TITLE OF THE INVENTION

Systems and Methods for Calculating and Offsetting Personal Carbon Generation

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] [Not Applicable]

- Pretty solid Background
- Some validation, but not as focused + clear as we might want
- Claims are better, but still need some work

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BACKGROUND OF THE INVENTION

[0002] The present invention generally relates to a system for removal of carbon generated by an individual. More particularly, the present invention relates to a system that allows individuals to measure the amount of carbon put into the atmosphere though various activities, followed by purchasing services to remove the amount of carbon generated from the atmosphere.

[0003] A current overwhelming concern of the humans worldwide is that of global warming. If we continue to consume resources at current levels, we will be faced with the continued degradation of the Earth's atmosphere. This in turn may lead to an increase in health issues including death, the rising of sea levels, and a serious burden to wildlife that rely on ice structures to survive. Natural Resources Defense Council, The Consequences of Global Warming, http://www.nrdc.org/globalwarming/fcons.asp. Additionally, there is an increased risk of drought, fire, and flooding throughout populated areas. The Nature Conservancy, Climate Change Impacts, http://www.nature.org/initiatives/climatechange/issues/. This is certainly a problem that affects not only the human race, but all of the animals and wildlife that make up the Earth's many ecosystems.

[0004] Several prior art systems ~~exist to~~ address the problem of overwhelming carbon generation. The system of Hamilton et al., U.S. Appl. No. 12/138,761 discloses a system for allocating carbon offsets for activities relating to printing items with a printer. In the Hamilton system, when the size of a print job has been determined, a total amount of carbon offset required for the print job is then calculated, and the user has the option to

purchase that service to remove the corresponding amount of carbon from the atmosphere.

[0005] Another example of a prior art system to address the problem of carbon generation is disclosed in Lilly, U.S. Appl. No. 12/276,389. In the method of Lilly, carbon generating activities are calculated, and a Carbon Quotient (also known as a Consumption Quotient) is affixed as a label to designate the impact that the activity has on the environment. As disclosed in Lilly page 2, paragraphs 0043 to 0046, the purpose of the invention is to allow individuals to clearly see the impact of the activity, as well as have a uniform rating system of activities.

[0006] Another example of a prior art system to address the problem of carbon generation is disclosed in Palanchian et al., U.S. Appl. No. 12/271,433. In the system of Palanchian, a user contributes funds to a renewable energy trust fund, which in turn provides funding for the development of renewable energy. The system of Palanchian states on page 5 paragraph 0063 that users have the ability to purchase renewable energy credits based on a 'carbon footprint' calculation, and that these credits go directly towards the funding of a renewable energy trust whose purpose is to advance the field of technology dealing with the consumption of renewable energy.

[0007] Another example of a prior art system to address the problem of carbon generation is disclosed in Reiner et al., U.S. Appl. No. 12/062,340. In the system of Reiner, manufacturers, regulators, corporations, and other such entities utilize a platform to exchange rights associated with environmentally relevant items. This occurs through the usage of a 'dashboard system' which enables the manufacturer, regulator,

corporation, or the like to make decisions regarding transactions involving environmentally relevant items.

[0008] The prior art systems to address the problem of carbon generation have several disadvantages for the individual user. First, the system of Hamilton is greatly limited in its scope. The system in Hamilton only applies in the area of printing documents, and the purchasing of services that remove carbon generated solely by this activity. This is a disadvantage because the everyday individual partakes in many additional activities throughout their daily lives which result in carbon being emitted into the atmosphere. A system that only provides for the removal carbon which is generated through printing tasks is only addressing a relatively small part of the problem of carbon generation.

[0009] Second, the system of Lilly discloses the calculation of carbon creating events, and merely provides a system of notations that potential consumers may see and make purchasing decisions based thereupon. This is a disadvantage because it limits the types of user activities which may be considered carbon producing to only those that have labels affixed. Additionally, the system of Lilly does not provide for the removal of carbon from the atmosphere which the user has generated through various activities.

OK, this is general enough not to implicate our invention

[0010] Next, the system of Palanchian only addresses user purchases which are made to contribute to renewable energy trust funds. This is a disadvantage because not only do these trust funds not remove any carbon in the atmosphere caused by the user, they only address technology dealing with renewable energy sources. The system of Palanchian essentially only involves the funding of new technologies that ultimately ~~will~~ result in the additional generation of carbon in the atmosphere. While there are benefits

to systems of this sort, they do not directly address the current issue we are faced with: removing carbon from the atmosphere.

[0011] Further still, while it is important to consider all sources of activities which produce carbon, a principal area of concern is the actions of everyday consumers. While the system of Reiner addresses entities such as manufacturers, corporations, and the like, there are many activities that the everyday person undertakes which result in carbon being emitted to the atmosphere. The system of Reiner does not address these activities, nor does it offer a way for consumers to purchase services that remove the carbon from the atmosphere which was emitted by them through the various activities.

BRIEF SUMMARY OF THE INVENTION

[0012] One or more of the embodiments of the present invention provide a system for calculating and offsetting personal carbon generation. The system includes a number of monitoring devices, a computing device, a central server, and carbon offset entities. The monitoring devices are in bidirectional communication with the central server, which is in bidirectional communication with the computing device and carbon offset entities.

[0013] In operation, the monitoring devices first monitor various activities which result in the generation of carbon. Once data representing these carbon producing activities has been generated, it is sent to the central server for additional calculations. The central server then determines the amount of carbon put into atmosphere through different user activities. The user may then access an internet website which displays the amount of carbon generated through different user activities. Next, a list of products is shown that will remove the corresponding amount of carbon from the atmosphere. The user has the ability to select which product he or she wishes to purchase, as well as allowing the system to automatically determine the amount of carbon put into the atmosphere by various user activities, as well as to automatically purchase services which will remove the corresponding amount of carbon from the atmosphere.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] Figure 1 illustrates a block diagram of a system for calculating and offsetting personal carbon generation.

[0015] Figure 2 illustrates a flow chart of a method for transmitting and monitoring data representing a weight measurement.

[0016] Figure 3 illustrates a flow chart of a method of monitoring and updating the data representing weight measurements.

[0017] Figure 4 illustrates a block diagram of a system for transmitting and monitoring data representing a weight measurement.

[0018] Figure 5 illustrates a flow chart of a method of monitoring and updating data representing household energy usage.

[0019] Figure 6 illustrates a block diagram of a system for monitoring and updating data representing household energy usage.

[0020] Figure 7 illustrates a household energy usage monitoring device internet website.

[0021] Figure 8 illustrates a flow chart of a method of monitoring and updating data representing vehicular distance travelled.

[0022] Figure 9 illustrates a block diagram of a system for monitoring and updating data representing vehicular travel.

[0023] Figure 10 illustrates a plan view of the tracking application of Figure 9 in authorization mode.

[0024] Figure 11 illustrates a plan view of the tracking application of Figure 9 in a first distance tracking mode.

[0025] Figure 12 illustrates a plan view of the tracking application of Figure 9 in a stop distance tracking mode.

[0026] Figure 13 illustrates a plan view of the entry screen of the user account of Figure 1.

[0027] Figure 14 illustrates the account home page of the user account of Figure 1.

[0028] Figure 15 illustrates a flow chart of a method for accessing the user account.

[0029] Figure 16 illustrates the account setup page of the user account of Figure 1.

[0030] Figure 17 illustrates a flow chart of a method for configuring the monitoring devices.

[0031] Figure 18 illustrates the monitoring control page of the user account of Figure 1.

[0032] Figure 19 illustrates a flow chart of a method for determining the carbon output.

[0033] Figure 20 illustrates the carbon offset page of the user account of Figure 1.

[0034] Figure 21 illustrates a flow chart of a method for providing services to generate revenue.

[0035] Figure 22 illustrates a flow chart of a method for carbon offsetting.

[0036] Figure 23 illustrates an alternative embodiment to the block diagram of a system for calculating and offsetting personal carbon generation of Figure 1.

DETAILED DESCRIPTION OF THE INVENTION

[0037] Figure 1 illustrates a block diagram of a system for calculating and offsetting personal carbon generation 100 according to an embodiment of the present invention. The system for calculating and offsetting personal carbon generation 100 includes a weight scale 110, a household energy usage monitoring device 120, a vehicular travel monitoring system 130, a computing device 140, a household energy usage monitoring device server 150, a central server 160, and carbon offset entities 170. The computing device 140 includes a data calculation utility 143 and a display device 145. The central server 160 includes computer readable storage 162, a user account 165, a carbon output determination system 168, and a carbon offset selection system 169.

[0038] In the system for calculating and offsetting personal carbon generation 100, the weight scale 110 is in bidirectional communication with the computing device 140. The data calculation utility 143 is an installed application on the computing device 140. The display device 145 is electrically coupled to the computing device 140. Also, the computing device 140 is in bidirectional communication with the central server 160.

[0039] The computer readable storage 162 is in bidirectional communication with the user account 165. The computer readable storage 162 is also in bidirectional communication with the carbon output determination system 168. The computer readable storage 162 is also in bidirectional communication with the carbon offset selection system 169. The household energy usage monitoring device 120 is in bidirectional communication with the household energy usage monitoring device server 150. The household energy usage monitoring device server 150 is in bidirectional

communication with the central server 160. The vehicular travel monitoring system 130 is in bidirectional communication with the central server 160. The carbon offset selection system 169 is in bidirectional communication with the carbon offset entities 170.

[0040] In operation, data representing measurements obtained from the weight scale 110 are provided to the data calculation utility 143. The data representing measurements obtained from the weight scale 110 then undergo a series of steps. The data calculation utility 143 operates on the received data representing measurements obtained from the weight scale 110 to determine if there is a difference between the current weight provided and the weight which was most recently previously transmitted. When a positive difference in weight is detected, this difference is added to the total weight and is transmitted to the central server 160. This data representing a change in the total weight is stored on the computer readable storage 162 located in the central server 160. When the central server 160 receives data representing the change in weight of household waste measured from the weight scale 110, the carbon output determination system 168 generates data representing the corresponding amount of carbon generated by the weight scale 110. This data representing the corresponding amount of carbon generated by the weight scale 110 is then sent to the computer readable storage 162. Upon receiving the data representing the corresponding amount of carbon generated, the data representing the corresponding amount of carbon generated by the weight scale 110 is then sent to the user account 165.

[0041] In further operation, data representing measurements obtained from the household energy usage monitoring device 120 is provided to the household energy usage monitoring device server 150. Upon configuring the server to automatically transmit the

data representing measurements obtained from the household energy usage monitoring device 120 (as seen below in Figure 7), data representing measurements obtained from the household energy usage monitoring device 120 is sent from the household energy usage monitoring device server 150 and is stored on the computer readable storage 162 located in the central server 160. This data representing the measurements obtained from the household energy usage monitoring device 120 is then sent to the carbon output determination system 168. Upon receiving the data representing measurements obtained from the household energy usage monitoring device 120, the carbon output determination system 168 generates data representing the corresponding amount of carbon generated based on the measurements obtained from the household energy usage monitoring device 120. This data representing the corresponding amount of carbon generated by household energy usage monitoring device 120 is then sent to the computer readable storage 162. Upon receiving the data representing the corresponding amount of carbon generated, the data representing the corresponding amount of carbon generated from measurements obtained from the household energy usage monitoring device 120 is then sent to the user account 165.

[0042] In further operation, data representing measurements obtained from the vehicular travel monitoring device 130 is provided to the central server 160. This data representing measurements obtained from the vehicular travel monitoring device 130 is then stored on the computer readable storage 162. This data representing measurements obtained from the vehicular travel monitoring device 130 is then sent to the carbon output determination system 168. Upon receiving the data representing measurements obtained from the vehicular travel monitoring device 130, the carbon output determination system

168 generates data representing the corresponding amount of carbon measured by the vehicular travel monitoring device 130. This data representing the corresponding amount of carbon generated from measurements obtained from the vehicular travel monitoring device 130 is then sent to the computer readable storage 162. Upon receiving the data representing the corresponding amount of carbon generated, the data representing the corresponding amount of carbon generated from measurements obtained from the vehicular travel monitoring device 130 is then sent to the user account 165.

[0043] In further operation, data representing the corresponding amount of carbon generated by the weight scale 110, data representing the corresponding amount of carbon generated from measurements obtained from the household energy usage monitoring device 120, and data representing the corresponding amount of carbon generated from measurements obtained from the vehicular travel monitoring device 130 is sent to the carbon offset selection system 169. After receiving the data representing the corresponding amount of carbon generated by the weight scale 110, data representing the corresponding amount of carbon generated from measurements obtained from the household energy usage monitoring device 120, and data representing the corresponding amount of carbon generated from measurements obtained from the vehicular travel monitoring device 130, the three sets of data are added together to create a total carbon output value. The system then communicates with carbon offset entities 170, and selects appropriate carbon offset entities 170 to offset the amount of carbon generated as determined by the carbon output determination system 168. This data is then transmitted to the central server 160, and stored on the computer readable storage 162. This data is then sent to the user account 165.

[0044] In further operation, when the user accesses the user account 165 as seen below in Figure 13 through the display 145 connected to the computing device 140, the user views the data representing the corresponding amount of carbon generated by the weight scale 110, data representing the corresponding amount of carbon generated from measurements obtained from the household energy usage monitoring device 120, and data representing the corresponding amount of carbon generated from measurements obtained from the vehicular travel monitoring device 130, as well as the data representing appropriate carbon offset entities 170 to offset the amount of carbon generated as determined by the carbon output determination system 168. The user then has the opportunity to purchase appropriate carbon offset entities 170 at this time.

[0045] The weight scale 110 also communicates directly to the data calculation utility 143 installed onto the computing device 140. Next, data representing measurements obtained from the weight scale 110 are received by the data calculation utility 143 installed onto the computing device 140 and calculations in differences in weight (as seen below in Figure 3) are performed on the computing device 140. This data is then sent to the computer readable storage 162, which transmits the data to the user account 165.

[0046] In a preferred embodiment, the user sets up the purchase of carbon offset entities 170 to occur automatically through the user account 165.

[0047] In an alternative embodiment, the weight scale 110 of Figure 1 conducts an article-by-article analysis of all items in the trash receptacle to provide more accurate carbon output data.

[0048] In an alternative embodiment, the user does not have to use any of the weight scale 110 of Figure 1, the household energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1. The user manually enters in values that the weight scale 110 of Figure 1, the household energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1 automatically measure and communicate to the user account 165 of Figure 1.

[0049] In an alternative embodiment, the system for calculating and offsetting personal carbon generation 100 is represented and described below in Figure 23.

[0050] Figure 2 illustrates a flow chart of a method for transmitting and monitoring data representing a weight measurement 200. First, at step 210, the weight is measured by the weight scale 110 of Figure 1.

[0051] Next, at step 220, the weight scale 110 of Figure 1 converts the weight measurement to data representing the weight measurement. The conversion occurs to transmit the data.

[0052] Next, at step 230, the data representing the weight measured on the weight scale 110 is communicated to the data calculation utility 143 of Figure 1 located on computing device 140 of Figure 1. This occurs by determining whether there is an active communication network between the scale 110 of Figure 1 and the computing device 140 of Figure 1. When there is a communication between the scale 110 of Figure 1 and the computing device 140 of Figure 1, the method for transmitting data proceeds to step 237. When there is not a communication between the scale 110 of Figure 1 and the computing device 140 of Figure 1, the method for transmitting data proceeds to step 235. The communicating is performed by transmitting the data.

[0053] Next, at step 235, the scale 110 of Figure 1 waits for an elapsed time of one minute, then proceed to step 230.

[0054] Next, at step 237, the scale 110 of Figure 1 communicates the data to the computing device.

[0055] Next, at step 240, the data calculation utility 143 of Figure 1 located on computing device 140 of Figure 1 receives the data representing the weight measured on the weight scale 110 of Figure 1.

[0056] Next, at step 250, the computing device 140 of Figure 1 communicates the data representing the weight measured on the weight scale 110 of Figure 1 to the central server 160 of Figure 1 located on the central server 160 of Figure 1. This occurs by determining whether there is a communication between the computing device 140 of Figure 1 and the central server 160 of Figure 1. When there is a communication between the computing device 140 of Figure 1 and the central server 160 of Figure 1, the method for transmitting data proceeds to step 257. When there is not a communication between the computing device 140 of Figure 1 and the central server 160 of Figure 1, the method for transmitting data proceeds to step 255. The communicating is performed by transmitting the data.

[0057] Next, at step 255, the computing device 140 of Figure 1 waits for an elapsed time of one minute, then proceeds to step 250.

[0058] Next, at step 257, the computing device 140 of Figure 1 communicates the data to the computing device.

[0059] Next, at step 260, the data representing the weight measured on the weight scale 110 of Figure 1 is received by the central server 160 of Figure 1.

[0060] Next, at step 270, the computer readable storage 162 of Figure 1 stores the data representing the weight measured on the weight scale 110 of Figure 1. This is to allow for future access of the data

[0061] Next, at step 280, the data representing the weight measured on the weight scale 110 of Figure 1 is communicated to the computing device 140 of Figure 1 by the central server 160 of Figure 1. The communicating is performed by the communicating device accessing the user account 165.

[0062] Next, at step 290, the display device 145 of Figure 1 displays the data communicated from the central server 160 of Figure 1 to the computing device 140 of Figure 1. This is to allow a user to observe the data representing the weight measured on the weight scale 110 of Figure 1.

[0063] In a preferred embodiment, the communication between the scale 110 of Figure 1 and the computing device 140 of Figure 1 occurs through a Bluetooth device.

[0064] In a preferred embodiment, when trash is emptied, the data calculation utility 143 of Figure 1 recognizes the substantial decrease in weight, and accepts the reduced weight as a new starting value for future calculations.

[0065] In another embodiment, the communication between the scale 110 of Figure 1 and the computing device 140 of Figure 1 occurs through a wired or wireless internet network.

[0066] In another embodiment, the data representing the weight measured on the weight scale 110 of Figure 1 is communicated directly from the weight scale 110 of Figure 1 to the central server 160 of Figure 1.

[0067] In another embodiment, the data representing the weight measured on the weight scale 110 of Figure 1 is automatically communicated to the data calculation utility 143 of Figure 1 located on computing device 140 of Figure 1 on a periodic basis of one time per minute.

[0068] Figure 3 illustrates a flow chart of a method of monitoring and updating the data representing weight measurements 300 taken from weight scale 110 of Figure 1. First, at step 310, the weight scale 110 of Figure 1 periodically measures the weight of items placed thereupon.

[0069] Next, at step 320, the weight scale 110 of Figure 1 converts the weight measurement to data representing the weight measurement. The conversion occurs to transmit the data.

[0070] Next, at step 330, the weight scale 110 of Figure 1 communicates the data to the computing device 140 of Figure 1 as outlined in steps 230-240 of Figure 2 as seen above.

[0071] Next, at step 340, the data calculation utility 143 of Figure 1 compares the current data representing the weight measurement taken from weight scale 110 of Figure 1 with previous data representing the weight measurement taken from weight scale 110 of Figure 1. This is done through the computing device 140 of Figure 1 communicating with the data representing the weight measurement taken from weight scale 110 of Figure

1 located on the computer readable storage 162 of Figure 1 on central server 160 of Figure 1. When there is a positive difference between the data representing the weight measurement taken from the weight scale 110 of Figure 1, the method of monitoring and updating the data representing weight measurements taken from weight scale 110 of Figure 1 proceeds to step 350. When there is not a difference between the data representing the weight measurement taken from the weight scale 110 of Figure 1 of five or more pounds, the method of monitoring and updating the data representing weight measurements taken from weight scale 110 of Figure 1 proceeds to step 345.

[0072] Next, at step 345, the weight scale 110 of Figure 1 disregards the small change in weight measured and waits for an elapsed time of one minute, then proceeds to step 310. Weight measurements of less than five pounds are disregarded because they may be due to evaporation or measurement inconsistencies of the weight scale 110 of Figure 1.

[0073] Next, at step 350, the data representing the weight measurement taken by the weight scale 110 of Figure 1 is communicated from the computing device 140 of Figure 1 to the central server 160 of Figure 1 as outlined in steps 250-260 of Figure 2 as seen above.

[0074] Next, at step 360, the difference between the current and past data representing the weight measurements taken from weight scale 110 of Figure 1 is added to the previous value of weight measured by the weight scale 110 of Figure 1.

[0075] Next, at step 370, the updated data representing the weight measurement taken from weight scale 110 of Figure 1 is stored on the computer readable storage 162 of Figure 1.

[0076] In a preferred embodiment, if the weight measured by weight scale 110 of Figure 1 is more than five pounds less than the previous measurement taken by weight scale 110 of Figure 1, this value is not be communicated to the central server 160 of Figure 1, but is disregarded by the data calculation utility 143 of Figure 1. Additionally, the data calculation utility 143 of Figure 1 resets the weight to zero to reflect a significant drop in weight measured by the weight scale 110 of Figure 1. An example of such a situation would be the measurement taken by weight scale 110 of Figure 1 after the trash has been emptied, thus there would be no weight on the weight scale.

[0077] In a preferred embodiment, when there is a positive difference between the data representing the weight measurement taken from the weight scale 110 of figure 1 of five or more pounds, the data calculation utility 143 of figure 1 adds this increase to the previous value measured by the weight scale 110 of Figure 1.

[0078] In another embodiment, the user is able to 'zero' the weight measurement of the trash through a command on in the data calculation utility 143 of Figure 1. This allows the data calculation utility to solely measure the weight of the trash measured by weight scale 110 of Figure 1.

[0079] Figure 4 illustrates a block diagram of a system for transmitting and monitoring data representing a weight measurement 400. The system for transmitting and monitoring data representing a weight measurement 400 includes the weight scale 110 of Figure 1, the computing device 140 of Figure 1, and the central server 160 of Figure 1. The weight scale 110 of Figure 1 further includes a weight measurement element 413, a measurement converting element 415 and a weight scale data communicating element 418. The computing device 140 of Figure 1 includes the data

calculation utility 143 of Figure 1, the display device 145 of Figure 1, a first computing device data communicating element 441, and a second computing device data communicating element 444. The central server 160 of Figure 1 includes the computer readable storage 162 of Figure 1, the user account 165 of Figure 1, the carbon output determination system 168, and a server data communicating element 463.

[0080] In the system for transmitting and monitoring data representing a weight measurement 400, the weight measurement element 413 of the weight scale 110 of Figure 1 provides measurements to the data converting element 415 of the weight scale 110 of Figure 1. Also, the data converting element 415 of the weight scale 110 of Figure 1 is in bidirectional communication with the weight scale data communicating element 418 of the weight scale 110 of Figure 1. The weight scale data communicating element 418 of the weight scale 110 of Figure 1 is in bidirectional communication with the first computing device data communicating element 441 of the computing device 140 of Figure 1. The first computing device data communicating element 441 of the computing device 140 of Figure 1 provides data to the data calculation utility 143 of Figure 1. The data calculation utility 143 of Figure 1 provides data to the second computing device data communicating element 444 of the computing device 140 of Figure 1. The second computing device data communicating element 444 of the computing device 140 of Figure 1 is in bidirectional communication with the server data communicating element 463 of the central server 160 of Figure 1. Also, the computing device 140 of Figure 1 is electronically coupled to the display 145 of Figure 1. The server data communicating element 463 of the central server 160 of Figure 1 is in bidirectional communication with the computer readable storage 162 of the central server 160 of Figure 1. The computer

readable storage 162 of the central server 160 of Figure 1 is in bidirectional communication with the carbon output determination system 168 of the central server 160 of Figure 1. The computer readable storage 162 of the central server 160 of Figure 1 is also in bidirectional communication with the user account 165 of the central server 160 of Figure 1.

[0081] In operation, the weight measurement element 413 of the weight scale 110 of Figure 1 measures the weight of items placed thereupon. This measurement is then converted to data representing the measurement taken by the weight scale 110 of Figure 1 by the data converting element 415. The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated to the weight scale data communicating element 418 of the weight scale 110 of Figure 1.

[0082] The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated by the weight scale communicating element 418 of the weight scale 110 of Figure 1 to the first computing device data communicating element 441 of the computing device 140 of Figure 1. The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated to the data calculating utility 143 of the computing device 140 of Figure 1. The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated to the second computing device data communicating element 444 of the computing device 140 of Figure 1. The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated to the server communication element 463 of the central server 160 of Figure 1.

[0083] The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated by the server communicating element 463 of the central server 160 of Figure 1 to the computer readable storage 162 of Figure 1 of the central server 160 of Figure 1. The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated to the user account 165 of Figure 1 of the central server 160 of Figure 1 or the carbon output determining system 168 of Figure 1 of the central server 160 of Figure 1.

[0084] In further operation the data representing a measurement taken by the weight scale 110 of Figure 1 is communicated from the carbon output determining system 168 of Figure 1 of the central server 160 of Figure 1 to the computer readable storage 162 of Figure 1 of the central server 160 of Figure 1, where it is stored. The data representing a measurement taken by the weight scale 110 of Figure 1 is then communicated to the server communicating element 463 of the central server 160 of Figure 1. The user then uses the display 145 of Figure 1 electronically linked to the computing device 140 of Figure 1 to access the user account 165 of Figure 1 and view the data representing a measurement taken by the weight scale 110 of Figure 1.

[0085] In a preferred embodiment, the weight scale is a HD-351BT wireless digital weight scale.

[0086] In an alternative embodiment, the weight scale is a different weight scale provided by the user.

[0087] In a preferred embodiment, the weight scale data communicating element 418 of the weight scale 110 of Figure 1 is a Bluetooth transmitter and communicates with

the first computing device data communicating element 441 of the computing device 140 of Figure 1 by a Bluetooth network.

[0088] In an alternative embodiment, the weight scale data communicating element 418 of the weight scale 110 of Figure 1 is a wired or wireless internet transmitter and communicates with the first computing device data communicating element 441 of the computing device 140 of Figure 1 by a wired or wireless internet connection.

[0089] In a preferred embodiment, the weight measurement element 413 of the weight scale 110 of Figure 1 takes weight measurements on a periodic basis, preferably one measurement every minute. In a preferred embodiment, the weight measurement element 413 of the weight scale 110 of Figure 1 provides data to the data converting element 415 of the weight scale 110 of Figure 1 on a periodic basis, preferably at a rate of one transmission per minute. In a preferred embodiment, the data converting element 415 of the weight scale 110 of Figure 1 provides data to the weight scale data communicating element 418 of the weight scale 110 of Figure 1 on a periodic basis, preferably at a rate of one transmission per minute. In a preferred embodiment, the weight scale data communicating element 418 of the weight scale 110 of Figure 1 provides data to the first computing device data communicating element 441 of the computing device 140 of Figure 1 on a periodic basis, preferably at a rate of one transmission per minute. In a preferred embodiment, the first computing device data communicating element then provides data to the data calculating utility 143 of Figure 1 on a periodic basis, preferably at a rate of one transmission per minute.

[0090] In an alternative embodiment, the weight measurement element 413 of the weight scale 110 of Figure 1 takes weight measurements upon user command. In an

alternative embodiment, the weight measurement element 413 of the weight scale 110 of Figure 1 measures the weight at a rate faster or slower than one measurement per minute. In an alternative embodiment, the weight measurement element 413 of the weight scale 110 of Figure 1 provides data to the data converting element 415 of the weight scale 110 of Figure 1 upon user command. In an alternative embodiment, the data converting element 415 of the weight scale 110 of Figure 1 provides data to the weight scale data communicating element 418 of the weight scale 110 of Figure 1 upon user command. In an alternative embodiment, the weight scale data communicating element 418 of the weight scale 110 of Figure 1 provides data to the first computing device data communicating element 441 of the computing device 140 of Figure 1 upon user command. In an alternative embodiment, the first computing device data communicating element then provides data to the data calculating utility 143 of Figure 1 upon user command.

[0091] In another preferred embodiment, the second computing device data communicating element 444 of computing device 140 of Figure 1 communicates with the server communicating element 463 of the central server 160 of Figure 1 through a wireless or wired internet connection.

[0092] In an alternative embodiment, the weight scale 110 of Figure 1 conducts an article-by-article analysis of all items in the trash receptacle to provide more accurate carbon output data.

[0093] Figure 5 illustrates a flow chart of a method of monitoring and updating data representing household energy usage 500 taken from household energy usage

monitoring device 120 of Figure 1. First, at step 510, the household energy usage monitoring device 120 of Figure 1 periodically measures the household energy usage.

[0094] Next, at step 520, the household energy usage monitoring device 120 of Figure 1 converts the energy usage measurement to data representing the energy usage measurement of the household energy usage monitoring device 120 of Figure 1. The conversion occurs to communicate the data.

[0095] Next, at step 530, the household energy usage monitoring device 120 of Figure 1 attempts to establish communication with the household energy usage monitoring device server 150 of Figure 1. When communication between the household energy usage monitoring device 120 of Figure 1 and the household energy usage monitoring device server 150 of Figure 1 does not occur, the method of monitoring and updating the data representing household energy usage 500 proceeds to step 535. When communication between the household energy usage monitoring device 120 of Figure 1 and the household energy usage monitoring device server 150 of Figure 1 does occur, the method of monitoring and updating the data representing household energy usage 500 proceeds to step 537.

[0096] Next, at step 535, the household energy usage monitoring device 120 of Figure 1 waits an elapsed time of one minute, then proceed to step 530.

[0097] Next, at step 537, the household energy usage monitoring device 120 of Figure 1 communicates the data to the computing device.

[0098] Next, at step 540, the data representing the energy usage measurement of the household energy usage monitoring device 120 of Figure 1 is received from the

household energy usage monitoring device 120 of Figure 1 to the household energy usage monitoring device server 150 of Figure 1, where it is stored to a storage partition.

[0099] Next, at step 550, the household energy usage monitoring device server 150 of Figure 1 attempts to establish communication with the central server 160 of Figure 1. When communication between the household energy usage monitoring device server 150 of Figure 1 and the central server 160 of Figure 1 does not occur, the method of monitoring and updating the data representing household energy usage 500 proceeds to step 555. When communication between the household energy usage monitoring device server 150 of Figure 1 and the central server 160 of Figure 1 does occur, the method of monitoring and updating the data representing household energy usage 500 proceeds to step 560.

[00100] Next, at step 555, the household energy usage monitoring device server 150 of Figure 1 waits an elapsed time of one minute, then proceed to step 550.

[00101] Next, at step 560, the data representing the energy usage measurement taken by the household energy usage monitoring device 120 of Figure 1 is communicated from the household energy usage monitoring device server 120 of Figure 1 to the central server 160 of Figure 1,

[00102] Next, at step 570, the data representing the energy usage measurement taken by the household energy usage monitoring device 120 of Figure 1 is stored on the computer readable storage 162 of Figure 1, overwriting any previous data representing the energy usage measurement taken by the household energy usage monitoring device 120 of Figure 1.

[00103] In a preferred embodiment, the user enters a command to make the data representing the energy usage measurement taken by the household energy usage monitoring device 120 of Figure 1 automatically be communicated from the household energy usage monitoring device server 150 of Figure 1 to the central server 160 of Figure 1. This command is located on the internet website of the household energy usage monitoring device 120 of Figure 1.

[00104] In a preferred embodiment, the household energy usage monitoring device 120 of Figure 1 is the EnergyHub device.

[00105] In an alternative embodiment, the household energy usage monitoring device 120 of Figure 1 is one of a number of devices, including the Tendril, Onzo, Agilewaves, Google PowerMeter, Greenbox, The Energy Detective, PowerMand, Green Energy Options, and Energy Aware.

[00106] In an alternative embodiment, the household energy usage monitoring device 120 of Figure 1 measures the energy usage and communicate the data representing the measurements only when prompted to do so by the user.

[00107] Figure 6 illustrates a block diagram of a system for monitoring and updating data representing household energy usage 600 taken from household energy usage monitoring device 120 of Figure 1. The system for monitoring and updating data representing household energy usage 600 includes the household energy usage monitoring device 120 of Figure 1, the household energy usage monitoring device server 150 of Figure 1, the central server 160 of Figure 1, and the computing device 140 of Figure 1. The household energy usage monitoring device 120 of Figure 1 further includes an energy usage measurement element 623, a measurement converting element

625 and a household energy usage monitoring device data communicating element 628. The household energy usage monitoring device server 150 of Figure 1 includes a household energy usage monitoring device server data communicating element 653 and a data storage element 655. The central server 160 of Figure 1 includes the computer readable storage 162 of Figure 1, the user account 165 of Figure 1, the carbon output determination system 168 of Figure 1, and a server data communicating element 463 of Figure 4. The computing device 140 of Figure 1 further includes the second computing device communicating element 444 of Figure 4, and the display 145 of Figure 1.

[00108] In the system for monitoring and updating data representing household energy usage 600, the energy usage measurement element 623 of the household energy usage monitoring device 120 of Figure 1 provides measurements to the data converting element 625 of the household energy usage monitoring device 120 of Figure 1. Also, the data converting element 625 of the household energy usage monitoring device 120 of Figure 1 is in bidirectional communication with the household energy usage monitoring device data communicating element 628 of the household energy usage monitoring device 120 of Figure 1. The household energy usage monitoring device data communicating element 628 of the household energy usage monitoring device 120 of Figure 1 is in bidirectional communication with the household energy usage monitoring device server data communicating element 653 of the household energy usage monitoring device server 150 of Figure 1. The household energy usage monitoring device server data communicating element 653 of the household energy usage monitoring device server 150 of Figure 1 is in bidirectional communication with the data storage element 655 of the household energy usage monitoring device server 150 of Figure 1. The household

energy usage monitoring device server data communicating element 653 of the household energy usage monitoring device server 150 of Figure 1 is in bidirectional communication with the server data communicating element 463 of the central server 160 of Figure 1. The server data communicating element 463 of the central server 160 of Figure 1 is in bidirectional communication with the computer readable storage 162 of the central server 160 of Figure 1. The computer readable storage 162 of the central server 160 of Figure 1 is in bidirectional communication with the carbon output determination system 168 of the central server 160 of Figure 1. The computer readable storage 162 of the central server 160 of Figure 1 is also in bidirectional communication with the user account 165 of the central server 160 of Figure 1. The second computing device data communicating element 444 of Figure 4 is in bidirectional communication with the server communicating element 463 of Figure 4. The display device 145 of Figure 1 is electrically linked to the computing device 140 of Figure 4.

[00109] In operation, the energy usage measurement element 623 of the household energy usage monitoring device 120 of Figure 1 measures the amount of household energy consumed. This measurement is then converted to data representing the measurement taken by the household energy usage monitoring device 120 of Figure 1 by the data converting element 625. The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated to the household energy usage monitoring device data communicating element 628 of the household energy usage monitoring device 120 of Figure 1.

[00110] The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated by the household energy usage

monitoring device communicating element 628 of the household energy usage monitoring device 120 of Figure 1 to the household energy usage monitoring device server data communicating element 653 of the household energy usage monitoring device server 150 of Figure 1. The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated to the data storage element 655 of the household energy usage monitoring device server 150 of Figure 1. The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated to the server communication element 463 of the central server 160 of Figure 1.

[00111] The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated by the server communicating element 463 of the central server 160 of Figure 1 to the computer readable storage 162 of Figure 1 of the central server 160 of Figure 1. The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated to the user account 165 of Figure 1 of the central server 160 of Figure 1 and the carbon output determining system 168 of Figure 1 of the central server 160 of Figure 1.

[00112] In further operation the data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is communicated from the carbon output determining system 168 of Figure 1 of the central server 160 of Figure 1 to the computer readable storage 162 of Figure 1 of the central server 160 of Figure 1, where it is stored. The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated to the server

communicating element 463 of the central server 160 of Figure 1. The user then uses the display 145 of Figure 1 electronically linked to the computing device 140 of Figure 1 to access the user account 165 of Figure 1 and view the data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1.

[00113] In a preferred embodiment, the household energy usage monitoring device 120 of Figure 1 is the EnergyHub device.

[00114] In an alternative embodiment, the household energy usage monitoring device 120 of Figure 1 is one of a number of devices, including the Tendril, Onzo, Agilewaves, Google PowerMeter, Greenbox, The Energy Detective, PowerMand, Green Energy Options, and Energy Aware.

[00115] In an alternative embodiment, the household energy usage monitoring device 120 of Figure 1 measures the energy usage and communicate the data representing the measurements only when prompted to do so by the user, thus not automatically communicating the data from the household energy usage monitoring device server 150 of Figure 1 to the central server 160 of Figure 1.

[00116] Figure 7 illustrates a household energy usage monitoring device internet website 700. The internet website includes a login command 710, and an export to CarbonSaint command 720.

[00117] In operation, a user logs into their household energy usage monitoring device account by engaging the login command 710. Upon logging into the household energy usage monitoring device account by engaging the login command 710, the user can chose to export the data representing measurements taken by the household energy

usage monitoring device 120 of Figure 1 by engaging the export to CarbonSaint command 720.

[00118] In an alternative embodiment, a user does not log in to their account by engaging the login command 710 before exporting the data representing measurements taken by the household energy usage monitoring device 120 of Figure by engaging the export to CarbonSaint command 720.

[00119] Figure 8 illustrates a flow chart of a method of monitoring and updating data representing vehicular distance travelled 800 taken from vehicular travel monitoring system 130 of Figure 1. First, at step 810, the user initiates the tracking application located on the communicating device.

[00120] Next, at step 813 the user engages the tracking function of the tracking application, and begins driving to their destination.

[00121] Next, at step 816, the user halts the tracking function of the tracking application when the user reaches their destination.

[00122] Next, at step 820, the vehicular travel monitoring system 130 of Figure 1 measures the distance travelled using location-based software installed on the communicating device.

[00123] Next, at step 830, the vehicular travel monitoring device 130 of Figure 1 converts the distance travelled measurement to data representing the distance travelled measurement of the vehicular travel monitoring system 130 of Figure 1. The conversion occurs to communicate the data.

[00124] Next, at step 840, the vehicular travel monitoring device 130 of Figure 1 attempts to establish communication with the central server 160 of Figure 1. When communication between the vehicular travel monitoring device 130 of Figure 1 and the central server 160 of Figure 1 does not occur, the method of monitoring and updating the data representing vehicular distance travelled 800 proceeds to step 845. When communication between the vehicular travel monitoring device 130 of Figure 1 and the central server 160 of Figure 1 does occur, the method of monitoring and updating the data representing vehicular distance travelled 800 proceeds to step 847.

[00125] Next, at step 845, the vehicular travel monitoring device 130 of Figure 1 waits an elapsed time of one minute, then proceed to step 840.

[00126] Next, at step 847, the vehicular travel monitoring device 130 of Figure 1 communicates the data to the computing device.

[00127] Next, at step 850, the data representing the vehicular distance travelled measurement taken by the vehicular travel monitoring device 130 of Figure 1 is communicated from the vehicular travel monitoring device 130 of Figure 1 to the central server 160 of Figure 1,

[00128] Next, at step 860, the data representing the vehicular distance travelled measurement taken by the vehicular travel monitoring device 130 of Figure 1 is stored on the computer readable storage 162 of Figure 1, overwriting any previous data representing the energy usage measurement taken by the vehicular travel monitoring device 130 of Figure 1.

[00129] In a preferred embodiment, the vehicular travel monitoring device 130 of Figure 1 is an Apple iPhone, or another GPS-enabled smart phone.

[00130] In a preferred embodiment, the vehicular travel monitoring device 130 of Figure 1 communicates with the central server 160 of Figure 1 through network connection of the vehicular travel monitoring device 130 of Figure 1.

[00131] In an alternative embodiment, the vehicular travel monitoring device 130 of Figure 1 is a device integrated into the vehicle and utilizes its internal GPS system to track the miles driven and transmits this information to the central server 160 of Figure 1. An example of such a device is the OnStar system.

[00132] In an alternative embodiment, Steps 810-850 of the method of monitoring and updating data representing vehicular distance travelled 800 are replaced by the user entering the actual gallons of gasoline consumed into the user account 165, as seen below in Figure 18.

[00133] In an alternative embodiment, Steps 810-850 of the method of monitoring and updating data representing vehicular distance travelled 800 are replaced by the user entering the make and model of the car and manually entering the numbers of miles driven into the user account 165, as seen below in Figure 18.

[00134] In an alternative embodiment, the vehicular travel monitoring device 130 of Figure 1 communicates with the central server 160 of Figure 1 through a wifi network.

[00135] Figure 9 illustrates a block diagram of a system for monitoring and updating data representing vehicular travel 900 taken from vehicular travel monitoring device 130 of Figure 1. The system for monitoring and updating data representing

vehicular travel 900 includes the vehicular travel monitoring device 130 of Figure 1, the central server 160 of Figure 1, and the computing device 140 of Figure 1. The vehicular travel monitoring device 130 of Figure 1 further includes tracking application 933, a data converting element 935, a display device 936, and a vehicular travel monitoring device data communicating element 938. The central server 160 of Figure 1 includes the computer readable storage 162 of Figure 1, the user account 165 of Figure 1, the carbon output determination system 168 of Figure 1, and a server data communicating element 463 of Figure 4. The computing device further includes the second computing device communicating element 444 of Figure 4, and the display device 145 of Figure 1.

[00136] In the system for monitoring and updating data representing vehicular travel 900, the display device 936 is electronically coupled to the vehicular travel monitoring device 130 of Figure 1. The tracking application 933 is installed on the vehicular travel monitoring device 130 of Figure 1. The tracking application 933 of the vehicular travel monitoring device 130 of Figure 1 provides measurements to the data converting element 935 of the vehicular travel monitoring device 130 of Figure 1. Also, the data converting element 935 of the vehicular travel monitoring device 130 of Figure 1 is in bidirectional communication with the vehicular travel monitoring device data communicating element 938 of the vehicular travel monitoring device 130 of Figure 1. The vehicular travel monitoring device data communicating element 938 of the vehicular travel monitoring device 130 of Figure 1 is in bidirectional communication with the server data communicating element 463 of the central server 160 of Figure 1. The server data communicating element 463 of the central server 160 of Figure 1 is in bidirectional communication with the computer readable storage 162 of the central server 160 of

Figure 1. The computer readable storage 162 of the central server 160 of Figure 1 is in bidirectional communication with the carbon output determination system 168 of the central server 160 of Figure 1. The computer readable storage 162 of the central server 160 of Figure 1 is also in bidirectional communication with the user account 165 of the central server 160 of Figure 1. The second computing device data communicating element 444 of Figure 4 is in bidirectional communication with the server communicating element 463 of Figure 4. The display device 145 of Figure 1 is electrically linked to the computing device 140 of Figure 4.

[00137] In operation, the display device 936 displays the tracking application 933 of the vehicular travel monitoring device 130 of Figure 1. The tracking application 933 of the vehicular travel monitoring device 130 of Figure 1 measures distance travelled by the vehicle. This measurement is then converted to data representing the measurement taken by the vehicular travel monitoring device 130 of Figure 1 by the data converting element 935. The data representing a measurement taken by the vehicular travel monitoring device 130 of Figure 1 is then communicated to the vehicular travel monitoring device data communicating element 938 of the vehicular travel monitoring device 130 of Figure 1.

[00138] The data representing a measurement taken by the vehicular travel monitoring device 130 of Figure 1 is then communicated by the vehicular travel monitoring device communicating element 938 of the vehicular travel monitoring device 130 of Figure 1 to the server communication element 463 of the central server 160 of Figure 1.

[00139] The data representing a measurement taken by the vehicular travel monitoring device 130 of Figure 1 is then communicated by the server communicating element 463 of the central server 160 of Figure 1 to the computer readable storage 162 of Figure 1 of the central server 160 of Figure 1. The data representing a measurement taken by the vehicular travel monitoring device 130 of Figure 1 is then communicated to the user account 165 of Figure 1 of the central server 160 of Figure 1 and the carbon output determining system 168 of Figure 1 of the central server 160 of Figure 1.

[00140] In further operation, the data representing a measurement taken by the vehicular travel monitoring device 130 of Figure 1 is communicated from the carbon output determining system 168 of Figure 1 of the central server 160 of Figure 1 to the computer readable storage 162 of Figure 1 of the central server 160 of Figure 1, where it is stored. The data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1 is then communicated to the server communicating element 463 of the central server 160 of Figure 1. The user then uses the display 145 of Figure 1 electronically linked to the computing device 140 of Figure 1 to access the user account 165 of Figure 1 and view the data representing a measurement taken by the household energy usage monitoring device 120 of Figure 1.

[00141] In a preferred embodiment, the vehicular travel monitoring device 130 of Figure 1 is an Apple iPhone, or another GPS-enabled smart phone.

[00142] In a preferred embodiment, the vehicular travel monitoring device 130 of Figure 1 communicates with the central server 160 of Figure 1 through network connection of the vehicular travel monitoring device 130 of Figure 1.

[00143] In a preferred embodiment, the vehicular travel monitoring device 130 of Figure automatically communicates the data representing the distance traveled to the sever 160 of Figure 1.

[00144] In another embodiment, the vehicular travel monitoring device 130 of Figure 1 of the system for monitoring and updating data representing vehicular travel 900 is merely replaced by the user inputting the actual gallons of gasoline consumed in vehicular travel into the user account 165 of Figure 1.

[00145] In another embodiment, the vehicular travel monitoring device 130 of Figure 1 of the system for monitoring and updating data representing vehicular travel 900 is merely replaced by the user inputting the make and model, as well as the number of miles driven through vehicular travel into the user account 165 of Figure 1.

[00146] In another embodiment, the communication between the vehicular travel monitoring device data communicating element 938 and the server communicating element 463 of Figure 4 is through a wireless fidelity network.

[00147] Figure 10 illustrates a plan view of the tracking application 933 of Figure 9 of the vehicular travel monitoring device 130 of Figure 1 in authorization mode 1000. The vehicular travel monitoring device 130 of Figure 1 includes display device 936 of Figure 9, and the tracking application 933 of Figure 9. The tracking application 933 of Figure 9 includes a user input section 1020.

[00148] In the vehicular travel monitoring device 130 of Figure 1, the display device 936 of Figure 9 is in electronic communication with the vehicular travel monitoring device 130 of Figure 1. The display device 936 of Figure 9 is also in

electronic communication with the tracking application 933 of Figure 9. The user input section 1020 is in electrical communication with the vehicular travel monitoring device 130 of Figure 1. The vehicular travel monitoring device 130 of Figure 1 is in bidirectional communication with the central server 160 of Figure 1.

[00149] In operation, when the tracking application 933 of Figure 9 is in input mode, a user inputs an identifying code in a series of steps. First, the display device 936 of Figure 9, which is preferably an LCD display, shows an "ENTER ACCOUNT CODE" message produced by the tracking application 933 of Figure 9. In response to reading the "ENTER ACCOUNT CODE" message, the user inputs an identifying code by inputting their account code into the user input section 1020 by pressing the screen of the display device 936 of Figure 9. After the user inputs the identifying code, tracking application 933 of Figure 9 generates data representing the identifying code and transmits the data representing the identifying code to the central server 160 of Figure 1.

[00150] The display device 936 is also any suitable device including a LED, a plasma display, an electroluminescent display, or a vacuum fluorescent display tube.

[00151] The user input section 1020 is also any suitable user input devices such as a series of buttons and mechanical rotating dials.

[00152] In an alternative embodiment, the tracking application 933 of Figure 9 does not necessarily include the user input section 1020. Instead, the vehicular travel monitoring device 130 of Figure 1 includes a speaker with voice recognition which is utilized by the tracking application 933 of Figure 9. The voice recognition is preferably implemented with a suitable combination of digital logic. In this embodiment, when a user speaks a pre-determined account code into the speaker, the tracking application 933

of Figure 9 generates data representing the verbal identifying code and transmits the signal representing the identifying code to the central server 160 of Figure 1.

[00153] In yet another embodiment, the tracking application 933 of Figure 9 does not necessarily include the user input section 1020. Instead, the vehicular travel monitoring device 130 of Figure 1 includes a biometric detection device with biometric data recognition which is utilized by the tracking application 933 of Figure 9. The biometric data recognition is preferably implemented with a suitable combination of digital logic. The biometric detection device is also any suitable biometric system including a retinal scanner, a finger print scanner, and a facial recognition scanner.

[00154] Figure 11 illustrates a plan view of the tracking application 933 of Figure 9 of the vehicular travel monitoring device 130 of Figure 1 in a first distance tracking mode 1100. The vehicular travel monitoring device 130 of Figure 1 includes display device 936 of Figure 9, and the tracking application 933 of Figure 9. The tracking application 933 of Figure 9 includes a user input section 1120.

[00155] In the vehicular travel monitoring device 130 of Figure 1, the display device 936 of Figure 9 is in electronic communication with the vehicular travel monitoring device 130 of Figure 1. The display device 936 of Figure 9 is also in electronic communication with the tracking application 933 of Figure 9. The user input section 1120 is in electrical communication with the vehicular travel monitoring device 130 of Figure 1. The vehicular travel monitoring device 130 of Figure 1 is in bidirectional communication with the central server 160 of Figure 1.

[00156] In operation, when the tracking application 933 of Figure 9 is in a first distance tracking mode, the display device 936 of Figure 9, which is preferably a LCD

display, shows a "PUSH TO BEGIN TRIP" message produced by the tracking application 933 of Figure 9. The "PUSH TO BEGIN TRIP" message produced by the tracking application 933 of Figure 9 is located on top of the input section 1120. In response to reading the "PUSH TO BEGIN TRIP" message, the user pushes the user input section 1120 by pressing the screen of the display device 936 of Figure 9. After the user pushes the input section 1120, tracking application 933 of Figure 9 begins to generate data representing the vehicular distance travelled.

[00157] In an alternative embodiment, data generated by the tracking application 933 of Figure 9 is communicated to the central server 160 of Figure 1 continuously as the data is generated by the tracking application.

[00158] Figure 12 illustrates a plan view of the tracking application 933 of Figure 9 of the vehicular travel monitoring device 130 of Figure 1 in a stop distance tracking mode 1200. The vehicular travel monitoring device 130 of Figure 1 includes display device 936 of Figure 9, and the tracking application 933 of Figure 9. The tracking application 933 of Figure 9 includes a user input section 1220.

[00159] In the vehicular travel monitoring device 130 of Figure 1, the display device 936 of Figure 9 is in electronic communication with the vehicular travel monitoring device 130 of Figure 1. The display device 936 of Figure 9 is also in electronic communication with the tracking application 933 of Figure 9. The user input section 1220 is in electrical communication with the vehicular travel monitoring device 130 of Figure 1. The vehicular travel monitoring device 130 of Figure 1 is in bidirectional communication with the central server 160 of Figure 1.

[00160] In operation, when the tracking application 933 of Figure 9 is in a stop distance tracking mode, the display device 936 of Figure 9, which is preferably a LCD display, shows a "PUSH TO END TRIP" message produced by the tracking application 933 of Figure 9. The "PUSH TO END TRIP" message produced by the tracking application 933 of Figure 9 is located on top of the input section 1220. In response to reading the "PUSH TO END TRIP" message, the user pushes the user input section 1220 by pressing the screen of the display device 936 of Figure 9. After the user pushes the input section 1220, tracking application 933 of Figure 9 stops generating data representing the vehicular distance travelled and transmits the data representing the vehicular distance travelled to the central server 160 of Figure 1 as seen in steps 840-850 of Figure 8.

[00161] In another embodiment, data representing the vehicular distance travelled generated by tracking application 933 of Figure 9 is not sent to the central server 160 of Figure 1 until the user instructs the tracking application 933 of Figure 9 to do so.

[00162] Figure 13 illustrates a plan view of the entry screen 1300 of the user account 165 of Figure 1. As described above, the user account is linked to the central server 160 of Figure 1. The entry screen 1300 includes cutting carbon command 1310, carbon saint solution command 1312, forums command 1314, store command 1316, about command 1317, latest news & notices command 1318, advertisements command 1319, and account login command 1320.

[00163] In operation, a user accesses a variety of information from the entry screen 1300. First, the user accesses their account by engaging the account login command 1320, which is explained in further detail in Figure 15 below. The account login

command 1320 then sends the user to the account home page 1400 as seen in further detail in Figure 14 below. Also, the user receives general information regarding the benefits of cutting carbon usage by engaging the cutting carbon command 1310. The user receives an overview of the systems and methods of calculating and offsetting personal carbon generation by engaging the carbon saint solution command 1312. The user receives a discussion board where the user can discuss specific topics and share tips for lowering carbon generation with other users by engaging the forums command 1314. The user purchases monitoring devices, as well as other products of interest by engaging the store command 1316. The user receives information about the corporation by engaging the about command 1317. The user accesses any updates and alerts by engaging the latest news & notices command 1318. Finally, the user selects advertisements by engaging the advertisement command 1319. The purpose of the advertisements is to generate revenue, as seen below in Figure 21.

[00164] Figure 14 illustrates the account home page 1400 of the user account 165 of Figure 1. As described above, the user account 165 of Figure 1 is located on the central server 160 of Figure 1. The account home page 1400 includes the cutting carbon command 1310 of Figure 13, the carbon saint solution command 1312 of Figure 13, the forums command 1314 of Figure 13, the store command 1316 of Figure 13, the about command 1317 of Figure 13, the latest news & notices command 1318 of Figure 13, advertisements command 1319 of Figure 13, and the account login command 1320 of Figure 13, which were discussed in Figure 13. The account home page 1400 further includes an account setup command 1422, a monitoring control command 1424, a carbon footprint command 1426, and a carbon offset command 1428.

[00165] In operation, the user returns to the account home page 1400 of the user account 165 of Figure 1 by engaging the account login command 1320 of Figure 13 which is explained in further detail in Figure 15 below. Next, the user sets up their account by engaging the account setup command 1422. The user accesses the monitoring control portion of the user account 165 of Figure 1 by engaging the monitoring control command 1424. The user observes the amount of carbon generated by the user by engaging the carbon footprint command 1426. The carbon information from the monitoring devices is displayed on the carbon footprint page. Additionally, the data can be displayed for the user's household as a whole, or by each individual monitoring device. Finally, the user accesses the carbon offsetting portion of the user account 165 by engaging the carbon offset command 1428.

[00166] In an alternative embodiment, the user compares their carbon generation with statistical information by engaging the carbon footprint command 1426. Also, the user is able to display trending data both as a household and on a device-by device basis by engaging the monitoring control command 1424.

[00167] Figure 15 illustrates a flow chart of a method for accessing user account 165 of Figure 1 1500 displayed on the display device 145 of Figure 1. First, at step 1510, the user engages the account login command 1320 of Figure 13.

[00168] Next, at step 1520, the user inputs their account credentials used to access their account.

[00169] Next, at step 1530, the user input data is communicated to the central server 160 of Figure 1.

[00170] Next, at step 1540, the central server 160 of Figure 1 attempts to verify the login information, by comparing the user input data to the credentials data stored on the central server 160 of Figure 1. When the user input data does not match the credentials data, the method for accessing user account 165 of Figure 1 1500 proceeds to step 1545. When the user input data matches the credentials data, the method for accessing user account 165 of Figure 1 1500 proceeds to step 1550.

[00171] Next, at step 1545, the user is sent back to step 1540 to reattempt to access the user account 165 of Figure 1.

[00172] Next, at step 1550, when the server confirms that the user input data matches the credentials data, the central server 160 of Figure 1 grants access to the user account 165 of Figure 1.

[00173] Next, at step 1560, the central server 160 of Figure 1 communicates the account home page 1400 of Figure 14 to the computing device 140 of Figure 1.

[00174] Next, at step 1570, the display device 145 of Figure 1 displays the account home page 1400 of Figure 14.

[00175] In an alternative embodiment, the user opts to bypass steps 1520 to 1550 by opting to allow the server to automatically communicate the account home page 1400 of Figure 14 to the computing device 140 of Figure 1, which the display device 145 of Figure 1 then displays to the user.

[00176] Figure 16 illustrates a plan view of the account setup page 1600 of the user account 165 of Figure 1. As described above, the user account 165 of Figure 1 is located on the central server 160 of Figure 1. The account setup page 1600 includes the cutting

carbon command 1310 of Figure 13, the carbon saint solution command 1312 of Figure 13, the forums command 1314 of Figure 13, the store command 1316 of Figure 13, the about command 1317 of Figure 13, advertisements command 1319 of Figure 13, and the account login command 1320 of Figure 13, which were discussed in Figure 13. The account setup page 1600 also includes an account information section 1610, and a device registration section 1620. The account information section 1610 includes a screen name command 1611, a location command 1613, a household statistics command 1614, a password command 1615, and a payment services command 1616. The device registration section 1620 includes a household waste scale command 1623, an energy hub command 1625, and a vehicle tracking command 1627.

[00177] In operation, the user modifies their user screen name linked to the user account 165 of Figure 1 by engaging the screen name command 1611. For example, the user provides the user account 165 of Figure 1 with information relating to the user's location by engaging the location command 1613. This is of use because the carbon output determination system 168 of Figure 1 determines the source of power provided to determine a multiplier for converting power usage to a carbon output measurement. The user views statistics representing the amount of carbon generated as measured by the weight scale 110 of Figure 1, the household energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1 by engaging the household statistics command 1614. The user modifies their user password linked to the user account 165 of Figure 1 by engaging the password command 1615. The user sets up information regarding payments of carbon offsets by using credit card through engaging the payment services command 1616.

[00178] In operation, the user prepares the weight scale 110 of Figure 1 for communicating data representing measurements taken by the weight scale 110 of Figure 1 by engaging the household waste scale command 1623. This is further explained in Figure 17 below. In operation, the user prepares the household energy usage monitoring device 120 of Figure 1 for communicating data representing measurements taken by the household energy usage monitoring device 120 of Figure 1 by engaging the energy hub command 1625. This is further explained in Figure 7 above. In operation, the user prepares the vehicular travel monitoring system 130 of Figure 1 for communicating data representing measurements taken by the vehicular travel monitoring system 130 of Figure 1 by engaging the vehicle tracking command 1627. This is further explained in Figure 17 below.

[00179] In a preferred embodiment, the household statistics command 1614 provides data that takes the form of a graph of the previous month's carbon generation on a day-by-day basis. If the user provides the number of people in the household to the household statistics command 1614, the data is displayed on a 'per person' basis. The graph displayed can display any one, two, or all variables representing carbon generation. Also, the user can change the time scale of data shown in the graph from one day to the entire duration of time that the account has been in existence.

[00180] Figure 17 illustrates a flow chart of a method for configuring the monitoring devices 1700. First, at step 1710, the user accesses the account setup page 1600 as seen in Figure 15.

[00181] Next, at step 1720, the user engages one of three commands: the household waste scale command 1623, the energy hub command 1625, and the vehicle

tracking command 1627. When a user engages the household waste scale command 1623, the method for configuring the monitoring devices 1700 proceeds to step 1723. When a user engages the energy hub command 1625, the method for configuring the monitoring devices 1700 proceeds to step 1725. When a user engages the vehicle tracking command 1627, the method for configuring the monitoring devices 1700 proceeds to step 1727.

[00182] Next, at step 1723, the user account installs the data calculation utility 143 of Figure 1 to the computing device 140 of Figure 1. This allows the data representing measurements from the weight scale 110 of Figure 1 to automatically be communicated to the central server 160 of Figure 1. The data representing measurements from the weight scale 110 of Figure 1 can be automatically relayed because the user account automatically inserts the user's account information into the utility prior to installation onto the computing device 140 of Figure 1.

[00183] Next, at step 1725, the user account directs the user to the energy usage monitoring device internet website 700 of Figure 7. This allows the data representing measurements from the energy usage monitoring device 120 of Figure 1 to automatically be communicated to the central server 160 of Figure 1. This process was explained in Figure 7 above.

[00184] Next, at step 1727, the user account installs the tracking application 933 of Figure 9 to the vehicular travel monitoring system 130 of Figure 1. This allows the data representing measurements from the vehicular travel monitoring system 130 of Figure 1 to automatically be communicated to the central server 160 of Figure 1. The data representing measurements from the vehicular travel monitoring system 130 of Figure 1

can be automatically relayed because the user account 165 of Figure 1 displays the user's account information to be entered into the tracking application 933 of Figure 9.

[00185] In a preferred embodiment, when the user engages any of the household waste scale command 1623, the energy hub command 1625, and the vehicle tracking command 1627 and the devices have already been configured, the user account 165 of Figure 1 instructs the user that the device is already configured. At this point, the user has the option of continuing with the configuration process.

[00186] Figure 18 illustrates the monitoring control page 1800 of the user account 165 of Figure 1. As described above, the user account 165 of Figure 1 is located on the central server 160 of Figure 1. The monitoring control page 1800 includes the cutting carbon command 1310 of Figure 13, the carbon saint solution command 1312 of Figure 13, the forums command 1314 of Figure 13, the store command 1316 of Figure 13, the about command 1317 of Figure 13, advertisements command 1319 of Figure 13, and the account login command 1320 of Figure 13, which were discussed in Figure 13. The monitoring control page 1800 further includes a household waste section 1810, a vehicle usage section 1820, and a home energy usage section 1830. The household waste section 1810 includes a wireless scale command 1811, a household waste manual entry command 1812, a trash level 1 command 1813, a trash level 2 command 1814, and a trash level 3 command 1815. The vehicle usage section 1820 includes a vehicle year command 1821, a vehicle make command 1822, a vehicle model command 1823, a smart phone application command 1824, a gallons of fuel used command 1825, and a vehicular miles driven command 1826. The home energy usage section 1820 includes an energy hub command 1833 and a home energy usage manual entry command 1835.

[00187] In operation, the user decides which (if any) monitoring devices he or she wishes to utilize in determining their carbon output. The user engages the appropriate command to use that option in monitoring.

[00188] In the household waste section 1810, the user opts to utilize the weight scale 110 of Figure 1 to provide data measurements representing the weight of household waste placed thereupon. To do this, the user engages the wireless scale command 1811. If the user has not configured the weight scale 110 of Figure 1 to automatically monitor the weight measured, the user account 165 of Figure 1 displays the account setup page 1600 so the user registers the weight scale 110 of Figure 1. When the weight scale 110 of Figure 1 is successfully registered with the user account 165 of Figure 1, and the user engages the wireless scale command 1811, the user account 165 of Figure 1 communicates to the carbon output determination system 168 of Figure 1 that data measurements representing the weight of household weight taken by the weight scale 110 of Figure 1 is provided. Alternatively, the user opts to manually enter data measurements representing the weight of household waste generated by the user. To do this, the user engages the household waste manual entry command 1812. When the user engages the household waste manual entry command 1812, the user account allows the user to manually enter the data measurements representing the weight of household trash directly into the user account 165 of Figure 1, which is then communicated to the carbon output determination system 168 of Figure 1.

[00189] Also in the household waste section 1810, the user selects their trash level by engaging the trash level 1 command 1815, trash level 2 command 1814, or trash level 3 command 1815. Engaging the trash level 1 command 1813 is appropriate for users that

consume substantial amounts of organic matter and high-end products that typically require more carbon to produce and ship. Engaging the trash level 2 command 1814 is appropriate for users that consume some organic matter and some high-end products. This is the setting that most likely applies to a majority of users. Engaging the trash level 3 command 1815 is appropriate for users that consume no organic matter and few high end products. The trash level 3 command 1815 is for users that properly practice composing and fully abide by energy conservation principles. The three different trash level commands have an impact on the carbon calculation. When the user selects the trash level 1 command 1813, carbon output calculations are made using the highest amount of carbon per pound. Conversely, when the user selects the trash level 3 command, carbon output calculations are made using the lowest amount of carbon per pound.

[00190] In the vehicle usage section 1820, the user opts to utilize the vehicular travel monitoring device 130 of Figure 1 to provide data measurements representing the distance travelled by vehicle. To do this, the user engages the smart phone application command 1824. If the user has not configured the vehicular travel monitoring device 130 of Figure 1 to automatically monitor and communicate the distance travelled, the user account 165 of Figure 1 displays the account setup page 1600 so the user registers the vehicular travel monitoring device 130 of Figure 1. When the vehicular travel monitoring device 130 of Figure 1 is successfully registered with the user account 165 of Figure 1, and the user engages the smart phone application command 1824, the user account 165 of Figure 1 communicates to the carbon output determination system 168 of Figure 1 that data measurements representing the distance travelled measurements taken

by the vehicular travel monitoring device 130 of Figure 1 is provided. The user must additionally provide vehicular characteristics by engaging the vehicle year command 1821, the vehicle make command 1822, and the vehicle model command 1823 by selecting the appropriate year, make and model of the user's vehicle.

[00191] Alternatively, the user opts to manually enter data measurements representing the amount of fuel consumed through the user's vehicular travel. The user does this in one of two ways. First, the user engages the gallons of fuel used command 1825. When the user engages the manual entry command, the user account allows the user to manually enter the data measurements representing the number of gallons of fuel the user used through vehicular travel directly into the user account 165 of Figure 1, which is then communicated to the carbon output determination system 168 of Figure 1. The second alternative involves the user engaging the miles driven command 1826. When the user engages the miles driven command 1826, the user must additionally provide additional vehicular characteristics by engaging the vehicle year command 1821, the vehicle make command 1822, and the vehicle model command 1823 by selecting the appropriate year, make and model of the user's vehicle. The user account then allows the user to manually enter the data measurements representing the number of miles that user drove through vehicular travel directly into the user account 165 of Figure 1, which is then communicated to the carbon output determination system 168 of Figure 1.

[00192] In the home energy usage section 1830, the user opts to utilize the household energy usage monitoring device 120 of Figure 1 to provide data measurements representing the amount of household energy consumed. To do this, the user engages the energy hub command 1833. If the user has not configured the household energy usage

monitoring device 120 of Figure 1 to automatically monitor the household energy usage, the user account 165 of Figure 1 displays the account setup page 1600 so the user registers the household energy usage monitoring device 120 of Figure 1. When the household energy usage monitoring device 120 of Figure 1 is successfully registered with the user account 165 of Figure 1, and the user engages the energy hub command 1833, the user account 165 of Figure 1 communicates to the carbon output determination system 168 of Figure 1 that data measurements representing the amount of household energy consumed taken by the household energy usage monitoring device 120 of Figure 1 is provided. Alternatively, the user opts to manually enter data measurements representing the amount of household energy consumed by the user. To do this, the user engages the home energy usage manual entry command 1835. When the user engages the home energy usage manual entry command 1835, the user account allows the user to manually enter the data measurements representing the amount of energy consumed by the user directly into the user account 165 of Figure 1, which is then communicated to the carbon output determination system 168 of Figure 1.

[00193] In a preferred embodiment, the user engages the wireless scale command 1811, the smart phone application command 1824, and the energy hub command 1833 to automatically measure and communicate the data representing the measurements taken by the devices to the central server 160 of Figure 1

[00194] In an alternative embodiment, the user does not engage the wireless scale command 1811, the smart phone application command 1824, and the energy hub command 1833, but rather manually enter the data representing measurements taken by the devices to the central server 160 of Figure 1.

[00195] Figure 19 illustrates a flow chart of a method for determining the carbon output 1900 based on data representing measurements taken on the weight scale 110 of Figure 1, the household energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1. First, at step 1910, the carbon output determination system 168 of Figure 1 receives data representing measurements taken on the weight scale 110 of Figure 1, the household energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1 from the computer readable storage 162 of Figure 1 of the central server 160 of Figure 1.

[00196] Next, at step 1920, the carbon output determination system 168 of Figure 1 takes the data representing measurements taken on the weight scale 110 of Figure 1, the household energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1, and generates a carbon output amount representing the amount of carbon generated by the user's activities.

[00197] Next, at step 1930, the carbon output determination system 168 of Figure 1 communicates the data representing the amount of carbon generated by the user's activities to the computer readable storage 162 of Figure 1.

[00198] Next, at step 1940, the data representing the amount of carbon generated by the user's activities is communicated to the user account 165 of Figure 1, where the values can be seen by engaging the carbon footprint command 1426 of Figure 14 of the user account 165 of Figure 1.

[00199] In a preferred embodiment, the carbon output determination system 168 of Figure 1 includes carbon calculator which automatically calculates the amount of carbon generated based on data obtained by the weight scale 110 of Figure 1, the household

energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1.

[00200] In an alternative embodiment, the carbon output determination system 168 of Figure 1 generates the carbon output data of measurements taken from weight scale 110 of Figure 1, the household energy usage monitoring device 120 of Figure 1, and the vehicular travel monitoring device 130 of Figure 1 through a series of numerical multipliers that modify the data to produce the carbon output of the device.

[00201] Figure 20 illustrates the carbon offset page 2000 of the user account 165 of Figure 1. As described above, the user account 165 of Figure 1 is located on the central server 160 of Figure 1. The carbon offset page 2000 includes the cutting carbon command 1310 of Figure 13, the carbon saint solution command 1312 of Figure 13, the forums command 1314 of Figure 13, the store command 1316 of Figure 13, the about command 1317 of Figure 13, advertisements command 1319 of Figure 13, and the account login command 1320 of Figure 13, which were discussed in Figure 13. The carbon offset page 2000 further includes a remediation section 2010, a sequestering section 2020, and a select all section 2030. The remediation section 2010 includes a select command 2012, a company name display 2013, and a rate display 2014. The number of select commands 2012, company name displays 2013, and rate displays 2014 is based on the number of companies that are listed in the remediation section 2010. Each company listing has one select command 2012, company name display 2013, and rate display 2014. The sequestering section 2020 includes a select command 2022, a company name display 2023, and a rate display 2024. The number of select commands 2022, company name displays 2023, and rate displays 2024 is based on the number of

companies that are listed in the sequestering section 2020. Each company listing has one select command 2022, company name display 2023, and rate display 2024. The select all section 2030 includes a select command 2032, a display 2033, and a rate display 2034.

[00202] In the remediation section 2010, the company name display 2013 displays a company which provides remediation services. The rate display 2014 displays the corresponding cost to offset one ton of carbon. To select the preferred company, the user engages the select command 2012.

[00203] In the sequestering section 2020, the company name display 2023 displays a company which provides sequestering services. The rate display 2024 displays the corresponding cost to offset one ton of carbon. To select the preferred company, the user engages the select command 2022.

[00204] In the select all section 2030, the user has the ability to choose all of the companies listed on the carbon offset page 2000 by engaging the select command 2032.

[00205] After the user makes their selections by engaging the preferred select commands 2012, 2022, and 2032, the user purchases the offsets.

[00206] In a preferred embodiment, the companies displayed in the company name displays 2013 and 2023 are charities or commercial companies.

[00207] In a preferred embodiment, if the user selects multiple companies, they are directed to another screen that allows them to determine the percentages of the funds that each company receives.

[00208] In a preferred embodiment, the user purchases the offset automatically by a recurring transaction. In this recurring transaction, the user account 165 of Figure 1

automatically calculates the user's carbon output each month and automatically purchases a carbon offset for the corresponding carbon output.

[00209] In an alternative embodiment, the user purchases the offset manually by entering the user's bank or credit card information into the user account 165 of Figure 1.

[00210] Figure 21 illustrates a flow chart of a method for providing services to generate revenue 2100. First, at step 2110, the user identifies revenue generating providers.

[00211] Next, at step 2120, the type of service provided is determined. If the service is an advertisement provider, the method for providing services to generate revenue 2100 proceeds to step 2123. If the service is a user that purchases carbon offsetting services, the method for providing services to generate revenue 2100 proceeds to step 2125. If the service is a carbon remediating or sequestering service provider, the method for providing services to generate revenue 2100 proceeds to step 2127.

[00212] Next, at step 2123, the advertisement provider is assessed an advertisement fee for advertisements placed throughout the user account 165 of Figure 1. The method for providing services to generate revenue 2100 then proceeds to step 2130.

[00213] Next, at step 2125, the user that purchases carbon offsetting services is assessed a processing fee for completing the transaction. The method for providing services to generate revenue 2100 then proceeds to step 2130.

[00214] Next, at step 2127, the carbon remediating or sequestering service provider is assessed a listing fee for displaying their companies in the user account 165 of

Figure 1. The method for providing services to generate revenue 2100 then proceeds to step 2130.

[00215] Next, at step 2130, the advertisement fees for advertisement providers, processing fees for the user's purchase of carbon offsetting services, and listing fees for the carbon remediating or sequestering service providers are all collected and transferred to a bank account.

[00216] In an alternative embodiment, revenue is also generated through user purchases within the user account 165 of Figure 1. These transactions occur when the user engages the store command 1316 of Figure 13.

[00217] Figure 22 illustrates a flow chart of a method for carbon offsetting 2200. First, at step 2210, the carbon offset selection system 169 of Figure 1 receives carbon output data from the carbon output determining system 168.

[00218] Next, at step 2220, the carbon offset selection system 169 of Figure 1 receives a set of data from a carbon offset entity 170 of Figure 1 that contains information representing the name of the offset provider, the type of carbon offset service provided, and the purchase price of the carbon offset service provided.

[00219] Next, at step 2230, the set of data from a carbon offset entity 170 of Figure 1 is communicated to the user account 160 of Figure 1 for the purposes of allowing the user to view the information representing the carbon offset entity 170 of Figure 1.

[00220] Next, at step 2240, the user account 160 of Figure 1 displays the carbon offset service through the user engaging the carbon offset command 1428 of Figure 14. This is seen above in Figure 20.

[00221] Next, at step 2250, the user selects the desired carbon offset service provided by the carbon offset entities 170 of Figure 1. This is further explained above in Figure 20.

[00222] Next, at step 2260, the user account 165 of Figure 1 displays a purchase price corresponding to the selected carbon offset service and the data representing the amount of carbon produced through measurements on the weight scale 110 of Figure 1, household energy usage monitoring system 120 of Figure 1, and vehicular travel monitoring system 130 of Figure 1.

[00223] Next, at step 2270, the user purchases the carbon offset service, thus offsetting their personal carbon output generation.

[00224] In a preferred embodiment, the user is able to select one or more services provided by carbon offset entities 170 of Figure 1. If the user selects more than one carbon offset service, the user allocates corresponding percentages of their carbon output that they wish to each carbon offsetting service.

[00225] In an embodiment, the user is able to set up the carbon offsetting so carbon offsetting services are automatically purchased based on the user's carbon output.

[00226] In an alternative embodiment, the system for calculating and offsetting personal carbon generation is represented by Figure 23. In this embodiment, the weight scale 110 of Figure 1 communicates directly with the carbon output determination system 168 of the central server 160 of Figure 1. Additionally, the household energy usage monitoring system 120 of Figure 1 communicates directly with the carbon output

determining system 168 of the central server 160 of Figure 1. Essentially, the monitoring devices bypass any additional steps, and communicate directly with the central server.

[00227] In view of the foregoing teaching, embodiments of the present invention provide numerous advantages over other known systems, methods, and devices for calculating and offsetting personal carbon generation. Of particular import, the system for calculating and offsetting personal carbon generation 100 of Figure 1 fully integrates the process for the everyday user.

[00228] First, the system for calculating and offsetting personal carbon generation 100 of Figure 1 monitors numerous carbon generating activities, and reports them to a central location. The user automatically sets up the monitoring of devices so that the monitoring occurs continuously, and without any further user intervention. The devices which are monitored include weight scales for monitoring the refuse output of the user, a device which monitors the amount of energy the household has consumed through use of appliances and the like, and a device that monitors the amount of vehicular travel performed by the user.

[00229] Next, the system for calculating and offsetting personal carbon generation 100 of Figure 1 collects the data measured by the monitoring devices at a central server, where the user accesses the data at any time. The user has the ability to track the results that their activities have on carbon generation immediately upon the transmittal of the data from the monitoring devices. Additionally, the user may view this information from any location so long as they have access to an internet connection.

Moreover, the system for calculating and offsetting personal carbon generation 100 of Figure 1 provides the user with the ability to purchase services which remove carbon

from the atmosphere. This is important because to fully complete the offsetting process, the user must be provided with options to remove from the atmosphere the amounts of carbon that their activities have generated. The user either selects the service they wish to purchase, and can additionally set up their account so the purchases are made automatically and without any further user intervention.

[00230] 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.

CLAIMS

1. A method for transmitting and storing data representing a weight measurement, said method including:

measuring weight, wherein said measurement is performed by a measurement device containing a data transmitting element;

converting said weight measurement to data representing said weight measurement;

transmitting said data representing said weight from said measuring device to a computing device through a first communication system, wherein said computing device is in communication with a remote data storage device containing a communication element, wherein said computing device communicates with said remote data storage device through a second communication system;

transmitting said data representing said weight from said measuring device from said computing device to said remote data storage device through said second communication system; and

storing said data representing said weight from said measurement device on said remote data storage device.

2. The method of claim 1 wherein said measuring device is a weight scale.

3. The method of claim 1 wherein said weight measurement represents the weight of household refuse generated through placing said household refuse into a garbage receptacle.

4. The method of claim 1 wherein said weight measurements are measured on a periodic basis.

5. The method of claim 1 wherein said data representing said weight measurement is transmitted through said first communication system to said computing device on a periodic basis.

6. The method of claim 1 wherein said first communication system is a Bluetooth network.

7. The method of claim 1 wherein said second communication system includes a wired or wireless computer network.

8. A system for transmitting and storing data representing weight measurements, said system including:

a measurement device, wherein said measurement device measures the weight of object placed thereupon, wherein said measurement device converts said weight measured to data representing said weight measurement, wherein said measurement device also includes a data transmitting element that transmits said data through a first communication network;

a computing device, wherein said computing device receives said data representing said weight measurement through said first communication network, wherein said computing device includes a data receiving element and a data

transmitting element that receives and transmits said data representing said weight measurement through a second communication network; and

a remote data storage device, wherein said remote data storage device includes a data receiving element and a data transmitting element that receives and transmits said data representing said weight measurement through said second communication network.

9. The system of claim 8 wherein said measurement device is a scale that measures said weight that represents the amount of household refuse generated through placing said household refuse into a garbage receptacle.
10. The system of claim 8 wherein said first communication network is a Bluetooth network.
11. The system of claim 8 wherein said second communication network includes a wired or wireless computer network.
12. The system of claim 8 wherein said scale measures said weight on a periodic basis.
13. The system of claim 8 wherein said scale transmits said data representing said weight measurements to said computing device through said first network on a periodic basis
14. A system for monitoring data representing fuel consumption generated through travel in an automotive vehicle, said system including;

a data generating device for generating data representing the distance travelled by said automotive vehicle, wherein said handheld computing device

includes a vehicular travel tracking application which measures the distance traveled through said travel in said automotive vehicle, a data transmitting element for transmitting said data representing the distance travelled by said automotive vehicle upon completion of the vehicular travel on a communication network;

a remote data storage device for receiving, storing, and transmitting said data representing said distance traveled by said automotive vehicle through said communication network, wherein said remote data storage device stores said data representing said distance traveled by said automotive vehicle, wherein said remote data storage device transmits said data representing said distance traveled by said automotive vehicle; and

a user account, wherein said user account communicates with said remote data storage device, wherein said user account receives said data representing said distance travelled by said automotive vehicle through said communication network, wherein said user account displays said data representing said distance travelled by said automotive vehicle through said communication network on a computing device.

15. The system of claim 14 wherein said data generating device operates by manually inputting the actual gallons of gasoline consumed through said vehicular travel into said remote storage device.

16. The system of claim 14 wherein said data generating device operates by manually inputting the make and model of the vehicle, as well as the numbers of miles driven through said vehicular travel into said remote storage device.

17. The system of claim 14 wherein said data generating device is a cellular telephone, wherein said cellular telephone contains Global Positioning Software.

18. The system of claim 14 wherein said data generating device transmits said data representing said distance traveled by said automotive vehicle automatically to said remote data storage device upon completion of said automotive travel.

19. A method for removing carbon from the atmosphere, said method including:

receiving carbon output data representing a measurement taken by a monitoring device and performing a carbon output calculation to determine the amount of carbon being put into the atmosphere;

receiving carbon offset cost data, wherein said carbon output cost data represents a cost per ton of a first remediation activity;

displaying said carbon offset cost data, wherein said carbon offset cost data is displayed on an internet website, wherein said carbon offset cost data is selected by a user for purchase;

selecting said remediation activity, wherein said selecting of said remediation activity occurs on said internet website,

displaying a purchase price of said remediation activity, wherein said purchase price of said remediation activity is based on said carbon output data quantifying the amount of carbon generated by data representing a measurement taken by a monitoring device; and

purchasing said carbon offset service, wherein said purchasing offsets the user's household carbon output.

20. The method of claim 19 wherein said remediation activity includes carbon remediation, carbon sequestering, carbon credits, and a combination thereof.

21. The method of claim 19 wherein said carbon offsetting automatically determines said remediation activity from a list of products based on said total amount of said carbon generated provided by said carbon output data and purchases said remediation activity.

22. The method of claim 19 wherein said remediation activity service may be automatically purchased by a computing device based on user-inputtable criteria.

23. The method of claim 19 wherein said monitoring device includes a weight scale, a household energy usage monitoring device, and a vehicular travel monitoring device.

ABSTRACT

A system and method for calculating and offsetting personal carbon generation is provided which includes monitoring devices that measure carbon generating activities for the purpose of determining the amount of carbon generated from these activities. In operation, the monitoring devices send their data to a central server, which in turn calculates the amount of carbon generated through each activity. After this calculation is made, the system presents the user with companies that provided services that remove carbon from the atmosphere. The user next selects the desired services available, and purchases them. The system and method for calculating and offsetting personal carbon generation further provides the user with the ability to set up all devices to automatically monitor the carbon generating activities and then send the data to the central server. Also, the system and method for calculating and offsetting personal carbon generation provides the user with the ability to automatically purchase carbon removal services based on the amount of carbon generated by their carbon generating activities.

10188

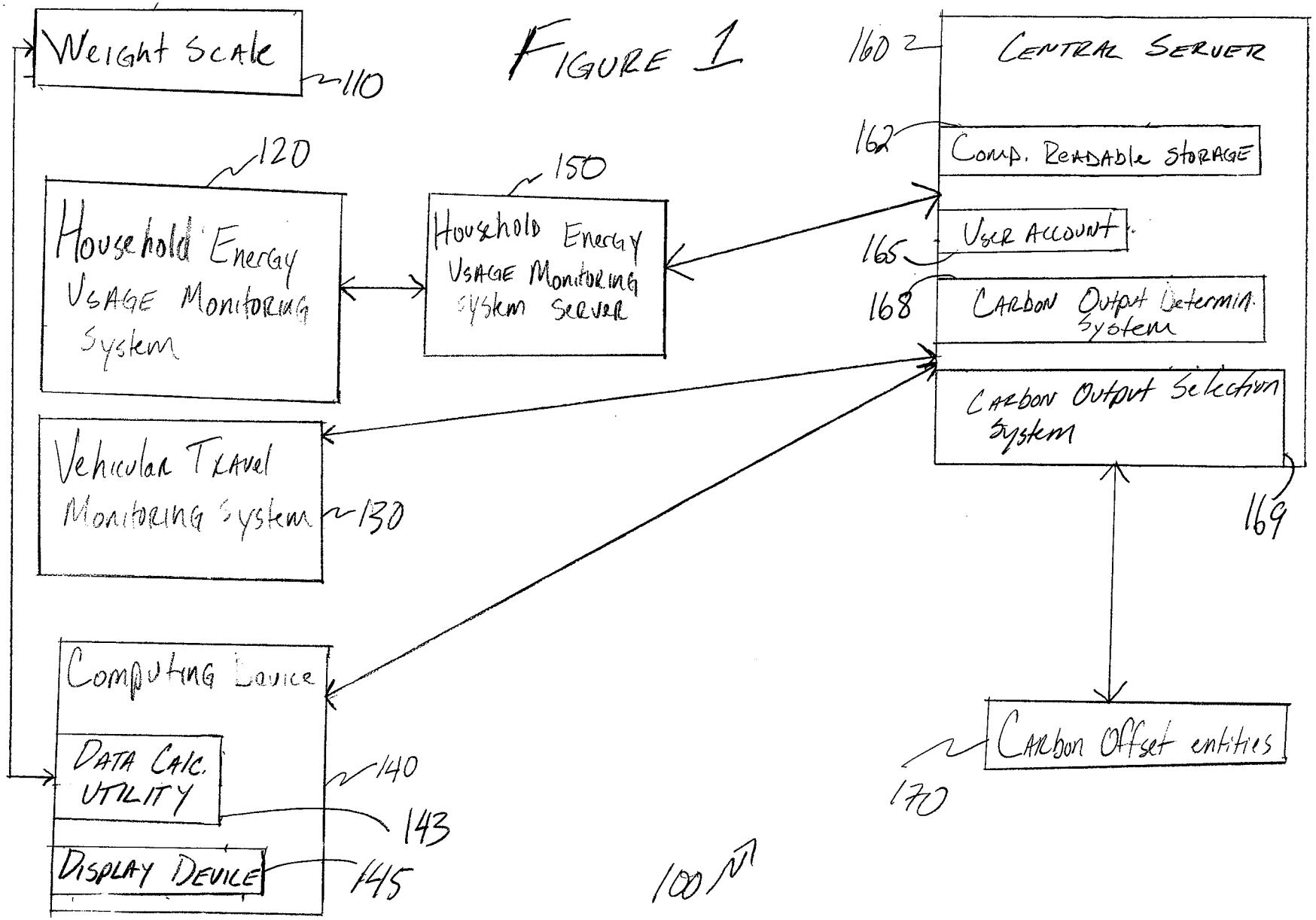


FIGURE 1

FIGURE 2

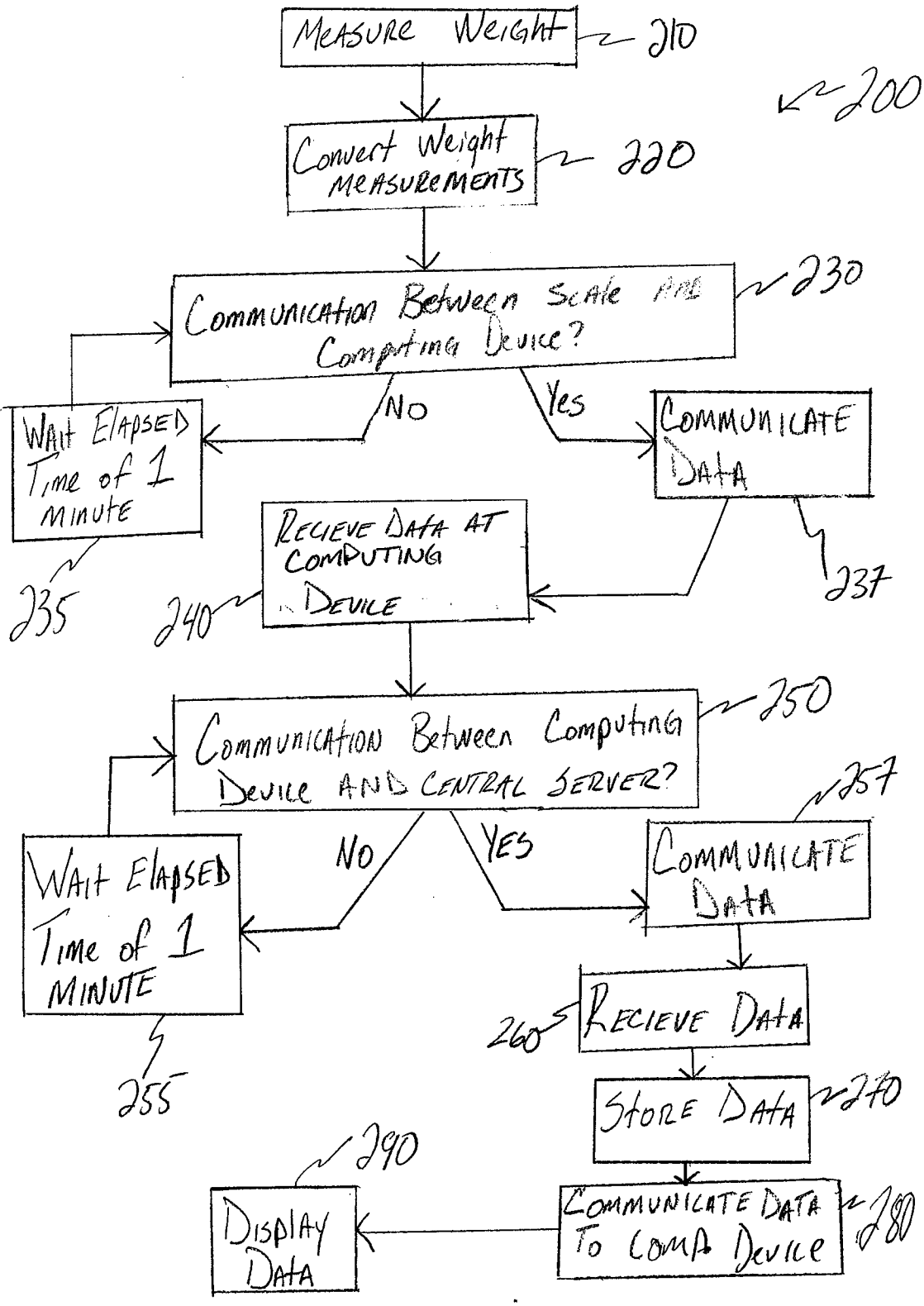
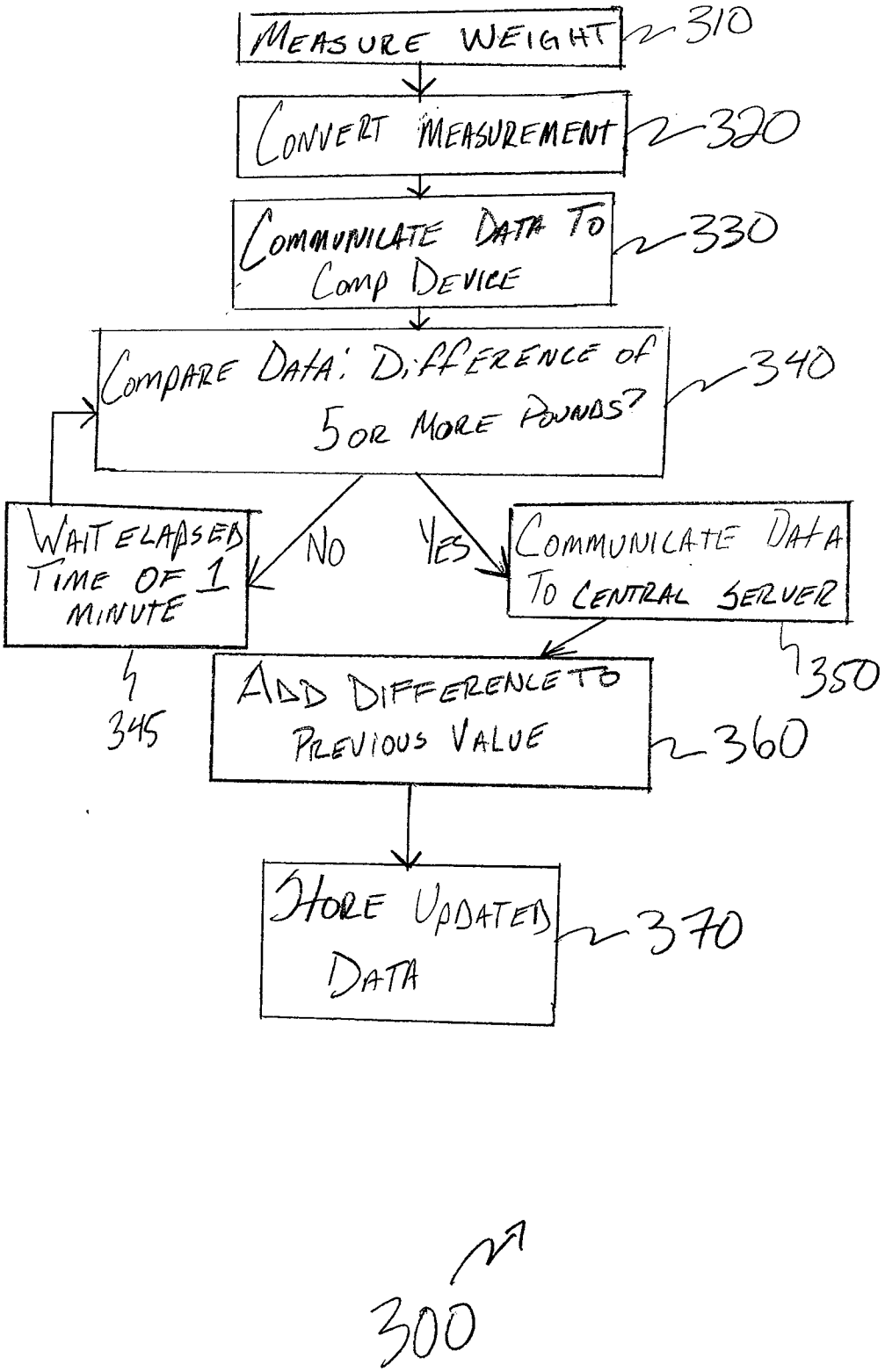

MEASURE WEIGHT
210
200
CONVERT WEIGHT MEASUREMENTS
220
COMMUNICATION BETWEEN SCALE AND COMPUTING DEVICE?
230
NO
YES
WAIT ELAPSED TIME OF 1 MINUTE
235
COMMUNICATE DATA
237
RECIEVE DATA AT COMPUTING DEVICE
240
COMMUNICATION BETWEEN COMPUTING DEVICE AND CENTRAL SERVER?
250
NO
YES
WAIT ELAPSED TIME OF 1 MINUTE
255
COMMUNICATE DATA
257
RECIEVE DATA
260
STORE DATA
270
COMMUNICATE DATA TO COMP. DEVICE
280
DISPLAY DATA
290

FIGURE 3


MEASURE WEIGHT
310
CONVERT MEASUREMENT
320
COMMUNICATE DATA TO COMP DEVICE
330
COMPARE DATA: DIFFERENCE OF 5 OR MORE POUNDS?
340
NO
YES
WAIT ELAPSED TIME OF 1 MINUTE
345
COMMUNICATE DATA TO CENTRAL SERVER
350
ADD DIFFERENCE TO PREVIOUS VALUE
360
STORE UPDATED DATA
370
300

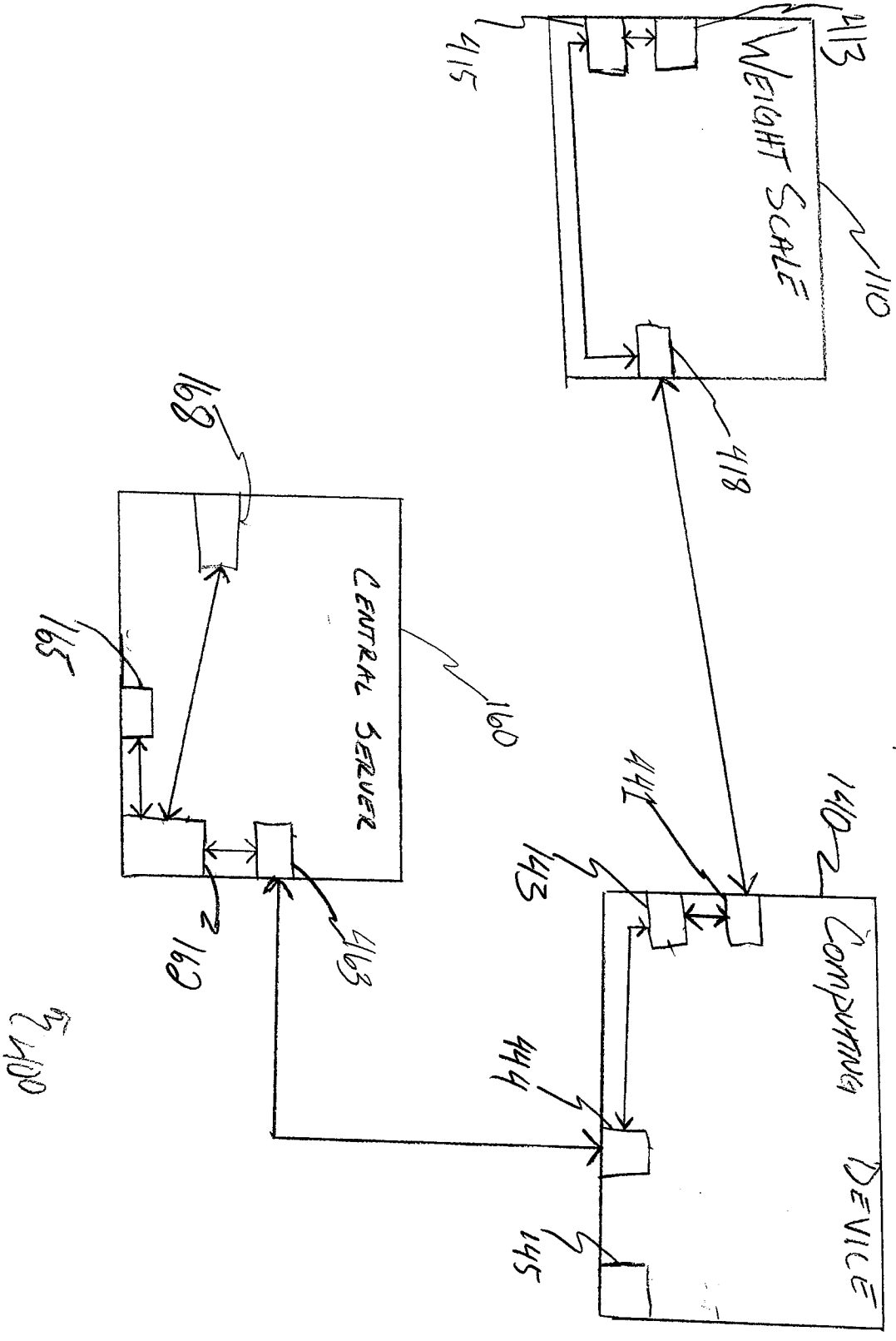

413
WEIGHT SCALE
110
415
418
168
CENTRAL SERVER
160
165
169
163
441
410
443
COMPUTING DEVICE
444
445
400

FIGURE 4

FIGURE 5

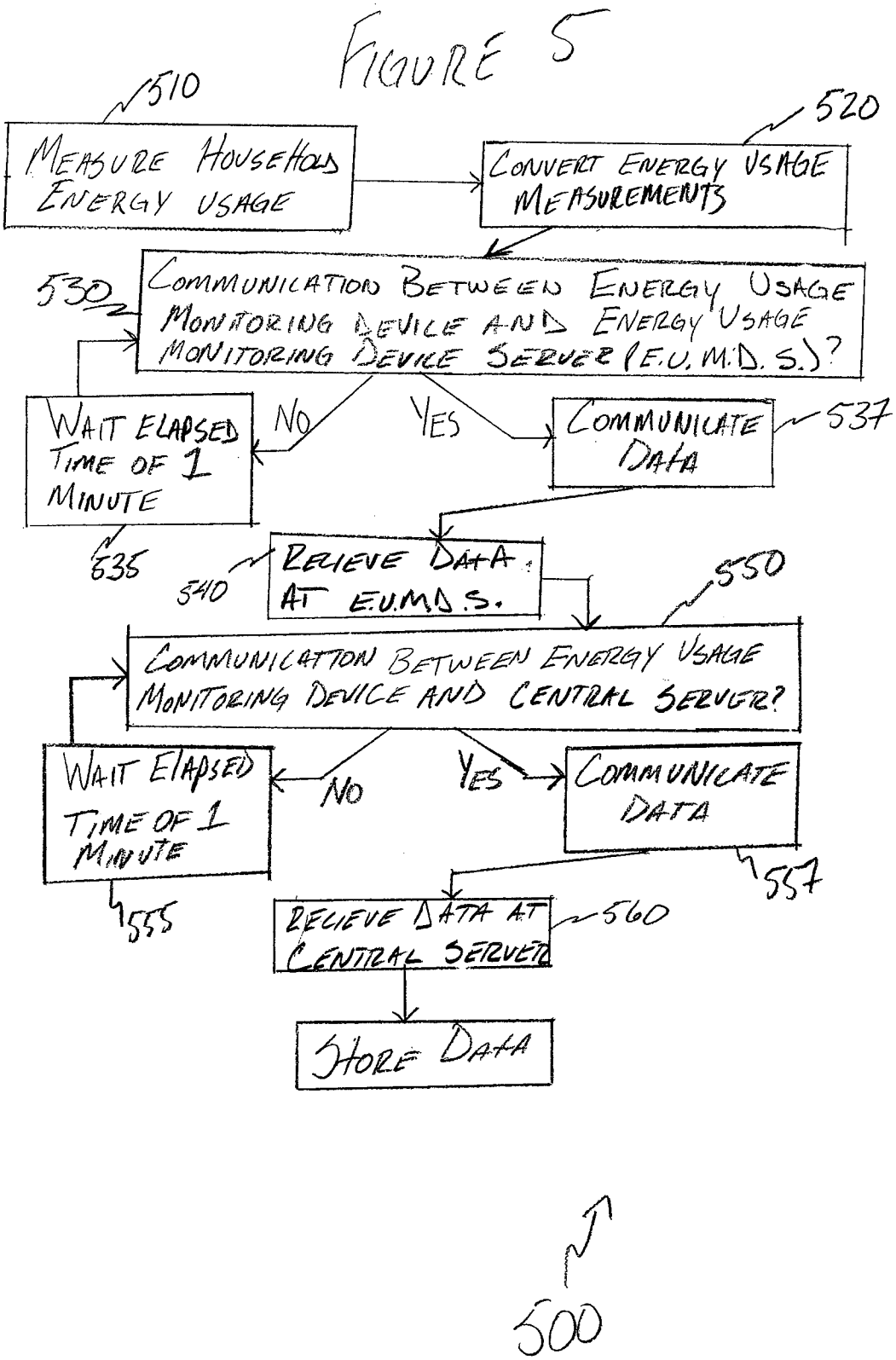

510
MEASURE HOUSEHOLD ENERGY USAGE
520
CONVERT ENERGY USAGE MEASUREMENTS
530
COMMUNICATION BETWEEN ENERGY USAGE MONITORING DEVICE AND ENERGY USAGE MONITORING DEVICE SERVER (E.U.M.D.S.)?
NO
YES
WAIT ELAPSED TIME OF 1 MINUTE
535
COMMUNICATE DATA
537
540
RECIEVE DATA AT E.U.M.D.S.
550
COMMUNICATION BETWEEN ENERGY USAGE MONITORING DEVICE AND CENTRAL SERVER?
NO
YES
WAIT ELAPSED TIME OF 1 MINUTE
555
COMMUNICATE DATA
557
RECIEVE DATA AT CENTRAL SERVER
560
STORE DATA
500

FIGURE 6

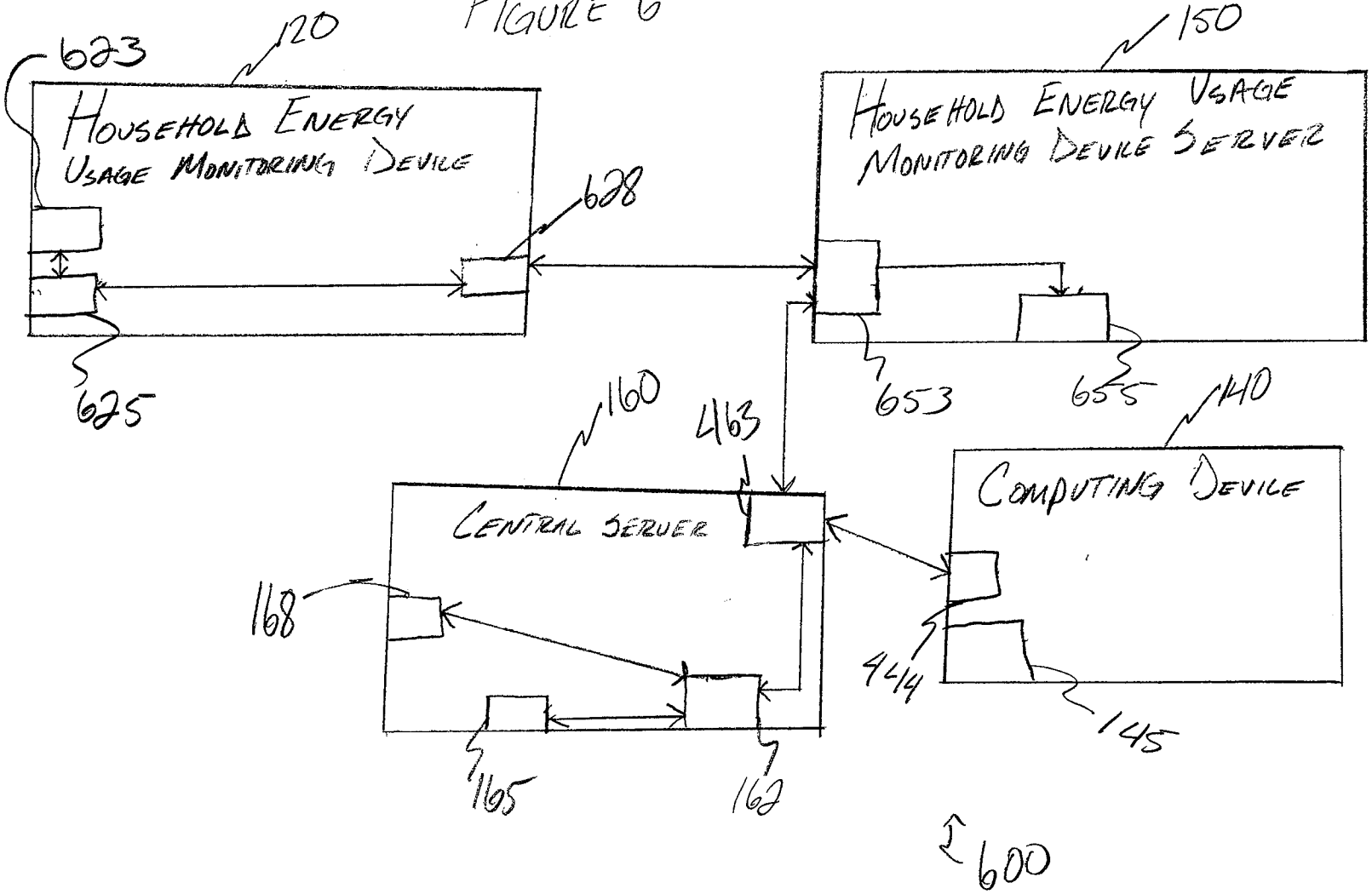

623
120
HOUSEHOLD ENERGY USAGE MONITORING DEVICE
628
625
150
HOUSEHOLD ENERGY USAGE MONITORING DEVICE SERVER
653
655
160
463
CENTRAL SERVER
168
165
162
140
COMPUTING DEVICE
414
145
600

FIGURE 7

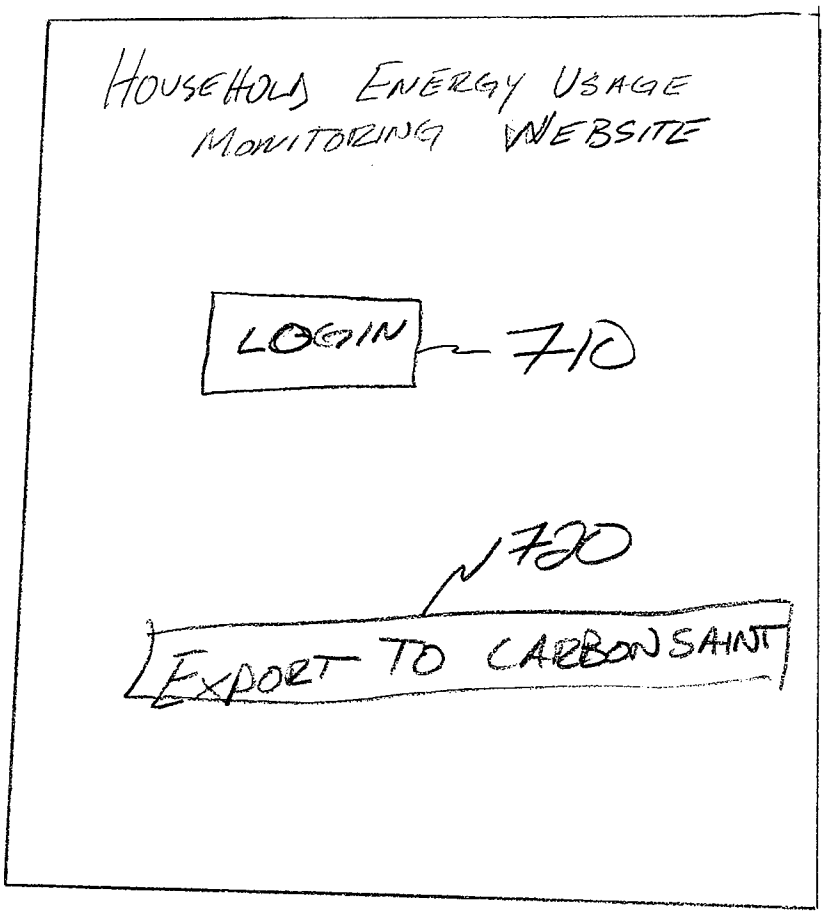
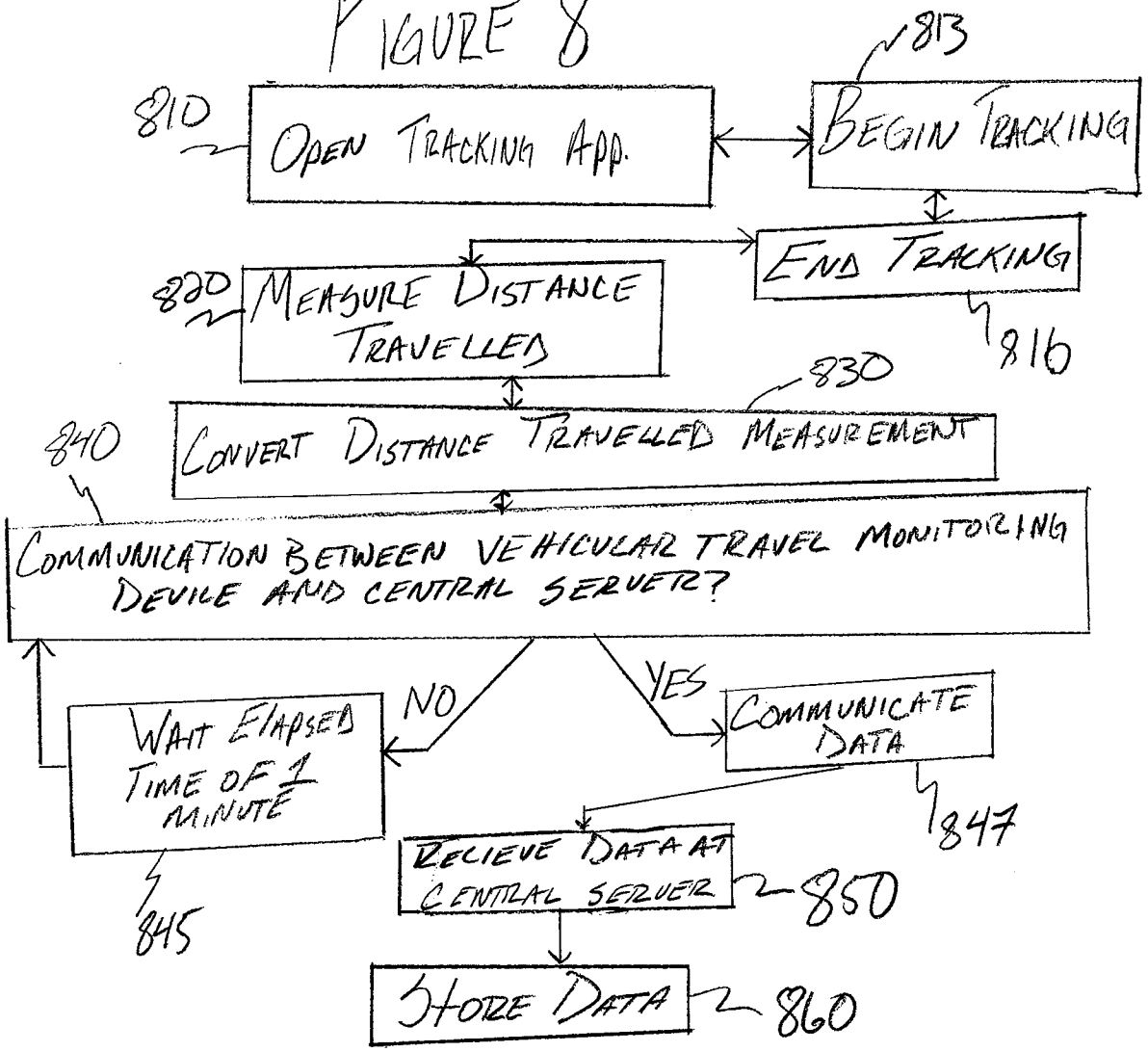

HOUSEHOLD ENERGY USAGE MONITORING WEBSITE
LOGIN
710
720
EXPORT TO CARBON SAINT
700

FIGURE 8


810
OPEN TRACKING APP.
813
BEGIN TRACKING
END TRACKING
816
820
MEASURE DISTANCE TRAVELLED
830
CONVERT DISTANCE TRAVELLED MEASUREMENT
840
COMMUNICATION BETWEEN VEHICULAR TRAVEL MONITORING DEVICE AND CENTRAL SERVER?
NO
YES
WAIT ELAPSED TIME OF 1 MINUTE
845
COMMUNICATE DATA
847
RECIEVE DATA AT CENTRAL SERVER
850
STORE DATA
860

800

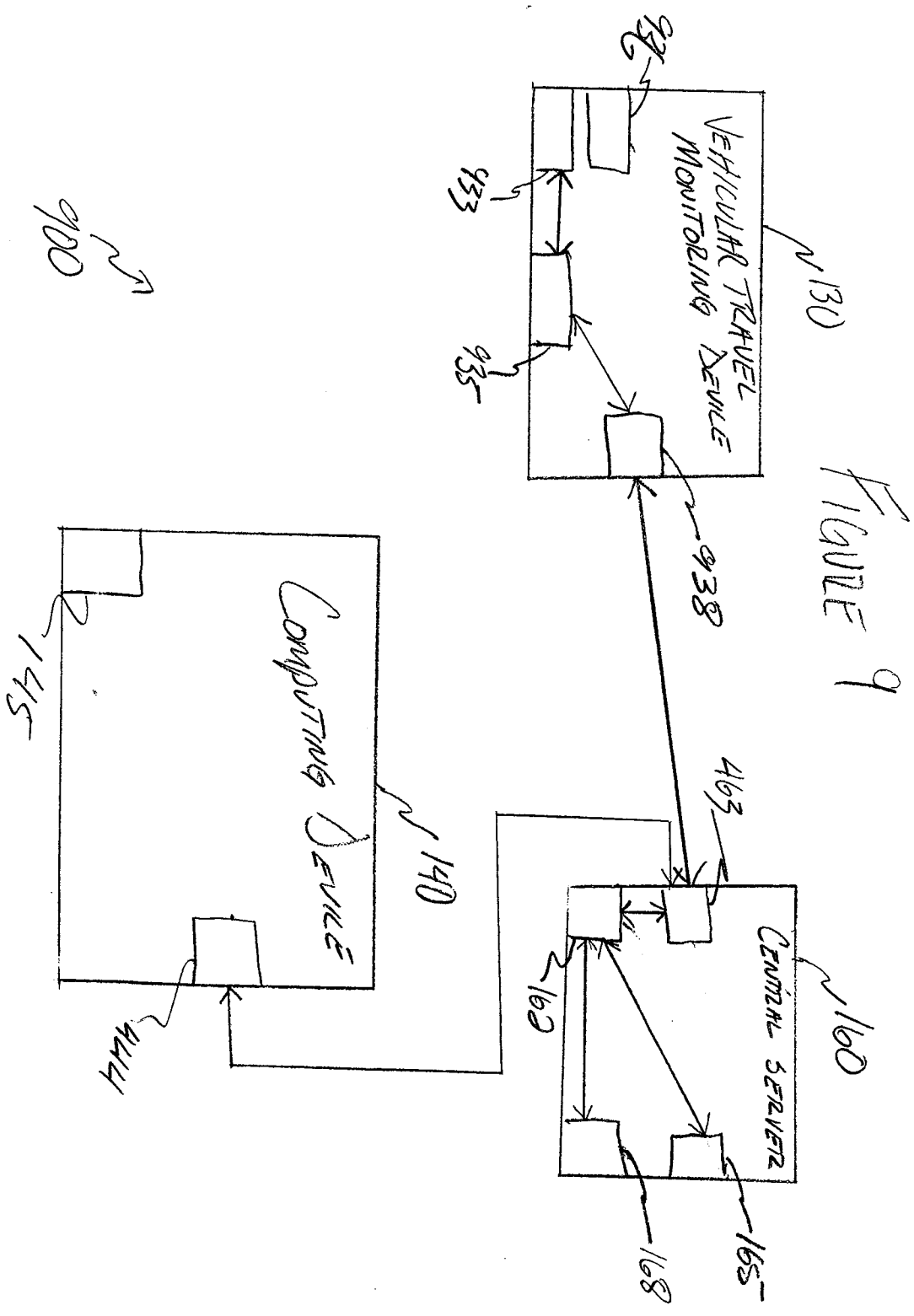

100
130
VEHICULAR TRAVEL MONITORING DEVICE
133
135
138
140
COMPUTING DEVICE
145
144
160
CENTRAL SERVER
162
163
165
168

FIGURE 9

FIGURE 10

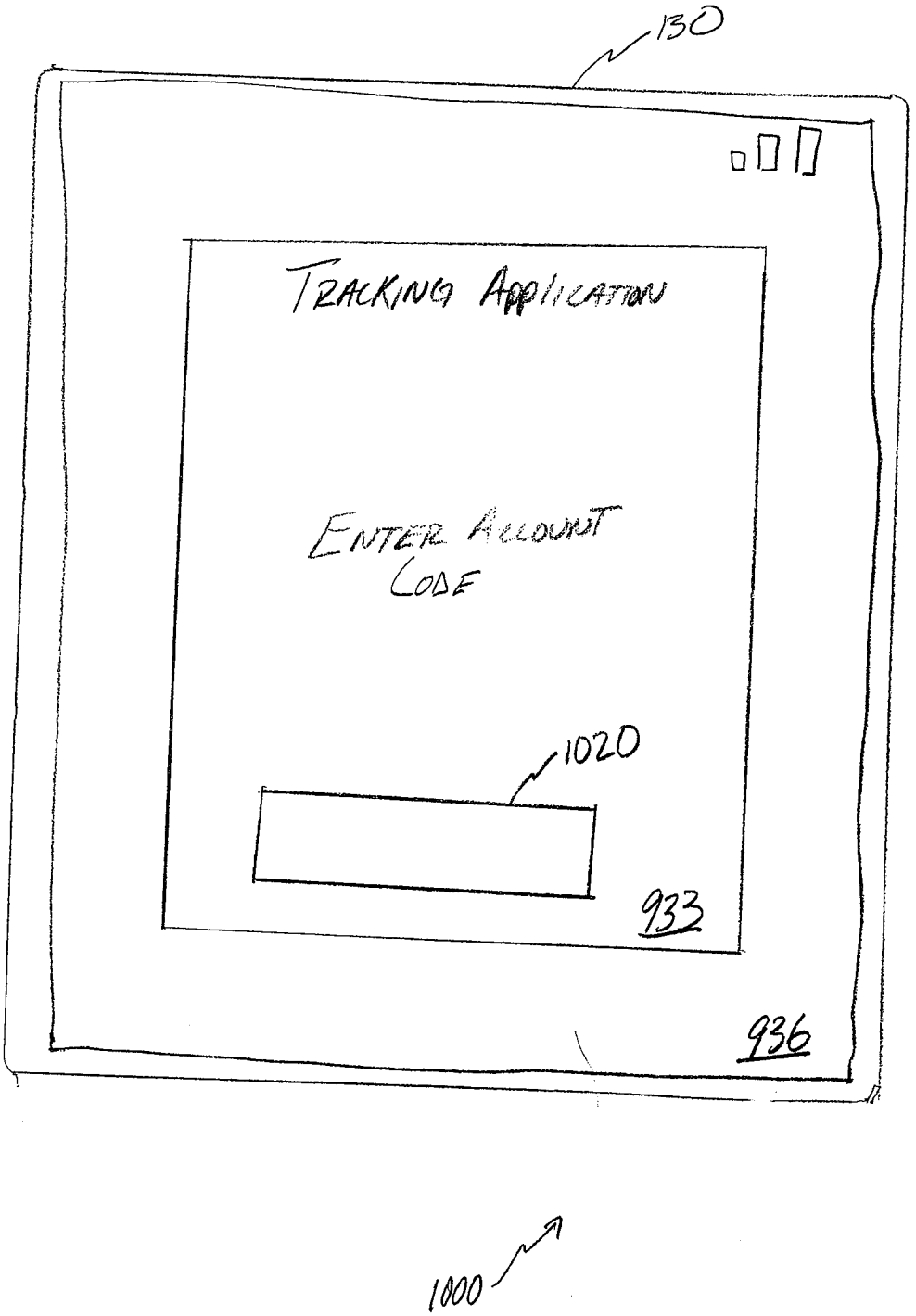

130
TRACKING APPLICATION
ENTER ACCOUNT CODE
1020
933
936
1000

FIGURE 11

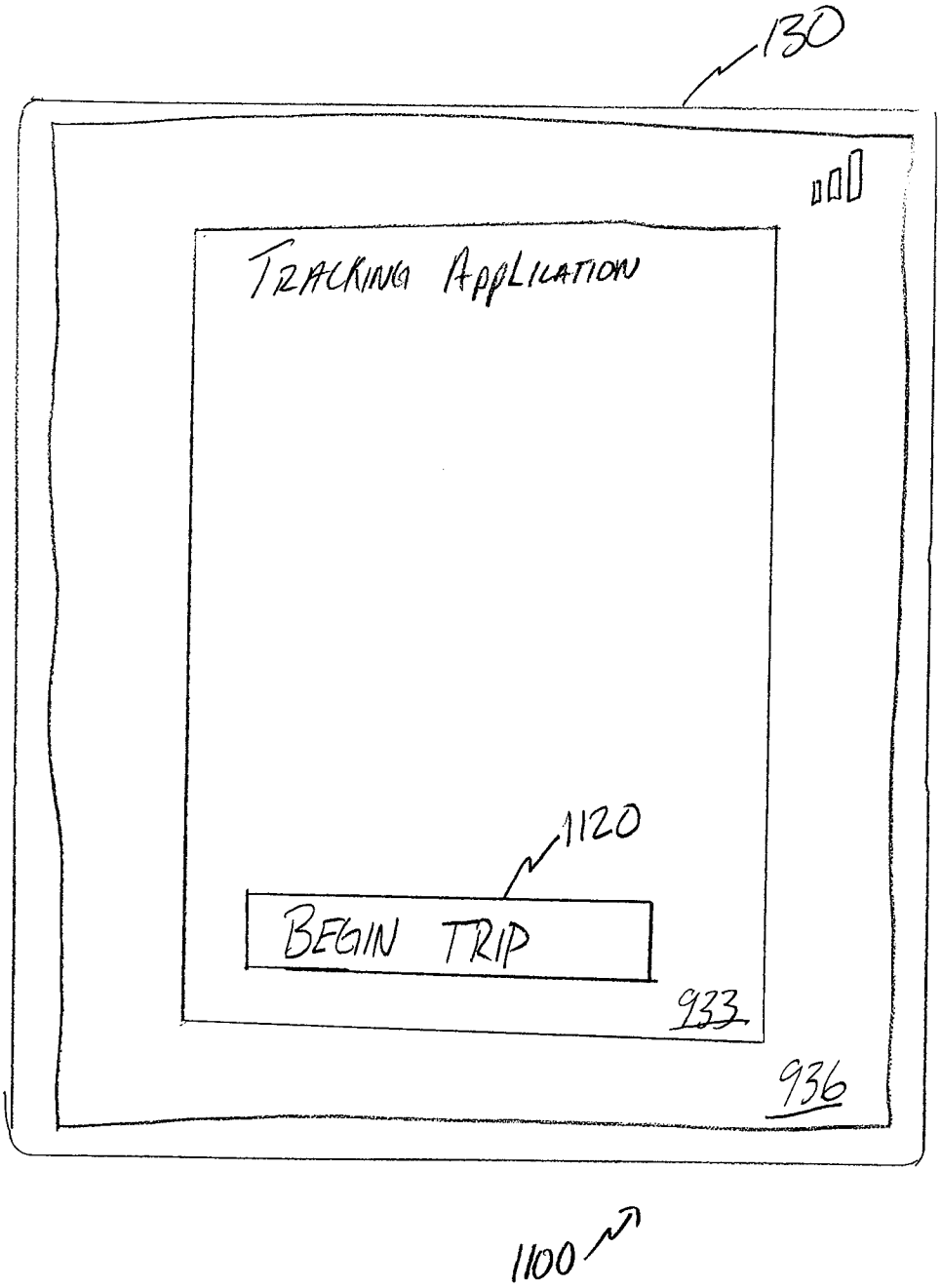
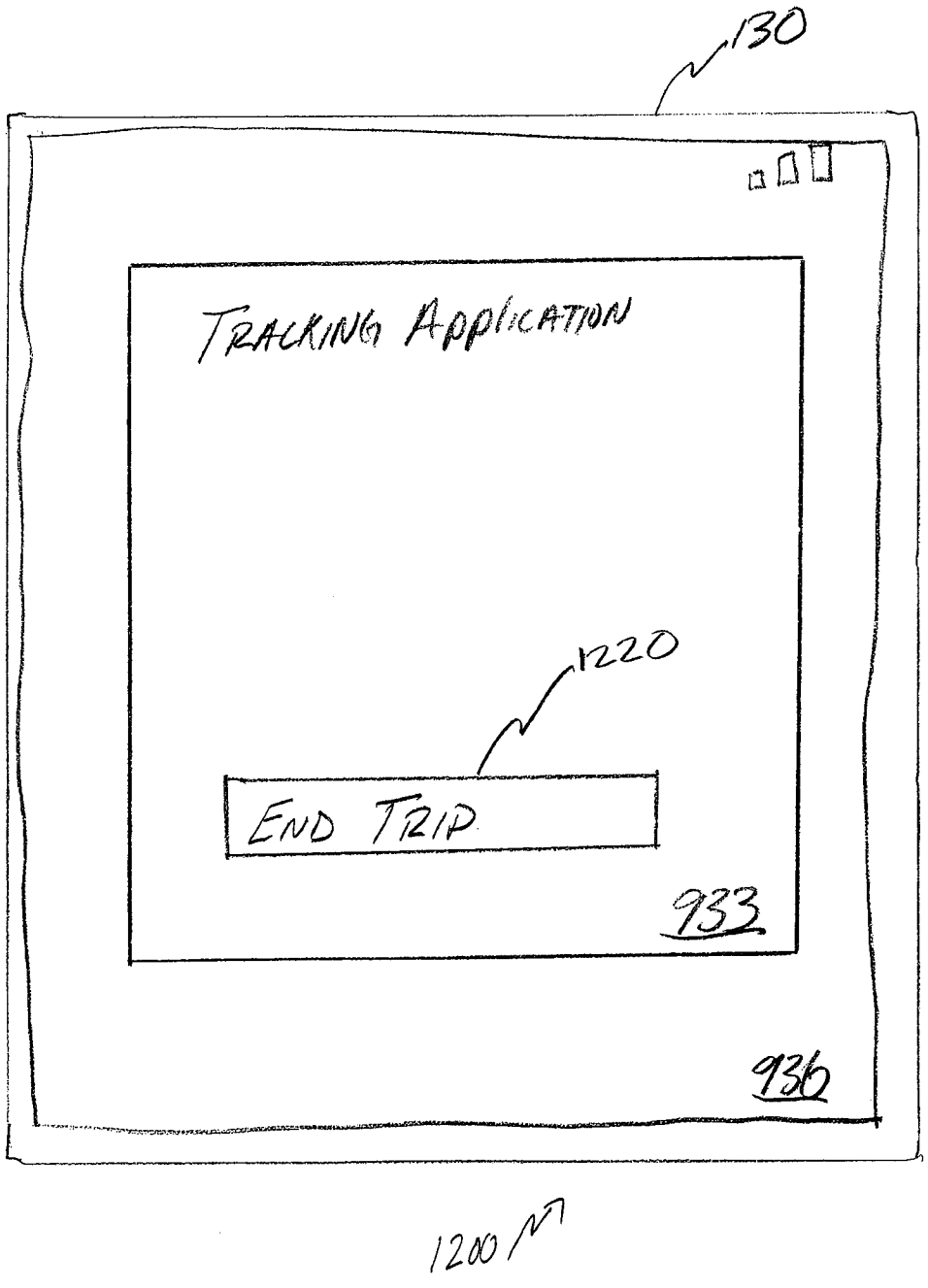
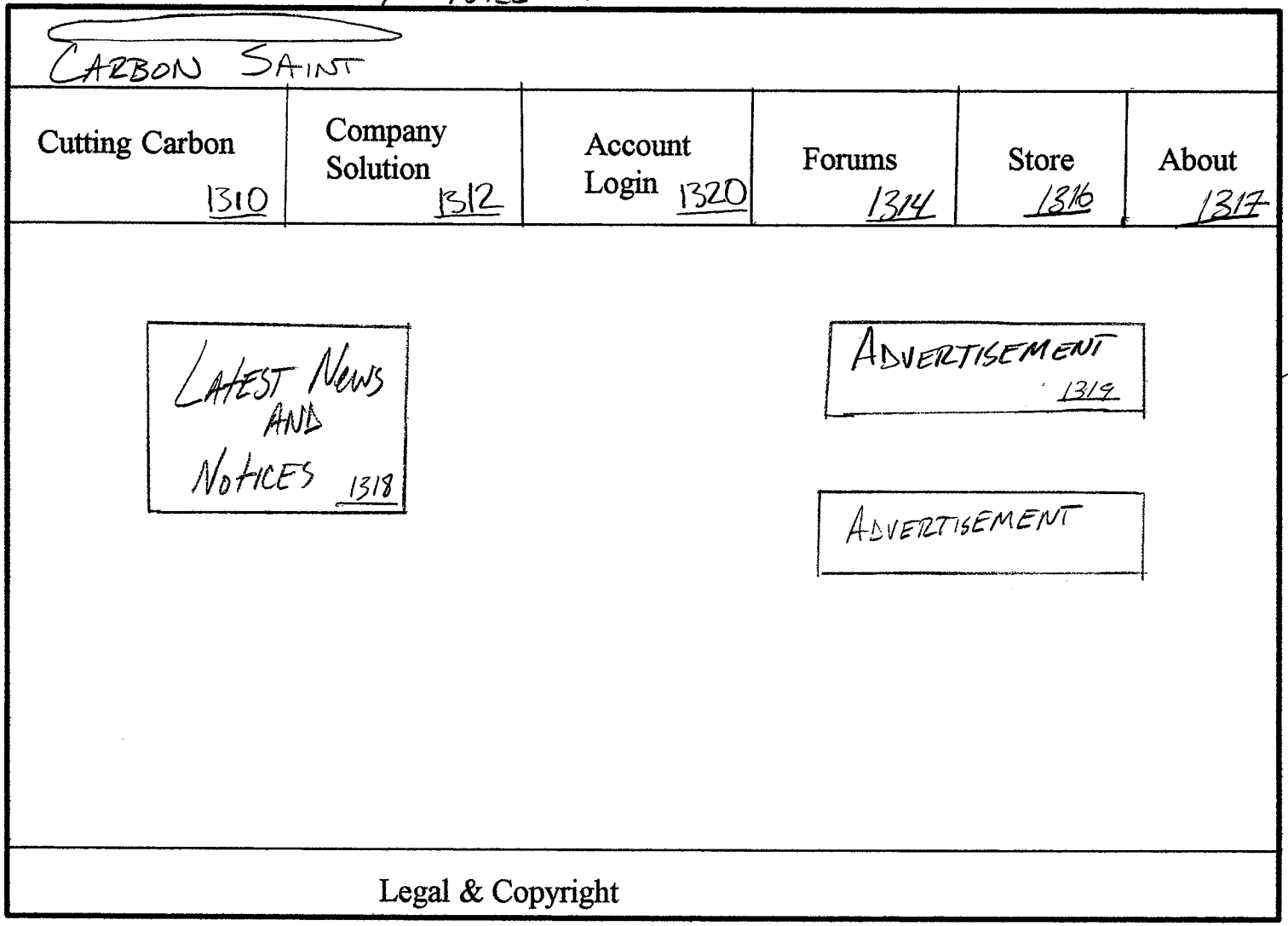


FIGURE 12



1088

FIGURE 13



2165

1300

10188

FIGURE 14

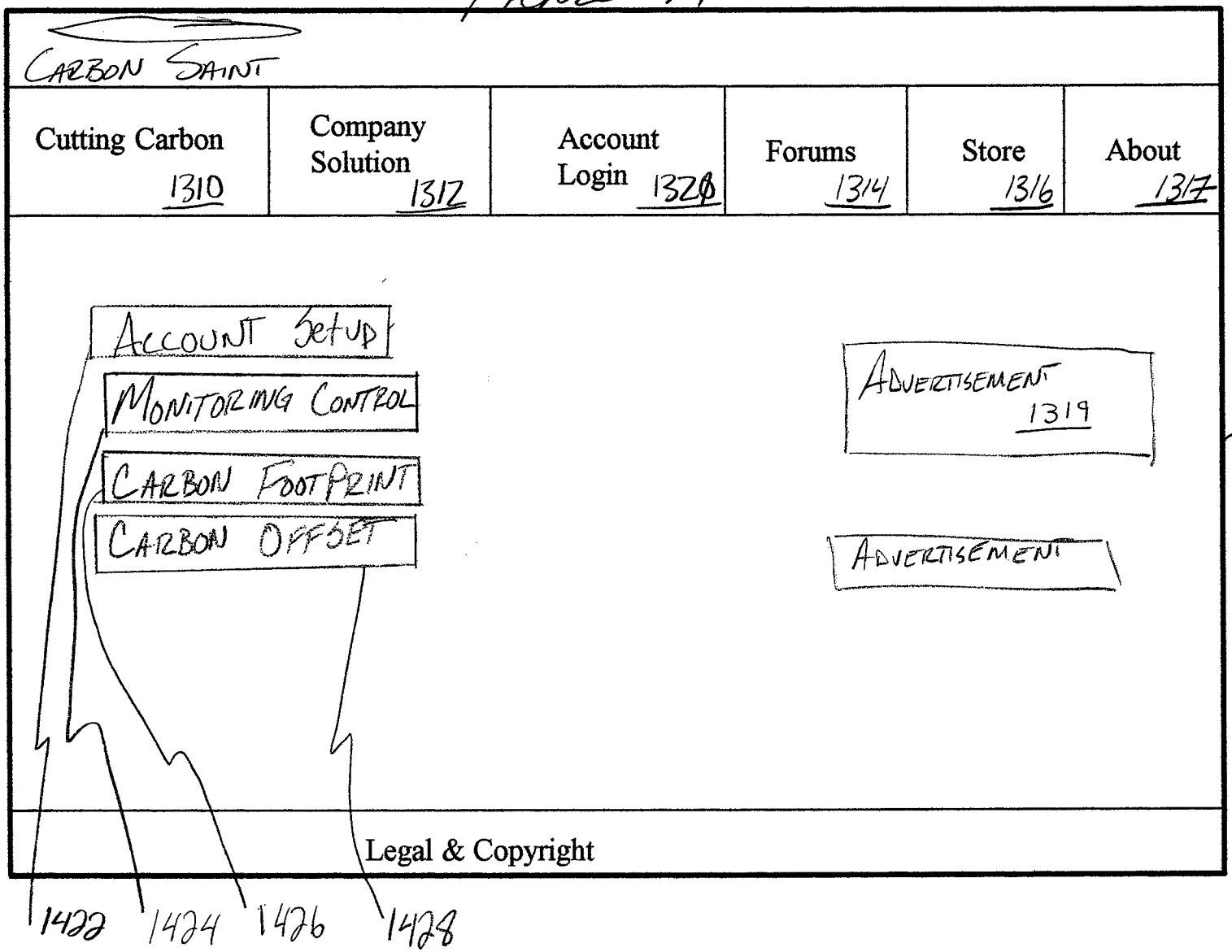
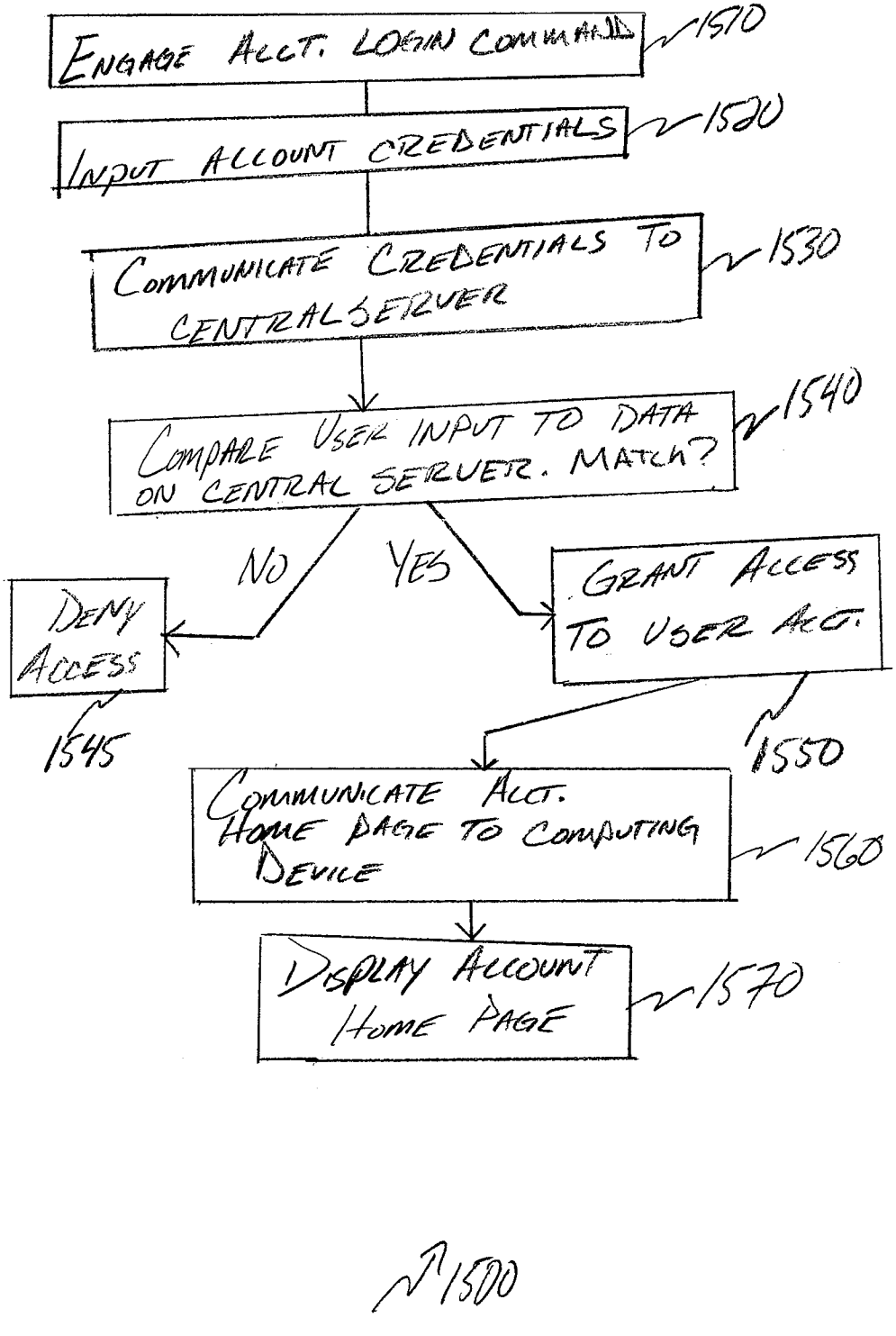


FIGURE 15


ENGAGE ACCT. LOGIN COMMAND
1510
INPUT ACCOUNT CREDENTIALS
1520
COMMUNICATE CREDENTIALS TO CENTRAL SERVER
1530
COMPARE USER INPUT TO DATA ON CENTRAL SERVER. MATCH?
1540
NO
YES
DENY ACCESS
1545
GRANT ACCESS TO USER ACCT.
1550
COMMUNICATE ACCT. HOME PAGE TO COMPUTING DEVICE
1560
DISPLAY ACCOUNT HOME PAGE
1570
1500

10182

FIGURE 16

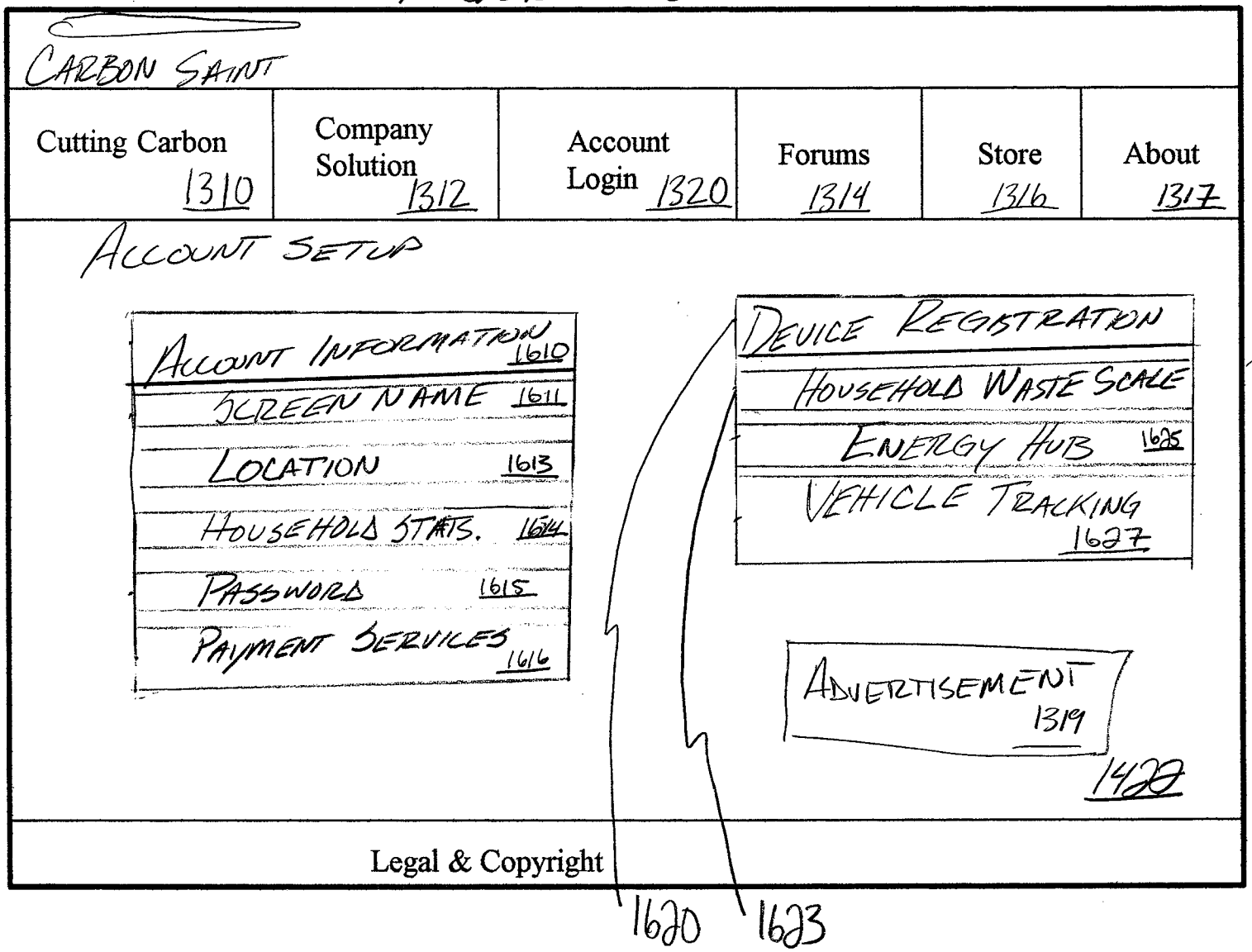
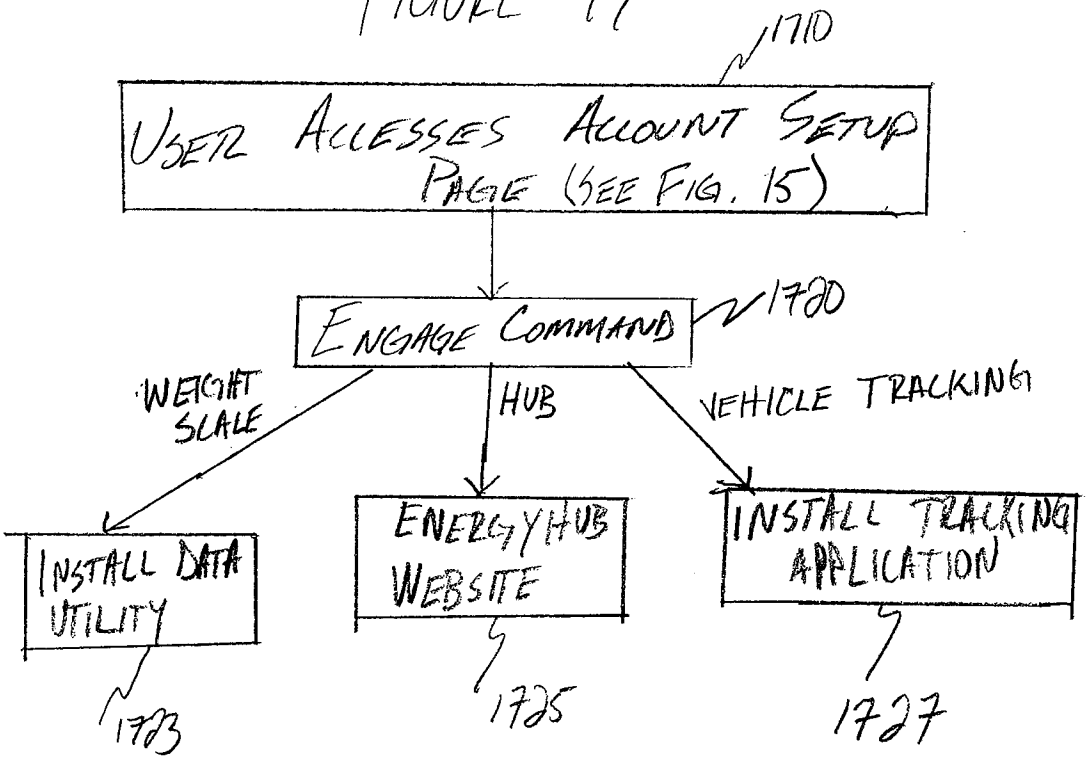


FIGURE 17



1700

FIGURE 18

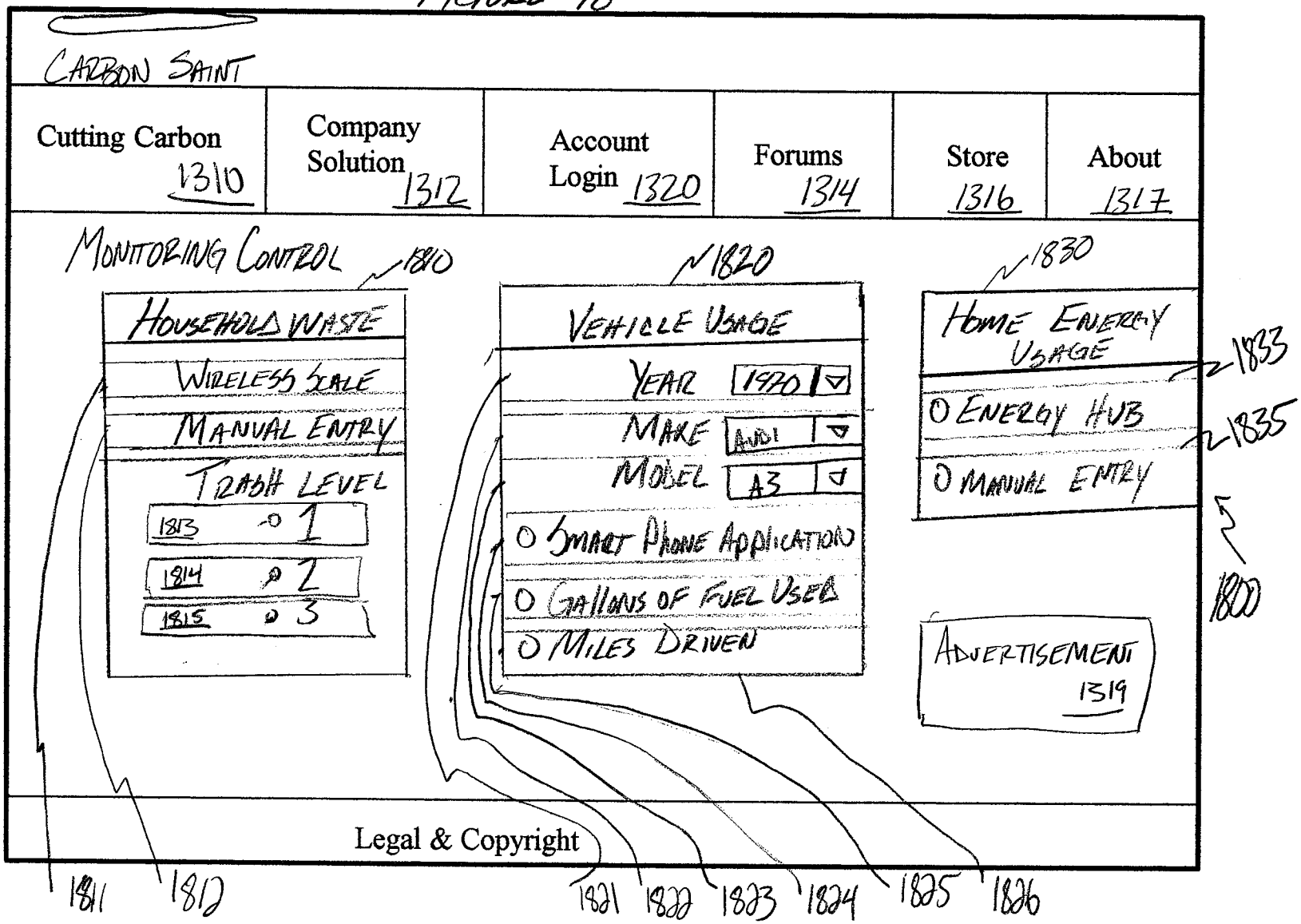
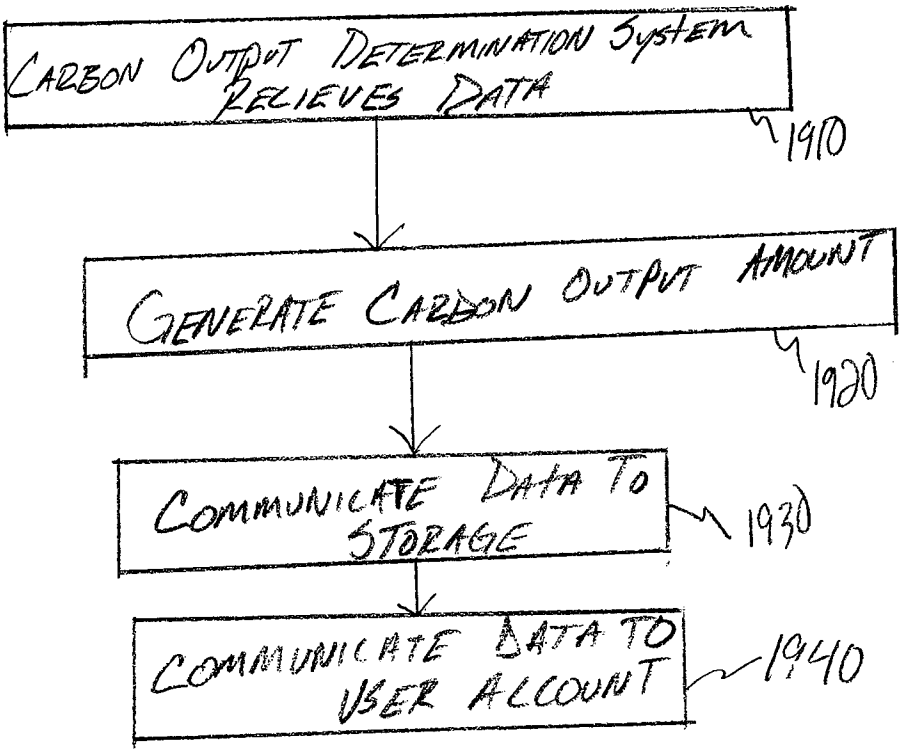

CARBON SAINT
Cutting Carbon 1310
Company Solution 1312
Account Login 1320
Forums 1314
Store 1316
About 1317
MONITORING CONTROL
1810
HOUSEHOLD WASTE
WIRELESS SCALE
MANUAL ENTRY
TRASH LEVEL
1813 1
1814 2
1815 3
1820
VEHICLE USAGE
YEAR 1990
MAKE AUDI
MODEL A3
SMART PHONE APPLICATION
GALLONS OF FUEL USED
MILES DRIVEN
1830
HOME ENERGY USAGE
ENERGY HUB
MANUAL ENTRY
1833
1835
1800
ADVERTISEMENT 1319
Legal & Copyright
1811
1812
1821
1822
1823
1824
1825
1826

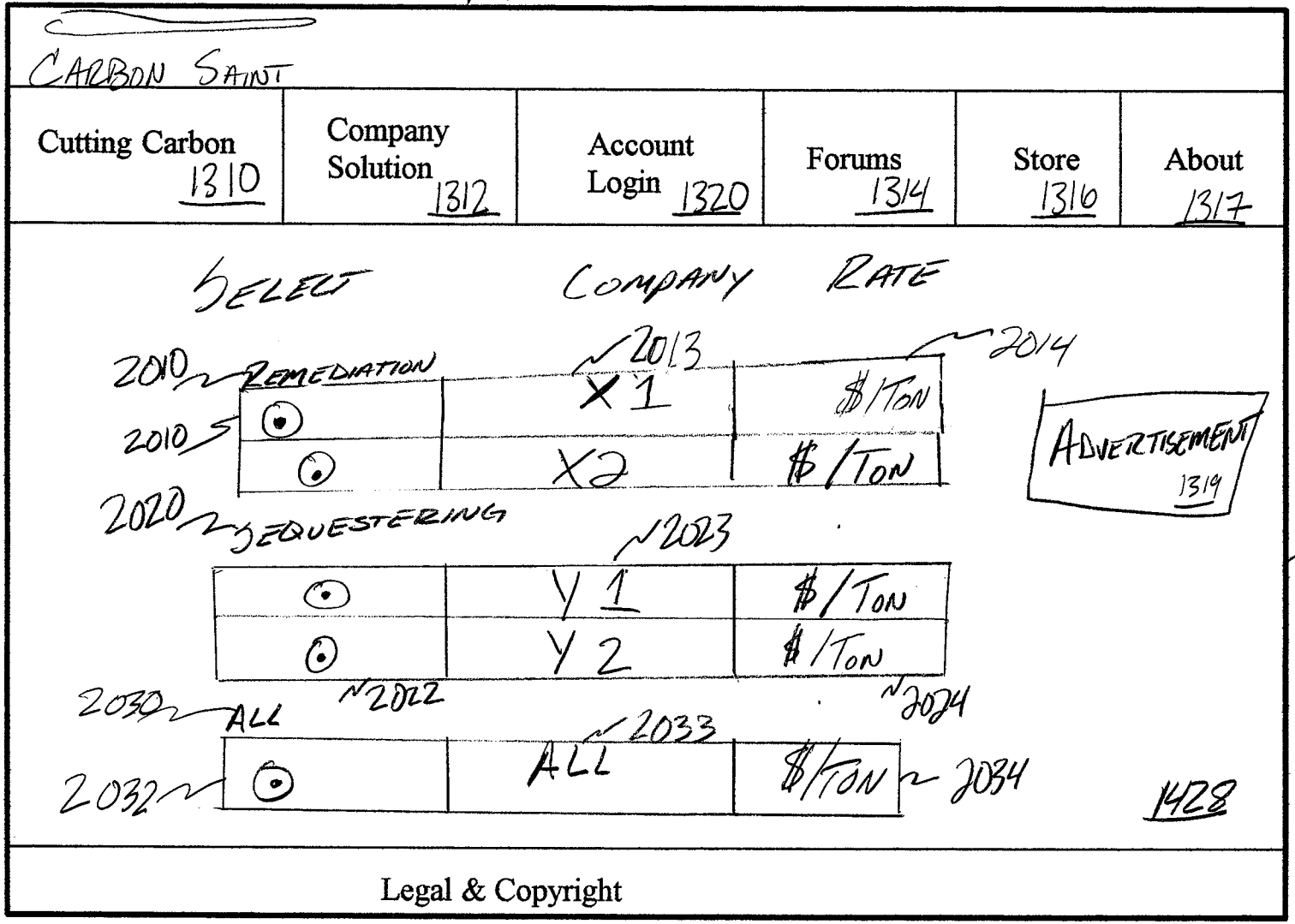
FIGURE 19



1900

10188

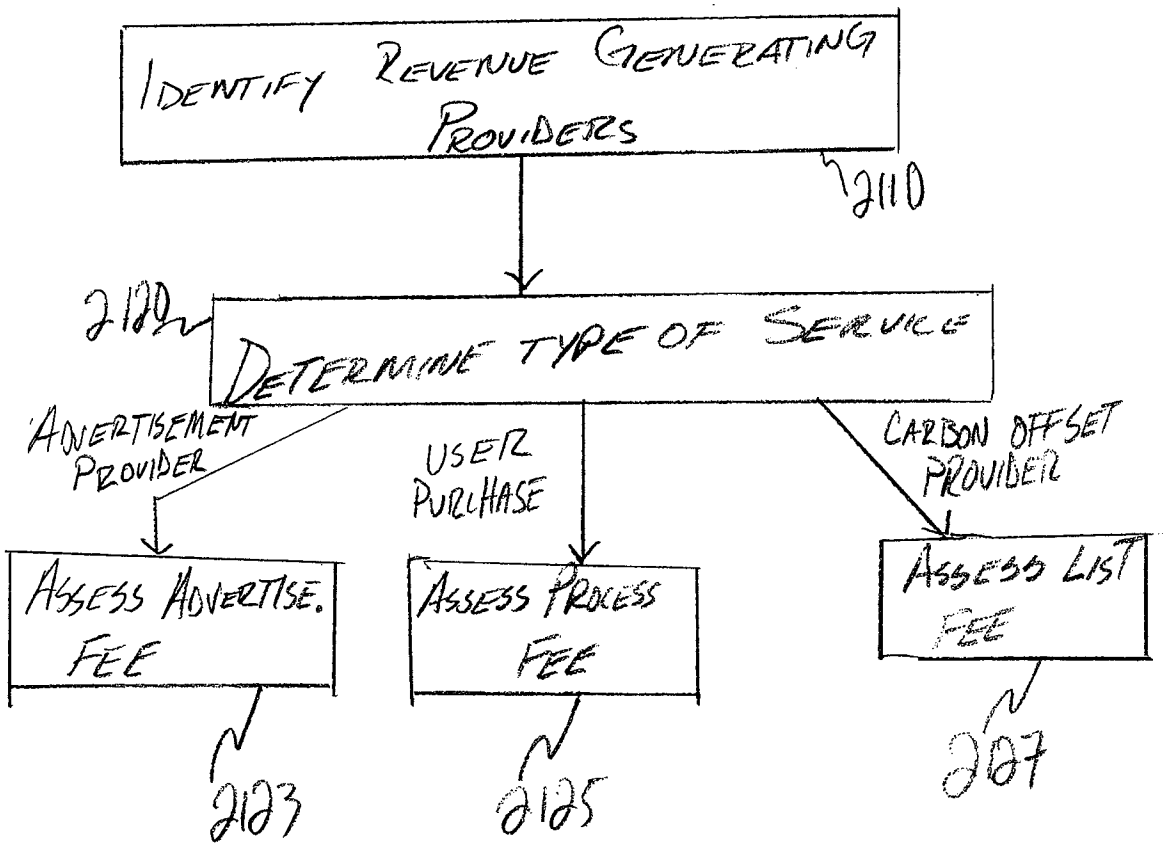
FIGURE 20



165

2000

FIGURE 21



2100

FIGURE 22

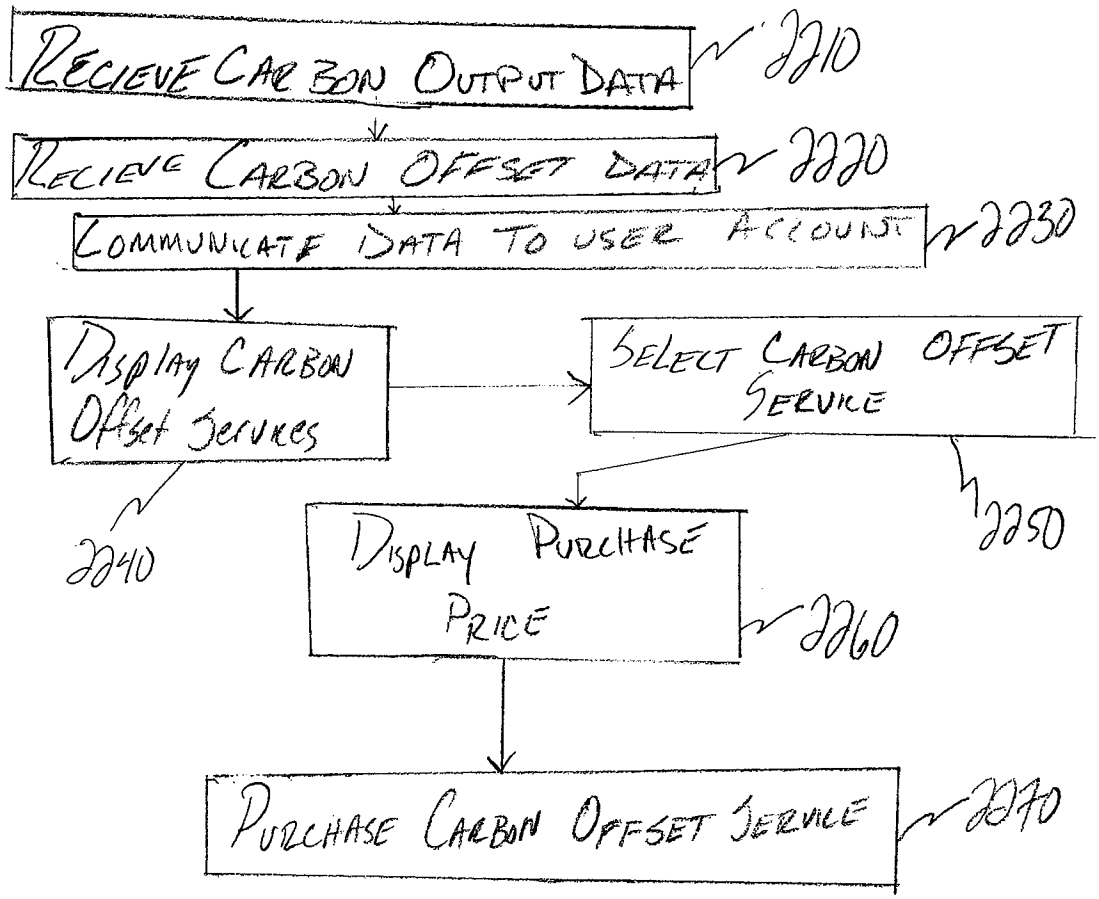
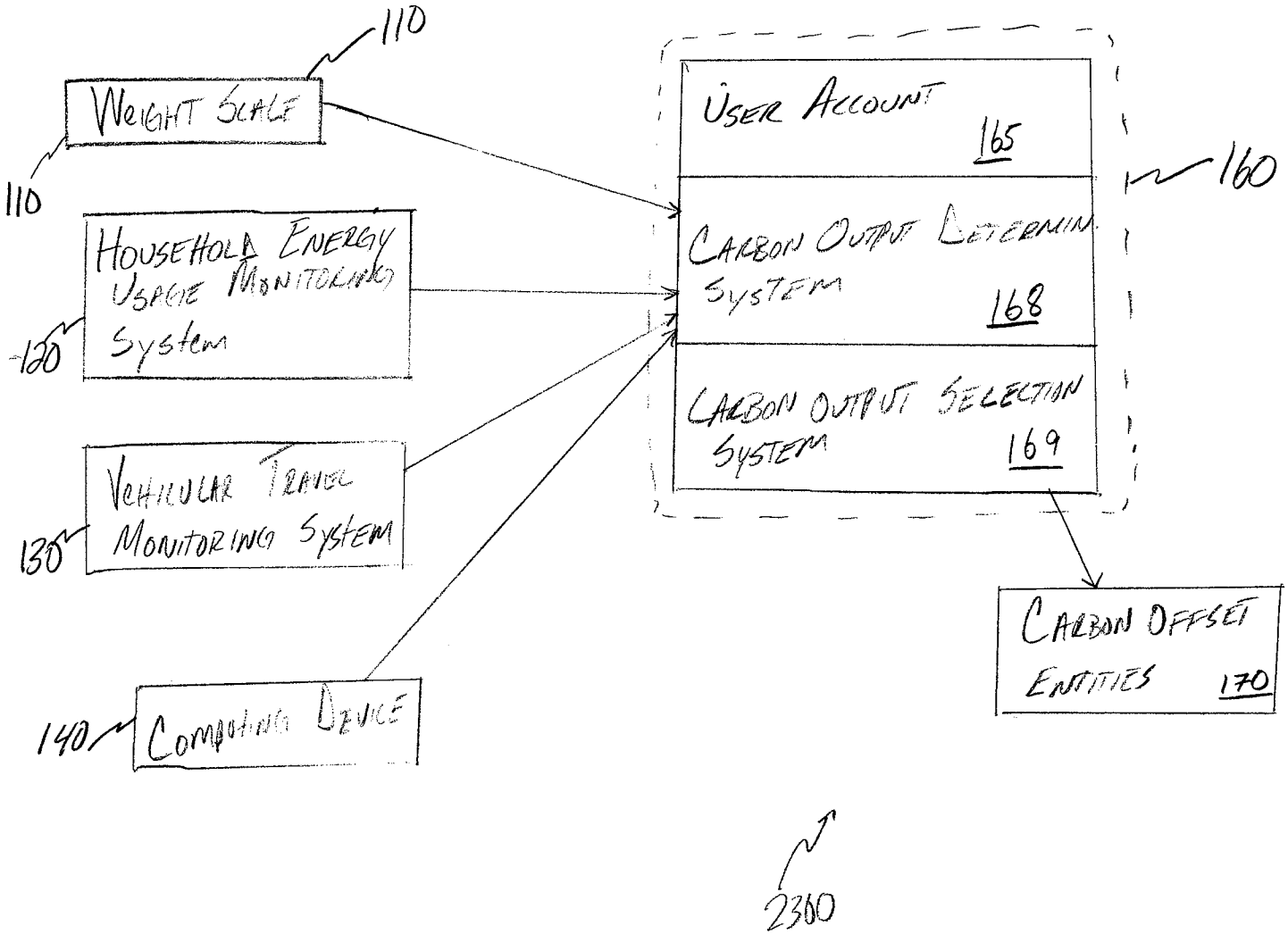

RECIEVE CARBON OUTPUT DATA
2210
RECIEVE CARBON OFFSET DATA
2220
COMMUNICATE DATA TO USER ACCOUNT
2230
DISPLAY CARBON OFFSET SERVICES
2240
SELECT CARBON OFFSET SERVICE
2250
DISPLAY PURCHASE PRICE
2260
PURCHASE CARBON OFFSET SERVICE
2270

FIGURE 23


110
WEIGHT SCALE
110
HOUSEHOLD ENERGY USAGE MONITORING SYSTEM
120
VEHICULAR TRAVEL MONITORING SYSTEM
130
COMPUTING DEVICE
140
USER ACCOUNT 165
CARBON OUTPUT DETERMIN. SYSTEM 168
CARBON OUTPUT SELECTION SYSTEM 169
160
CARBON OFFSET ENTITIES 170
2300