PASSIVE CARE CONTROL METHOD AND ASSOCIATED SYSTEMS

Technical Field

[0001] The present invention relates generally to a passive care control method and associated systems.

Background

[0002] In certain facilities where people live who require supervision or monitoring for health or care reasons, when such a person becomes incapacitated and requires assistance, it is not always easy for that person to indicate to a relevant authority or authorised carer that assistance is required. For example, in healthcare facilities and aged care facilities etc., providing specialised equipment such as alert systems and alarm buttons that have been specifically developed to enable these persons to only request assistance in times of need may not be viable cost wise and may also require additional installation costs.

[0003] In an aged care facility for example, residents may live semi-autonomously in their own unit. Many accidents occur in wet environments such as the bathroom. However, when an accident occurs, it is not unusual for the resident to be incapacitated and not be in a position to call out for help. Similar scenarios are also envisioned in other environments where other physical consumables are provided, such as gas and electricity.

Summary

[0004] Embodiments of the present invention seek to substantially overcome, or at least ameliorate, one or more disadvantages of existing arrangements.

[0005] Disclosed are arrangements which seek to address the above problems by monitoring usage of a physical consumable and determining whether abnormal usage of the physical consumable has occurred. Upon determination of abnormal usage, an abnormal usage indicator may be generated and sent to a registered device to provide an alert of the abnormal usage.

[0006] According to a first aspect of the present disclosure, there is provided a method for detecting abnormal usage of water in a water usage environment, wherein the method comprises the steps of: monitoring detected water usage data

associated with the provision of water in a water usage environment using a plurality of different types of water provisioning device that are arranged to provide water, where the different types of water provisioning device are selected from the group consisting of: a tap; a toilet flush; a shower unit; applying weightings to the detected water usage data based on the type of water provisioning device; and detecting abnormal usage of water based on the monitoring of the detected water usage data and the applied weightings.

[0007] According to an aspect of the present disclosure, there is provided a method for detecting abnormal usage of a physical consumable in a physical consumable usage environment, wherein the method comprises the steps of: monitoring detected usage data associated with the provision of at least one physical consumable in a physical consumable usage environment using at least one physical consumable provisioning device that is arranged to provide the physical consumable; and detecting abnormal usage of the physical consumable based on the monitoring of the detected usage data.

[0008] The method may include the step of wirelessly transmitting the detected usage data to at least one abnormal usage monitoring device, wherein the step of detecting the abnormal usage is performed by the monitoring device. Also, the abnormal usage monitoring device may be a gateway device or a server in a building management system.

[0009] The method may include the step of detecting the abnormal usage are performed by a physical consumable monitoring device associated with the physical consumable provisioning device.

[0010] The method may include the step of generating an alert based on the detection of the abnormal usage.

[0011] The method may include the step of sending the generated alert to one or more registered devices associated with the usage of the physical consumable.

[0012] The method may include the steps of comparing the detected usage data with prior usage data associated with prior use of the physical consumable by the physical consumable provisioning device, and detecting the abnormal usage of the physical consumable based on the comparison of the detected usage data with the prior usage data.

[0013] The method may include the step of comparing the detected usage data with the prior usage data by detecting whether the detected usage data matches a usage pattern associated with the prior usage data.