CLAIMS

1. A portable atmospheric water generator for operating in an environment with ambient air and generating potable water therefrom, the portable atmospheric water generator comprising:

(a) a water production element configured to transform water vapor from the ambient air to liquid water;

(b) at least one tap element being in water receiving communication with the water production element and being user-actuatable between an open state and a closed state, the at least one tap element being configured to allow water to be dispensed therefrom when in its open state and to prevent water from being dispensed therefrom when in its closed state, wherein:

(i) actuation periods are respectively defined by each length of time the at least one tap element is continuously in its open state, and

(ii) actuated volumes of water are respectively defined by the volume of water dispensed during each actuation period; and

(c) a computer element configured to:

(i) register one or more registered users of the generator;

(ii) record the actuated volumes dispensed by respective registered users;

(iii) for each registered user, sum the respective actuated volumes dispensed throughout respective user dispensing periods, thereby defining respective user aggregate volumes; and

(iv) convey respective user aggregate volumes to one or more of the registered users;

wherein the computer element is configured to be placed in network communication with computer elements of one or more additional said generators located at other locations, each of the computer elements being configured to receive respective potable water availability data from each of the other generators, and indicate potable water availability and location information corresponding to each of the other generators.

2. A portable atmospheric water generator for operating in an environment with ambient air and generating potable water therefrom, the portable atmospheric water generator comprising:

(a) a water production element configured to transform water vapor from the ambient air to liquid water;

(b) at least one tap element being in water receiving communication with the water production element and being user-actuatable between an open state and a closed state, the at least one tap element being configured to allow water to be dispensed therefrom when in its open state and to prevent water from being dispensed therefrom when in its closed state, wherein:

(i) actuation periods are respectively defined by each length of time the at least one tap element is continuously in its open state, and

(ii) actuated volumes of water are respectively defined by the volume of water dispensed during each actuation period; and

(c) a computer element configured to:

(i) register one or more registered users of the generator;

(ii) record the actuated volumes dispensed by respective registered users;

(iii) for each registered user, sum the respective actuated volumes dispensed throughout respective user dispensing periods, thereby defining respective user aggregate volumes; and

(iv) convey respective user aggregate volumes to one or more of the registered users.

wherein the registering of one or more registered users enables the registered users to create respective user hydration profiles with associated user names, each user hydration profile including respective user hydration data which:

(a) is accessible by the respective registered user by logging into their hydration profile using a unique authentication ID, and

(b) tracks respective user aggregate volumes conveyed in the form of at least one of:

(i) one or more standard units of volume measurement;

(ii) a degree of progress toward a pre-set goal of the respective registered user; and

(iii) a number of hypothetical plastic containers of pre-determined volumetric capacity which are collectively volumetrically equivalent to a respective user aggregate volume.

3. A portable atmospheric water generator as defined in claim 2 in which the authentication ID is readable by the computer element by way of the respective user’s entry of a passcode.

4. A portable atmospheric water generator as defined in claim 2 in which the authentication ID is readable by the computer element by way of biometric sensing.

5. A portable atmospheric water generator as defined in claim 2 in which the authentication ID is readable by the computer element by way of radio frequency identification (RFID) tag or near field communication (NFC) tag.

6. A portable atmospheric water generator as defined in claim 5 in which the RFID or NFC tag is embedded or contained in a drinking vessel of the respective user.

7. A system comprising:

(a) a multiplicity of portable atmospheric water generators for operating in respective environments with ambient air and generating potable water therefrom, the portable atmospheric water generators each comprising:

(i) a water production element configured to transform water vapor from the ambient air to liquid water;

(ii) a flow measurement element for use in determining one or more volumes of potable water dispensed from the portable atmospheric water generator by users during one or more respective dispensing periods; and

(iii) a computer element configured to obtain user profile data, dispense data and service data, the user profile data pertaining to one or more respective registered users, the dispense data pertaining to at least one or more of the volumes of potable water dispensed by respective registered users, and the service data pertaining to the operation of one or more components of the portable atmospheric water generator; and

(b) a server element in network communication with the computer elements and configured to receive therefrom one or more of the user profile data, dispense data and service data.

wherein:

the server element runs an application programming interface accessible by mobile computing devices of respective said registered users; and

the application programming interface makes available to a social network account of one or more of the registered users:

(a) the dispense data pertaining to the respective registered user; and

(b) a respective number of hypothetical plastic containers of pre-determined volumetric capacity which are collectively volumetrically equivalent to each of the one or more volumes of potable water dispensed by the respective registered user.

8. A system comprising:

(a) a multiplicity of portable atmospheric water generators for operating in respective environments with ambient air and generating potable water therefrom, the portable atmospheric water generators each comprising:

(i) a water production element configured to transform water vapor from the ambient air to liquid water;

(ii) a flow measurement element for use in determining one or more volumes of potable water dispensed from the portable atmospheric water generator by users during one or more respective dispending periods; and

(iii) a computer element configured to obtain user profile data, dispense data and service data, the user profile data pertaining to one or more registered users, the dispense data pertaining to at least one or more of the volumes of potable water dispensed by respective said registered users, and the service data pertaining to the operation of one or more components of the portable atmospheric water generator; and

(b) a server element in network communication with the computer elements and configured to receive therefrom one or more of the user profile data, dispense data and service data;

wherein:

(a) the computer elements each include a display screen; and

(b) the server element is further configured to send to the computer elements for display on the respective display screens at least one or more of:

(i) aggregated user data including a total of all of the volumes of potable water dispensed by a respective registered user from all of the respective portable atmospheric water generators during a respective dispensing period;

(ii) educational or motivational messages relating to water use;

(iii) educational or motivational messages relating to water conservation;

(iv) graphics, messages or promotions relating to a brand; and

(v) service notifications.

9. A system comprising:

(a) a multiplicity of portable atmospheric water generators for operating in respective environments with ambient air and generating potable water therefrom, the portable atmospheric water generators each comprising:

(i) a water production element configured to transform water vapor from the ambient air to liquid water;

(ii) a follow measurement element for use in determining one or more volumes of potable water dispensed from the portable atmospheric water generator by users during one or more respective dispensing periods; and

(iii) a computer element configured to obtain user profile data, dispense data and service data, the user profile data pertaining to one or more registered users, the dispense data pertaining to at least one or more of the volumes of potable water dispensed by respective said registered users, and the service data pertaining to the operation of one or more components of the portable atmospheric water generator; and

(b) a server element in network communication with the computer elements and configured to receive therefrom one or more of the user profile data, dispense data and

service data, the server element being further configured to send software application updates to the computer elements.