ACTIVE CARE CONTROL METHOD, ELECTRONIC CONTROL DEVICE, CENTRAL GATEWAY DEVICE AND SERVER

Technical Field

[0001] The present invention relates generally to an active care control method, electronic control device, central gateway device and server.

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 alarm buttons, usually requires the incapacitated person to move to the alarm button to activate the alarm.

[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, the alarm button may be located at a point that is inaccessible to the incapacitated resident. 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 providing an alert/alarm system and method that can be easily activated by a user. The alert/alarm system and method may utilise modified physical consumable monitoring technology to forward a generated alert/alarm to a registered device via existing infrastructure.

[0006] According to a first aspect of the present disclosure, there is provided a method for detecting an assistance indicator in a water usage environment, wherein the method comprises the steps of: detecting an assistance indicator using an electronic control device that is arranged to control at least one water

provisioning device in the water usage environment, wherein the assistance indicator is generated by a portable electronic communication device, and wherein the assistance indicator indicates a user of the portable electronic device in the water usage environment requires assistance; generating an

alert based on detection of the assistance indicator; and communicating the alert to a registered device that is associated with the water provisioning device.

[0007] The method may include the step of generating the assistance indicator using the portable electronic communication device.

[0008] The method may include the steps of wirelessly transmitting the assistance indicator to a gateway device in a building management system, and generating the alert at the gateway device.

[0009] The method may include the steps of wirelessly transmitting the assistance indicator to a server in a building management system, and generating the alert at the server.

[0010] The method may include the step of associating a unique ID of the electronic control device with the assistance indicator to identify one or more of a user, or location, of the electronic control device.

[0011] The method may include the step of associating a unique ID of the water provisioning device with the assistance indicator to identify one or more of a user, or location, of the water provisioning device.

[0012] According to a second aspect of the present disclosure, there is provided an electronic control device arranged to control at least one water provisioning device in a water usage environment, the electronic control device comprising a processor and a memory, wherein the memory comprises software code arranged to cause the processor to detect an assistance indicator generated by a portable electronic communication device, wherein the assistance indicator indicate a user of the portable electronic device in the water usage environment requires assistance; generate an alert based on detection of the assistance indicator; and communicate the alert to a registered device that is associated with the water provisioning device.

[0013] The electronic control device may be part of or integrated with the water provisioning device.

[0014] The electronic control device may be arranged to communicate the alert to the registered device via a central gateway device and a server.

[0015] According to a third aspect of the present disclosure, there is provided a central gateway device in a building management system, wherein the central gateway device comprises a processor and memory, wherein the memory comprises software code arranged to

cause the processor to detect an assistance indicator using an electronic control device that is arranged to control at least one water provisioning device in a water usage environment, wherein the assistance indicator is generated by a portable electronic communication device, and wherein the assistance indicator indicates a user of the portable electronic device in the water usage environment requires assistance; generate an alert based on detection of the assistance indicator; and communicate the alert to a registered device that is associated with the water provisioning device.

[0016] The central gateway device may be arranged to communicate the alert to the registered device via a server.

[0017] According to a fourth aspect of the present disclosure, there is provided a server in communication with a building management system, wherein the server comprises a processor and memory, wherein the memory comprises software code arranged to cause the processor to detect an assistance indicator using an electronic control device that is arranged to control at least one water provisioning device in a water usage environment, wherein the assistance indicator is generated by a portable electronic communication device, and wherein the assistance indicator indicates a user of the portable electronic device in the water usage environment requires assistance; generate an alert based on detection of the assistance indicator; and communicate the alert to a registered device that is associated with the water provisioning device.

[0018] Other aspects are also disclosed.

Brief Description of the Drawings

[0019] At least one embodiment of the present invention will now be described with reference to the drawings and appendices, in which:

[0020] Fig. 1 shows components forming at least part of a building management system for monitoring an alert/alarm according to the present disclosure;

[0021] Fig. 2 shows a physical consumable monitoring device according to the present disclosure;

[0022] Fig. 3 shows a gateway device forming at least part of a building management system according to the present disclosure;

[0023] Fig. 4 shows a server forming at least part of a building management system according to the present disclosure;

[0024] Fig. 5 shows a portable electronic communication device according to the present disclosure.

Detailed Description including Best Mode