

required for the vehicle to reach a refueling station), as shown at reference numeral **21**.

[**0032**] It is to be understood that the position of the vehicle **12** may be monitored using the location detection system **24** operatively disposed in the vehicle **12**. The position of the vehicle **12** may be monitored substantially continuously or at predetermined time intervals.

[**0033**] Some vehicle systems **16** and/or the call center **46** are capable of monitoring the vehicle fuel conditions. Non-limitative examples of such fuel conditions include remaining fuel level, fuel usage rate (fuel usage per unit distance traveled), and/or the like, and/or combinations thereof.

[**0034**] In an embodiment, the system(s) **16** monitor the fuel conditions, such as a remaining fuel quantity. The data collected by the system(s) **16** is then transmitted to the vehicle communications network **14**, which in turn communicates such data to the telematics unit **18**. The telematics unit **18** communicates the data to the call center **46** via the other components in the system **10**. The call center **46** may monitor other fuel conditions using the data and other data retrieved. For example, the call center **46** may use the fuel level data and vehicle speed to calculate the fuel usage rate (i.e. the rate at which the vehicle **12** is currently using fuel). In an alternate embodiment, the processor **20** is capable of monitoring the fuel conditions.

[**0035**] Using the data regarding the fuel condition(s), an off-board system (e.g. the call center **46**) or the on-board processor **20** is capable of determining a remaining driving distance. It is to be understood that the remaining driving distance is indicative of the mileage that the vehicle **12** may travel with the current fuel level and at the current fuel usage rate. It is to be further understood that the mileage is representative of actual driving distances by highways and streets available to the user. As previously stated, the remaining driving distance may be continuously monitored and updated.

[**0036**] The remaining driving distance may be presented to the user via audible prompts, digital displays (non-limitative examples of which include a multi-function display (MFD), an LCD display, a driver information center display, a radio display, an arbitrary text device, and/or combinations thereof), and/or combinations thereof.

[**0037**] The method further includes monitoring the then-current position of the vehicle **12** and providing the user with a location of (and/or directions to) at least one refueling station within the remaining driving distance of the vehicle **12**. It is to be understood that the method includes determining a driving distance to the refueling stations that are within the remaining driving distance.

[**0038**] The call center **46** is capable of accessing a database of the locations of refueling stations and then determining the refueling stations within the remaining driving distance of the vehicle **12**. The call center **46** may communicate the location(s) of the refueling stations to the user via the telematics unit **18**. In an alternate embodiment, the on-board processor **20** is capable of accessing a database of locations of refueling stations and determining whether the refueling stations are within the remaining driving distance, and providing the locations of the refueling stations to the user. It is to be understood that the refueling station loca-

tion(s) may be presented to the driver using audio prompts and/or display systems, such as those described hereinabove.

[**0039**] In any of the embodiment(s) disclosed herein, the call center **46** and/or the on-board processor **20** may additionally check the hours of operation for fueling stations and exclude those that are closed at the then-current time.

[**0040**] It is to be understood that the locations, operating hours, type(s) of fuel sold/dispensed, and/or any other relevant data regarding fueling stations may be substantially regularly updated to the vehicle **12** using components of the system **10** that are linked to, for example, a central repository of fueling station data that has the ability to respond relatively quickly to a request to download data. The vehicle's location detection system **24** may provide its location, and the vehicle's systems **16** may provide the estimated remaining driving distance, fuel type, and optionally the last time the database was updated. The central repository would download (for example, to an on-board computer **20** having monitoring, computational, decision making, and communication capabilities) the location of the appropriate refueling stations within the current driving range, taking into account a designated or predetermined margin for error. In a non-limitative example where the vehicle **12** remains in the same area that it was in at the last update, new station locations may be downloaded.

[**0041**] Further, the distance from the then-current vehicle position to any of the locations of the refueling stations within the remaining driving distance may be continuously monitored. Actual driving distance/range of the vehicle **12** may be altered by changes in weather conditions, changes in road conditions (e.g. rural versus city driving, or mountainous versus flat roads), changes in the route stored in the navigation system, and/or the like. In a non-limitative example, if the road or weather conditions slow a driver down, or if the driver is re-routed due to a detour, fuel usage rate may change, thus altering the remaining driving distance/range and potentially altering the fueling locations within the remaining driving distance.

[**0042**] In an embodiment, the fuel station locations provided to the user may be particular to that user and/or vehicle. For example, the call center **46** may have on file that the vehicle **12** requires diesel fuel, and thus will provide to the user the location of fueling stations that sell diesel fuel. Alternately, the vehicle **12** may identify the required fuel type when a fueling station location update is requested or performed.

[**0043**] Upon being presented with various fueling station locations, the user may proceed to any refueling station selected from a list of suitable available alternatives (if any). The user may also initiate a navigation route request to a particular station. Initiation of the request may be verbal and/or via a physical motion. As such, an input system (used to initiate such a request) may include an alphanumeric keypad, a microphone **28**, a menu selection system, and/or combinations thereof.

[**0044**] Verbal communication may take place via microphone **28** coupled to the in-vehicle or mobile phone **32** associated with the telematics unit **18**. Caller utterances into the microphone **28** are received at a call center **46**, which tokenizes the utterance stream for further processing. In one embodiment, the tokenized utterances are placed in a subscriber information database **52** at the call center **46**.