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REMOTE SALES ASSOCIATE SYSTEM

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REMOTE SALES ASSOCIATE SYSTEM

FIELD OF THE INVENTION

[0001] Embodiments of the present invention relate generally to merchandise security systems and methods for monitoring and protecting merchandise from theft in a retail environment using a remote sales associate system.

BACKGROUND OF THE INVENTION

[0002] Oftentimes, retailers display items of merchandise for consumers in a manner that allows a consumer to decide whether to purchase the item while at the same time reducing the incidence of theft. In some instances, retailers stock and store items of merchandise in secure cabinetry, shelving, boxes or the like. A consumer would need to obtain the attention of a sales associate, wait for the sales associate to respond and retrieve the item prior to being able to finalize a purchase. Thus, retailers may benefit from a system for providing consumers with remote access to a store associate and items for purchase while at the same time preserving the ability to present merchandise in a way that encourages a consumer to purchase the item but also deters theft in the absence of an associate.

BRIEF SUMMARY OF THE DRAWINGS

[0003] FIG. 1 illustrates a schematic of a remote sales associate according to one embodiment of the invention.

DETAILED DESCRIPTION OF EMBODIMENTS OF THE INVENTION

[0004] Embodiments of the present invention will now be described more fully hereinafter with reference to the accompanying drawings, in which various embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. Rather, these embodiments are

provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art.

[0005] Referring now to the accompanying figures wherein identical reference numerals denote the same elements throughout the various views, illustrated embodiments of methods and systems according to the present invention are capable of not only protecting an item of merchandise against theft or unauthorized removal, but may also provide consumers 26 with remote access to retail associates for facilitating a transaction as explained in further detail below. The remote sales associate systems and methods provided herein may also assist with minimizing human resource downtime by utilizing employees locally, regionally, and/or globally to engage and assist consumers 26. The system 10 is operable for providing consumers 26 with remote access to items of merchandise 12 and in some cases, such remote access may occur on demand and/or in real time. The items of merchandise 12 may be any item, including any number of consumer products or electronic products (e.g. hand-held device, cellular phone, smart phone, tablet, laptop computer, etc.). Additionally, the items of merchandise 12 may be packaged (or boxed) or non-packaged items. Although described in relation for use in a retail environment, the remote access system shown and described herein is suitable in other settings, such as for example, a residential or commercial environment, and is not intended to be limited to use only in a retail environment.

[0006] In an exemplary embodiment, as shown FIG. 1, a remote sales associate system 10 for providing consumer access to an item of merchandise 12 may generally include one or more monitors 16, one or more security devices 18 (e.g. cabinet locks, box locks, shelf locks, etc.) and a plurality of remote devices 20 (e.g. hand-held device, cellular phone, smart phone, tablet, laptop computer, etc.). The remote devices 20 may be used, for example, by a remote sales associate 24 in a local, regional and/or global retail establishment. The monitors 16 may be consumer kiosks whereby consumers are able to initiate communication with the remote devices 20 and/or interact with the consumer kiosks, such as for facilitating a variety of transactions (e.g., unlocking a lock, completing a purchase, answering questions, etc.). The monitors 16, in some embodiments, may be, for example, two-way monitors. The monitors 16 may have an audio and/or video interface configured to display video and/or images, such as live video of a

remote sales associate 24, and provide audio output and/or input. The monitors 16 may be strategically located throughout a retail establishment, such as proximate to one or more security devices 18, and may be mechanically secured (e.g. via fasteners, adhesives, etc.) to a support surface to allow for ease of consumer access. The monitors 16 may be connected to an actuating mechanism 22 configured to initiate communication with a remote sales associate 24. In some embodiments, the actuating mechanism 22 may be, for instance, a call button or a mobile device. In other embodiments, the actuating mechanism 22 may be the monitor 16 wherein the monitor 16 is provided with touch screen capabilities.

[0007] According to one embodiment, the plurality of remote devices 20 are configured to communicate with a security device 18. The monitors 16, security devices 18, and remote devices 20 may be in communication with one another over a network 24. The communication may be hard-wired and/or wireless. For example, in one embodiment, the communication is wireless, and the network 24 may be a cloud-based network. Consumers 26 may interact within the remote sales associate system 10, such as by using an actuating mechanism 22 or other interface and/or by communicating with a zone manager 28 via a mobile device 30 (e.g., a cellular phone, smartphone, or tablet), as explained in further detail below. The mobile device 30 may be owned by the consumer 26 and/or provided in the retail establishment by the retailer.

[0008] In one embodiment, the actuating mechanism 22 may be configured to be connected to circuitry contained in the monitor 16. As such, a consumer 26 may actuate the actuating mechanism 22 or other interface to initiate communication with the remote sales associate 24 via the monitor 16. In this way, a consumer 26 may obtain on-demand, real-time communication. The circuitry contained in the monitor 16 may include a communications protocol (e.g. Bluetooth, Bluetooth Low Energy, Wi-Fi, cellular, etc.) that facilitates communication with a remote device 20 in the possession of a remote sales associate 24. The remote device 20 may contain circuitry and a software application. The software application may be a commercially available application that may be customized according to individual retailers and provided to retailers and consumers 26 for use with any remote device 20 and/or mobile device 30. The software application may be configured to facilitate communication between the remote sales associate 24 and the consumer 26. For example, in one embodiment, retailers and consumers 26

may be able to download/store the software application for use on the remote device 20 and/or mobile device 30. As mentioned above, and in some embodiments, when a consumer 26, actuates the actuating mechanism 22 or other interface, the monitor 16 communicates through the network 24, whereby a signal is sent to a remote device 20 of an available remote sales associate 24 indicating that a consumer 26 is requiring assistance. Likewise, and in other embodiments, the consumer 26 may own and have in his/her possession a mobile device 30 wherein the mobile device 30 may contain a software application stored thereon. In this instance, a consumer 26 interacts with the software application stored on his/her mobile device 30, and a signal from the mobile device 30 of the consumer 26 is sent over the network 24 to a remote device 20 of an available remote sales associate 24, indicating that a consumer 26 is requiring assistance. Similarly, and according to another embodiment, the monitor 16 may be a two-way touch screen monitor 16. In this embodiment, a consumer 26 interacts with the two-way touch screen monitor 16, wherein a signal from the two-way touch screen monitor 16 is sent over the network 24 to a remote device 20 of an available remote sales associate 24, indicating that a consumer 26 is requiring assistance. In some embodiments, a remote sales associate 24 located anywhere locally, regionally and/or globally may be capable of being notified that a consumer 26 requires assistance.

[0009] An available remote sales associate 24 may be capable of acknowledging an incoming message and/or notification by interacting with the software application stored on his/her remote device 20. Acknowledgement of an incoming message and/or notification may initiate a real-time video feed from the remote device 20 of the remote sales associate 24 to the monitor 16 and/or remote device 30, at which time the remote sales associate 24 may be prompted to remotely assist the consumer 26. In one embodiment, the remote sales associate system 10 may be configured to allow a remote sales associate 24 to remotely assist a consumer 26 by unlocking a cabinet, shelf, box, lock or the like thereby allowing a consumer 26 access to an item of merchandise 12 to purchase. The remote sales associate system 10 may also be configured to allow the remote sales associate 24 to relock the cabinet, shelf, box, lock or the like once the consumer 26 has had the opportunity to analyze and/or purchase the item of merchandise 12. For example, the remote sales associate 24 may use his/her remote device 20 to

send a command to relock the security device 18. In some embodiments, for instance, the security device 18 may be a self-locking mechanism such that once an item of merchandise is removed, the security device 18 self-locks. In some embodiments, the consumer 26 may be capable of relocking the security device 18, for instance such as by closing the door of a cabinet after removing an item of merchandise 12. In some embodiments, when a theft event (e.g., a security device 18 is tampered with or compromised) is detected (e.g., using one or more sensors at the security device 18 and/or zone managers 28 (discussed below)), a remote sales associate 24 may be capable of appearing real-time on the monitor 16 and/or the consumer 26 mobile device 30. In some instances, the security device 18 may be configured to communicate with one or more remote devices 30 in response to a theft event.

[0010] In one embodiment, the remote sales associate system 10 may be configured to allow the remote sales associate 24 to assist the consumer 26 with an item of merchandise 12 of interest, such as by answering questions and/or providing the consumer 26 information related to the item of merchandise 12. In another embodiment, the remote sales associate system 10 may be configured to assist a consumer 26 with navigating throughout a retail establishment to locate items of merchandise 12. In another embodiment, the remote sales associate system 10 may be configured to allow the remote sales associate 24 to assist the consumer 26 with a remote transaction and/or checkout to purchase of an item of merchandise 12. In some embodiments, the remote sales associate system 10 may also be capable of allowing the remote sales associate 24 to be a personal concierge for the consumer 26. For example, the remote sales associate 24, being visible to the consumer 26 via his/her mobile device 30, may be able to traverse the retail establishment along with the consumer 26 thereby creating a platform for the remote sales associate 24 to direct the consumer 26 to a desired item of merchandise 12 and/or to upsell to the consumer 26, thereby enticing the consumer 26 to purchase other items of merchandise 12. In other embodiments, the remote sales associate system 10 may be a platform for retail establishments to increase sales and employee productivity. For example, through the use of a remote sales associate system 10, retail establishments may be capable of offering employee incentives such as rewards, store credit or points for calls answered and/or consumers 26 assisted. Another example of an incentive could be that the remote sales associate system 10

may allow retail establishments to offer employees additional work/sales during employee off days and/or before or after store operating hours.

[0011] In one embodiment, the items of merchandise 12 and monitors 16 may be strategically located throughout a retail establishment and may be managed according to zones using a zone manager 28. For example, the remote sales associate system 10 may utilize zone manager 28 techniques similar to that disclosed in International Publication No. WO2015/050710 entitled “System and Method for Monitoring Merchandise in a Retail Establishment”, the contents of which are incorporated herein by reference. In some embodiments, the plurality of remote devices 20 are configured to communicate with one or more of the zone managers 28. The monitors 16, security devices 18, remote devices 20 and zone managers 28 may be in communication with one another and over a network 24. In some embodiments, the zone manager 28 may be any suitable device that is configured to facilitate communication with a plurality of remote devices 20, and/or the network 24. For example, a zone manager 28 may be secured to, or positioned at, any desired location to establish a detection zone for items of merchandise 12. Additionally, in some embodiments, each zone manager 28 may be secured in, or positioned at, locations that may not otherwise be visible to consumers 26 and could be placed, for instance, on the ceiling, walls, and/or behind or below a counter, panel, or cabinet of a retail establishment. The zone managers 28 may be configured to detect the items of merchandise 12. For example, zone managers 28 may be capable of assisting with detecting the location of an item of merchandise 12 and/or detecting the possibility of a theft event whereby a remote sales associate 24 may be notified via an audible, non-audible, and/or visual alarm through the monitors 16, a security device 18, and/or a remote device 20. In some cases, a zone manager 28 may be configured to detect that an item of merchandise 12 has been removed from a security device 18 and/or moved beyond an allowable distance from the zone manager 28, thereby indicating a theft event. As mentioned above, in some embodiments, a remote sales associate 24 may be capable of appearing real-time on the monitor 16 and/or mobile device 30 when a theft event is detected.

[0012] The foregoing has described one or more exemplary embodiments of a remote sales associate system. Embodiments of a remote sales associate system have been shown and

described herein for purposes of illustrating and enabling one of ordinary skill in the art to make, use and practice the invention. Those of ordinary skill in the art, however, will readily understand and appreciate that numerous variations and modifications of the invention may be made without departing from the spirit and scope thereof. Accordingly, all such variations and modifications are intended to be encompassed by the appended claims.

That which is claimed is:

1. A remote sales associate system for a retail establishment comprising:
one or more consumer kiosks having an audio and/or video interface; and
one or more security devices configured to secure one or more items of merchandise from theft; and
one or more remote devices configured to communicate with the one or more consumer kiosks and/or the security devices in response to a request by a consumer to facilitate a remote transaction with the consumer.
2. The remote sales associate system according to claim 1, wherein the one or consumer kiosks, security devices, and/or remote devices are configured to wirelessly communicate with one another via a network.
3. The remote sales associate system according to claim 1, wherein the one or more consumer kiosks comprises an actuator or interface for initiating communication with the one or more remote devices.
4. The remote sales associate system according to claim 1, wherein the one or more security devices comprise a lock configured to be unlocked remotely via the one or more remote devices.
5. The remote sales associate system according to claim 4, wherein the one or more security devices comprise a lock configured to be relocked by the consumer.
6. The remote sales associate system according to claim 4, wherein the one or more security devices comprise a lock configured to be relocked via the one or more remote devices.
7. The remote sales associate system according to claim 1, further comprising a consumer mobile device configured to communicate with the one or more consumer kiosks and/or remote devices.

8. The remote sales associate system according to claim 1, wherein the one or more consumer kiosks comprises one or more monitors.
9. The remote sales associate system according to claim 8, wherein the one or more monitors are two-way monitors.
10. The remote sales associate system according to claim 1, wherein the video and/or audio interface is configured to initiate communication with the one or more remote devices in response to a request by the consumer at the one or more consumer kiosks.
11. The remote sales associate system according to claim 1, wherein the one or more security devices comprises a locked cabinet configured to secure the item of merchandise therein.
12. The remote sales associate system according to claim 1, wherein the video and/or audio interface is configured to display live video obtained by the one or more remote devices in response to a request by the consumer at the one or more consumer kiosks.
13. A method for facilitating a transaction in a retail establishment, the method comprising:
 - providing one or more consumer kiosks having an audio and/or video interface; and
 - providing one or more security devices configured to secure one or more items of merchandise from theft; and
 - providing one or more remote devices configured to communicate with the one or more consumer kiosks and/or security devices in response to a request by a consumer to facilitate a remote transaction with the consumer.
14. The method of claim 13, further comprising receiving a request to initiate communication with the one or more remote devices by the consumer at the one or more consumer kiosks.

15. The method of claim 13, further comprising receiving a request to initiate communication with the one or more remote devices with an actuator or interface at the one or more consumer kiosks.
16. The method of claim 13, further comprising remotely unlocking the one or more security devices with a lock via the one or more remote devices.
17. The method of claim 16, further comprising relocking the one or more security devices with a lock.
18. The method of claim 16, further comprising remotely relocking the one or more security devices with a lock via the one or more remote devices.
19. The method of claim 13, further comprising displaying live video obtained by the one or more remote devices at the audio and/or video interface in response to the consumer request.
20. A method for facilitating a transaction in a retail establishment, the method comprising:
 - receiving a request at one or more consumer kiosks having an audio and/or video interface;
 - communicating with the one or more consumer kiosks using one or more remote devices in response to the request; and
 - facilitating a remote transaction with the consumer using the one or more remote devices.

ABSTRACT

A remote sales associate system for remotely assisting a consumer in a retail store. The remote sales associate system includes one or more consumer kiosks, security devices, and remote devices configured to interactively communicate with one another to remotely assist a consumer with a transaction.

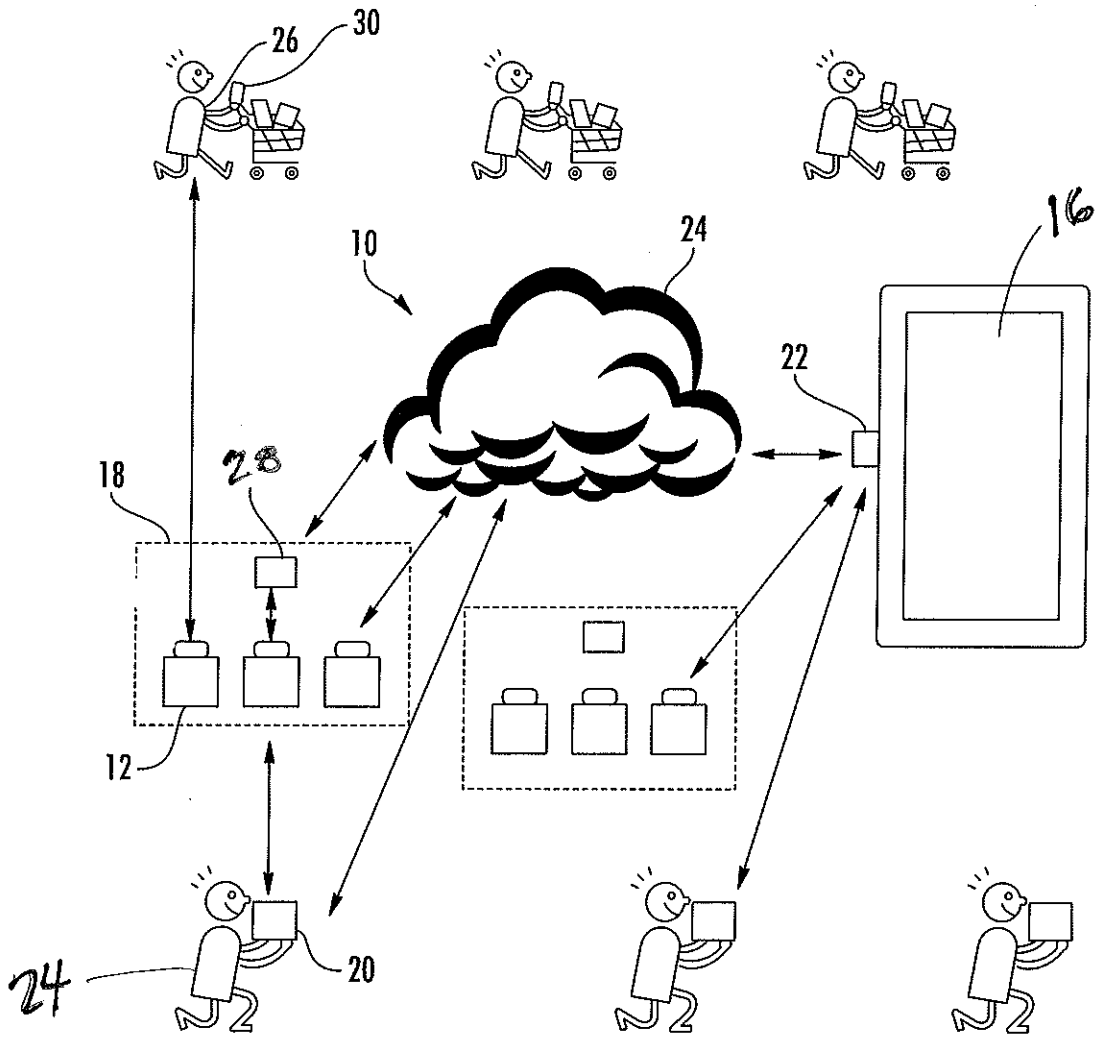


FIG. 1