

The invention claimed is:

1. A method of monitoring conditions in a space, comprising: establishing a communication link between a network connected monitoring device and one or more user mobile devices through communicative pairing; receiving one or more user mobile devices and user identification entities signals through the monitoring device; receiving user mobile device pairing records comprising pairing and pairing disconnection with the monitoring device, and a corresponding user mobile device unique identifier; receiving user mobile device pairing records comprising pairing and pairing disconnection with a beacon disposed at a location, and a corresponding beacon unique identifier; recording the pairing records in a memory; activating/deactivating an alarm operation; triggering an alert; wherein a processing system includes detecting a pulling event during a deactivated alarm operation that comprises at least one of: (i) detecting a user mobile device or user identification entity at a location through a beacon, after detecting opening/closing of a normally closed door disposed at a shortest distance from the monitoring device; or, (ii) detecting the lapse of a visit time period with respect to the concurrent time; or, (iii) receiving user mobile device sent pairing records comprising pairing disconnection with the monitoring device; or, (iv) detecting a smallest user time log, among a plurality of user time logs of users as inhabitants, exceeding a preconfigured threshold; generating a state signal; transmitting the state signal to a user as inhabitant mobile device, when requesting authorization to resume a lapsed visit time period; transmitting the state signal to the monitoring device.

2. The method of claim 1, wherein the monitoring device detecting step includes a pulling event during a deactivated alarm operation, that comprises at least one of: (i) receiving the state signal; or, (ii) detecting opening/closing of the normally closed door; or, (iii) detecting pairing disconnection with a user mobile device; or,

(iv) detecting the lapse of a visit time period with respect to the concurrent time; generating a secondary state signal; transmitting the secondary state signal to a selected user mobile device.

3. The method according to claim 1, further comprising: receiving the secondary state signal; generating an arming signal for the secondary state signal; activating an alarm operation; transmitting the arming signal to the monitoring device.

4. The method according to claim 2, wherein the monitoring device, further comprising: generating an overriding signal for the arming signal; transmitting the overriding signal to: (a) an activated electrical device receiving the overriding signal and deactivating within a preconfigured time period, or, a deactivated electrical device receiving the overriding signal and activating within a preconfigured time period; and/or, (b) an electric door lock receiving the overriding signal remains in the locked state precluding being unlocked; and/or, (c) a relay slave receiving the overriding signal and deactivating an activated power connected system within a preconfigured time period, or, receiving the overriding signal and activating a deactivated power connected system within a preconfigured time period.

5. The method of claim 1, wherein the processing system detecting a pushing event during an activated alarm operation, comprising: receiving a user as inhabitant mobile device sent message authorizing to resume a lapsed visit time period; or, receiving user mobile device sent pairing records comprising pairing with the monitoring device; or, detecting a smallest user time log, among a plurality of user time logs of users as inhabitants, crossing below a preconfigured threshold, and

transmitting said smallest user time log, comprising the corresponding projected user arrival time to the monitoring device.

6. The method of claim 5, wherein the monitoring device detecting a pushing event during an activated alarm operation, comprises: detecting occupancy; or, detecting opening/closing of a normally closed door; detecting pairing with a user mobile device; generating a returning signal; transmitting the returning signal to the user mobile device.

7. The method according to claim 6, wherein the processing system deactivating an alarm operation, comprises: receiving the returning signal; deactivating the alarm operation.

8. The method according to claim 6, further comprising: transmitting the returning signal upon detecting the normally closed door opening/closing, in a selected time period of the day, wherein within a time span from the user time log comprised projected user arrival time or an effective visit time period, to: (a) a deactivated electrical device, wherein receiving the returning signal and activating; and/or, (b) an electric door lock, wherein receiving the returning signal and switches to a locked/unlocked state allowing being unlocked; and/or, (c) a relay slave, wherein receiving the returning signal and activating a power connected deactivated system within a preconfigured time period.

9. The method of triggering an alert during an activated alarm operation according to claim 6, comprising: the monitoring device detecting occupancy, or opening/closing of the normally closed door, not receiving a response message within a preconfigured time period from a user as inhabitant mobile device or a user as visitor mobile device, wherein a concurrent visit time period is in effect and

the monitoring device not concurrently paired with a user as inhabitant mobile device or a user as visitor mobile device; the monitoring device detecting occupancy, or pairing with a user as visitor mobile device, not receiving a response message within the preconfigured time period from a user as inhabitant mobile device, or, the processing system not receiving a user as inhabitant mobile device sent message authorizing to resume a lapsed visit time period within a preconfigured time period, wherein a concurrent visit time period is not in effect; the monitoring device detecting opening/closing of the normally closed door, not concurrently paired with a user as inhabitant mobile device or a user as visitor mobile device, not receiving a response message within the preconfigured time period from a user as inhabitant mobile device, wherein a concurrent visit time period is not in effect; or, the monitoring device detecting occupancy, or opening/closing of the normally closed door, not concurrently paired with a user as visitor mobile device, wherein a smallest user time log, among a plurality of user time logs of users as inhabitants, exceeded the preconfigured threshold, and a concurrent visit time period is not in effect; the monitoring device generating a secondary state signal and sending it to the processing system; the processing system triggering an alert.

10. The method of claim 1, wherein the user time log, further comprises: the geo-location data of user as inhabitant; or, the address of a location; or, the projected user arrival time at the monitoring device disposed space; the projected user arrival time comprising the lead time duration pertinent to a user as inhabitant, including: obtaining the unique identifier of a beacon disposed at a location; or, recording user mobile device pairing records comprising pairing and pairing disconnection with a beacon; or, providing questions to a user about the location; obtaining user

provided answers to the questions in text and/or voice; or, deriving at least one pattern related to at least one characteristic of the location, wherein said at least one characteristic including the geo-location and user activity, and, projecting a typical/average time of stay of the user as inhabitant at the location.

11. A method of monitoring conditions by a processing system in a building related to a plurality of users, including at least at least one staff and at least one visitor, comprising: establishing a communication link with one or more user mobile devices, staff digital devices through communicative pairing; activating and deactivating an alarm operation in accordance with administrative authorization; receiving from staff digital device pairing records comprising pairing and pairing disconnection with a plurality of beacons disposed at a location, and corresponding unique identifiers; receiving from user mobile digital device pairing records comprising pairing and pairing disconnection with at least one monitoring device and one or more beacons disposed at a plurality of locations, and the corresponding unique identifiers; triggering an alert in accordance with user as staff digital device pairing records not including pairing with one or more distinct beacons within a preconfigured time period, or preconfigured time period since receiving an alert message; or, triggering an alert in accordance with a detected event during an activated alarm operation; generating an activity signal corresponding to an entity, including: (a). a normally closed door disposed with a door sensor detecting opening/closing; (b). an elevator door disposed on a landing floor corresponding to a landing elevator car; (c) an occupancy sensor detecting occupancy; generating a secondary activity signal for a selected activity signal corresponding to detected occupancy in a building territory; recording the secondary activity signal and defining the concurrent time as the reporting time; counting a maneuvering time

duration commencing from the reporting time to the time of an activity signal corresponding to an entity disposed at a shortest distance from the occupancy sensor pertinent to said secondary activity signal; triggering an alert in accordance with a maneuvering time duration exceeding the preconfigured time period, wherein the occupancy sensor pertinent to the secondary activity signal, comprising: (a) disposed not at a shortest distance from a door, an elevator door, or a parking garage exit; or, (b) disposed at a shortest distance from a door or an elevator door without a corresponding activity signal; or, (c) disposed at a shortest distance from an elevator door with a corresponding activity signal for an elevator car landed on the floor level of said building territory departing without passenger boarding the elevator car.

12. A system for implementing the method according to claim 1, further comprising: at least one monitoring device disposed in a space; one or more beacons disposed at a location; a processing system communicatively linked with at least one monitoring device; the processing system communicatively linked with one or more beacons.

13. The system according to claim 12, wherein the monitoring device further comprises: a wireless module enabling signals/data transport through a short-range wireless communication link with at least one user identification entity, at least one user mobile device, at least one door sensor, at least one electrical device; an interface for receiving sensor signals/data; an RJ45 or other wired or wireless Ethernet interface for linkage with a network, including the PSTN, LAN, and the internet; an occupancy sensor generating a signal upon detecting occupancy; one or more climate sensors including a digital temperature sensing module or a

thermistor, or, a gas sensor, or, a hot water temperature sensor, or a hot water volume sensor, or, a humidity sensor, or, a smoke sensor, collecting indoor climate attribute data comprising: the indoor temperature, or, concentration of a gas in air, or, hot water temperature, or, hot water volume, or, relative humidity, or, concentration of combustion particulates in air; a processing module for processing data; a memory for storing data.

14. The system according to claim 13, wherein the monitoring device is configured to: pair with one or more user mobile devices through a short-range wireless communication link; receive signals/data sent from said one or more user mobile devices; send to the processing system signals/data collected from sensors, and user mobile devices.

15. The system according to claim 14, wherein the user mobile device is configured to: pair with the monitoring device and establish a short-range wireless communication link; receive signals/data sent from the monitoring device; or, pair with a beacon disposed at a location, comprising a building or a vehicle; receive signals/data sent from the processing system through the network; send geo-location data to the processing system in accordance with a preconfigured frequency; send the pairing records to the processing system; provide questions to a user about a location disposed with at least one beacon comprising a unique identifier; receive user provided answers to the questions; analyze the data and said answers to obtain a user time log; send the user time log to the processing system.

16. The system according to claim 12 comprising: at least one application server having computing and data processing capability, connected to the network with the process and software that allows interactive processing of information

receiving from one or more of the user mobile devices, staff digital devices, monitoring devices, and beacons; a memory working with or within the application server for storing data, pairing records and other information; a clock/timer providing the clock time to the monitoring device, user mobile device and staff digital device; receiving signals/data sent from sensors, or at least one of a relay slave, and user mobile devices, through the monitoring device; receiving user mobile devices sent data, comprising any one or combination of the geo-location data, user time log and pairing records; receiving data collected from one or more beacons disposed at a location; providing questions to a user about the location; receiving user provided answers to the questions; analyzing the data and answers to obtain a user time log; storing the monitoring device sent signals/data in the memory; storing in the memory user as inhabitant mobile device sent information, including the user time log; receiving user as visitor mobile device sent information, including the response message; storing in the memory one or more preconfigured thresholds pertinent to the user time log; storing in the memory a plurality of preconfigured thresholds comprising multiple number of time periods; storing in the memory one or more user as inhabitant defined visit time periods pertinent to a communicatively linked monitoring device.

17. The method according to claim 1 further comprising receiving and processing user mobile device sent user time log or geo-location data.

18. The method according to claim 1 wherein the pairing records comprising pairing and pairing disconnection are recorded with respect to time.

19. The method according to claim 2 further comprising the monitoring device transmitting the secondary state signal to the processing system, wherein a concurrent visit time period is in effect and not receiving a response message within a preconfigured time period from the selected user mobile device; or, a concurrent visit time period is not in effect and not receiving a response message within a preconfigured time period from the selected user mobile device.

20. The method according to claim 6 further comprising the monitoring device transmitting the returning signal to the processing system, wherein a concurrent visit time period is in effect and receiving a response message within a preconfigured time period from a user as inhabitant mobile device, or, a user as visitor mobile device; or, a concurrent visit time period is not in effect and receiving a response message within a preconfigured time period from a user as inhabitant mobile device.