## DETAILED DESCRIPTION OF THE INVENTION

**[0001]** Figure 1 illustrates a system for offsetting carbon output 100 according to an embodiment of the present invention. The system for offsetting carbon output 100 includes a measuring device 110, a communicative device 120, a central system 130, a carbon offset entity 140, a long-range network 150, a short-range network 152, and an external database. The measuring device 110 includes a weight scale 112, an energy hub 114, and a cell phone 116. The central system 130 includes a main server 131, an account data storage 137, an offset data storage 138, and an internal database 139. The main server 131 includes a carbon manager unit 132, a carbon calculator unit 133, a carbon offset unit 136, an e-store unit 138, and a forum unit 136.

**[0002]** In the system for offsetting carbon output 100, the weight scale 112 of the measuring device 110 is in unidirectional communication with the computer 122 of the communicative device 120 connected through the short-range network 152. The energy hub 114 of the measuring unit 110 is in unidirectional communication with the energy hub server 124 of the communicative device 120 connected through the long-range network 150. The energy hub server 124 is in bidirectional connection with the central system 130 connected through the long-range network 150. The cell phone 116 of the measuring unit 110 is in unidirectional communication with the central system 130 connected through the external network 150. The carbon offset entity 140 is in bidirectional communication with the central system 130. The external database 160 is in bidirectional communication with the central system 130.

**[0003]** In operation, the measuring device 110 measures a raw data ~~from at least one source that generates carbon output. The raw data represents carbon consumption~~ consumed ~~by a consumer. In the preferred embodiment~~, the raw data is comprised of household trash weight, household energy usage, and vehicle usage.

**[0004]** In the system for offsetting carbon output 100, the weight scale 112 of the ~~measuring device 110~~ is in unidirectional communication with the computer 122 of the communicative device 120 connected through the short-range network 152. The energy hub 114 of the measuring unit 110 is in unidirectional communication with the energy hub server 124 of the communicative device 120 connected through the long-range network 150. The energy hub server 124 is in bidirectional connection with the central system 130 connected through the long-range network 150. The cell phone 116 of the measuring unit 110 is in unidirectional communication with the central system 130 connected through the external network 150. The carbon offset entity 140 is in bidirectional communication with the central system 130. The external database 160 is in bidirectional communication with the central system 130.

**[0005]** The household trash weight is automatically measured by the weight scale 112 when the consumer puts the generated trash on the weight scale 112 (as shown in Figure 3). The weight scale 112 then automatically transmits the raw data of trash weight to the computer 122 of the ~~communicative device 120~~ through the short-range network 152 by enabling its wireless network modem. According to one embodiment of the present invention, the weight scale is a Bluetooth-enabled wireless digital weight scale that transmits the raw data to the computer 122 by activating a Bluetooth wireless communication. Once a Bluetooth module in the weight scale 112 is

connected to the short range network 152, the raw data of trash weight is transmitted to the computer 122 whenever the consumer weighs trash on the weight scale. In the preferred embodiment, the short-range network 152 is a Bluetooth wireless network.

**[0006]** After the raw data of trash weight has been received by the computer 122 of the communicative device 120, the computer 122 automatically transmits the raw data to the main server 131 of the central system 130 through the long-range network 150 (as shown in Figure 3). In one embodiment, the long-range network 150 is an internet.

**[0007]** After receiving the data from the computer 122 of the communicative device 120, the carbon calculator unit 133 of the main server 131 calculates a carbon output value that represents equivalent amount of carbon generated by the trash (as shown in Figure 6). According to one embodiment of the present invention, the carbon output value represents a number of tons of carbon generated by the consumer.

**[0008]** For the purpose of performing an accurate calculation, the carbon calculator unit 133 first extracts a conversion factor, one of trash levels selected by the consumer, from the account data storage 137 (as shown in Figure 3). Next, the carbon calculator unit 133 applies that selected trash level in converting the trash weight into a corresponding carbon output value. Finally, the carbon calculator unit 133 stores the converted carbon output value in the account data storage 137.

**[0009]** The household energy usage is measured by the energy hub 114 (as shown in Figure 4). When the consumer consumes gas or electricity, a meter in a house measures the amount of gas or electricity consumed by the consumer. The meter then transmits the raw data, the measured amount of consumed gas or electricity, to the

energy hub 114. In one embodiment, a "smart meter" with wireless capability is installed in the utilities of the house in order to automatically transmit the raw data to the energy hub 114 through a wireless communication. The energy hub communicates with the meter with a low-power wireless link.

**[0010]** After receiving the raw data from the meter, the energy hub 114 automatically transmits the raw data to the energy hub server 124 of the ~~communicative device 1~~20 through the long-range network 150. Upon receiving the raw data, the energy hub server 124 automatically transmits the raw data to the main server 131 of the central system 130. In one embodiment, the energy hub 114 is a household energy measuring device provided by Energy Hub available on on-line (http://www.energyhub.net).

**[0011]** The carbon calculator unit 133 of the main server 131 searches for a carbon output value that represents equivalent amount of carbon generated by household energy consumed by the consumer in the internal database 139 (as shown in Figure 6). Upon finding a matching carbon output value in the internal database 139, the carbon calculator unit 133 extracts the matching carbon output value from the internal database 139 and stores the matching carbon output value in the account data storage 137.

**[0012]** The vehicle usage is measured by the cell phone 116 (as shown in Figure 5). The cell phone 116 contains an application that uses a GPS signal to track the actual number of miles driven by the vehicle. In one embodiment, the cell phone is an iPhone or other GPS-enabled smart phones. This application is initiated by the consumer when the consumer enters the vehicle. Once initiated, the application tracks

the actual number of miles driven by the vehicle by using the GPS signal. When the vehicle stops, the application transmits the measured number of miles driven by the vehicle to the main server 131 of the central system 130 through the ~~long-range~~ network 150.

**[0013]** The carbon calculator unit 133 in the main server 141 extracts a conversion factor, the make and the model of the vehicle, from the account data storage 137 (as shown in Figure 6). After extracting, the carbon calculator unit 133 searches for a MPG data of the vehicle that matches the make and the model of the vehicle in the internal database 139. Once the carbon calculator unit 133 finds the MPG data, it calculates the number of gallons consumed by the vehicle based on that MPG data. Finally, the carbon output calculator 133 converts the calculated number of gallons to a carbon output value that represents equivalent amount of carbon generated by the vehicle based on the data stored in the internal database 139.

**[0014]** The account data storage 137 stores the calculated carbon output value in an allocated memory slot that has been assigned to a carbon-account created by the consumer. In one embodiment, the main server 131 operates a website where the consumer may create his or her carbon-account, a personal web account with a unique ID, in order to access the website. as further described below w/R/T --

**[0015]** After the creation, the consumer may monitor a carbon output value stored in his or her carbon-account by logging into the main server 131 with a valid ID. In the preferred embodiment, the consumer accesses the main server 131 and monitors the carbon output value stored in his or her carbon-account by operating the computer 122. In one embodiment, there is a menu in the website operated by the main server

131 where the consumer may request to see the statistics of his or her carbon consumption.

**[0016]** As a default, a graph indicating the consumer's total carbon consumption of the last month is displayed in the website. The graph also indicates the consumer's total carbon consumption of each day during the last month. The consumer can also view the statistics of his or her total monthly usage of the household based on each source. For example, if the consumer wants to see only the total monthly usage of the vehicle, he may do so by selecting an appropriate option in the menu.

**[0017]** In addition, if the consumer had entered the total number of people in the household, the graph also displays the total carbon consumption of each person. The consumer may view his or her total carbon consumption of any specific day, any specific month, any specific year, or any specific time frame that was defined by the consumer. When the consumer generates more carbon, the amount of carbon generated is automatically calculated and stored in the carbon-account of the consumer.

**[0018]** The consumer can offset the carbon output value stored in his or carbon-account by purchasing a carbon offset credit (as shown in Figure 7). The carbon offset credit represents a value for offsetting specific amount of carbon generated by the consumer. In one embodiment, one carbon offset credit represents a credit for offsetting a ton of carbon. This carbon offset credit is provided by the carbon offset entity 140. The carbon offset entity 140 also provides a cost data which contains a specific cost of a carbon offset credit provided by that carbon offset entity 140. In the preferred embodiment, at least one carbon offset entity provides such data to the main

server 131. The carbon offset unit 134 of the main server 131 stores this cost data in the carbon offset data storage 138. This cost data may be updated whenever the carbon offset entity 140 changes the cost of its carbon offset credit.

**[0019]** The carbon offset unit 134 displays each cost of carbon offset credit provided by each carbon offset entity 140 in a website operated by the main server 131 (as shown in Figure 11). The consumer with a valid carbon-account ID may see the list when the consumer logs into the main server 131. When the consumer selects one of carbon offset entities from which he or she wants to purchase carbon offset credits, the consumer makes a payment to the selected carbon offset entity. The total payment is calculated based on the carbon output value stored in the carbon-account of the consumer. For each purchase, the consumer pays for a number of carbon offset credits that represents the total amount of carbon generated by the consumer. After making the payment, the carbon offset unit 134 offsets the carbon output value stored in the carbon-account of the consumer.

**[0020]** In addition to offsetting the carbon output value, the main server 131 also operates the e-store unit 135. The e-store unit 135 provides an online-~~sale~~ store for the measuring unit 110 including the weight scale 112, the energy hub 114, and the cell phone 116. Other items are also available in the e-store unit 135 such as hemp or carbon-free clothing, books, other carbon conservation products, and even vacation and service opportunities.

**[0021]** In addition to operating the e-store unit, the main server 131 also operates the forum unit 136. In the forum unit 136, any carbon-account holders may discuss specific topics and share tips for lowering their carbon output values.

**[0022]** The system for offsetting carbon output 100 generates a long-term profit by charging transaction processing fees for each purchase of carbon offset credits. The preferred rate for the processing fee is 5%, which will be included in the cost of carbon offset credit.

**[0023]** In another embodiment, the raw data may be transmitted to the main server 131 of the central system 130 ~~by~~ that is manually. The consumer may directly enter the weight of trash measured by the weight scale 112 in the website operated by the main server 131. The consumer may directly enter the number of miles driven by the vehicle or the number of gallons consumed by the vehicle in the website operated by the main server 131. Also, the consumer may directly enter the amount of gas or electricity consumed by the consumer in the website operated by the main server 131.

as shown below in Fig 10

**[0024]** In another embodiment, when the carbon calculator unit 133 searches for a matching carbon output value that is equivalent to the amount of carbon generated by the consumer, the carbon calculator unit 133 seeks that matching carbon output value in the external database 160. The external database is comprised of a data which contains specific carbon output value that is equivalent to specific amount of carbon generated by household energy usage or vehicle usage of the consumer.

**[0025]** In another embodiment, the consumer may choose certain number of carbon offset credits that he or she wants to purchase and may pay for that number of carbon offset credits.

**[0026]** In another embodiment, the consumer may choose to offset a carbon output value stored in his or her carbon-account that has been generated by a particular

source. For example, the consumer may choose to offset certain carbon output value that has been generated by household energy.

**[0027]** In another embodiment, the consumer may choose to offset a carbon output value stored in his or her carbon-account that has been generated during a specified period of time. For example, the consumer may choose to offset a carbon output value that has been generated during last four days or last three months.

**[0028]** In another embodiment, the consumer may actively offer a cost for purchasing a carbon offset credit to the carbon offset entity 140 rather than passively select one of the listed costs in the website operated by the main server 131. When the carbon offset entity 140 accepts the offer, the consumer makes a payment to the carbon offset entity 140.

**[0029]** In another embodiment, an additional revenue may be generated from charging the carbon offset entity 140. In exchange for listing up the carbon offset entity 140 as a seller of a carbon offset credit, the central system 130 may charge a fee.

**[0030]** In another embodiment, an additional revenue may be generated from charging an advertising fee on all advertisements on the website operated by the main server 131.

**[0031]** Figure 2 illustrates a flowchart of a method of offsetting a carbon output value generated by the consumer 200. First, at step 210, the measuring device 110 measures the raw data comprised of household trash weight, household energy usage, and vehicle usage.

**[0032]** Next, at step 220, for the purpose of transmitting the raw data representing household trash weight or household energy usage, the communicative device 120 first receives the raw data from the energy hub 114 or the weight scale 112. After receiving, the communicative device 120 transmits the received raw data to the main server 131 of the central system 130. For the purpose of transmitting the raw data representing vehicle usage, the cell phone 116 transmits the raw data directly to the main server 131 of the central system 130 after measuring.

**[0033]** Next, at step 230, the carbon calculator unit 133 calculates a carbon output value by converting the raw data into the carbon output value that represents equivalent amount of carbon generated by the consumer. as further described below...

**[0034]** Next, at step 240, the carbon calculator unit 133 stores the calculated carbon output value in the account data storage 137. The carbon output value is stored in a memory slot that is allocated to the carbon-account created by the consumer.

**[0035]** Next, at step 250, the consumer monitors the stored carbon output value in his or her carbon-account at any time by logging into the main server 131.

**[0036]** Next, at step 260, the carbon output value is ~~being~~ offset by the consumer. First, the carbon offset unit 134 of the main server 131 displays a list of data that represents a specific cost for purchasing a specific carbon offset credit provided by a particular carbon offset entity 140. Second, the consumer selects at least one carbon offset entity 140 from which he or she wants to purchase carbon offset credits. Third, the consumer ~~makes a payment~~. Finally, the carbon output value stored in the carbon-account of the consumer is offset? purchased a carbon offset credit

**[0037]** Figure 3 illustrates a flowchart of a method of measuring raw data representing household trash weight 300. First, at step 310, the consumer creates his or her carbon-account. The consumer visits an account login web page operated by the main server 131 and obtains a unique ID and a password for his or her carbon-account (as shown in Figure 9).

**[0038]** Next, at step 312, the consumer registers a weight scale that the consumer is going to use as the measuring unit 110 for the purpose of measuring household trash weight. The consumer can register the weight scale by visiting a registration web page operated by the main server 131 (as shown in Figure 9). By clicking an appropriate link, the consumer gets access to download a utility onto the communicative device 120 that automatically takes the measured weight from the weight scale and relays it to the consumer's carbon-account. The carbon manager unit 131 mandates the consumer to insert his or her account ID into the utility before downloading.

**[0039]** Next, at step 314, the consumer installs the downloaded utility in the computer 122 of the communicative device 120.

**[0040]** Next, at step 316, the consumer sets up a setting for monitoring carbon output. The consumer can set up options for monitoring carbon output by visiting a monitoring control web page operated by the main server 131 (as shown in Figure 10). The consumer selects "Wireless Scale" and one of trash levels in the menu (as shown in Figure 10). The trash level is a value that represents specific amount of carbon generated per pound of trash. The trash level is determined by two factors: the type of trash and the weight of trash. For example, if the trash includes more organic matters and composes of high-end products that emit more carbon output, a higher trash level

with higher value of carbon per pound is determined. In contrast, if the trash includes less organic matters and composes of low-end products, a lower trash level containing lower value of carbon per pound is determined. For the preferred embodiment, three trash levels are being applied.

**[0041]** Next, at step 320, the consumer puts trash on the weight scale.

**[0042]** Next, at step 322, the weight scale measures the weight of the trash.

**[0043]** Next, at step 324, after measuring the weight, the weight scale automatically transmits the measured data to the computer 122 of the communicative device 120 through the short-range network 152. The weight scale repeats the step 322 and the step 324 in every second.

**[0044]** Next, at step 330, the utility installed in the communicative device receives the measured data from the weight scale.

**[0045]** Next, at step 332, the utility compares previous weight value with newly received weight value. The initial weight value was set to zero when the utility was installed.

**[0046]** Next, at step 334, the utility checks whether the weight value has been declined to zero. If the weight value is not declined to zero then the utility repeats the step 330 and the step 332.

**[0047]** Next, at step 336, if the weight value is declined to zero then the utility automatically transmits previous weight value to the main server 131 in Figure 1.

**[0048]** Next, at step 338, the utility resets the weight value to zero.

**[0049]** In another embodiment, the consumer may enter the measured weight of trash manually by selecting "Manual Entry" in "Monitoring Control" menu section (as shown in Figure 10).

**[0050]** Figure 4 illustrates a flowchart of a method of measuring raw data representing household energy usage 400. First, at step 410, the consumer creates his or her carbon-account same as the step 310 of Figure 3.

**[0051]** Next, at step 412, the consumer registers the energy hub 114 as the measuring unit 110. The consumer logs into a website operated by Energy Hub, and clicks on "Automatic Export to Carbon Saint" link, and enters his or her unique carbon-account ID.

**[0052]** Next, at step 414, the consumer sets up a setting for monitoring carbon output. Same procedures are followed by the consumer as the step 316 of Figure 3 except that the consumer selects "Energy Hub" menu in "Home Energy Usage" section of "Monitoring Control" menu (as shown in Figure 10).

**[0053]** Next, at step 420, the consumer consumes energy by using house utilities.

**[0054]** Next, at step 422, the electricity and gas meters with wireless capability measures the consumed amount of energy.

**[0055]** Next, at step 424, the electricity and gas meters with wireless capability transmits the measured energy usage to the energy hub 114 through wireless communication.

**[0056]** Next, at step 430, the energy hub 114 receives the measured energy usage from the meters.

**[0057]** Next, at step 432, the energy hub automatically transmits the received data of measured energy usage to the energy hub server 124 through the long-range network 150.

**[0058]** Next, at step 434, the energy hub server 124 receives the raw data from the energy hub 114.

**[0059]** Next, at step 436, the energy hub server 124 automatically transmits the raw data to the main server 131.

**[0060]** In another embodiment, the consumer may enter the measured household energy usage manually by selecting "Manual Entry" in "Monitoring Control" menu section (as shown in Figure 10).

**[0061]** Figure 5 illustrates a flowchart of a method of measuring raw data representing vehicle usage 500. First, at step 510, the consumer creates his or her carbon-account same as the step 310 of Figure 3.

**[0062]** Next, at step 512, the consumer registers a cell phone that the consumer is going to use as the measuring unit 110 for the purpose of measuring vehicle usage. The consumer can register the cell phone by visiting a registration web page operated by the main server 131 (as shown in Figure 9). By clicking an appropriate link, the consumer gets access to download an application onto the cell phone that automatically tracks the number of miles driven by using a GPS signal and relays it to the consumer's carbon-account.

**[0063]** Next, at step 514, the consumer installs the application on the cell phone after downloading.

**[0064]** Next, at step 516, the consumer sets up a setting for monitoring carbon output. Same procedures are followed by the consumer as the step 316 of Figure 3 except that the consumer selects "Smartphone App" and selects the make, model, and the year of the vehicle in "Vehicle Usage" section of "Monitoring Control" menu (as shown in Figure 10).

**[0065]** Next, at step 520, the consumer activates the application in the cell-phone before driving by entering his or her saint-account ID.

**[0066]** Next, at step 522, the application starts to track the number of miles driven using a GPS signal when the consumer starts driving the vehicle. The application continues to track the number of miles driven while the consumer is driving the vehicle.

**[0067]** Next, at step 524, the consumer deactivates the application by pushing "stop" button when the consumer stops driving the vehicle.

**[0068]** Next, at step 530, the application automatically transmits the measured number of miles driven by the vehicle to the central system 130 through the long-range network 150.

**[0069]** In another embodiment, the consumer may enter the measured number of miles driven manually by selecting "Miles Driven" in "Monitoring Control" menu section (as shown in Figure 10).

**[0070]** In another embodiment, the step 530 is performed automatically without an intervention of deactivating the application in the step 524. The application

regularly transmits the measured number of miles driven to the central system 130 in a period of time that had been defined by the consumer.

**[0071]** In another embodiment, the step 530 is performed automatically without an intervention of deactivating the application in the step 524. The application regularly transmits the measured number of miles driven to the central system 130 in a period of time that had been defined by the consumer.

**[0072]** In another embodiment, the consumer may enter the gallons of fuel consumed by the vehicle manually by selecting "Gallongs Of Fuel Used" in "Monitoring Control" menu section (as shown in Figure 10).

**[0073]** Figure 6 illustrates a flow chart of a method of calculating a carbon output value from the raw data. First, at step 610, the carbon calculator unit 133 of the main server 131 receives the raw data from the measuring unit 110.

**[0074]** Next, if the received data is comprised of trash weight, at step 620, the carbon calculator unit 133 extracts a conversion factor from the account data storage 137. In this instance, the conversion factor is one of trash levels selected by the consumer (as shown in Figure 3).

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**[0075]** Next, at step 622, the carbon calculator unit 133 calculates the carbon output value by multiplying the selected trash level by the measured weight of trash.

**[0076]** Next, at step 624, the carbon calculator unit 133 sends the calculated carbon output value to the account data storage 137 where the carbon output value is stored in a memory slot that is allocated to the carbon-account of the consumer.

**[0077]** Next, if the received data is comprised of energy usage, at step 640, the carbon calculator unit 133 searches for a matching carbon output value that represents equivalent amount of carbon generated from the amount of gas or electricity consumed by the consumer in the internal database 139. There is a list of data in the internal database 139 comprised of a range of carbon output values, each of which represents specific amount of carbon that is equivalent to the amount of carbon generated from specific amount of electricity or gas consumed.

**[0078]** Next, at step 642, after the carbon calculator unit 133 finds a matching carbon output value, it extracts that matching carbon output value from the internal database 159.

**[0079]** Next, at step 644, the carbon calculator unit 133 sends the carbon output value to the account data storage 137 where the carbon output value is stored in a memory slot that is allocated to the carbon-account of the consumer.

**[0080]** Next, if the received data is comprised of vehicle usage, at step 660, the carbon calculator unit 133 extracts a conversion factor from the account data storage 137. In this instance, the conversion factor is comprised of the make and model of the vehicle driven by the consumer.

**[0081]** Next, at step 661, the carbon calculator unit 133 searches a matching MPG data that is stored in the internal database 139. In the internal database, there is an array of data comprised of MPG data of a specific vehicle organized based on the vehicle's information including the make and the model information of the vehicle.

**[0082]** Next, at step 662, upon finding the matching MPG data in the internal database 139, the carbon calculator unit 133 extracts the MPG data from the internal database 139.

**[0083]** Next, at step 663, the carbon calculator unit 133 performs a calculation of dividing the number of miles driven by the MPG data to obtain the actual number of gallons consumed by the vehicle.

**[0084]** Next, at step 664, the carbon calculator unit 133 searches for a matching carbon output value that represents equivalent amount of carbon generated from the number of gallons consumed by the vehicle in the internal database 139. There is a list of data in the internal database 139 comprised of a range of carbon output values, each of which represents specific amount of carbon that is equivalent to the amount of carbon generated from specific number of gallons consumed by a vehicle.

**[0085]** Next, at step 665, after the carbon calculator unit 133 finds a matching carbon output value, it extracts that carbon output value from the internal database 159.

**[0086]** Next, at step 666, the carbon calculator unit 133 sends the carbon output value to the account data storage 137 where the carbon output value is stored in a memory slot that is allocated to the carbon-account of the consumer.

**[0087]** In another embodiment, the carbon calculator unit 133 uses a conversion factor in calculating a carbon output value that represents equivalent amount of carbon generated from the amount of electricity or gas used by the consumer instead of finding the matching carbon output value from the internal database 159. In this

embodiment, the conversion factor is a value indicating specific amount of carbon generated per cubic feet of gas or specific amount of carbon generated per kwh of electricity.

**[0088]** In another embodiment, the carbon calculator unit 133 uses a conversion factor in calculating a carbon output value that represents equivalent amount of carbon generated from the amount of gallons consumed by the vehicle driven by the consumer instead of finding the matching carbon output value from the internal database 159. In this embodiment, the conversion factor represents a value indicating specific amount of carbon generated per gallon of gasoline.

**[0089]** Figure 7 illustrates a flowchart of a method of offsetting carbon output value. First, at step 710, the main server 131 receives carbon offset credit data from the carbon offset entity 140. The preferred embodiment is to have more than one carbon offset entity that provides such information.

**[0090]** Next, at step 715, the carbon offset unit 134 of the main server 131 adjusts the cost to reflect 5% processing fee.

**[0091]** Next, at step 720, the carbon offset unit 134 stores the adjusted cost in the offset data storage 138 of the central system 130.

**[0092]** Next, at step 725, the carbon offset unit 134 displays, in a web page operated by the main server 131, the adjusted cost of each carbon offset credit with each name of carbon offset entity that had provided such carbon offset credit (as shown in Figure 11). The consumer visits this web page and sees the cost information.

**[0093]** Next, at step 730, the consumer selects at least one carbon offset entity from which he or she wants to purchase carbon offset credits.

**[0094]** Next, at step 735, the carbon offset unit 134 extracts a cost data of selected carbon offset entity from the offset data storage 138. At the same time, at step 740, the carbon offset unit 134 extracts a carbon output value stored in the carbon-account of the consumer from the account data storage 137.

**[0095]** Next, at step 745, the carbon offset unit 134 calculates the total amount of payment that the consumer shall pay by multiplying the cost of the selected carbon offset credit and the extracted carbon output value at the step 740.

**[0096]** Next, at step 750, the consumer pays the calculated total amount of payment. The consumer enters payment information such as his or her credit card number and bank account number.

**[0097]** Next, at step 755, the carbon offset unit 134 completes the transaction by sending the payment information to the selected carbon offset entity 140.

**[0098]** Next, at step 760, the carbon offset unit 134 generates the 5% processing fee out of the total amount of payment made by the consumer.

**[0099]** Next, at step 765, the carbon offset unit 134 offsets the carbon output value stored in the account data storage 137.

**[00100]** In another embodiment, the carbon offset unit 134 provides an automatic payment plan for the consumer. Once the consumer sets up his or her bank account number or credit card information, the carbon offset unit 134 automatically offsets the carbon output value stored in the carbon-account of the consumer and proceeds a

payment. This automatic payment may be performed regularly for each day, week, month, or any set of time frame defined by the consumer.

**[00101]** In another embodiment, the transaction fee of 5% in the step 715 and the step 760 may be modified to a different percentage.

**[00102]** Figure 8 illustrates a user interface of main screen page operated by the main server 131 in accordance with an embodiment of the present invention. The user interface of main screen page 800 includes "Cutting Carbon" page 810, "Carbon Saint Solution" page 820, "Account Login" page 830, "Forums" page 840, "Store" page 850, "About" page 860, and advertisements section 870.

**[00103]** The "Cutting Carbon" page 810 provides general information about cutting carbon emissions to the consumers. The "Carbon Saint Solution" page 820 describes the services provided by the ~~present invention~~ website. The "Account Login" page 830 provides user interfaces for setting up a carbon-account, setting up monitoring control options, monitoring carbon output values, and offsetting carbon output values. The "Forums" page 840 provides a cyber-forum for the consumers to discuss specific topics and share tips for lowering their carbon footprints. The "Store" page 850 provides sales for all of the carbon output measuring devices that may be used as the measuring unit 110 and other carbon conservation products. The "About" page 860 mostly provides corporate information related to the website. The advertisements 840 display ads of other products sold by other entities which pay certain rates of advertising fees to the central system 130 in exchange for the advertisements.

**[00104]** In operation, when the consumer selects "Account Login" 810, four additional menus appear in the web page. "Account Setup" 812 provides a user

interface for setting up a carbon-account and registering the measuring unit 110. "Monitoring Control" 814 provides a user interface for setting up monitoring control options of the measuring unit 110. "Carbon Footprint" 816 provides a user interface for monitoring the carbon output value stored in the consumer's carbon-account. "Carbon Offset" 818 provides a user interface for offsetting the carbon output value generated by the consumer.

**[00105]** In another embodiment, different graphics, designs, texts, and symbols may be used for structuring the menus or the configuration of the web page in order to provide equivalent features of the user interface 800 to the consumer.

**[00106]** Figure 9 illustrates a user interface of setting up a carbon-account in accordance with an embodiment of the present invention. The user interface of setting up a carbon-account 900 includes "Account Information" section 910 and "Device Registration" section 912.

**[00107]** The "Account Information" section 910 provides a user interface for creating a carbon-account, setting up personal information of the consumer including a password, changing or updating personal information, and setting up a payment method. The "Device Registration" section 912 provides a user interface for registering the measuring unit 110.

**[00108]** In operation, the consumer creates his or her carbon-account initially by entering personal information such as name and location, and obtains a unique ID and a password. The consumer also may set up a payment method for purchasing carbon offset credits. For example, the consumer may enter his or her credit card information or bank account number in the "Payment Services" menu in the "Account

Information" section 910. Once the consumer creates his or her carbon-account, the consumer may register the measuring unit 110. For example, if the consumer wants to use the weight scale 112 as a measuring unit then the consumer chooses "Household Waste Scale" menu of the "Device Registration" section 912.

**[00109]** In another embodiment, any different graphics, designs, texts, or symbols may be used for structuring the menus or the configuration of the web page in order to provide equivalent features of the user interface 900 to the consumer.

**[00110]** Figure 10 illustrates a user interface of setting up monitoring control options in accordance with an embodiment of the present invention. The user interface of setting up monitoring control options 1000 includes "Household Waste" section 1010, "Vehicle Usage" section 1020, and "Home Energy Usage" section 1030.

**[00111]** The "Household Waste" section 1010 provides a user interface for selecting one of the options for measuring household trash weight and for calculating a carbon output value. The "Vehicle Usage" section 1020 provides a user interface for selecting one of the options for measuring the amount of carbon output related to vehicle usage and for calculating a carbon output value. The "Home Energy Usage" section 1030 provides a user interface for selecting one of options for measuring the amount of energy consumed in a house.

**[00112]** In operation, for the household trash weight, the consumer may select either "Wireless Scale" or "Manual Entry" for measuring purpose and also may select one of three trash levels for calculating purpose. For the vehicle usage, the consumer may select the make, the model, and the manufacturing year of his or her vehicle. Also, the consumer may either select one of "Smart Phone App," "Gallons Of Fuel

Used," and "Miles Driven." For instance, if the consumer selects "Smart Phone App," the application installed in the cell phone 116 will automatically tracks the number of miles driven by the vehicle and transmits the tracked number of miles to the main server 131. But if the consumer selects "Miles Driven," then the consumer manually enters the number of miles driven by the vehicle. For the household energy usage, the consumer may either select one of "Energy Hub" and "Manual Entry." If the consumer selects "Energy Hub" then the energy hub 114 will automatically measures the amount of energy consumed in a house and transmits the measured data to the energy hub server 122.

**[00113]** In another embodiment, any different graphics, designs, texts, or symbols may be used for structuring the menus or the configuration of the web page in order to provide equivalent features of the user interface 1000 to the consumer.

**[00114]** Figure 11 illustrates a user interface of offsetting carbon footprint in accordance with an embodiment of the present invention. The user interface of offsetting carbon footprint 1100 includes "Select" section 1110, "Company" section 1120, and "Rate" section 1130, all of which are divided into three categories of "Remediation" 1140, "Sequestering" 1150, and "All" 1160.

**[00115]** The "Select" section 1110 provides a user interface for selecting particular carbon offset entity 140 from which the consumer wants to purchase carbon offset credits. The "Company" section 1120 provides name of each carbon offset entity listed. The "Rate" section 1130 provides information for a specific cost of a carbon offset credit provided by certain carbon offset entity 140. The "Remediation" 1140 provides a user interface for remediating carbon footprint generated by the consumer.

The "Sequestering" 1150 provides a user interface for sequestering carbon footprint generated by the consumer. The "All" 1160 provides a user interface for automatically splitting the total carbon remediation equally among all of the carbon offset entities. The "Buy" button links to a payment proceeding screen where the consumer enters relevant payment information in order to complete the transaction.

**[00116]** In operation, first, the consumer determines whether he or she wants to remediate or sequester carbon footprint generated by him or her. Second, the consumer selects at least one carbon offset entity 140 that is listed in either "Remediation" 1140 or "Sequestering" 1150 section from which he or she wants to purchase carbon offset credits. Third, the consumer clicks "Buy" button in order to complete the transaction. When the consumer chooses multiple carbon offset entities, the consumer is directed to another web page where the consumer is allowed to put percentages for each selected carbon offset entity. In an instance where the consumer chooses all of the carbon offset entities by selecting "All" 1160, the carbon offset unit 134 automatically splits the purchasing carbon offset credits to all carbon offset entities listed equally.

**[00117]** In another embodiment, any different graphics, designs, texts, or symbols may be used for structuring the menus or the configuration of the web page in order to provide equivalent features of the user interface 1100 to the consumer.

**[00118]** Figure 12 illustrates a system for transmitting a raw data with respect to carbon consumption 1200 according to an embodiment of the present invention. The system for transmitting a raw data with respect to carbon consumption 1200 includes a

transmitter 1210, a network 1220, and a receiver 1230. The transmitter 1210 includes a GPA-enabled application 1212 and a network modem 1214.

**[00119]** In the system for transmitting a raw data with respect to carbon consumption 1200, the transmitter 1210 is in unidirectional communication with the receiver 1230 connected through the network 1220. The GPA-enabled application 1212 of the transmitter 1210 is electronically connected to the network modem 1214 of the transmitter 1210.

**[00120]** In operation, a consumer carries the transmitter 1210 with himself or herself when the consumer enters into a vehicle. The GPA-enabled application 1212 of the transmitter 1210 is initiated by the consumer before the consumer drives the vehicle. The consumer may initiate the GPA-enabled application 1212 by pressing a start button that is located in the transmitter 1210. One embodiment of the transmitter is a cell phone that contains the GPS-enabled application 1212. When the consumer drives the vehicle, the initiated GPS-enabled application 1212 automatically calculates a travel distance of the vehicle by tracking the number of miles driven from a first location to a second location. For the tracking, the GPS-enabled application 1212 uses a GPS-signal.

**[00121]** The GPS-enabled application 1212 stops the calculation when the consumer pushes a stop button that is located in the transmitter 1210. The GPS-enabled application then sends the raw data to the network modem 1214 of the transmitter 1210. The network modem 1214 then transmits the received raw data to the receiver 1230 through the network 1220. One embodiment of the network 1220 is internet. The network modem 1214 is enabled when the consumer turns on the

transmitter and maintains the connection with the network 1220 while the transmitter 1210 is in active condition.

**[00122]** In another embodiment, the GPS-enabled application 1212 sends the raw data in real time to the network modem 1214 without requiring an input from the consumer. The network modem 1214 then transmits the data to the receiver 1230 in real time.

**[00123]** Figure 13 illustrates a system for transmitting a raw data with respect to carbon consumption 1300 according to an embodiment of the present invention. The system for transmitting a raw data with respect to carbon consumption 1300 includes a measuring device 1300, a short-range network 1320, a transmitter 1330, a long-range network 1340, and a receiving device 1350. The measuring device 1310 includes a first wireless network modem 1315. The transmitter 1330 includes a second wireless network modem 1332 and a network modem 1334.

**[00124]** In the system for transmitting a raw data with respect to carbon consumption 1300, the measuring device 1310 is in unidirectional communication with the transmitter 1330 connected through the short-range network 1320. The transmitter 1330 is in unidirectional communication with the receiving device 1350 connected through the long-range network 1340. The first wireless network modem 1315 of the measuring device 1310 is in wireless communication with the second wireless network modem 1332 connected through the short-range network 1320. The second wireless network modem 1332 is electronically connected with the network modem 1334 of the transmitter 1330.

**[00125]** In operation, the measuring device 1310 measures a raw data with respect to carbon consumption consumed by a consumer. One embodiment of the present invention for the measuring device 1315 is a weight scale that contains a Bluetooth wireless network modem. The measuring device 1310, the scale, measures the weight of trash that has been generated by the consumer when the consumer puts the trash on the scale.

**[00126]** The scale then automatically sends the raw data to the transmitter 1330 by performing a series of steps. First, the scale activates the first wireless network modem 1315, which in return, tries to make a wireless connection with the second wireless network modem 1332 of the transmitter 1330. One embodiment for the first wireless network modem 1315 and the second wireless network modem1332 is a Bluetooth wireless network modem. Second, once the first wireless network modem 1315 and the second wireless network modem 1332 has been connected through the short-range network 1320, the scale transmits the raw data to the transmitter 1330. One embodiment for the short-range network is a Bluetooth network.

**[00127]** Upon receiving the raw data, the transmitter 1330 sends the raw data from the second wireless network modem 1332 to the network modem 1330. The network modem 1334 then transmits the raw data to the receiving device 1350 through the long-range network 1340. One embodiment for the long-range network is internet 1340. The network modem 1334 starts making a connection with the receiving device 1350 when the transmitter 1330 is activated and maintains that connection while the transmitter 1330 is in activated condition. One embodiment for the transmitter is a computer.

**[00128]** In another embodiment, the measuring device is a meter that contains a wireless network modem. The meter measures the amount of house energy consumed by the consumer and transmits the measured data to the transmitter through the short-range network 1320.

**[00129]** In another embodiment, the first wireless network modem 1315 of the measuring device 1310 maintains the wireless connection with the second network modem 1332 of the transmitter 1330 while the measuring device 1310 is in activated condition.

**[00130]** While particular elements, embodiments, and applications of the present invention have been shown and described, it is understood that the invention is not limited thereto because modifications may be made by those skilled in the art, particularly in light of the foregoing teaching. It is therefore contemplated by the appended claims to cover such modifications and incorporate those features which come within the spirit and scope of the invention.

PROS - good order of explanation
- clear figures
- well thought out

CONS - "Fixed" meter drawing & did not include original
- some small faults
- claims still need work

- One of the best so far

CLAIMS

What is claimed.

1. A system of determining a carbon output value based on a real-time data that represents carbon consumption, said system including:

at least one measuring device measuring a raw data from at least one source that generates carbon output, wherein said raw data represents carbon consumption consumed by a consumer;

a communicative device receiving said raw data from said measuring device wherein said measuring device automatically transmits said raw data to said communicative device after measuring said raw data, transmitting said raw data to a remote server wherein said communicative device automatically transmits said raw data to said remote server after receiving said raw data from said measuring device; and

said remote server calculating a carbon output value wherein said remote server converts said raw data into said carbon output value that represents specific amount of carbon wherein said carbon output value is equivalent to the amount of carbon generated by said consumer, storing said carbon output value in a memory slot of said remote server wherein said memory slot is allocated to a carbon-account of said remote server wherein said carbon-account is a personal web account of said remote server created by said consumer, monitoring said carbon output value wherein said consumer logs into said remote server with said carbon-account wherein said consumer monitors said carbon output value being displayed in a website operated by said remote server.

2. The system of claim 1 wherein said raw data is comprised of weight of trash consumed by said consumer, house energy consumed by said consumer, and vehicle usage used by said consumer.

3. The system of claim 1 wherein said measuring device and said communicative device are implemented in a portable-machine wherein said portable-machine measures said raw data and then automatically transmits said raw data to said remote server.

4. The system of claim 3 wherein said portable-machine is a cell phone containing a GPS-enabled application wherein said application calculates a travel distance of said cell phone by tracking the number of miles travelled by said cell phone from a first location to a second location.

5. The system of claim 1 wherein said measuring device is in unidirectional communication with said communicative device.

6. The system of claim 5 wherein said measuring device containing a Bluetooth wireless network module wherein said measuring device uses said Bluetooth wireless network module in transmitting said raw data to said communicative device.

7. The system of claim 5 wherein said measuring device receiving said raw data from at least one meter installed in a house wherein said meter is in unidirectional communication with said measuring device wherein said unidirectional communication is comprised of a wireless network wherein said meter is comprised of an electricity meter and a gas meter installed in said house.

8. The system of claim 1 wherein said remote server calculates said carbon output value by multiplying said raw data by one of conversion factors wherein said one

of conversion factors is a value representing specific amount of carbon generated per specific amount of trash wherein said one of conversion factors is determined based on the type and the weight of trash.

9. The system of claim 1 wherein said remote server calculates said carbon output value using one of conversion factors for calculating the number of gallons consumed by a vehicle driven by said consumer wherein said conversion factors is comprised of the make and the model data of said vehicle.

10. The system of claim 1 wherein said remote server,

operating a website for a sale of a carbon offset credit, wherein said consumer logs into said website with said carbon-account wherein said consumer purchases said carbon offset credit from at least one carbon offset entity, wherein said carbon offset entity is a carbon remediation organization that provides said carbon offset credit to said remote server, wherein said carbon offset credit represents a value for offsetting specific amount of carbon,

offsetting said carbon output value stored in said memory slot allocated to a carbon-account created by said consumer, wherein said remote server deducts a carbon output value equivalent to the amount of carbon represented by the number of carbon offset credits purchased by said consumer from said carbon output value stored in said memory slot.

11. The system of claim 10 wherein said remote server,

displaying a list of data in said website operated by said remote server, wherein said list of data is comprised of a cost for purchasing said carbon offset credit provided

by said carbon offset entity, wherein said consumer may see said list of data in said website by logging into said website,

providing a selection method to said consumer wherein said consumer may select at least one said carbon offset entity from which said consumer wants to purchase said carbon offset credit,

providing a payment method to said consumer wherein said consumer makes a payment to the selected carbon offset entity, wherein said remote server proceeds said payment.

12. A method of determining a carbon output value based on a real-time data that represents carbon consumption, said method including:

measuring a raw data from at least one source that generates carbon output using a measuring device, wherein said raw data represents carbon consumption consumed by a consumer;

transmitting said raw data from said measuring device to a remote server using a communicative device, wherein said measuring device automatically transmits said raw data to said communicative device after completing said measuring, wherein said communicative device automatically transmits said raw data to said remote server after receiving said raw data from said measuring device;

calculating a carbon output value wherein said remote server converts said raw data into said carbon output value that represents specific amount of carbon wherein said carbon output value is equivalent to the amount of carbon generated by said consumer;

storing said carbon output value in a memory slot of said remote server wherein said memory slot is allocated to a carbon-account of said remote server wherein said

carbon-account is a personal web account of said remote server created by said consumer; and

monitoring the stored carbon output value wherein said consumer logs into said remote server with said carbon-account, wherein said consumer monitors said stored carbon output value being displayed in a website operated by said remote server.

13. The method of claim 12 wherein said raw data is comprised of weight of trash consumed by said consumer, house energy consumed by said consumer, and vehicle usage used by said consumer.

14. The method of claim 12 wherein said measuring and said transmitting is performed by a portable-machine wherein said portable-machine measures said raw data and then automatically transmits said raw data to said remote server.

15. The method of claim 14 wherein said portable-machine is a cell phone containing a GPS-enabled application wherein said application calculates a travel distance of said cell phone by tracking the number of miles travelled by said cell phone from a first location to a second location.

16. The method of claim 12 wherein said measuring device is in unidirectional communication with said communicative device.

17. The method of claim 12 wherein said measuring device containing a Bluetooth wireless network module wherein said measuring device uses said Bluetooth wireless network module in transmitting said raw data to said communicative device.

18. The method of claim 12 wherein said measuring device receiving said raw data from at least one meter in a house, wherein said meter is in unidirectional communication with said measuring device, wherein said unidirectional communication

is comprised of a wireless network, wherein said meter is comprised of an electricity meter and a gas meter installed in said house.

19. The method of claim 12 wherein said remote server calculates said carbon output value by multiplying said raw data by one of conversion factors, wherein said one of conversion factors is a value representing specific amount of carbon generated per specific amount of trash, wherein said one of conversion factor is determined based on the type and the weight of trash.

20. The method of claim 12 wherein said remote server calculates said carbon output value using one of conversion factors for calculating the number of gallons consumed by a vehicle driven by said consumer, wherein said one of conversion factors is comprised of the make and the model data of said vehicle.

21. The method of claim 12 further comprising:

operating a website for a sale of a carbon offset credit using a remote server wherein said consumer logs into said website with said carbon-account, wherein said consumer purchases said carbon offset credit from at least one carbon offset entity, wherein said carbon offset entity is a carbon remediation organization that provides said carbon offset credit to said remote server, wherein said carbon offset credit represents a value for offsetting specific amount of carbon.

offsetting said carbon output value, wherein said remote server offsets said carbon output value stored in said memory slot allocated to said carbon- account, wherein said remote server deducts a carbon output value equivalent to the amount of carbon represented by the number of carbon offset credits purchased by said consumer from said stored carbon output value stored in said memory slot.

22. The method of claim 21 wherein said operating is performed by said remote server,

said remote server displaying a list of data in said website operated by said remote server, wherein said list of data is comprised of a cost for purchasing said carbon offset credit provided by said carbon offset entity, wherein said consumer may see said list of data in said website by logging into said website,

said consumer selecting at least one carbon offset entity from which said consumer wants to purchase said carbon offset credit,

said consumer makes a payment to the selected carbon offset entity, wherein said remote server proceeds said payment.

23. A system of transmitting a raw data with respect to carbon consumption, said system including:

a transmitter measuring a raw data wherein said raw data represents carbon consumption with respect to vehicle usage of a consumer wherein said transmitter automatically measures said raw data when said consumer drives a vehicle, transmitting said raw data to a receiving device wherein said transmitter automatically transmits said data after measuring, and

said receiving device receiving said data from said transmitter.

24. The system of claim 23, wherein said transmitter is a portable device containing a GPS-enabled application wherein said application automatically calculates a travel distance of said vehicle by tracking the number of miles driven from a first location to a second location wherein said GPS-enabled application using a GPS signal to track the number of miles driven.

25. The system of claim 23, wherein said portable device automatically transmits measured number of miles driven to said receiving device by sending an electronic signal through a network.

26. The system of claim 25, wherein said network is comprised of internet.

27. A system of transmitting a raw data with respect to carbon consumption, said system including:

a measuring device measuring a raw data wherein said raw data represents carbon consumption consumed by a consumer, transmitting said raw data to a transmitter wherein said measuring device automatically transmits said data through a short-range network after completing said measuring;

a transmitter receiving said raw data from said measuring device wherein said transmitter automatically transmits said raw data to a receiving device through a long-range network after receiving said raw data; and

a receiving device receiving said raw data from said transmitter.

28. The system of claim 27, wherein said measuring device containing a wireless network modem wherein said measuring device uses said wireless network modem in transmitting said raw data to said transmitter, wherein said short-range network is comprised of a wireless network.

29. The system of claim 27, wherein said transmitter containing a wireless network modem wherein said transmitter uses said wireless network modem to receive the raw data transmitted from said measuring device, containing a network modem wherein said transmitter uses said network modem in order to transmit said raw data to said receiving device, wherein said long-range network is comprised of internet.

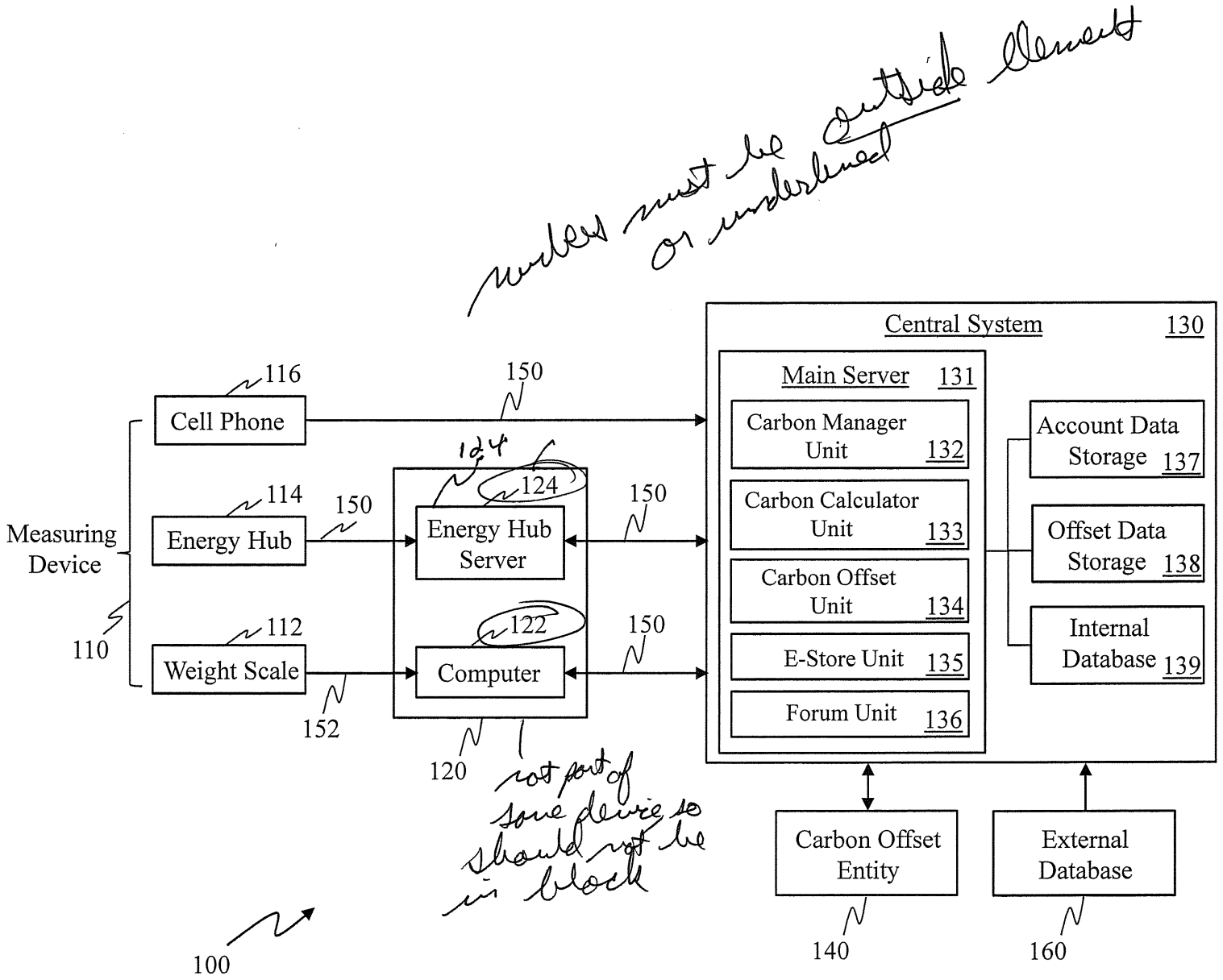
Central System
130
Main Server
131
Carbon Manager Unit
132
Carbon Calculator Unit
133
Carbon Offset Unit
134
E-Store Unit
135
Forum Unit
136
Account Data Storage
137
Offset Data Storage
138
Internal Database
139
Cell Phone
116
Energy Hub
114
Weight Scale
112
Measuring Device
110
150
Energy Hub Server
124
Computer
122
120
152
Carbon Offset Entity
140
External Database
160
100

Figure 1

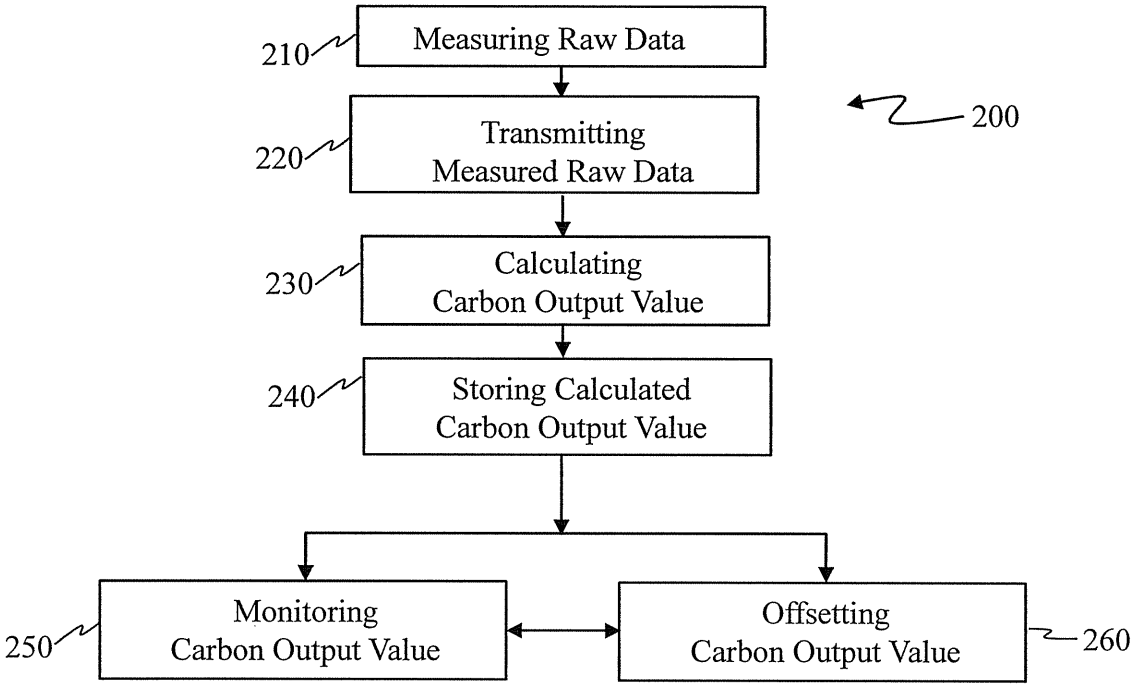
210
Measuring Raw Data
200
220
Transmitting
Measured Raw Data
230
Calculating
Carbon Output Value
240
Storing Calculated
Carbon Output Value
250
Monitoring
Carbon Output Value
Offsetting
Carbon Output Value
260

Figure 2

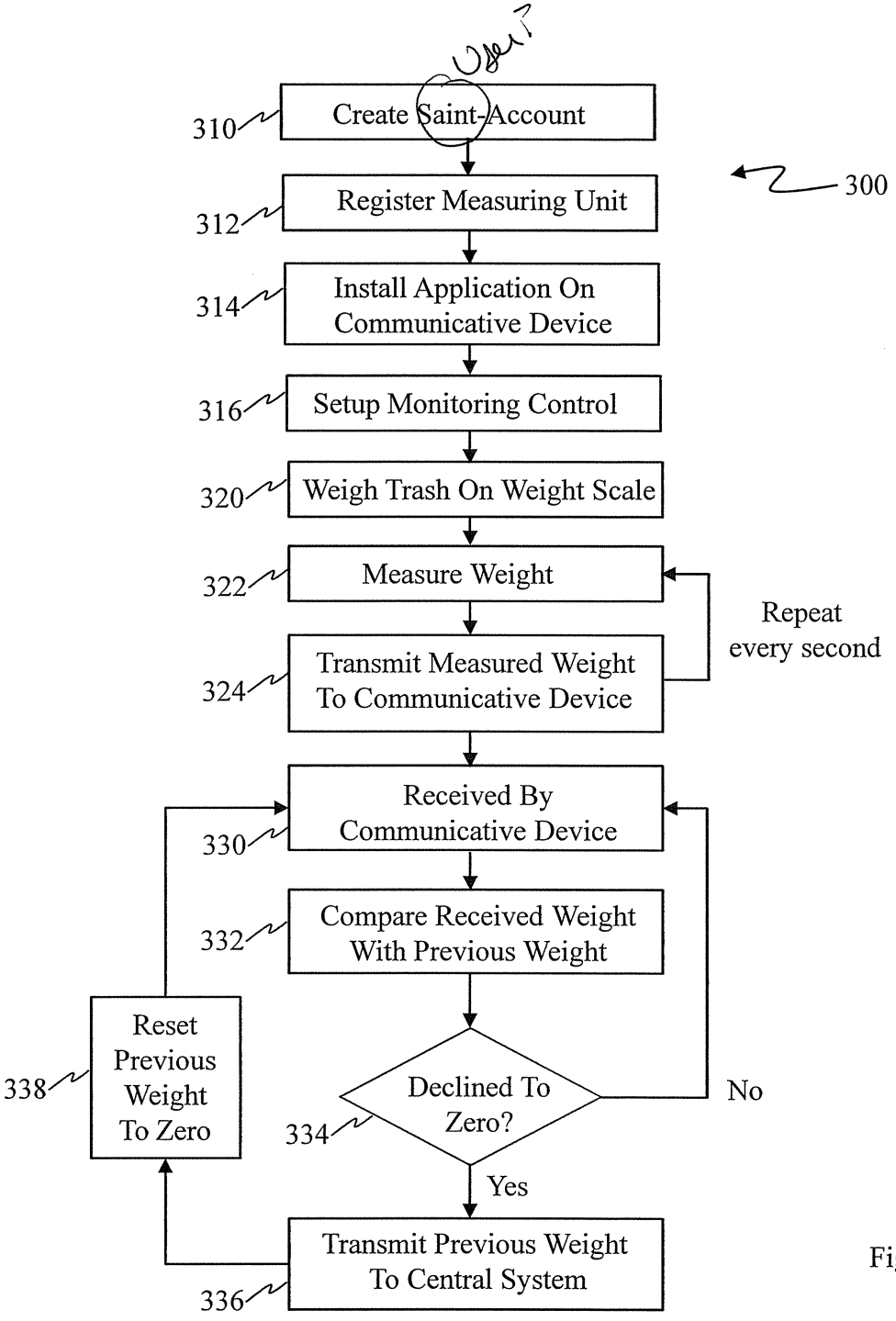
Create Saint-Account
310
Register Measuring Unit
312
Install Application On Communicative Device
314
Setup Monitoring Control
316
Weigh Trash On Weight Scale
320
Measure Weight
322
Transmit Measured Weight To Communicative Device
324
Repeat every second
300
Received By Communicative Device
330
Compare Received Weight With Previous Weight
332
Declined To Zero?
334
No
Yes
Reset Previous Weight To Zero
338
Transmit Previous Weight To Central System
336

Figure 3

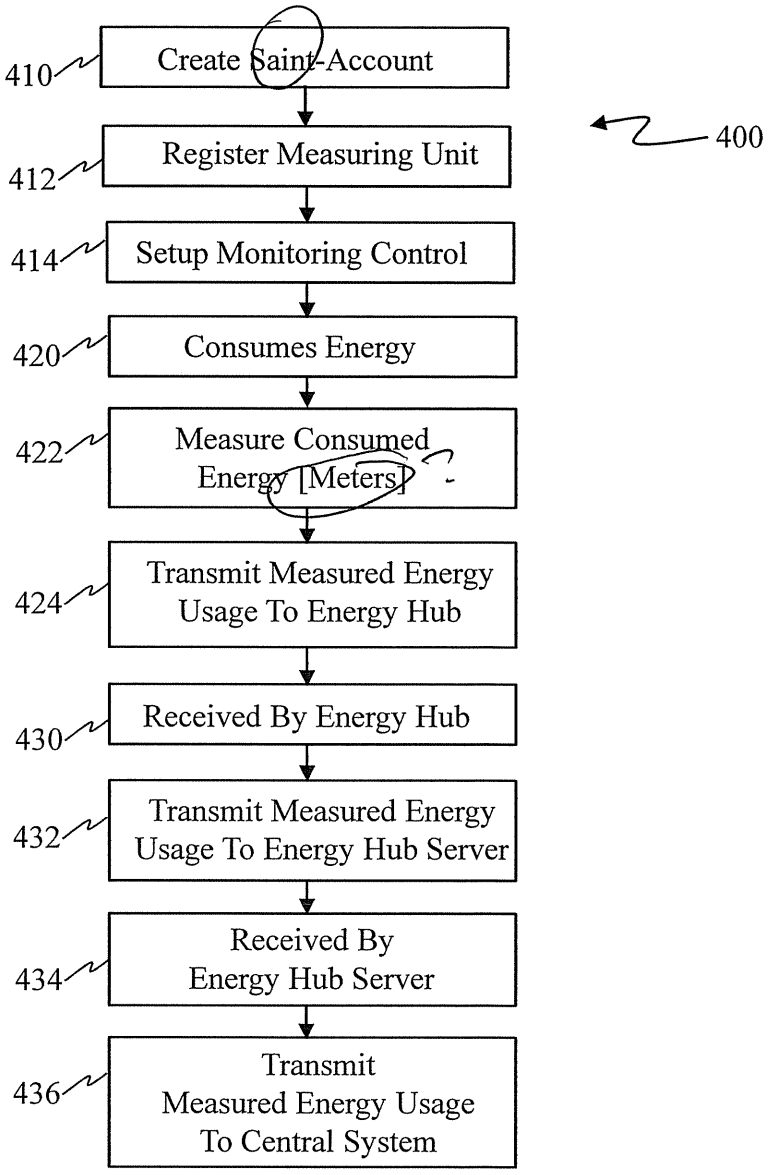
410
Create Saint-Account
400
412
Register Measuring Unit
414
Setup Monitoring Control
420
Consumes Energy
422
Measure Consumed Energy [Meters]
424
Transmit Measured Energy Usage To Energy Hub
430
Received By Energy Hub
432
Transmit Measured Energy Usage To Energy Hub Server
434
Received By Energy Hub Server
436
Transmit Measured Energy Usage To Central System

Figure 4

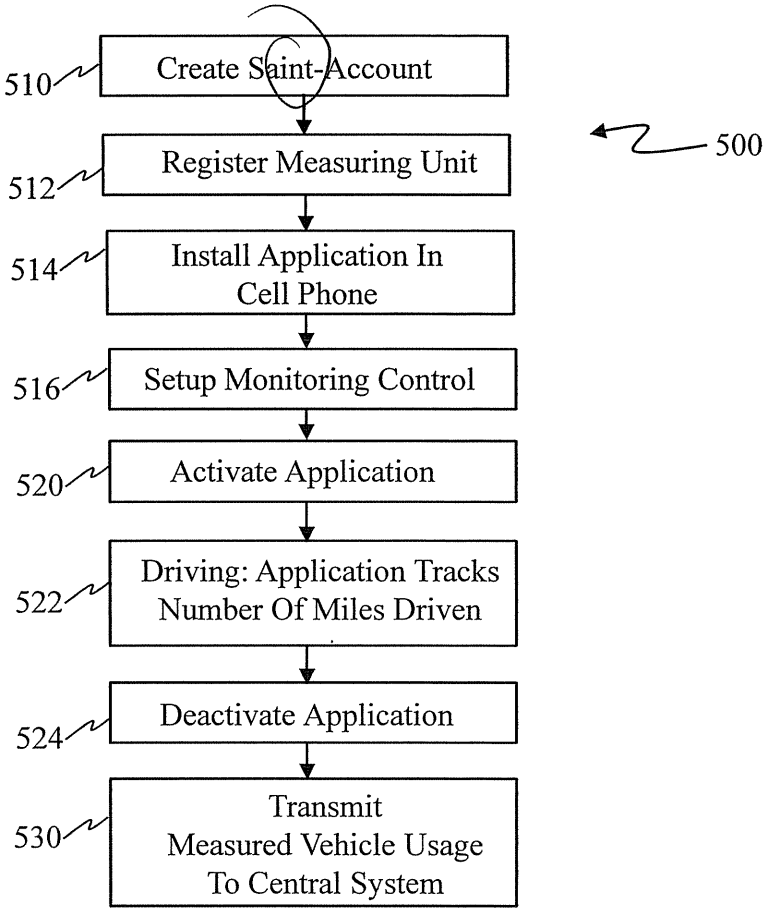
510
Create Saint-Account
500
512
Register Measuring Unit
514
Install Application In Cell Phone
516
Setup Monitoring Control
520
Activate Application
522
Driving: Application Tracks Number Of Miles Driven
524
Deactivate Application
530
Transmit Measured Vehicle Usage To Central System

Figure 5

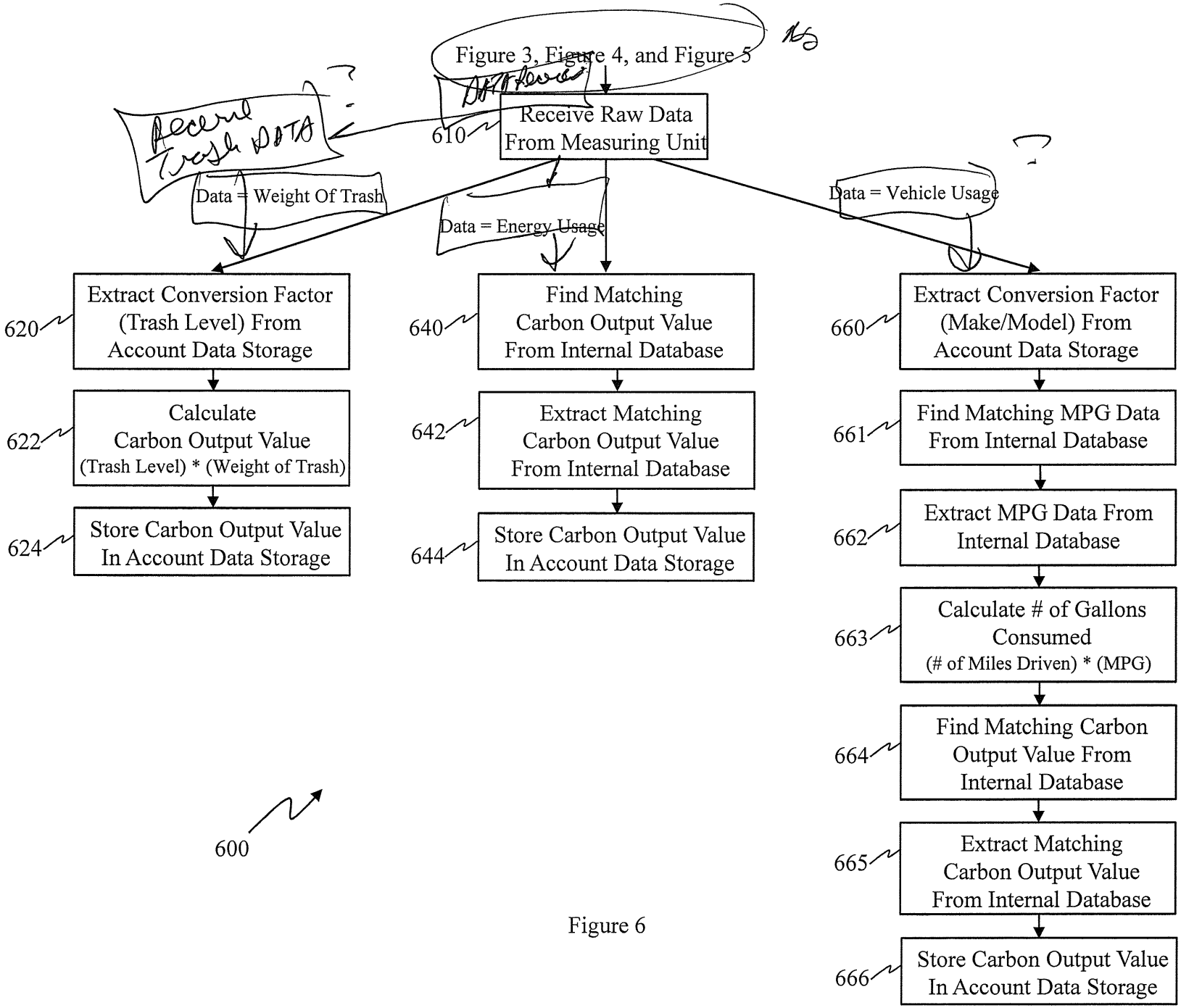
Figure 3, Figure 4, and Figure 5
Receive Raw Data From Measuring Unit
610
Data = Weight Of Trash
Data = Energy Usage
Data = Vehicle Usage
Extract Conversion Factor (Trash Level) From Account Data Storage
620
Calculate Carbon Output Value (Trash Level) * (Weight of Trash)
622
Store Carbon Output Value In Account Data Storage
624
Find Matching Carbon Output Value From Internal Database
640
Extract Matching Carbon Output Value From Internal Database
642
Store Carbon Output Value In Account Data Storage
644
Extract Conversion Factor (Make/Model) From Account Data Storage
660
Find Matching MPG Data From Internal Database
661
Extract MPG Data From Internal Database
662
Calculate # of Gallons Consumed (# of Miles Driven) * (MPG)
663
Find Matching Carbon Output Value From Internal Database
664
Extract Matching Carbon Output Value From Internal Database
665
Store Carbon Output Value In Account Data Storage
666
600

Figure 6

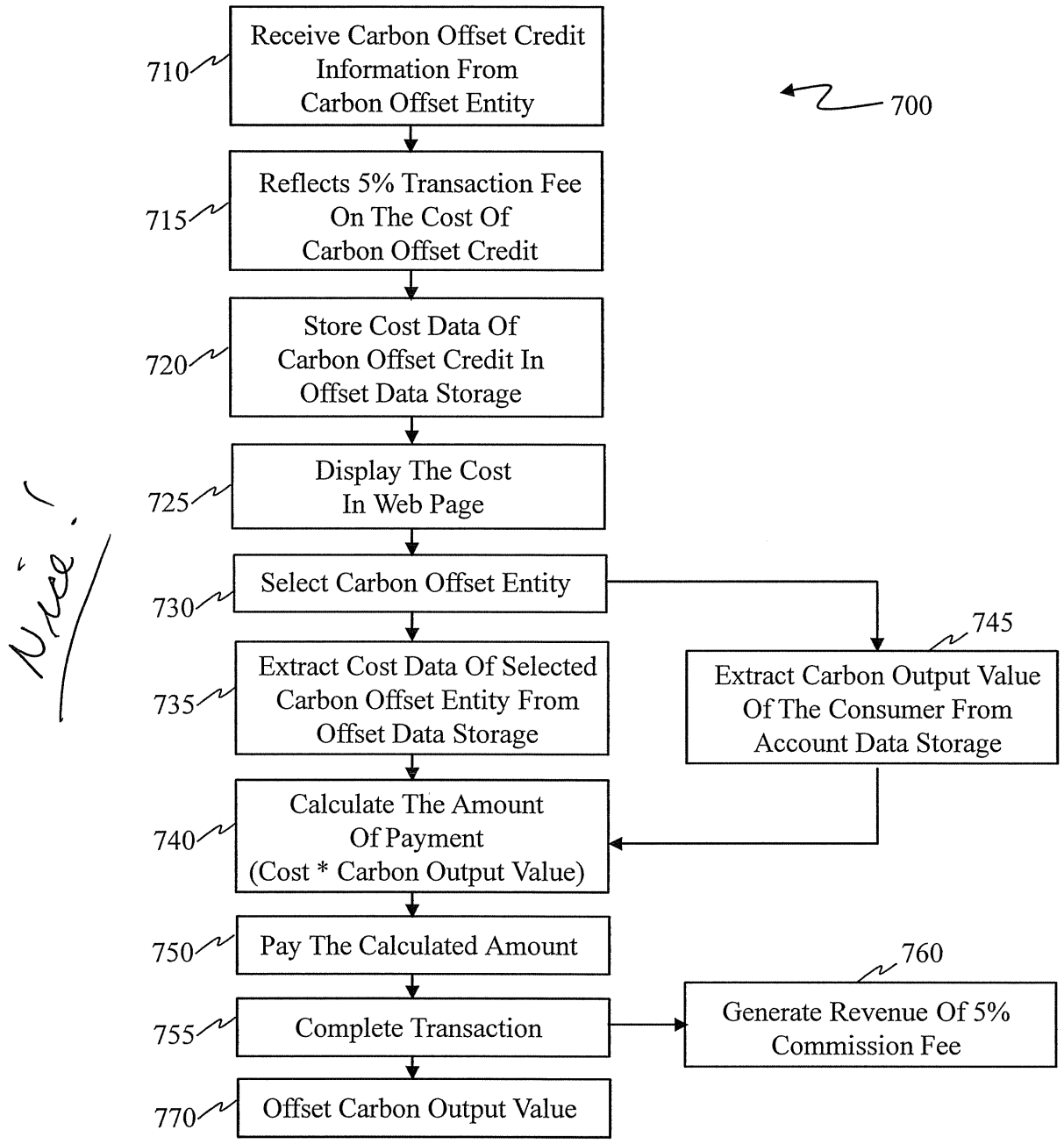
Receive Carbon Offset Credit Information From Carbon Offset Entity
710
700
Reflects 5% Transaction Fee On The Cost Of Carbon Offset Credit
715
Store Cost Data Of Carbon Offset Credit In Offset Data Storage
720
Display The Cost In Web Page
725
Select Carbon Offset Entity
730
745
Extract Carbon Output Value Of The Consumer From Account Data Storage
Extract Cost Data Of Selected Carbon Offset Entity From Offset Data Storage
735
Calculate The Amount Of Payment (Cost * Carbon Output Value)
740
Pay The Calculated Amount
750
760
Generate Revenue Of 5% Commission Fee
Complete Transaction
755
Offset Carbon Output Value
770

Figure 7

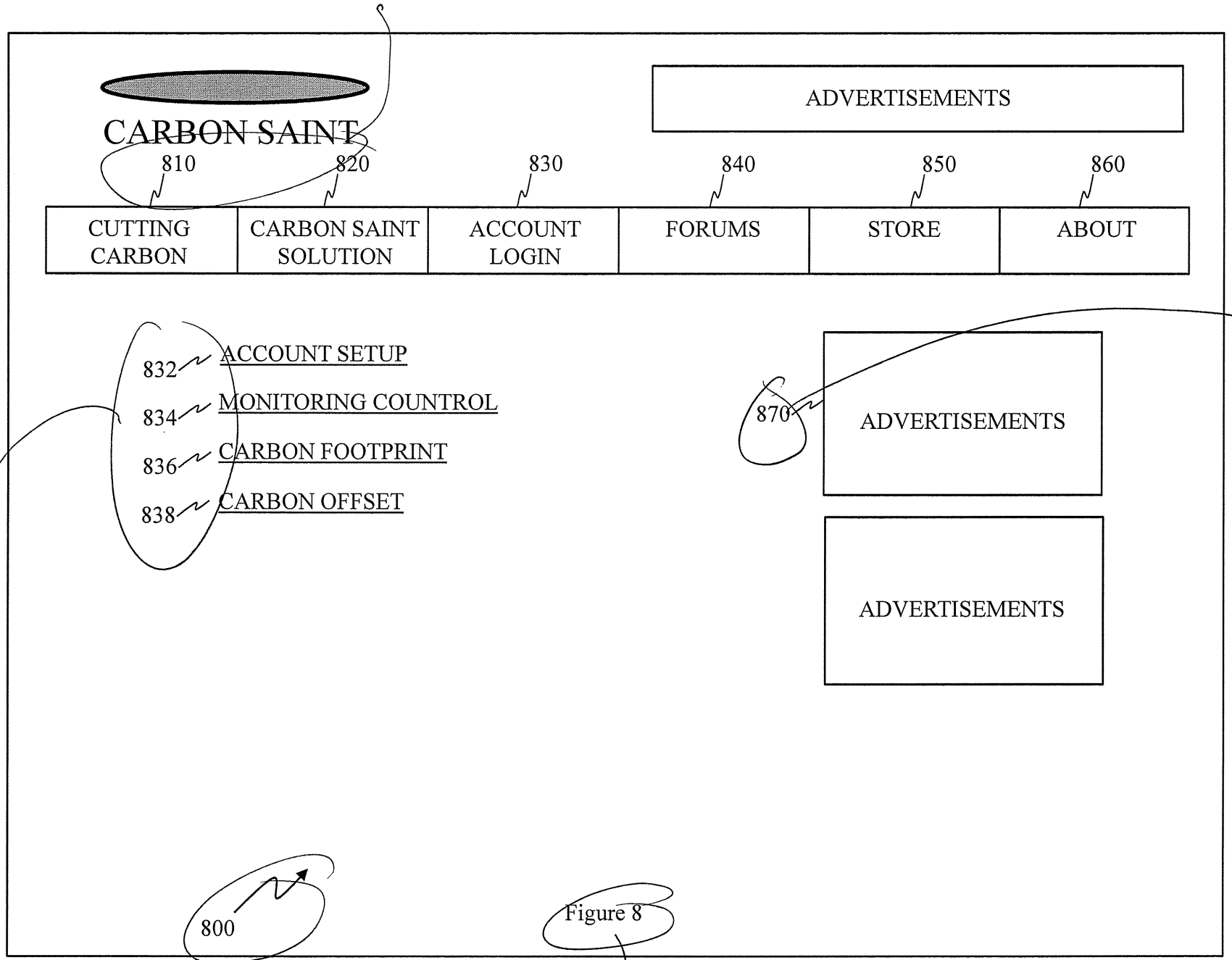
CARBON SAINT
ADVERTISEMENTS
810
820
830
840
850
860
CUTTING CARBON
CARBON SAINT SOLUTION
ACCOUNT LOGIN
FORUMS
STORE
ABOUT
832 ACCOUNT SETUP
834 MONITORING COUNTROL
836 CARBON FOOTPRINT
838 CARBON OFFSET
870
ADVERTISEMENTS
ADVERTISEMENTS
800

Figure 8

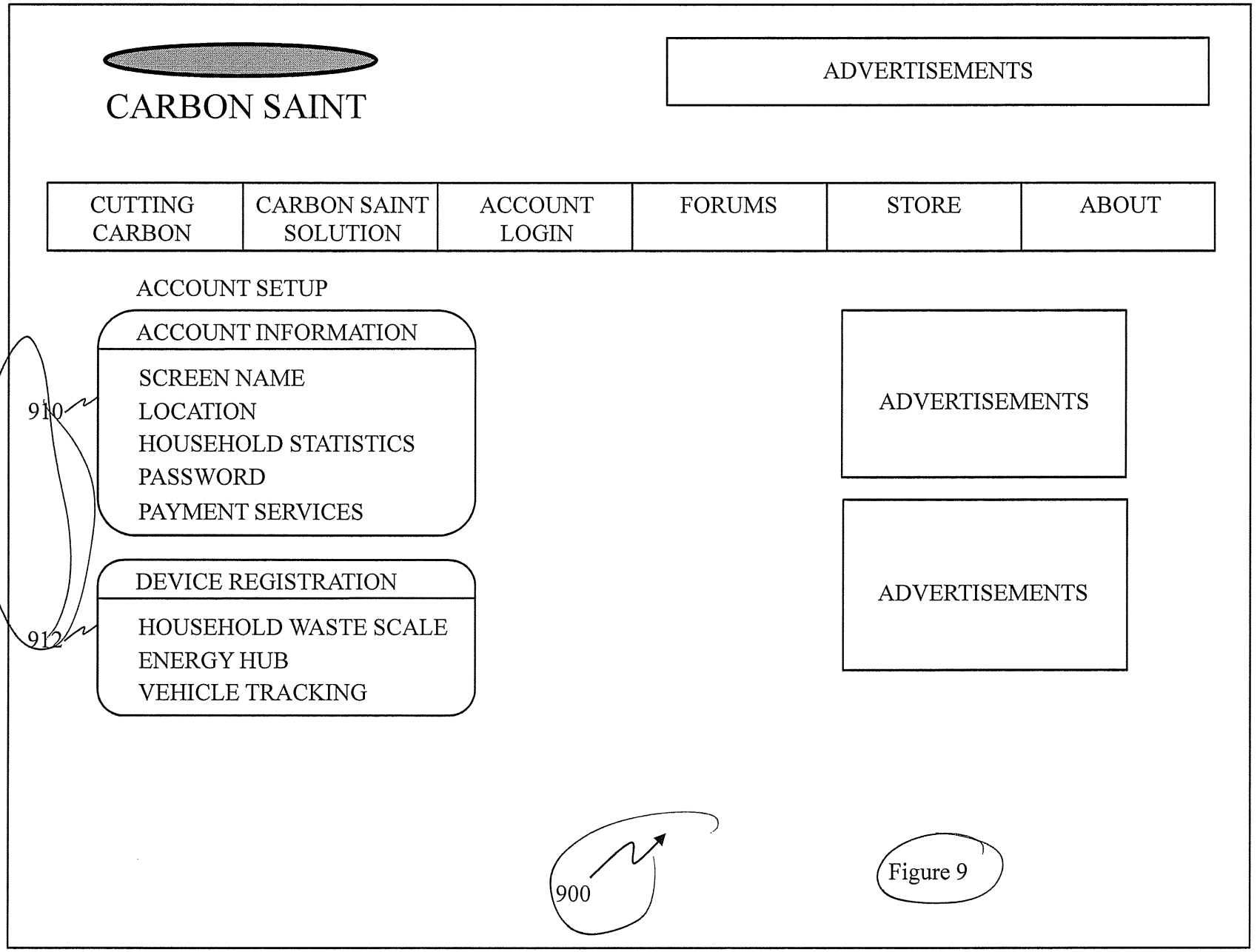
CARBON SAINT
ADVERTISEMENTS
CUTTING CARBON
CARBON SAINT SOLUTION
ACCOUNT LOGIN
FORUMS
STORE
ABOUT
ACCOUNT SETUP
ACCOUNT INFORMATION
SCREEN NAME
LOCATION
HOUSEHOLD STATISTICS
PASSWORD
PAYMENT SERVICES
910
DEVICE REGISTRATION
HOUSEHOLD WASTE SCALE
ENERGY HUB
VEHICLE TRACKING
912
ADVERTISEMENTS
ADVERTISEMENTS
900

Figure 9

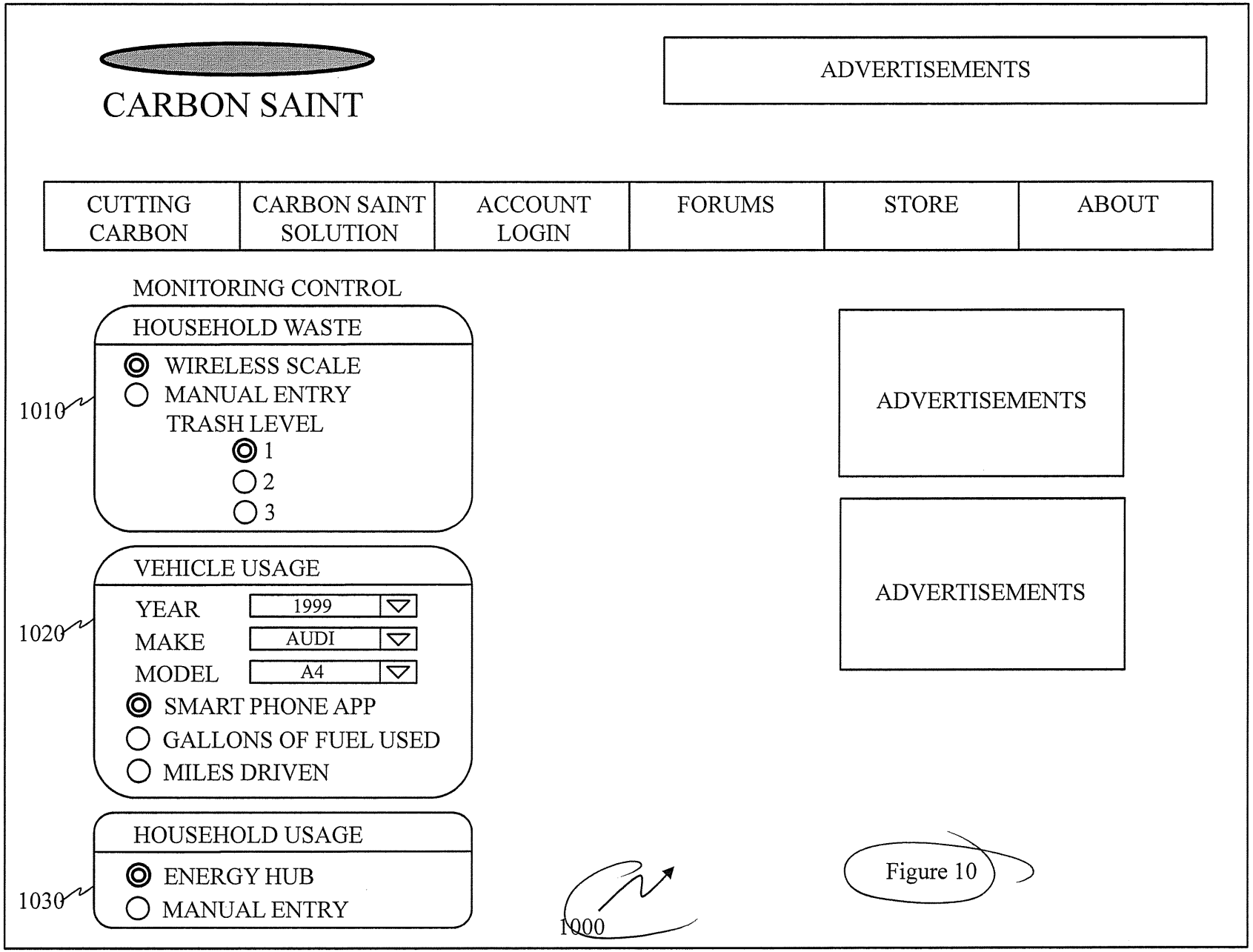
CARBON SAINT
ADVERTISEMENTS
CUTTING CARBON
CARBON SAINT SOLUTION
ACCOUNT LOGIN
FORUMS
STORE
ABOUT
MONITORING CONTROL
HOUSEHOLD WASTE
WIRELESS SCALE
MANUAL ENTRY
TRASH LEVEL
1
2
3
1010
VEHICLE USAGE
YEAR
1999
MAKE
AUDI
MODEL
A4
SMART PHONE APP
GALLONS OF FUEL USED
MILES DRIVEN
1020
HOUSEHOLD USAGE
ENERGY HUB
MANUAL ENTRY
1030
ADVERTISEMENTS
ADVERTISEMENTS
1000

Figure 10

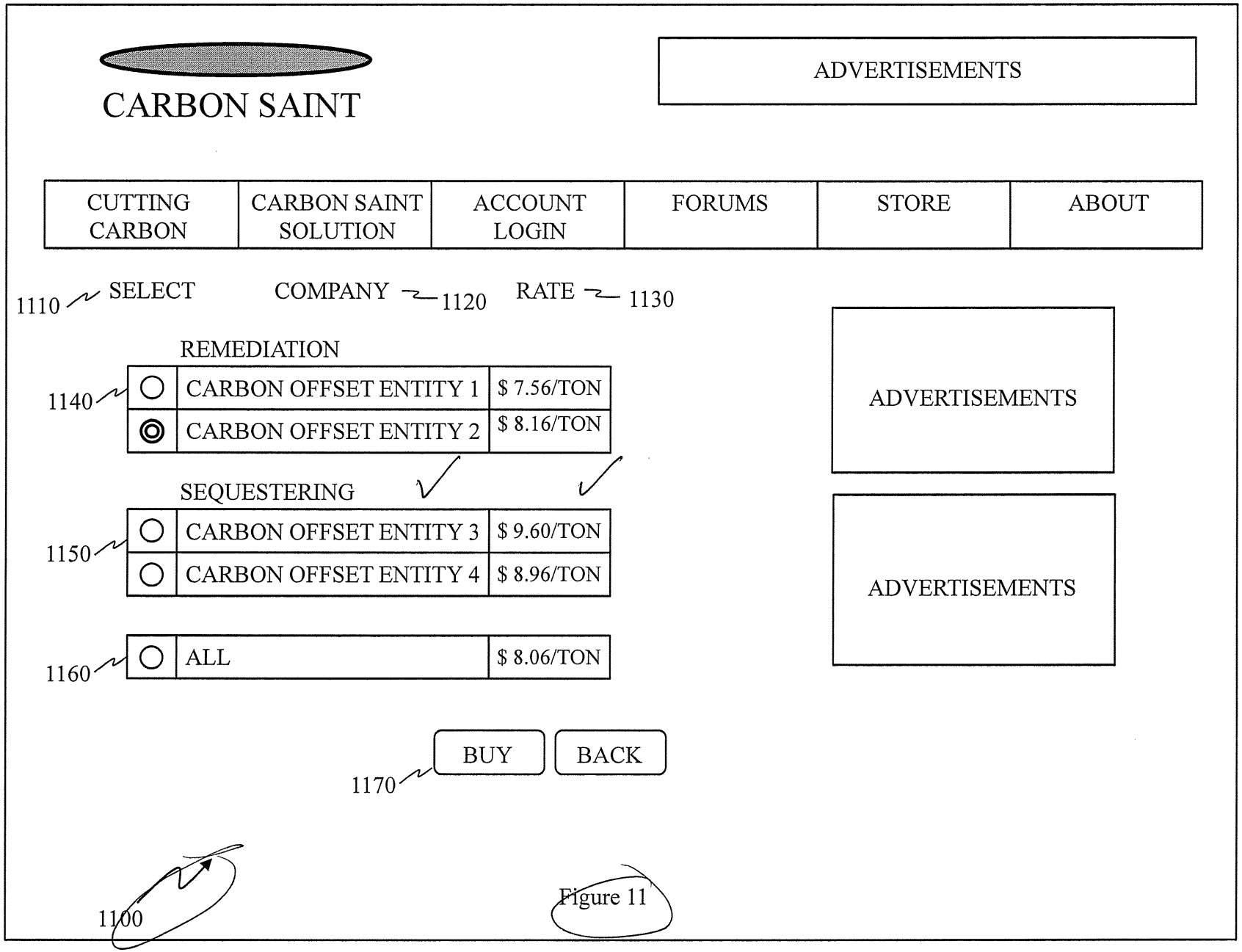
CARBON SAINT
ADVERTISEMENTS
CUTTING CARBON
CARBON SAINT SOLUTION
ACCOUNT LOGIN
FORUMS
STORE
ABOUT
1110
SELECT
COMPANY
1120
RATE
1130
REMEDIATION
1140
CARBON OFFSET ENTITY 1
$ 7.56/TON
CARBON OFFSET ENTITY 2
$ 8.16/TON
SEQUESTERING
1150
CARBON OFFSET ENTITY 3
$ 9.60/TON
CARBON OFFSET ENTITY 4
$ 8.96/TON
1160
ALL
$ 8.06/TON
ADVERTISEMENTS
ADVERTISEMENTS
1170
BUY
BACK
1100

Figure 11

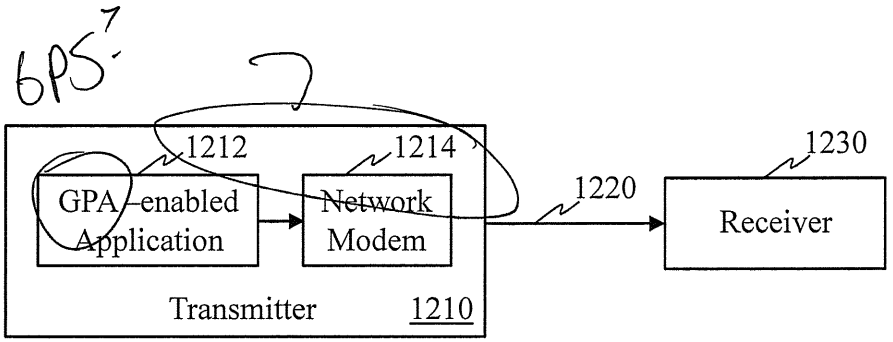
1212
1214
1230
GPA-enabled Application
Network Modem
1220
Receiver
Transmitter
1210
1200

Figure 12

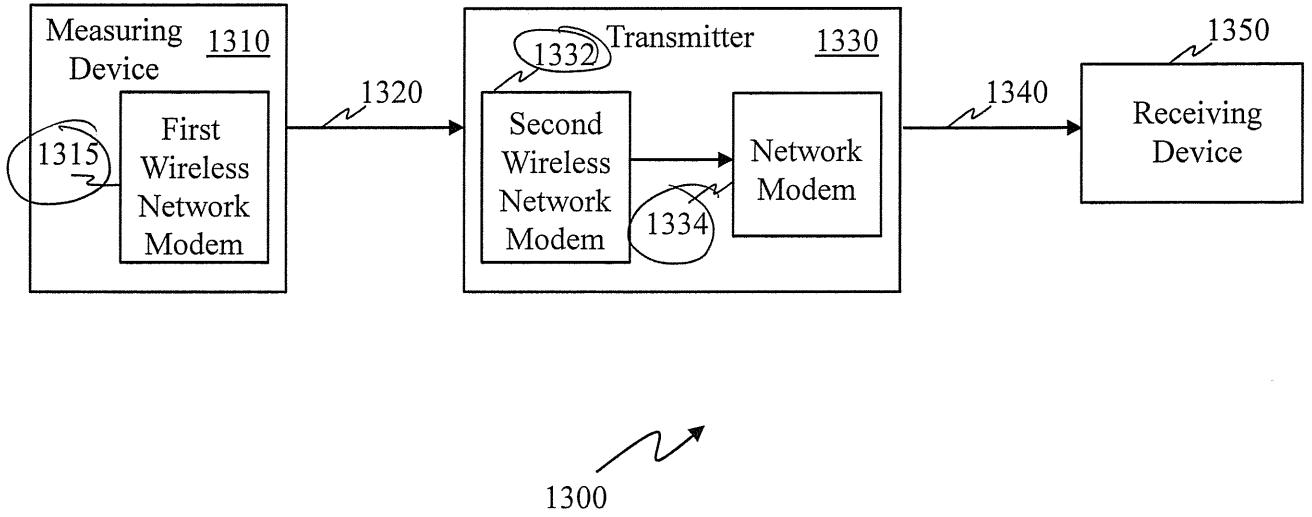
Measuring Device 1310
1315
First Wireless Network Modem
1320
Transmitter 1330
1332
Second Wireless Network Modem
1334
Network Modem
1340
1350
Receiving Device
1300

Figure 13