand dandruff shampoo, the user can now choose from dry scalp, classic clean, sensitive care, ocean lift, extra volume, refresh, citrus breeze, smooth and silky and intensive treatment. It is apparent from the above that the user wants to have a wide and yet specific choice for the products that they use. However, even with nine dandruff shampoo choices, the consumer is not getting a product that is specifically tailored for them. In the previous example, even with nine different dandruff products, the shampoo product will still not cover the specific needs of the millions of consumers who use or want to use this product.

**[0007]** Therefore, a need exists for techniques to allow consumers to personalize products for their specific needs. A further need exists for a system and method to enable a user to customize a consumable product wherein the user's product preferences may be stored and retrieved at a later time when the user purchases the product.

## SUMMARY

**[0008]** A system and method to enable users to control mix parameters of a product from the global computer network to obtain a personalized consumer product are provided. The system and method of the present disclosure will enable a user to customize products containing solids and fluids by allowing a server on the global computer network, e.g., the Internet, to instruct the hardware mixing the solids and fluids of the user's preferences for the final mix.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0009]** The above and other aspects, features, and advantages of the present disclosure will become more apparent in light of the following detailed description when taken in conjunction with the accompanying drawings in which:

**[0010]** FIG. **1** is a diagram of a system for creating a personalized consumer product in accordance with an embodiment of the present disclosure;

**[0011]** FIG. **2** is an exemplary consumer product in accordance with the present disclosure;

**[0012]** FIG. **3** is a flow chart illustrating a method for creating a consumer product according to a user's specific product preferences;

**[0013]** FIG. **4** is a diagram of a beverage dispenser in accordance with the present disclosure; and

**[0014]** FIG. **5** is a flow chart illustrating a method for dispensing a beverage according to a user's preferences.

## DETAILED DESCRIPTION

**[0015]** Preferred embodiments of the present disclosure will be described hereinbelow with reference to the accompanying drawings. In the following description, well-known functions or constructions are not described in detail to avoid obscuring the present disclosure in unnecessary detail.

**[0016]** A system and method for creating a personalized consumer product are provided. The system and method of the present disclosure enables a user, e.g., a consumer, to customize products containing solids and fluids by allowing a server communicating over the global computer network, e.g., the Internet, to provide product preferences of a user to a product or a mixing device, e.g., a product or beverage dispenser.

**[0017]** For illustrative purposes, a consumer purchases a product, e.g., a name brand shampoo. The user has specific needs for their hair care that they want the shampoo to conform to. By example, this specific user wants the shampoo to have extra moisturizers and a refreshing ocean flavor, but without a tint to color the hair. The user goes to the web site for the product that the user has purchased. The user will type in the web site address, e.g., URL, into their computer, or alternatively, the product communicates the web site information to the user's computer and directs the user to that site. At the product web site, the user fills in information on their consumer product preferences and their specific hair care requirements. The user then places the purchased product near a communication module (e.g., a WiFi™ access point, Bluetooth™ module, infrared port, RFID reader, etc.) coupled to their computer and the server of the web site via the global computer network, e.g., the Internet, tells the product container how to mix the various elements contained in the product container so that the final product mix conforms to what the web site/server has determined would be appropriate for the consumer. The computer server also stores the specific consumer's product preferences, so that future shampoo purchases of the same brand can also be mixed according to the consumer's stored preferences. After the shampoo mix is finalized, the user has a product that has been exactly customized for their individual needs. It is to be appreciated system and method of the present disclosure would apply to the mixing of many consumable products, including toothpaste, shampoos, conditioners, beverages, soaps, etc.

**[0018]** Referring to FIG. **1**, a system **100** for creating a personalized consumer product is illustrated. The system **100** includes a terminal **102**, e.g., a user computer, for accessing a server **104** over a communications network **106**, e.g., the Internet. The terminal **102** and server **104** will communicate using any conventional architecture, for example a client/

server architecture where the terminal **102** will execute a client application, e.g., a web browser, to access an application executing on the server **104**. The terminal **102** will access the server **104** to enable a user to enter product preferences for a specific product which will be store in database **108** for future use. The server **104** will formulate the proper mix of elements, e.g., ingredients, for the product according to the user's product preferences. The server **104** will transmit the proper formulation to the terminal **102** which will communicate the formulation to the product **110**. The terminal **102** will include a communication module **112** for communicating the formulation to the product **110**. The communication module **112** may include a hardware or wireless interface to interface with the product **110**, as will be described in more detail below.

**[0019]** It is to be understood that the present disclosure may be implemented in various forms of hardware, software, firmware, special purpose processors, or a combination thereof. In one embodiment, the present disclosure may be implemented in software as an application program tangibly embodied on a program storage device. The application program may be uploaded to, and executed by, a machine, e.g., terminal **102** or server **104**, comprising any suitable architecture such as a personal computer, a workstation or server. Preferably, the machine is implemented on a computer platform having hardware such as one or more central processing units (CPU), a random access memory (RAM), a read only memory (ROM) and input/output (I/O) interface(s) such as a keyboard, cursor control device (e.g., a mouse or joystick) and display device. A system bus couples the various components and may be any of several types of bus structures including a memory bus or memory controller, a peripheral bus, and a local bus using any of a variety of bus architectures. The computer platform also includes an operating system and micro instruction code. The various processes and functions described herein may either be part of the micro instruction code or part of the application program (or a combination thereof) which is executed via the operating system.

**[0020]** In addition, various other peripheral devices may be connected to the computer platform of the machine by various interfaces and bus structures, such a parallel port, serial port or universal serial bus (USB). One such peripheral device may include a communications device, e.g., a modem, satellite relay, wireless connection, etc., for enabling communications from the terminal **102** to various servers. Other peripheral devices may include additional storage devices, a printer and a scanner.

**[0021]** It is to be further understood that, because some of the constituent system components and method steps depicted in the accompanying figures may be implemented in software, the actual connections between the system components (or the process steps) may differ depending upon the manner in which the present disclosure is programmed. Given the teachings of the present disclosure provided herein, one of ordinary skill in the related art will be able to contemplate these and similar implementations or configurations of the present disclosure.

**[0022]** The terminal **102** and/or server **104** may operate in a networked environment using logical connections to one or more remote computers. The remote computer may be a personal computer, a server, a router, a network PC, a peer device or other common network node, and typically includes many or all of the elements described above relative to the machine. It is to be appreciated that the network **106** may be a local area network (LAN), wide area network (WAN), the Internet or any known network that couples a plurality of computers to enable various modes of communication via network messages. The terminal **102** may communicate to the server **104** and network **106** via any known communication link **107**, for example, dial-up, hardwired, cable, DSL, satellite, cellular, PCS, wireless transmission (e.g., 802.11a/b/g, etc.), etc. Furthermore, the devices will communicate using the various known protocols such as Transmission Control Protocol/Internet Protocol (TCP/IP), File Transfer Protocol (FTP), Hypertext Transfer Protocol (HTTP), etc. During a purchasing transaction, the computing devices may employ Hypertext Transfer Protocol Secure (HTTPs), Secure Sockets Layer (SSL) Protocol, Secure Electronic Transaction (SEC) Protocol, etc.

**[0023]** With reference to FIGS. **1**, **2** and **3**, a system and method of the present disclosure will now be described, where FIG. **2** illustrates a consumer product in accordance with the present disclosure and FIG. **3** is a flow chart illustrating a method for creating a consumer product according to a user's specific product preferences.

**[0024]** Initially, in step **302**, the user purchases and/or acquires the product **110**. The product **100** will consist of a case covering or housing **202**, and inside the case covering, the product **110** includes one or more sealed compartments **204** that are waterproof and gas proof. These compartments **204** will contain the elements, e.g., fluids and/or solids, to be mixed to produce the final product. Each compartment is connected by a small tube **206** to a chamber **210**, e.g., a mixing chamber (MC). Each tube will include a valve **208**, e.g., a microvalve, that will control the amount of fluid and/or solid that is dispensed into the mixing chamber **210**. The microvalves **208** will be controlled by controller **212**, e.g., a microprocessor. Micro Electro Mechanical Systems (MEMS) microvalves are known in the art and exemplary microvalves are disclosed in U.S. Pat. No. 6,592,098 entitled "Microvalve"; U.S. Pat. No. 5,989,445 entitled "Microchannel System for Fluid Delivery"; U.S. Pat. No. 6,206,022 entitled "integrated Flow Controller Module" and "Development of a Rapid-Response Flow-Control System Using MEMS Microvalve Arrays", Journal of Microelectromechanical Systems. Vol., 13, No 6, December 2004, pp. 912-922; the contents of all of which are hereby incorporated by reference in their entireties. In one embodiment, the microvalves and controller are fabricated on a single integrated circuit chip as described in the above reference documents.

**[0025]** A communication module (CM) **214** is provided and coupled to the controller **212**. The communication module **214** will communicate to the controller **212** the specific valve settings for each valve based on the user's product preferences. The product **110** will also contain memory **214**, e.g., random access memory, read only memory, etc., for storing instructions to be executed by the controller **212**. As instructed by the controller **212**, the microvalves **208** will release fluids and/or solids from the separate compartments **204** into the central waterproof and gas proof chamber (MC) **210**. Optionally, the mixing chamber **210** will contain an actuator or a mixing device **216**. The mixing device **216** will be powered by an electric motor or by any other means of power. The actuator or mixing device **216** will be coupled to the controller **212** and will receive instruction from the communication module **214**. The communication module **214** will tell the controller **212** when and for how long to activate the actuator or mixing device **216**. Upon activation of the

actuator **216**, the contents of the sealed chamber **210** will be mixed. The mixing chamber **210** will include an exit port **218** for the fluids/solids to be dispensed to the user. This exit port **218** may be a release valve to dispense the fluids/solids, or another type of exit point, e.g., a threaded cylindrical connection and cap, that will allow the user to dispense the contents of the mixing chamber **210**.

**[0026]** It is to be appreciated that the final mixed product to be dispensed from the chamber **210** may in one embodiment be a mixture of elements released from the compartments **204**. In another embodiment, the chamber **210** may include a base substance before any element is released into the chamber and subsequently elements will be released into the chamber based on the user's product preferences.

**[0027]** After acquiring the product, the user takes the product to a computer/terminal **102** to identify the product (step **304**). The identification can be by the user entering a barcode **113** of the product into a web site on the global computer network (GCN) for the product. Alternatively, a scanner **114** is coupled to the terminal **102** for reading the barcode **113** on the product **110** and automatically directing the user's computer to the appropriate web site. In a further embodiment, the identifying step could be done with communications between the product **110** and the computer **102** via communication module **112**, e.g., via WiFi™ communications (a,b,d, g, n, etc), Bluetooth™ communications, RFID communications, a cable between the product and a communications port on the applicable computer (e.g., USB, Firewire™, etc.), etc. The communication module (CM) **214** will allow the product **110** to communicate with the computer **102** via the protocols listed above. The communication module **214** of product **110** will identify the product make and model and also direct the computer **102** to the specific web site on the global computer network that applies to the product.

**[0028]** Next, in step **306**, the user will transmit their identity to the server **104**. In one embodiment, the user's computer will tell the product web site residing on the server the user's identity through a standard Internet cookie stored on the computer **102**. The server **104** will identify the cookie and, if the user's identity is known to the server (step **308**), the server **104** will use standard lookup database software such as Microsoft™ SQL or Oracle™ Database and standard computer processing power to locate the user's product preferences (PP) (step **312**). These preferences will be stored in the server database **108** cross-referenced by the user's identity.

**[0029]** If the server **104** cannot locate the user's identity or the user's product preferences in the database **108** because the user is unknown to the database (step **308**), the web site and corresponding server **104** will communicate with the user's computer and transmit a questionnaire to the user for the user to fill out to register the user (step **310**). The questionnaire will prompt the user with questions to determine the user's product preferences. Once the questionnaire is completed, the server will use a software algorithm and standard computer processing power to determine the user's product preferences, e.g., the proper mix of elements. Once the user's product preferences are determined, the server will store this information in a standard database software program such as Microsoft™ SQL or Oracle™ Database, cross-referenced to the users identity information. Optionally, the server will issue an identity code, e.g., an alphanumeric code, to the user to facilitate retrieval of the user's product preferences for a subsequent purchase.

**[0030]** Once the user's product preferences are established, the server **104** will communicate this information to the user's terminal **102** (step **314**). Once received at the terminal **102**, the communication module **112** will transmit this information through the product container or housing **202** using communication protocols including but not limited to Bluetooth™, WiFi™ (a,b,d,g,n, etc), cable, infrared, RFID, voice recognition or any other communications medium now known or practiced in the future (step **316**).

**[0031]** The communication module **214** on the product **110** will receive this information and send the information to the controller **212**. The controller **212** will then instruct the microvalves **208** in the container **202** as to the specific amount of fluids and/or solids that should be released into the mixing chamber **210** (step **318**). The valves will then open to release the fluids and/or solids into the mixing chamber **210**. Once released, the fluids and/or solids in the mixing chamber **210** may be mixed by the user manually, by actuator **216** powered by a motor, or by an alternative means. The user may now use the customized product.

**[0032]** In another embodiment of the present disclosure, the user goes to a beverage dispenser, e.g., a soda dispenser or another type of beverage dispenser (coffee, liquor, etc.). The user identifies himself to the beverage dispenser, e.g., by typing in a user code on a touch keypad on the dispenser, via a communications device such as a mobile device having Bluetooth™, WiFi™, RFID, etc. capabilities, via a magnetic card or by voice recognition. The user enters this identity information into the dispenser and the dispenser retrieves the user's product preferences from memory. Alternatively, the dispenser communicates the user's identity information to a server on the global computer network (e.g., the Internet). The server then identifies the user of the dispenser and directs the dispenser to mix the beverage for the user exactly the way the user has predetermined that they like to drink the beverage. In the example of soda, the user can and will determine the amount of carbonation, the amount of sweetness for the beverage, and if any extra flavors, such a lemon or lime, will be added to the beverage. The user is then dispensed the beverage for consumption.

**[0033]** The above described embodiment will now be described in relation to FIGS. **1**, **4** and **5** where FIG. **4** is a beverage dispenser in accordance with an embodiment of the present disclosure and FIG. **5** is a flow chart illustrating a method for dispensing a beverage according to a user's preferences.

**[0034]** A beverage dispenser **400** to mix and dispense beverages in accordance with the present disclosure is shown in FIG. **4**. The dispenser **400** will consist of a housing **402** and a plurality of compartments **404** for storing elements of the beverages, for instance, soda syrup, additional flavorings such as lemon or lime, additional sweeteners for the beverage, etc. The compartments **404** are coupled to a dispensing section **409** by tubing **406** including valves **408**. The valves **408** may be any valves known in the art including but not limited to electrically actuated valves, pneumatically actuated valves, etc. The dispensing section **409** will mix the various elements and direct the mixture into a receptacle **411**, e.g., a cup, bottle, can, etc. Alternatively, the tubing **406** will led to a mixing chamber **410** to mix the various elements before allowing the mixture to flow to the dispensing section **409**. The dispenser **400** will further include a water carbonation unit **418** to carbonate the beverage and refrigeration system **420** to cool the beverage and/or elements contained within the housing **402**

of the dispenser **400**. Optionally, the mixing chamber **410** may include a valve controlling the flow of the beverage to the dispensing section **409**. All of the valves **408** will be coupled to a controller **412**, e.g., a microprocessor, which will actuate each valve independently to control the amount of each element or ingredient to be added to the mixture. Storage memory **413** in the form of random access memory, read only memory, etc., will be coupled to the controller **412** for storing instruction to be executed by the controller.

**[0035]** The dispenser **400** will further include a communication module (CM) **414** for coupling the dispenser to the global computer network, e.g., the Internet, and for enabling communications between the dispenser **400** and a server residing on the Internet. The dispenser **400** will also include a user interface module (UIM) **416** for enabling a user to input information to the dispenser and to receive information from the dispenser. The user interface module **416** will enable communications between the user and dispenser via a keyboard, voice recognition module, WiFi communication (b, d, g, n, etc.), RFID communications, infrared communication, Bluetooth, or any other type of communication now known or practiced in the future that will allow the user to identify themselves and/or input information to the beverage dispenser. The user interface module **416** will also include a display screen to relay messages from the controller and/or from a server residing on the Internet via the communication module **414** to the display. This display may be in the form of an LCD display, LED display, Plasma display, CRT display, or another type of display device currently known or utilized in the future. Optionally, the user interface module **416** will include a card reader, e.g., a magnetic swipe reader, RFID card reader, etc., for reading a card issued to the user, the card including the identity of the user, the user's product preferences, credits for purchases, etc.

**[0036]** Referring to FIG. **5**, initially, in step **502**, a user will go to a web site residing on a server **104** on the global computer network to register his identity at this site. At the web site, the server **104** will communicate with the user's computer **102** and transmit a questionnaire to the user for the user to fill out via a conventional browser interface, e.g., Microsoft™ Internet Explorer. This questionnaire will prompt information from the user where once completed, the server will use a software algorithm and with standard computer processing power to determine the users beverage product preferences (BPP) (step **504**). Once the user's beverage product preferences (BPP) is determined, the server **104** will store this information in a standard database software program such as Microsoft™ SQL or Oracle™ Database, cross-referenced to the user's identify information. The server will then issue an identity code to the user (step **506**), e.g., an alphanumeric code. The identity code may be embedded in an RFID card or on a magnetic swipe card. In one embodiment, the identity code may be transferred to the user's computer where the user may download the code to a mobile device, e.g., a personal digital assistant (PDA), mobile phone, etc., and the mobile device will wirelessly transfer the code to the user interface module **416** and/or the communication module **414** when the mobile device is within range of the dispenser **400**.

**[0037]** Once the user is ready to dispense a beverage, the user will locate a beverage dispenser **400** that is coupled to the communications network **106**. The user will then communicate the user's identity to the subject dispenser via the dispenser's user interface module **416** (step **508**). Communications may be in the form of a keyboard, magnetic reader, voice recognition, WiFi™ communication (b, d, g, n, etc.), RFID communications, infrared communication, Bluetooth™, or any other type of communication now known or practiced in the future that will allow the user to identify themselves to the beverage dispenser. This system and method may also include the beverage manufacturer or beverage dispenser company issuing to the user an ID card that may have a magnetic stripe on the card or another form of communications for the user to use to communicate with the user interface module **416** of the beverage dispenser **400**. As described above, the card may have credits for the user to purchase the beverage.

**[0038]** The beverage dispenser **400** will now use its communication module **414** to communicate with the server **104**. Using the internal memory **413** of the dispenser **400**, the communication module **414** will be directed to a specific web site on the global computer network and, while at that site, it will communicate the user's identity (step **510**). The selected web site will identify the user's identity and, if known to the server (step **512**), the server will use standard database lookup software such as Microsoft™ SQL or Oracle™ Database and standard computer processing power to locate the user's beverage product preferences (BPP) (step **516**). These beverage product preferences (BPP) will be stored in the database **108** and cross-referenced by the user's identity, e.g., in the form of an Internet cookie from a previous registration session.

**[0039]** If the server **104** cannot locate the user's beverage product preferences (BPP) in the database **108** because the user is unknown to the database (step **512**), the server **104** will communicate with the beverage dispenser's display and send a message that the user needs to register at a specific site (step **514**). In one embodiment of the present disclosure, the user could be asked to complete a questionnaire while at the beverage dispenser via the user interface module **416**. The questionnaire would be transmitted from the server **104** to the communication module **414** and controller **412** of the dispenser **400** and then would appear on the display of the dispenser. The user would fill out the questionnaire using the user interface module **416**, and then the results of the questionnaire would be transmitted from the dispenser using the communication module **414** to the selected site on the Internet, where the user's beverage product preferences (BPP) would be determined by a computer software program utilizing standard computer processing power. As described above, the user's beverage product preferences (BPP) would be stored in database **108**, cross-referenced to the user's identity. Furthermore, the user may be issued an identity code for future use at this or other beverage dispensers. Alternatively, the dispenser may accept the user's beverage product preferences (BPP) for a one time purchase at the dispenser and not store the beverage product preferences (BPP) in the database **108**.

**[0040]** The server **104** will now transmit via the communications network **106** to the communication module **414** of the dispenser the user's beverage product preferences (BPP) (step **518**). This beverage product preferences (BPP) information may appear on the display of the dispenser and the user could in one embodiment of this disclosure confirm the beverage product preferences (BPP) using the dispensers user interface module **416**. Once the dispenser has the user's beverage product preferences (BPP), the controller **412** of the dispenser will tell the valves **408** that are part of the dispenser how much of each of the separate stored elements (e.g., flavors, carbonation, etc.) to release into the mixing chamber

410 or dispensing section 409 (step 520). For instance, one specific beverage product preferences (BPP) may cause the dispenser to mix a certain amount of lemon flavoring into a cola beverage. In another case, a user's beverage product preferences (BPP) could cause the dispenser to release additional sugar into the beverage. The dispenser may now dispense the customized beverage.

[0041] In a further embodiment, a plurality of dispensers will be coupled to the communications network and, periodically, server 104 will download the database of product preferences cross-referenced by user identities to each of the plurality of dispensers. In this embodiment, after a user identifies themselves to the dispenser via the user interface module 416 and/or the communication module 414, the controller 412 will retrieve the user's beverage product preferences (BPP) from memory without having to access the server 104.

[0042] While the disclosure has been shown and described with reference to certain preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the disclosure as defined by the appended claims.

What is claimed is:

1. A method for customizing a product according to a user's preferences, the method comprising the steps:
identifying a product to a server over a network;
identifying a user to the server over the network;
retrieving the user's product preferences from a database associated with the server based on the product's identity and user's identity; and
transmitting the user's product preferences from the server to a communication module over the network for formulating at least one element contained within the product based on the user's product preferences.

2. The method as in claim 1, wherein the identifying a product step includes reading a barcode from the product.

3. The method as in claim 1, wherein the identifying a product step includes manually entering a product code into a computer, the computer being coupled to the network.

4. The method as in claim 1, wherein the communication module is a wireless communication module, the method further comprising receiving the product identity wirelessly from the product.

5. The method as in claim 1, wherein the identifying a user step includes receiving an Internet cookie from a computer of the user.

6. The method as in claim 1, further comprising the step prompting the user with questions to determine the user's product preferences.

7. The method as in claim 6, further comprising issuing an identity code for the user and cross-referencing the identity code to the user's product preferences.

8. The method as in claim 1, wherein the at least one element is a fluid, a solid or any combination thereof.

9. A system for customizing a product according to a user's preferences comprising:
a remote server including a database configured to store a product preference of a predetermined product for at least one user; and
a first communication module in communication with the remote server;
wherein the remote server is configured to receive the identity of the predetermined product and the identity of the at least one user, retrieve the product preference from the database based on the identity of the predetermined product and the identity of the least one user and transmit the product preference to the first communication module.

10. The system as in claim 9, wherein the transmitted product preference is a formulation including a predetermined amount of at least one element.

11. The system as in claim 10, wherein the at least one element is a fluid, a solid or any combination thereof.

12. The system as in claim 10, wherein the server is configured to communicate at least one question to a terminal of the at least one user for prompting the user with the at least one question relating to the predetermined product and the server is further configured for determining the formulation based on at least one response of the user.

13. The system as in claim 12, wherein the server is further configured for issuing an identity code for the user and cross-referencing the identity code to the formulation.

14. The system as in claim 13, wherein the server is configured for storing the identity code and cross-referenced formulation in the database.

15. The system as in claim 14, wherein the terminal is configured to transmit the identity code to the server.

16. The system as in claim 15, wherein the identity code is stored as an Internet cookie on the terminal.

17. A product to be consumed by a user comprising:
a housing;
a controller configured to control an amount of the at least element disposed within the housing;
a communication module configured to transmit an identifier of the product to a server over a network, receive product preferences of the user from the server based on the identifier and communicate to the controller the received product preferences of the user for formulating a final product; and
an exit port disposed on the housing for dispensing the final product.

18. The product as in claim 17, wherein the final product is a toothpaste, a shampoo, a conditioner, a beverage or a soap.

19. The product as in claim 17, wherein the at least one element is a fluid, a solid or any combination thereof.

20. The product as in claim 17, wherein the communication module is configured to receive the product preferences of the user via hardwired or wireless communications from the server over the network.

* * * * *